Welcome to the College of Staten Island, a senior college of The City University of New York, offering courses of study that lead to associate’s, bachelor’s and master’s degrees and, in collaboration with the Graduate School and University Center/CUNY, doctoral degrees. CSI affords students opportunities for success at every level, from our own Honors Program and the CUNY Honors College: University Scholars Program, to those who need extra support through peer counseling. Our mission is your success.

The College of Staten Island is committed to academic excellence and opportunity. The administration, the faculty, the staff, and I are all keenly aware of the role we play in our students’ lives, and the role you play in the period of time you are here. I realize that a student’s first responsibility is to get an education—to work, to leave us—and that my responsibility as president is to facilitate that process and to work with the faculty and staff to provide you an excellent education.

CSI offers outstanding programs in the sciences, health sciences, and technology. We have a state of the art campus, offering students access to computer labs, scientific facilities, and modern communications. CSI can bring you an array of perspectives on the physical world with our technology; whether you want to explore the vastness of the heavens in the observatory or view the microcosmic world in well equipped laboratories, the possibilities for exploration are limitless.

The College of Staten Island also speaks to the heart—and the heart aroused—with a wide range of liberal arts courses. We build upon many fine programs in the humanities and social sciences to bring our students to an awareness of our rich intellectual tradition, and a new understanding of themselves. Recognizing too, that material well-being is important, the College strives to give you the skills and learning necessary to enhance your earning potential—to make your life better financially, even while fostering in our College community a sense of responsibility to the society in which we live.

Committed to pluralism and diversity, the College of Staten Island offers programs to further mutual understanding. A well-educated society is our hope for the future, for it is a society that can read skeptically and recognize sham, a society that can embrace differences in others, and a society that recognizes its responsibility to live collectively in an awareness of mutual dependence, both in the United States and abroad.

A life of the mind must be nourished by a healthy body and an appreciation for the arts. In addition to our excellent academic programs, we have a magnificent Sports and Recreation Center, which I hope you will use; the Center for the Arts is a spectacular facility offering a variety of programs to serve your cultural needs.

My vision for the College of Staten Island is of an institution that has an unwavering commitment to providing a quality education; a college continually evolving to meet the changing needs of our students; and a senior college that nourishes a culture of civility, respect, and tolerance. The education you will receive at CSI will prepare you for the future—give you tools to cope and prevail, to change and enjoy. We prepare our students for life.

Eleanor Roosevelt said, “When you cease to make a contribution, you begin to die.” The College of Staten Island, through its faculty, staff, students, alumni, and friends, is very much alive and contributing to the pluralistic society that is today and will carry us through the years ahead. Look at the offerings and information in this Catalog as the beginning of a journey into your future—one filled with learning, diversity, excitement, and promise.

I wish you a very successful, joyful career at the College of Staten Island.

Marlene Springer
President
Students entering in fall 2004 or later must consult the *Catalog* supplement for changes in degree requirements and College policies.

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### Fall 2003

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<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
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<tbody>
<tr>
<td>Aug 30</td>
<td>Saturday</td>
<td>First day of classes</td>
</tr>
<tr>
<td>Sep 1</td>
<td>Monday</td>
<td>College closed</td>
</tr>
<tr>
<td>Sep 26-28</td>
<td>Friday-Sunday</td>
<td>No classes</td>
</tr>
<tr>
<td>Oct 1</td>
<td>Wednesday</td>
<td>Last day to file for January 2004 graduation</td>
</tr>
<tr>
<td>Oct 6</td>
<td>Monday</td>
<td>No classes</td>
</tr>
<tr>
<td>Oct 7</td>
<td>Tuesday</td>
<td>Classes follow Monday schedule</td>
</tr>
<tr>
<td>Oct 13</td>
<td>Monday</td>
<td>College closed</td>
</tr>
<tr>
<td>Oct 23</td>
<td>Thursday</td>
<td>Mid-term grades due</td>
</tr>
<tr>
<td>Nov 26</td>
<td>Wednesday</td>
<td>Classes follow Friday schedule</td>
</tr>
<tr>
<td>Nov 27-30</td>
<td>Thursday-Sunday</td>
<td>College closed</td>
</tr>
<tr>
<td>Dec 15</td>
<td>Monday</td>
<td>Last day of classes</td>
</tr>
<tr>
<td>Dec 16-23</td>
<td>Tuesday-Tuesday</td>
<td>Final Examinations</td>
</tr>
<tr>
<td>Dec 24</td>
<td>Wednesday</td>
<td>College closed, Winter Recess begins</td>
</tr>
<tr>
<td>Dec 25</td>
<td>Thursday</td>
<td>College closed</td>
</tr>
<tr>
<td>Dec 31</td>
<td>Wednesday</td>
<td>College closed</td>
</tr>
<tr>
<td>Jan 1</td>
<td>Thursday</td>
<td>College closed</td>
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## Spring 2004

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
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<tbody>
<tr>
<td>Jan 29</td>
<td>Thursday</td>
<td>First day of classes</td>
</tr>
<tr>
<td>Feb 12</td>
<td>Thursday</td>
<td>College closed</td>
</tr>
<tr>
<td>Feb 16</td>
<td>Monday</td>
<td>College closed</td>
</tr>
<tr>
<td>Feb 18</td>
<td>Wednesday</td>
<td>Classes follow Monday schedule</td>
</tr>
<tr>
<td>Mar 1</td>
<td>Monday</td>
<td>Last day to file for June 2004 graduation</td>
</tr>
<tr>
<td>Mar 22</td>
<td>Monday</td>
<td>Mid-term grades due</td>
</tr>
<tr>
<td>Apr 2-13</td>
<td>Friday-Tuesday</td>
<td>No classes, Spring Recess</td>
</tr>
<tr>
<td>May 3</td>
<td>Monday</td>
<td>Last day to file for August 2004 graduation</td>
</tr>
<tr>
<td>May 19</td>
<td>Wednesday</td>
<td>Last day of classes</td>
</tr>
<tr>
<td>May 20-28</td>
<td>Thursday-Friday</td>
<td>Final Examinations</td>
</tr>
<tr>
<td>May 31</td>
<td>Monday</td>
<td>College closed</td>
</tr>
<tr>
<td>June 3</td>
<td>Thursday</td>
<td>Commencement</td>
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**College calendars for fall 2004 and spring 2005 will appear in a supplement to this Catalog.**
Sponsorship and Accreditation

The Board of Trustees

CUNY is governed by the Board of Trustees composed of 17 members, ten of whom are appointed by the Governor of New York State, and five by the Mayor of New York City. The chairperson of the University Faculty Senate serves ex officio, without vote; the chairperson of the University Student Senate serves ex officio, with vote. The individual colleges of CUNY have considerable latitude in governing their own affairs through various bodies representing faculty, students, and administrators. The Board of Trustees decides overall University policy and approves major new collegiate plans and programs.

The College

The College of Staten Island is a four-year, senior college of The City University of New York that offers exceptional opportunities to all its students. Programs in the liberal arts and sciences and professional studies lead to bachelor’s and associate’s degrees. The master’s degree is awarded in 13 professional and liberal arts and sciences fields of study. The College participates in doctoral programs of the City University Graduate School and University Center in Biology, Chemistry, Computer Science, Physics, and Psychology.

A broad general education is assured through requirements that allow students to explore a range of fields of knowledge and acquire educational breadth in mathematics, the sciences, social sciences, arts, and humanities. Requirements for the bachelor’s degree provide a disciplined and cumulative program of study in a major field of inquiry. Enrollment in baccalaureate programs requires freshmen admission standards consonant with those of CUNY senior colleges. Enrollment in associate’s degree programs is open to all students with a high school diploma or the equivalent.

The Honors College offers a challenging curriculum and an enriched extracurricular environment. It is designed for a limited number of students who have demonstrated a well-developed commitment to learning and who intend to continue their undergraduate education in graduate and/or professional schools. Students who have earned, or expect to earn, a high school academic diploma with an average of at least 90 are eligible to apply for admission to the Honors College.

The College participates in the CUNY Honors College: University Scholars Program. Students who have been accepted into the CUNY Honors Program will participate simultaneously in the Honors Colleges of CSI and the University.

The academic year follows a two-semester pattern, with a separate summer session. Classes are scheduled days, evenings, and weekends. The College has an extensive Continuing Education program and offers off-campus courses with and without credit.

CSI was founded in 1976 through the union of two existing colleges—Staten Island Community College and Richmond College. Staten Island Community College, the first community college in the University, opened in 1955. Richmond College, an upper-division college that offered undergraduate and graduate degrees to students who had successfully completed the first two years of college study elsewhere, was founded in 1965. The merger of these two colleges resulted in the only public four-year institution of higher learning on Staten Island.

The City University of New York

The City University of New York (CUNY), of which the College of Staten Island is a part, traces its beginning to 1847 and a public referendum that provided tuition-free higher education for residents of New York City. The municipal college system grew rapidly and its various colleges were consolidated as The City University of New York by an act of the New York State Legislature in 1961. CUNY comprises 11 senior colleges, six community colleges, a graduate school, a law school, and a medical school. It is the largest municipal college system and the third largest university in the nation.

The Board of Trustees

CUNY is governed by the Board of Trustees composed of 17 members, ten of whom are appointed by the Governor of New York State, and five by the Mayor of New York City. The chairperson of the University Faculty Senate serves ex officio, without vote; the chairperson of the University Student Senate serves ex officio, with vote. The individual colleges of CUNY have considerable latitude in governing their own affairs through various bodies representing faculty, students, and administrators. The Board of Trustees decides overall University policy and approves major new collegiate plans and programs.

Sponsorship and Accreditation

CSI is accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools, 3624 Market Street, Philadelphia, PA 19104; 1.215.662.5606. The Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Commission on Recognition of Postsecondary Accreditation.

The Computer Science program is accredited by the Computing Sciences Accreditation Board (CSAB) of the Accreditation Board for Engineering and Technology (ABET), a specialized accrediting body recognized by the Council for Higher Education Accreditation (CHEA). The Engineering Science program is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (EAC/ABET) and the Electrical and Civil Engineering Technology programs are accredited by the Technology Accreditation Commission of ABET. The Medical Technology program utilizes hospital affiliations accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). The baccalaureate and associate degree programs in Nursing are accredited by the National League for Nursing Accrediting Commission, 61 Broadway, New York, NY 10006; 1.212.363.5555. The Physician Assistant program, offered by the College in affiliation with Baley Seton Hospital, is accredited by the Commission on Accreditation of Allied Health Education. The Physical Therapy program is accredited by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association. The programs in Education have been accepted into candidacy by the National Council for Accreditation of Teacher Education.

Copies of these accreditation documents, as well as the respective accreditation documents for the various academic disciplines, are available for review in the College Library.
The Campus

Completed in 1994, the 204-acre campus of CSI/CUNY is the largest site for a college in New York City. Set in a park-like landscape, the campus is centrally located on Staten Island. Mature trees and woodlands, flowering trees and ornamental plantings, fields and outdoor athletic facilities, the great lawn, sculpture, and seating areas create a rural oasis in an urban setting.

Fourteen renovated neo-Georgian buildings serve as classrooms, laboratories, and offices. The academic buildings house 300 classrooms, laboratories and instructional spaces, study lounges, department and program offices, and faculty offices.

North and South Academic Quadrangles are connected by the Alumni Walk, with the Library and Campus Center as focal points. The Center for the Arts is located midway between the Quadrangles at the fountain plaza. The Sports and Recreation Center and the athletic fields are located near the main entrance to the campus.

Sixteen works of art, a permanent collection of works either commissioned or purchased through the Art Acquisitions Program of the Dormitory Authority of the State of New York, are installed throughout the campus. The artists and their free-standing sculptures and reliefs are: Vincenzo Amato, Body of Hector/Glaucus; Miriam Bloom, Shooliloo; Fritz Bultman, Garden at Nightfall (extended loan); Chryssa, Untitled; Lucille Friedland, Big Stride (gift of the artist); Red Grooms, Marathon; Sarah Haviland, Staten Island Arch; Jon Isherwood, Borromini’s Task; Zero Higashida, Maquette for a Small Universe; Valerie Jaudon, Untitled; Niki Ketchman, Red Inside; Win Knowlton, Ellipse; Mark Mennin, Torak; Don Porcaro, Moon Marker; and Hans Van de Bovenkamp, Stele in the Wind.

Astrophysical Observatory: The 16-foot dome astrophysical observatory was completed in 1996. In addition to serving students in astronomy courses, the facility is used for faculty and student research projects, environment monitoring projects, and community programs.

Biological Sciences/Chemical Sciences Building: An ultramodern facility, the building contains classrooms, laboratories, faculty offices, research facilities for faculty and students, the Center for Environmental Science, and the Center for Developmental Neuroscience and Developmental Disabilities.

Campus Center: The Campus Center provides facilities for a complete student life including offices for student organizations, food services, health services, a study lounge, bookstore, and the studios of WSIA-FM, the student-operated radio station.

Center for the Arts: Entered from the Great Lawn and from the Alumni Walk, the Center houses two academic wings for programs in the arts as well as superb public spaces: the Clara and Arleigh B. Williamson Theatre, a 900-seat concert hall, a recital hall, an experimental theater, lecture halls, an art gallery, and a small conference center.

Library: Designed with inviting reading rooms, open shelves, and study carrels, the Library research and study facilities are enhanced by computer data-based operations available to all students. The Library Media Services make accessible pedagogical multimedia materials to distant classrooms and laboratories by means of the campus fiber-optic network.

Sports and Recreation Center: This 77,000 square-foot multi-purpose facility and surrounding athletic fields serve the intercollegiate and intramural sports and recreation programs for students. On a membership basis, faculty, staff, alumni, and the general public also have access to the facilities.

Mission of the College of Staten Island

The College of Staten Island, one of the 11 senior colleges of The City University of New York, is, like the University, committed to both access and excellence. This double commitment is especially critical given CSI’s status as the only public college on Staten Island and the one instance in which CUNY is represented in a borough by one unit alone. The College offers the associate degree in selected areas, a comprehensive range of baccalaureate programs, selected master’s programs, and, in cooperation with the CUNY Graduate Center, doctoral programs.

The College of Staten Island’s remarkable campus, with its superb laboratories, studios, and classrooms, serves the pivotal endeavors of teaching and research that promote discovery and dissemination of knowledge while developing human minds and spirits.

The College’s faculty, administration, and staff practice their commitment to educational excellence as they instill in students preparing to enter their chosen careers an enduring love of learning, a sensitivity to pluralism and diversity, a recognition of their responsibility to work for the common good, and an informed respect for the interdependence of all people.

Goals
1. To view the quality and success of the College’s educational mission not by the qualifications of entering students alone but by the qualifications of those we educate and those who receive degrees.
2. To foster and enhance faculty commitment to effective teaching and learning.
3. To encourage and support faculty scholarship, research, publication, creative work, and the involvement of students as partners in research and creative activities.
4. To extend the benefits of the College to the larger community by making educational, intellectual, and cultural activities available to all, and by supporting research programs that serve the people of Staten Island, its agencies, and institutions.
5. To offer rigorous general education and degree programs in the liberal arts and sciences and in a range of professional disciplines.
6. To advance the effective use of technology in all aspects of the College’s operations, so as to strengthen support services, teaching, and research.
7. To provide, with efficiency and sensitivity, the broad range of academic and administrative services required by a commuting student population.
8. To further, in all aspects of the College's activities, an appreciation of the pluralism of American society and an awareness of the importance of global education and international understanding.
9. To cultivate civility and dialogue between and among all members of the College's communities.
10. To build academic and research programs through collaborative initiatives with the community colleges, senior colleges, and the Graduate Center of The City University of New York, and with national and international counterparts.
11. To forge professional relationships with educators at all levels, and to work collectively to seek new and effective approaches to K-12 education.
12. To strengthen student interest in life-long learning, their purposeful participation in the issues that face our society, and their lively commitment to their own physical and spiritual well-being.
Admissions

Matriculated and Non-Degree (Non-Matriculated) Students:

Students are classified into two groups according to their enrollment status: matriculated and non-degree. Matriculated students are those who have met the College admission requirements and are accepted and registered in a program of study leading to a degree. Non-degree (non-matriculated) students are those who are enrolled for credit courses but who are not officially registered in a degree program. Credits earned as a non-matriculated student may later be transferred to a degree program.

Students may enroll as candidates for the bachelor’s degree or the associate’s degree. Bachelor’s degree programs are designed to be completed in four years and associate’s degree programs in two years. The programs for the junior and senior years of study, upper-division programs, are structured for smooth articulation for students graduating with associate’s degrees and students transferring from community colleges. The College has also developed auxiliary and pre-entry programs with support systems for those students returning to the classroom after an interruption in their education and for the not-so-recent high school graduate.

Application for Admission

Admission to all undergraduate colleges in the City University is centralized. High school seniors attending New York City public schools will receive individualized application forms from their guidance offices. Other interested applicants may obtain an application by calling or visiting the Office of Recruitment and Admissions. Applicants should list one of the code numbers representing curricula of CSI as their first choice on the CUNY Freshman Application.

Transfer students who wish to apply for matriculated undergraduate status must file a Transfer Application. This can be obtained from the Office of Recruitment and Admissions. Credits earned at another institution and transferred to CSI are evaluated and certified by the Office of the Registrar. See section on Filing an Application.

Academic Requirements for Admission to Bachelor’s Degree Programs (Four-Year)

Freshmen

1. An applicant for admission to a bachelor’s degree program must pass the three CUNY Basic Skills Tests, unless he/she qualifies for exemption based on a satisfactory performance on the SAT or ACT standardized tests or Regents Examinations.

2. Admission to a bachelor’s degree program is determined by an applicant’s score on the College’s admissions index. The index is based on the applicant’s high school courses and academic average and the combined verbal and mathematics SAT scores. An applicant whose score reaches or exceeds the College’s minimum index number will be admitted to a bachelor’s degree program. A faculty admissions committee may consider the admission of applicants whose scores approach the College’s minimum index number.

Students admitted directly into four-year bachelor’s degree programs are eligible for the Baccalaureate Program and may enroll in designated sections of general education courses. Applicants who are not admitted to a bachelor’s degree program may enter an associate’s degree program at the College.

Transfer Students

Students are encouraged to continue in bachelor’s degree programs from associate’s degree programs at CSI, and they may also transfer from other colleges and universities into bachelor’s degree programs. Students must have passed the CUNY Basic Skills Tests in mathematics, writing, and reading prior to enrolling in a bachelor’s degree program. Final degree credit for transfer work depends on grades earned and College and departmental requirements. With some exceptions, a course with a grade of C or higher may be transferred. In the case of transfers from CUNY colleges, D grades are usually acceptable. Transfer credits carry a grade of Pass (P) on the CSI transcript. Transfer students from other CUNY colleges are encouraged to visit CUNY’s online Transfer Information and Program Planning System (CUNY TIPPS) at www.tipps.cuny.edu for information about transfer credits.
Based on University policy, all liberal arts and sciences courses taken in one City University college are considered transferable, with full credit, to each college of the City University, and full credit will be granted for these courses in all departments and programs and recognized for the fulfillment of degree requirements. See section on General Education Requirements for details on transfer of courses in this category.

Students must earn a minimum of 30 credits at the College and, to qualify for a bachelor’s degree, at least half of the credits required for the major.

Work completed at other colleges may be used to fulfill general education and other requirements. The Office of the Registrar will evaluate each student’s transcript. Every effort will be made to apply the coursework previously completed by transfer students to the general education requirements at CSI.

In many programs, particularly in professional and scientific disciplines, students are required to complete specific courses before being considered for admission to these programs. Generally, these courses are taken during the first two years of study as necessary preparation for the advanced work required. Students seeking admission to these programs may have to spend additional time completing pre-major courses.

**Academic Requirements for Admission to the Honors College**

First-time students may apply for admission to the CUNY Honors College at CSI and/or to the CSI Honors College. Applicants are expected to have an academic diploma with an average of at least 90. The admissions committee for the Honors College considers the following documents submitted by applicants: high school transcript; scores on Regents Examinations; scores on the SAT, ACT, and achievement tests; Advanced Placement courses; extracurricular activities; evidence of talents and interests; letters of recommendation; and personal essay. Personal interviews are also required. Admission is limited and competitive.

Students transferring from other colleges who have completed no more than 24 credits may apply to the CSI Honors College. In addition to the documents above, transfer students must submit official college transcripts.

CSI students who have completed 12 to 24 credits with a 3.5 grade point average and who have taken or are ready to take MTH 130 Pre-Calculus Mathematics or the equivalent are also eligible to apply for transfer into the Honors College.

For information or an application, please call 1.718.982.2222, or write the Honors College, CSI/CUNY, South Administration Building (1A), Room 206, 2800 Victory Blvd., Staten Island, NY 10314.

**Academic Requirements for Admission to Associate’s Degree Programs (Two-Year)**

**Freshmen**

Applications for matriculation as a first-time student will be accepted from persons who have never attended any institution of higher education (with the exception of those students who have taken college courses while in high school) and who have either:

1. graduated from an accredited high school, or
2. earned an equivalency diploma (GED), or
3. are currently attending high school and will receive a diploma prior to enrollment.

A diploma from an accredited high school is required for admission to the College. Scores on either the New York State Equivalency Diploma Examination or the General Education Development Examination are accepted as substitutes for the high school diploma provided that the student attains a score of 35 or higher on each of the five tests, with a total score of 225 or higher.

**Transfer Students**

Applicants who have attended another college must file a transfer application. Applications for matriculation will be accepted from transfer students who have an official transcript verifying attendance at another college. As a general rule, the College requires a grade point average equivalent to a C for transfer as a matriculated student.

The Office of the Registrar will evaluate credits of transfer students for advanced standing. Final degree credit for transfer work depends on grades earned and College and departmental requirements. With some exceptions, a course with a grade of C or higher may be transferred. In the case of transfers from CUNY colleges, D grades are usually acceptable. Transfer credits carry a grade of Pass (P) on the CSI transcript. However, all students must complete a minimum of 30 credits at the College, including at least one-half the credits required for the core, in order to earn an associate’s degree.

**Admissions Committee**

An Admissions Committee of six members of the faculty and administrative staff considers all matters affecting the admission of students to the College of Staten Island, including academic requirements.

**College Preparatory Initiative (CPI)**

The College Preparatory Initiative (CPI), a collaborative effort between The City University of New York and the New York City Board of Education, was designed to strengthen the academic preparation of high school students. This requirement for all students entering CUNY colleges is 16 units. See section on Degree Requirements for complete details.

High school students should consult with guidance counselors to ascertain which courses meet the CPI requirements. GED students will
receive units in English and mathematics based on their test scores. Students who have not completed the CPI requirements prior to enrolling in the University will be required to demonstrate skills and knowledge in the discipline areas in which they lack preparation. In most cases, this will be accomplished by taking college courses in designated academic areas. No student will be eligible for graduation from CSI until all CPI requirements are satisfied.

**Advanced Placement**

The College will grant placement and credits, to a maximum of 30 credits, on the basis of special examinations taken prior to admission. These include approved high school advanced placement examinations, Regents Examinations, Educational Testing Service examinations, Departmental Challenge examinations, New York State College Proficiency examinations, and the College Level Examination Program (CLEP). Further information is available from the Office of Recruitment and Admissions.

**International Students**

The Center for International Service at CSI facilitates admission and registration for international students. The Center is located in the North Administration Building (2A), Room 206; telephone 1.718.982.2100.

**Veterans**

The veterans advisement service is supervised by the Registrar. Assistance is available in interpreting regulations and policies of the Department of Veterans Affairs, and educational and financial counseling is offered. The office of the veterans adviser is in the North Administration Building (2A), Room 110.

**SEEK Program**

The SEEK program (Search for Education, Elevation, and Knowledge) is a New York State program for residents who are in need of both academic and financial assistance in order to obtain a college education. Information about the program and the application procedures may be obtained from the SEEK Office, South Administration Building (1A), Room 112; telephone 1.718.982.2413.

**Readmission**

Undergraduate students who do not register for a semester and then decide to return in a subsequent semester must file an application for readmission with the Registrar. Readmission is routine unless the student is applying for a different curriculum, which may entail a review of qualifications. To qualify for priority registration, applications for readmission must be filed by the deadline specified in the calendar in the Schedule of Classes.

**Special Categories of Registration**

**Permit Students**

Permit students from within the City University must submit a valid CUNY permit from their home college to the CSI Office of Recruitment and Admissions prior to registration. Permit students from outside the City University must submit documentation from their home schools that they have permission to enroll at CSI.

**Senior Citizens**

Senior citizens, 60 years and older, may be permitted to enroll in undergraduate courses as non-matriculated students, on a space-available basis, without tuition and fees, provided they do so on an audit basis. Senior citizens enrolling as auditors are charged an administrative fee and a Consolidated Service Fee for the semester as indicated in the Fee Schedule.

A senior citizen may enroll in courses for credit but cannot be enrolled in the same semester for courses on both an audit basis (no tuition) and a credit or degree basis (tuition charged).

**Filing an Application**

**Freshman Applications**

Students enrolled as seniors in New York City public schools and some private schools receive personalized application forms from their high school. These should be completed and returned to the high school along with the $40 application fee. The high school will send the applications to the University Application Processing Center (UAPC).

All other students may obtain a regular application form by mail or in person from CSI, or the CUNY Office of Admissions Services (OAS). The application, a school transcript, and a non-refundable application fee of $40 must be mailed to the UAPC.

The address for each is as follows:

University Application Processing Center (UAPC)
Box 350136
Brooklyn, New York 11235-0001
Transfer Applications

The College of Staten Island accepts transfer applications from students who have attended an accredited postsecondary institution. Students who are currently attending or who have previously attended a college of The City University of New York should apply through the registrar's office of the college attended, using the standard transfer application form of the CUNY Office of Admission Services.

Students must meet the standards of proficiency in the basic skills areas of reading, writing, and mathematics established by the University and pass the CUNY Proficiency Examination to transfer to a bachelor's degree program.

Transfer students from colleges outside CUNY can obtain an application from the CSI Office of Recruitment and Admissions. This form and official transcripts of all previous college work should be sent to UAPC (address above). The fee for transfer applications is $50. Please see also the statement on the CUNY Proficiency Examination in the section Academic Policies and Procedures.

Non-Degree (Non-Matriculated) Applications

Non-matriculated (non-degree) students receive applications at the time of registration.

After Acceptance to the College of Staten Island

Orientation

An orientation program for all new students provides an introduction to the College, its programs, and student life. Orientation sessions are scheduled at the beginning of each semester, before or during the time periods devoted to testing, advisement, and registration.

Testing

CUNY Basic Skills Tests:

All new students are required to take the CUNY Basic Skills Tests in order to become degree (matriculated) students. The scores are used for advisement and placement into college courses. Entering students are scheduled for the Skills Tests. The tests are administered several times during the year by the Testing Office, South Administration Building (1A), Room 104. For information see the section on CUNY Basic Skills Tests in the chapter Academic Policies and Procedures.

Placement Examinations

Special examinations are given to determine placement at the appropriate course level in several departments, such as Biology and Modern Languages. See the department chairperson or the Testing Office for further information.

Advisement

Upon acceptance into the College of Staten Island, each student is assigned an academic adviser. During the first semester and prior to registration for the second semester it is expected that students will meet with their assigned advisers to discuss educational and vocational goals and to develop long-range academic plans. Thereafter, students meet with their advisers at least once each semester to discuss the following semester’s academic program and to have their advisement registration form signed, and to discuss progress toward graduation. Once each semester, students are sent an updated Academic Advisement Plan that details progress toward the degree. Students should review their plan and report any problem immediately to the Academic Advisement Office, South Administration Building (1A), Room 101.

Registration

Students must register each semester. Registration and appointment materials are sent by the Office of the Registrar prior to registration to all current, readmitted, and newly admitted students. An open registration period is scheduled at the beginning of each semester for students who miss their registration appointments or who are returning to CSI too late for an appointment to be scheduled.

Students scheduled for registration using the College’s Web (eSIMS) or telephone registration process may register and perform program changes following the procedures accompanying the registration appointment form. Instructions for both Web and telephone registration are also published in the Schedule of Classes.

A detailed registration schedule and class listings are published each semester in the Schedule of Classes. Registration is not complete until all financial obligations have been satisfied. The Registrar’s Office is in the North Administration Building (2A), Room 110.

Immunization Requirement

New York State Public Health Law requires immunization against measles, mumps, and rubella for some students. All students born on or after January 1, 1957, who are enrolling for six or more equated credits must have proof of immunization on file at the College Health Center, Campus Center, Room 112, one week prior to registration. Transfer students must request that their health records be transferred to CSI. Information and the immunization forms are available at the Health Center and the Registrar’s Office, and in the Schedule of Classes.
I.D. Cards
Each student will be provided with a photo identification card. Each semester the I.D. cards are validated upon completion of registration. Validated I.D. cards must be carried by a student on campus at all times. Duplicate I.D. cards are available at a cost of $5.00.

Student Enrollment, Retention, and Graduation
The College has an enrollment of nearly 11,000 undergraduate students, full-time and part-time. Almost 2,600 new undergraduates entered in fall 2002 as first-time freshmen or as transfer students. For the College's heterogeneous student population, progress toward a degree depends upon a number of factors: preparation for college, goals, and other commitments. These and other factors affect such student outcomes as retention, graduation, and post-collegiate success.

Approximately 67% of all first-time freshmen who entered associate and baccalaureate degree programs in fall 2001 re-enrolled in fall 2002. Members of this cohort who entered as full-time students were retained at a rate of 68%, while members of this cohort who entered as part-time students were retained at a rate of 54%. For full-time transfer students who entered in fall 2001, the retention rate was 63%.

The College awarded 1,405 undergraduate degrees in the 2001-2002 academic year. More than 60% of these were bachelor's degrees, nearly 40% were associate's degrees, and 0.2% were one-year certificates.
Payment

A student is not registered until all financial obligations to the College have been satisfied. Before registration can be completed, students must have paid in full unless the student: (a) has been awarded financial aid sufficient to cover tuition and fees, (b) is enrolled in the University Payment Plan, (c) is eligible for a tuition waiver, (d) is in a special registration status (e.g., veteran). The registration dates are printed in the Schedule of Classes for each semester. During the registration process, a student's bill is prepared with a payment/validation due date indicated. Students registering late will be given a bill at the time of registration and are expected to pay their bill within three or fewer days. If a student's bill is not paid and a student is not covered by one of the above categories, the registration will be canceled. A student who has not fulfilled all financial obligations to the College will be barred from obtaining any transcripts or from registering for the next semester.

Residency for Tuition Billing Purposes

A student may qualify for the resident tuition rate if he/she continuously maintained his/her principal place of abode in the State of New York for a period of at least 12 consecutive months immediately preceding the first day of classes. If a student has attended a high school in New York City or State for the two semesters immediately prior to the first day of classes, the student qualifies for the resident rate.

Last Semester Free

Determination of Last Semester Free

Effective fall 2002, The Board of Trustees of the City University of New York eliminated the Last Semester Free program established in 1992 for undergraduates receiving a bachelor's degree. However, the program will continue to be available to students who began their studies at CUNY on or after September 1, 1997 (the fall 1997 semester) who graduate no later than January 2004 (at the end of the fall 2003 semester). After January 2004, the Last Semester Free program will no longer be available. The following definitions will apply to those eligible students in the above applicable period:

All resident senior or community college first-time freshmen who enroll in any City University of New York (CUNY) undergraduate degree program on or after September 1, 1997 and who graduate no later than January 2004 shall be entitled to a waiver of 100 percent of all resident tuition charges for the final semester of study culminating in a baccalaureate degree, on a one-time basis only, regardless of original CUNY college or program of enrollment, subject to verification of completion of baccalaureate degree requirements at any CUNY college. Further information can be obtained from the Registrar's Office.

For purposes of determining eligibility for the last semester free, a first-time freshman shall be defined as any student entering a CUNY college on or after September 1, 1997 as either a degree student or a non-degree student without prior registration or credit accumulated as a college student from any accredited postsecondary institution.

Definition of Last Semester Free

For full-time students, the last semester is any semester of full-time attendance (12 or more credits) that will result in a student receiving a baccalaureate degree. If, for whatever reason, the student does not actually fulfill the degree requirements during the semester in which the last semester free benefit is conferred, the student will be required to pay the rates in effect at the time for all subsequent semesters or sessions of study.

For part-time students, the last semester begins at the point at which a student is 15 credits away from degree completion and ends after the next 15 credits for which a student registers. If, for any reason (failure, switched major, withdrawals, etc.), those next 15 credits do not actually result in a baccalaureate degree and the student must, or wishes to, take additional credits, then the normal charges per credit would apply from the 16th credit forward. Courses dropped after the first day of classes continue to count as part of the last semester free benefit awarded for the semester.

Definition of Residency within a CUNY Baccalaureate Program for the Last Semester Free

Students who begin as first-time freshmen in any CUNY college on or after September 1, 1997 may earn non-CUNY credits toward the baccalaureate degree and still maintain eligibility for the last semester free if more than 50 percent of credits toward the degree are earned at CUNY and courses taken at non-CUNY colleges have the recorded approval of their departmental or academic adviser or college registrar prior to such attendance. Such advance recorded approval shall be necessary to protect eligibility for the last semester free and must be on file in the Registrar's Office.

Students who leave a CUNY college and enroll in any number of credits elsewhere without having received specific approval from their “home” college will be considered as advanced standing (non-CUNY transfer) students upon their readmission to CUNY and will have forfeited their eligibility for the last semester free.
Definition of New York State Residency for Eligibility for Last Semester Free

Documented New York State residency at the time of enrollment as a first-time freshman on or after September 1, 1997 shall qualify a student for the last semester free at the resident tuition rate regardless of subsequent changes in residency. Students who enter CUNY claiming New York State residency status for the last semester free, but not having documented such residency by the time of initial course registration as first-time freshmen, shall have one year from their initial registration to do so.

Student Status

Full-Time and Part-Time

Undergraduate students are considered part-time if they are registered for 11 equated credits or less. A student is considered full-time if registered for 12 or more equated credits in a semester. Students applying for TAP should see the requirements for TAP eligibility in the section on Financial Aid and in the Schedule of Classes.

Part-time undergraduate matriculated students are charged the tuition rate on a per equated credit basis (1-11 equated credits).

Undergraduate full-time students are charged tuition on a per semester basis; undergraduate non-resident full-time students are charged tuition on a per equated credit basis.

Summer session and non-degree students are billed on a per equated credit basis regardless of the number of equated credits for which they register. There are no maximum tuition limits for summer session or non-degree students. Non-degree students (as of June 1, 1992) pay a higher rate than matriculated students.

Senior Citizens

Individuals satisfying the New York City/State residency requirements and who are 60 years of age or older (as of the first day of the semester or session) are permitted to enroll in undergraduate courses on a space-available basis. Proof of age is required by the College; the following forms of proof of age are acceptable: Medicare card, driver's license, or birth certificate.

Administrative fee: A non-refundable administrative fee of $65 per semester or session is charged senior citizens who are enrolling on an audit basis. The application fee and student activity fee are not charged. Senior citizens as students are responsible for the consolidated service fee and any other fees they might incur.

Undergraduate courses: For senior citizens enrolled in undergraduate courses, tuition will not be charged provided credit is not given for the course(s). Senior citizens are enrolled on an audit basis and will receive an "AUD" grade. Senior citizens who wish to enroll for credit must pay the applicable tuition and fees, including the application fee and the student activity fee. Senior citizens cannot be registered on both an audit basis (no tuition) and a credits basis (tuition charged) during the same semester.

Graduate courses: Senior citizens are not permitted to register free of tuition or fee for graduate-level courses. Senior citizens may register for graduate courses on a space-available basis and are charged the graduate tuition rate regardless. No exception is made for matriculated or non-matriculated status. The student activity fee and application fee must also be paid.

Tuition

<table>
<thead>
<tr>
<th>UNDERGRADUATE*</th>
<th>Resident</th>
<th>Non-Resident</th>
</tr>
</thead>
<tbody>
<tr>
<td>full-time matriculated</td>
<td>$2,000/semester</td>
<td>$360/equated credit</td>
</tr>
<tr>
<td>part-time matriculated</td>
<td>$170/equated credit</td>
<td>$360/equated credit</td>
</tr>
<tr>
<td>non-degree</td>
<td>$220/equated credit</td>
<td>$470/equated credit</td>
</tr>
</tbody>
</table>

*Tuition is subject to change without prior notice by the CUNY Board of Trustees.

Tuition bills may be paid with a credit card: MasterCard or Visa.

The last date for submitting documentation for a residency status change for tuition billing purposes is the last day of final examinations (see the academic calendar in the Schedule of Classes).

Matriculated Status

If a student's matriculation status changes on or after the first day of classes, the lower matriculation tuition charge will not be effective until the next semester's registration. No refunds will be issued for the semester in which the reclassification occurs. Students who have satisfied their baccalaureate degree requirements (graduated) and wish to take additional credits beyond the degree, will automatically be coded non-degree and charged the higher non-degree rate per credit, unless they have filed for a second undergraduate degree in the Registrar's Office by the last business day before the first day of classes.

Non-Instructional Fees*

Student Activity Fee

The Student Activity Fee is billed to all students at the following rate:

full-time students: $74.00  part-time students: $48.00

Fees include a $4.00 contribution to the New York Public Interest Research Group (refundable through NYPIRG office) and an 85 cent University Student Government fee. Non-instructional fees are non-refundable.
## Miscellaneous Fees and Charges

<table>
<thead>
<tr>
<th>Fee</th>
<th>Amount</th>
<th>Notes</th>
</tr>
</thead>
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<tr>
<td>Consolidated Service Fee</td>
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<td>all students pay this fee</td>
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<td>Technology Fee</td>
<td>$75</td>
<td>full-time students per semester</td>
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<tr>
<td></td>
<td>$37.50</td>
<td>part-time students per semester</td>
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<td>Application Fees</td>
<td>$50</td>
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<td>$10</td>
<td>payable upon registration after an absence from the College of one or more semesters</td>
</tr>
<tr>
<td>Readmission</td>
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</tr>
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<td>Program Change</td>
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<td>Senior Citizens</td>
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<td>Cooperating Teacher Waiver</td>
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<tr>
<td>Late Registration</td>
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<td>charged after the specified registration period or bill due date</td>
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<td>CUNY Accelerated Study Fee for credits in excess of 18 (resident students only):</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>$100</td>
<td>less than or equal to two credits</td>
</tr>
<tr>
<td></td>
<td>$230</td>
<td>greater than two but less than or equal to four credits</td>
</tr>
<tr>
<td></td>
<td>$460</td>
<td>greater than four but less than or equal to six credits</td>
</tr>
<tr>
<td></td>
<td>$690</td>
<td>greater than six credits</td>
</tr>
<tr>
<td>Late Payment</td>
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<td>Transcript</td>
<td>$4</td>
<td>each (except for copies going to other CUNY colleges for which there is no charge)</td>
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<td>Payment Reprocessing</td>
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<td>for bad checks</td>
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<tr>
<td>Duplicate Bill</td>
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<td></td>
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<tr>
<td>Duplicate Diploma</td>
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<td></td>
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<tr>
<td>Duplicate I.D. Card</td>
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<td></td>
</tr>
<tr>
<td>Special Examination</td>
<td>$15</td>
<td>for the first; $5 each additional</td>
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</tbody>
</table>

*Fees are subject to change without prior notice by the CUNY Board of Trustees.

## Materials Charges

Special materials charges of $10 or more are required in some courses. Details may be found in each semester's Schedule of Classes. Materials charges are not refundable.

## Library Fines

Overdue books: General circulation: 10 cents per day, including days on which the Library is closed, to a maximum of the current price of the item.

Reserve items: $1.20 per overdue hour to a maximum of the current price of the item.

Damaged book: Borrower must pay any overdue fines up to and including the date the item is reported as being damaged, plus an amount to be determined by the nature and extent of the damage, not to exceed the current price of the item, plus a processing charge of $10.

Lost item: Borrower must pay a $10 processing charge in addition to the current price of the item.

## Tuition and Fee Refunds

When courses are canceled by the College, a full refund of appropriate tuition and fees will be made. In cases of student-initiated withdrawals, the date on which the withdrawal application is received by the Registrar, not the last date of attendance, is considered the official date of withdrawal for the purpose of computing refunds. Withdrawal from a course before the beginning of classes allows a 100 percent refund of tuition and the CUNY accelerated study fee; and withdrawal from the College in order to register at another unit of City University during the same semester allows a 100 percent refund of tuition and CUNY accelerated study fee. Information about refunds for withdrawal under other circumstances is shown in the Academic Calendar printed in the Schedule of Classes each semester. Class non-attendance, informing the instructor of withdrawal, or altering the bill to indicate intention to drop a course DOES NOT constitute an official withdrawal. If a portion of the tuition has been paid with federal financial aid funds, that portion of any tuition refund is returned to the appropriate financial aid program.

Students should be aware that withdrawal or failure to complete a course affects their financial aid obligations. Questions about financial aid obligations should be referred to the Office of Financial Aid.

## Return of Title IV Funds

Title IV (Pell, SEOG, Direct and Perkins Loans) recipients who withdraw from all courses, officially or unofficially, are subject to a calculation to determine earned Federal Financial Aid. This calculation may require a payment toward tuition and fees that previously were determined to have been satisfied.
Medical Withdrawals

Medical withdrawals, which must include documentation from a physician, should be addressed to the College Health Center. Medical withdrawals are subject to the regular College refund policy. See the Schedule of Classes for more details.
Application Procedures and Deadlines

Obtain/Use a Federal PIN Number @ www.pin.ed.gov

Students/spouses and parents should use a federal PIN number to sign the FAFSA (Free Application for Federal Student Aid) and TAP (Tuition Assistance Program) applications. To obtain a PIN number or find out what a previously issued PIN number is, sign onto www.pin.ed.gov. Applicants will receive a PIN number by email in five to seven days or a PIN number will be mailed in nine to 12 days.

College Codes

CSI’s FAFSA college code is 002698 and the TAP college code is 1417.

Apply on the Web @ www.fafsa.ed.gov

Complete the FAFSA and TAP applications online at www.fafsa.ed.gov. When you receive your confirmation after submitting your FAFSA, you will see a paragraph directly below with the heading NY STATE RESIDENTS. Use the hyperlink immediately to get to the Web TAP application. Most of the answers will be filled in with your federal data. Review, revise, and answer any unanswered questions. Submit your form electronically when you are satisfied that the application is complete. You have now applied for federal and state aid.

CSI Invites You to Use Our Application Lab

CSI has created a Student Service Center where prospective and current students may make appointments to file for federal and state financial aid on the Web by calling 1.718.982.2601. Remember to bring financial documents, such as federal and state tax returns and information about any income not listed on tax returns. These documents will make it easier to file. The Student Service Center is located in the North Administration Building (2A), Room 407.

Transfer Students

Follow the application steps listed above to apply for federal and state financial aid. If you are currently receiving financial aid at another college or university, call the Federal Student Aid Information Center at 1.800.433.3243 and request a duplicate SAR (Student Aid Report). Submit this SAR to the Student Financial Aid Office and request that a TAP change form be sent to you.

Priority Deadlines

The priority deadline is March 30 for students applying for federal and state financial aid for the summer/fall and spring semesters and November 30 for students applying for federal and state financial aid for the spring semester.

Withdrawing from Courses May Affect Your Financial Aid

There are immediate and long-term financial aid consequences when you begin a semester and later withdraw from some or all courses. Review the Federal Satisfactory Academic Progress Guidelines and the TAP/APTS Progress-Pursuit Chart, both of which follow this section, to learn more about the academic side of financial aid.

Special Information for Recipients of Federal Student Financial Assistance

Students who withdraw from all classes, either officially or unofficially, will have their records reviewed to determine if the federal aid disbursed to them exceeds the amount they were entitled to receive. Overpayments will be billed to the student. Failure to repay these overpayments within 30 days will result in the College withholding all academic privileges, and the overpayment will be reported to the National Student Loan Data System (NSLDS). This system will withhold all future federal aid until the overpayment is resolved.

Some Financial Aid is Taxable

Federal tax regulations now require that students report some grants, scholarships, and fellowships to the Internal Revenue Service as taxable income. In addition, Federal Work Study wages are taxable. Recipients of funds from these sources are strongly urged to consult their tax advisor or the Internal Revenue Service to determine the impact of such grants on their personal tax circumstances. All students are urged to maintain accurate records of financial aid received and receipts for expenses related to attendance at college, such as books, supplies, tuition, and fees.

Federal Satisfactory Academic Progress

In order to make satisfactory academic progress toward a degree, for purposes of receipt of Title IV Federal Student Assistance, an undergraduate student must achieve at least the GPA required for probationary status at the institution: after two years of enrollment at the college, have at least a C average, or its equivalent, or academic standing consistent with the requirements for graduation; and have accumulated credits toward the degree according to the following standards:
Federal Financial Aid

Eligibility: To be eligible for any of the federal financial aid programs, a student must:
1. be a U.S. citizen, or
2. be an eligible non-citizen, and
3. be matriculated, and
4. take at least six equated credits a semester, unless otherwise noted below, and
5. not be in default of a Federal Loan (Perkins, Stafford or Direct Loan) or have completed the required process to obtain “Renewed Eligibility” and
6. not owe a refund on any Title IV Grant, and
7. be making satisfactory progress toward a degree, and
8. provide proof of high school graduation or its equivalent.

Federal Programs

Federal PELL Grant Program: For eligible students, the grant will vary depending on whether the student is less than half-time, half-time, three-quarter time, or full-time. A student must be an undergraduate who has not already earned a bachelor’s degree. A student receives half of the Federal Pell Grant in the fall semester and half in the spring semester. College seniors who will graduate at the end of the fall semester are eligible to have their first disbursement of a Federal Pell Grant in the summer and the last disbursement in the fall, provided the student notifies the Financial Aid Office in writing so the proper arrangements can be made. Students who received only one semester of Federal Pell Grant for a particular academic year (fall-spring period) may have the last disbursement made to them for the summer term following the academic year of readmission and will be evaluated for future eligibility at the end of the spring term against the appropriate standard for the degree program in which the student is enrolled. If a student is readmitted after less than one year of non-enrollment, the academic record will be evaluated for satisfactory academic progress under these standards as the record stood at the end of the last term of attendance.

Eligibility and appeals: Undergraduate students who fall below the conditional standard may appeal through the Registrar's Office to retain eligibility for receipt of Title IV federal student assistance. There is no limit to the number of times a student may appeal.

Transfer Students: Students who transferred after the end of the academic year of readmission during the academic year of readmission and will be evaluated for future eligibility at the end of the spring term. If the standards in 1. and 2. are not met, eligibility may be retained by meeting conditional standards.

Federal Perkins Loan Program:
- For baccalaureate programs, accumulated credits are equal to or greater than [(cumulative credits attempted) - 18] or for associate degree programs, accumulated credits equal to or greater than [(875 credits attempted) - 21]. Students will be measured against the satisfactory progress standard at the end of the spring term to determine eligibility for receipt of Title IV student financial assistance for the upcoming year.

Federal Supplemental Educational Opportunity Grant Program:
- Grants are targeted to Federal Pell Grant recipients.
- Students who already have a bachelor's degree are ineligible.
- Federal Work-Study Program: This program provides on- and off-campus employment opportunities for needy students. At the time this catalog was written, on-campus wage rates were $7.00 per hour for undergraduate and $9.00 per hour for graduate students. Work schedules are developed around a student’s class schedule and the average work schedule consists of ten hours per week. A student pursuing a second undergraduate degree is not precluded from the Federal Work-Study Program.

Federal Direct Loan: The elements listed below are common to all the Federal Direct Loan programs unless otherwise noted.
1. The applications may be obtained from the Financial Aid Office or at a Federal Direct Pre-loan session, for first-time borrowers.
2. Promissory notes must be completed, signed, and returned to the processor before any loan funds are credited to the tuition bill or disbursed to the student.
3. These are loans and must be repaid.
4. For the first loan, a pre-loan interview is required. This can be done on the Web, at www.ed.gov/offices/OPE/DirectLoan/. Students may also attend one of our workshops.
5. Prior to graduation, transferring to another college, leaving this College for any reason, or taking fewer than six equated credits a term, students must request an Exit Interview.
6. Students must immediately notify the Financial Aid Office and the Federal Direct Loan Service if their address changes.
7. If the College is notified that a student has defaulted on a loan, all College services will be withheld.

Federal Direct Subsidized Loans: FAFSA data must be received before a Federal Direct Loan can be processed. Undergraduate students who:
1. have not completed the freshman year may borrow $2,625 annually, not to exceed need (independent students may borrow up to an additional $4,000 in unsubsidized funds);
2. are in their sophomore year may borrow $3,500 annually, not to exceed need (independent students may borrow up to an additional $4,000 in unsubsidized funds);
3. are in their junior or senior year may borrow $5,500 annually, not to exceed need (independent students may borrow up to an additional $5,000 in unsubsidized funds);
4. the aggregate undergraduate loan limit is $23,000.

Federal Direct Unsubsidized Loans: A student applicant must establish his/her eligibility or ineligibility for the Federal Direct Subsidized Loan before applying for the Federal Direct Unsubsidized Loan. A student may borrow an Unsubsidized Loan, using the same schedule listed under Federal Direct Subsidized Loans, in the amount he/she was ineligible to receive as a Federal Direct Subsidized Loan. For example, a student borrower who has not completed his/her first year and has been determined to be eligible for $1,500 under the Federal Direct Subsidized Loan may borrow the remaining $1,125 from the Federal Direct Unsubsidized Loan if the College budget permits. The difference between these programs is that no interest is due on the Federal Direct Subsidized Loan while the student remains in college in an eligible status. The student pays the interest on the Federal Direct Unsubsidized Loan from the day the loan is disbursed. The student may either pay the interest while in school or capitalize the interest, adding it to the principal each month.

The maximum yearly amount a student can borrow for Federal Direct Subsidized and Direct Unsubsidized Stafford Loans is:

<table>
<thead>
<tr>
<th></th>
<th>Dependent Student</th>
<th>Independent Student</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st-year undergraduate</td>
<td>$2,625</td>
<td>$6,625</td>
</tr>
<tr>
<td>2nd-year undergraduate</td>
<td>$3,500</td>
<td>$7,500</td>
</tr>
<tr>
<td>3rd- &amp; 4th-year undergraduate</td>
<td>$5,500</td>
<td>$10,500</td>
</tr>
</tbody>
</table>

Federal Direct PLUS Loans: Parents of dependent students can borrow Federal Direct PLUS Loans to pay for their children’s education. To apply, the students’ parents must complete a separate application available at the Office of Student Financial Aid. Before receiving any loan funds, parents will receive promissory notes that must be completed, endorsed, and returned to the processor. The College will verify that the student for whom the parent is borrowing the money meets all applicable loan requirements. Parents are not required to attend a Pre-loan or Exit Interview.

Federal Aid to Native Americans: For information regarding this program, interested students should contact the Office of Student Financial Aid.

New York State Programs

The State of New York offers a number of grant programs that provide assistance to eligible students. To apply, the student must complete the Free Application for Federal Student Aid (FAFSA), which is available at the Office of Student Financial Aid. In addition, the student must complete the TAP/APTS Application and SUNY Supplement, which will be mailed to the student once the FAFSA data has been received by the University. The criteria listed below are common to all State Aid programs listed unless otherwise noted.

A student should:
1. be a New York State resident for the year preceding the award, and
2. be a U.S. citizen or permanent resident alien or paroled refugee, and
3. be a matriculated student, and
4. meet the TAP Progress and Pursuit guidelines, and
5. not be in default on a Federal Loan or if in default, have completed the required process to obtain “Renewed Eligibility,” and
6. be economically eligible based on current New York State criteria.
Tuition Assistance Program (TAP): This program is designed to provide tuition grants for full-time students. These grants are awarded by the New York State Higher Education Services Corporation. Students must meet the TAP Progress and Pursuit guidelines prior to the start of each term. These guidelines are also published in the Schedule of Classes each semester.

If a student does not meet either the Progress or Pursuit standard(s), he/she loses his/her TAP eligibility. The Registrar will notify a student if he/she fails to meet these standards and outline how he/she may apply for a waiver. The Committee on Course and Standing reviews all appeals. Only one waiver may be issued during a student’s undergraduate years.

Conditions/Restrictions for the waiver are:

1. Student must have a good overall record with academic difficulties concentrated in one term.
2. The appeal must be based on circumstances outside the College, such as a car accident or an eviction.
3. The reason must be extenuating, extraordinary, or unusual. Normal family responsibilities, work, and fear of failing a class do not meet this standard.
4. The student must provide documentation to support the waiver request.

TAP will not pay for a student to repeat a course to get a better passing grade unless the College requires that the course be repeated. Students who take several remedial courses that carry no credits must make sure that they also take at least three degree credits for their first TAP and six degree credits for all other TAP awards. See the TAP/APTS Progress-Pursuit Chart to determine the number of degree credits that must be accumulated before a TAP/APTS award can be credited to the tuition bill.

Aid for Part-Time Study (APTS): Undergraduate students enrolled for at least six but not more than 11 equated credits are considered for this award at CUNY. Notification is first provided on the semester bill as a credit against the tuition charge. The award is determined each semester and may vary from semester to semester, based on usage throughout the entire University. This award uses up a portion of a student’s TAP eligibility.

Part-Time TAP: At the time this Catalog was written, New York State had not yet decided to fund the Part-Time TAP program for CUNY for 2003-2004. If funding is approved, for this program a part-time student is defined as one who:
1. is enrolled as a first-time freshman during the 1998-99 academic year or thereafter at CUNY, and
2. has earned at least 24 credits at CUNY by the time of the award, and
3. has a cumulative grade point average of at least 2.00, and
4. is enrolled for at least six but less than 12 credits per semester.

Awards will be calculated as a percentage of the full-time award for which the student would be eligible if enrolled full-time.

Vietnam Veteran Tuition Awards: Vietnam Veterans Tuition Awards provide up to $500 per semester (full-time attendance) or $250 per semester (part-time attendance) to Vietnam veterans enrolled in an undergraduate program at a degree-granting institution in New York State.
Eligibility:
1. residency in New York State on April 20, 1984, or at the time of entry into service and resumption of residency by September 1, 1987;
2. service in the U.S. Armed Forces in Indochina between January 1, 1963 and May 7, 1975;
3. discharge from the U.S. Armed Forces under other than dishonorable conditions;
4. enrolled in an approved undergraduate program in a degree-granting institution in New York State;
5. files an application for TAP and PELL.

If a TAP award is also received, the combined awards can be no greater than tuition. Where the combined awards exceed tuition, the TAP award will be reduced accordingly.

Search for Education, Elevation, and Knowledge (SEEK): Students wishing to enter the SEEK program must meet family income and academic guidelines. When filling out the application for admission, the student should indicate a desire to enter the SEEK program. Applicants will be contacted by the College’s SEEK Office and invited to a SEEK financial aid workshop where the SEEK program will be explained in detail. At this workshop, applicants will be guided through the financial aid applications and asked to supply required documentation. Financial aid reserved for students in the SEEK program is in the form of grants for stipends, to purchase books, and to pay the student activity fee. To be eligible for the SEEK financial aid, the student must apply for PELL using the Free Application for Federal Student Aid form (FAFSA) and TAP using the TAP/APTS Application and CUNY Supplement.

Other New York State Programs: Regents Nursing Scholarship, Regents Award for Children of Deceased or Disabled Veterans, State Aid to Native Americans. Information on these programs is available from the New York State Higher Education Services Corporation, 99 Washington Avenue, Albany, NY 12255.
### TAP/APTS PROGRESS-PURSUIT CHART

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| 2) To Meet Program Pursuit Standards, a student must have completed this percentage of course 120% eq. cr. if full-time, or this percentage of entire course load if part-time |
|---------------------------------------------------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|                                                                                | 0       | 50%     | 50%     | 75%     | 75%     | 100%    | 100%    | 100%    | 100%    |

| 3) To Meet Academic Progress Guidelines, a student must have accrued at least this many credits |
|-------------------------------------------------------------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|                                                                                                  | 0      | 0      | 6      | 18     | 31     | 45     | 60     | 75     | 90     | 105    |

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<th>4) With at least this Grade Point Average</th>
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*Students in Associate’s Degree programs must have a 2.0 grade point average at the point of graduation.

**A student who has received two academic years of State-funded financial aid including TAP (four semesters/payments) must have a cumulative C average (GPA=2.00) in order to continue to receive payments.
New York City Program

Peter F. Vallone Academic Scholarship: Funding for this scholarship is dependent each year on continued funding in the New York City budget.

To receive a Peter F. Vallone Academic Scholarship students must:
1. Have a high school college academic average of B or above, and
2. file the FAFSA each year; and
3. enroll initially in CUNY within 12 months of high school graduation, and
4. once enrolled, maintain continuous full-time (12 credits or more) enrollment in CUNY, excluding summer; and
5. in the first semester, enroll and attend classes for 12 credits of which six credits must meet the requirements of the degree, and
6. in the second and all subsequent semesters, enroll and attend classes for at least 12 credits that count toward the degree, and
7. maintain at least a 3.0 cumulative average.

Appeals process: Students who wish to file an appeal may do so at the Office of the Vice President for Student Affairs in the South Administration Building (1A), Room 301.

Payment process: Peter F. Vallone Academic Scholarships are used as a credit against students’ tuition and fee charges. If any/all of the award remains after these charges are satisfied, the balance will be paid by check to the student through the University Financial Aid Payroll System.

Award Renewal Process: To renew the Peter F. Vallone Academic Scholarship, the student must file a Renewal FAFSA each spring by the priority deadline of March 31. CSI encourages all students to use their Federal PIN number to file on the Web. Students may call 1.877.423.2601 to obtain an appointment in the Financial Aid Student Service Center in the North Administration Building (2A), Room 407, or may access the FAFSA Application Website at www.fafsa.ed.gov. Students who wish to file a paper FAFSA may do so.
Scholarship Committee  
Office of Career Placement, Scholarships, and Awards  
South Administration Building (1A), Room 105

The scholarship program at the College of Staten Island recognizes academic excellence and college or community service. In addition to scholarships offered directly by the College, the CSI Foundation, and departments and associations of the College, memorial scholarships have been endowed through the generosity of many individuals and organizations who value higher education. Scholarships support, in varying ways, the education of the men and women of our community.

Eligibility: General Standards

Scholarship awards generally require a minimum grade point average of 3.5. College and/or community service is also generally required. Financial need is required only when indicated. Scholarships are awarded to students enrolled for 12 or more credits at all levels of study—first-year students, sophomores, juniors, seniors. Some scholarships may be available for part-time undergraduate and graduate students.

Requirements

Registered for at least 12 credits (matriculated), with the exception of a few specialized scholarships for part-time and graduate students.  
Academic excellence (GPA 3.5 or above).  
School and/or community service.  
Incoming students: high school average of 90% or above.

Relationship to Financial Aid

In most instances, scholarship awards do not affect TAP awards. New York State TAP regulations require that tuition-based scholarships be used as a resource in determining eligibility for a TAP award. Because most of the awards offered by CSI are not designated as tuition scholarships, they will have no affect on TAP awards. Only awards specifically designated as tuition awards, such as the Williamson Scholarship, affect eligibility for TAP. Students who wish additional information on the relationship between these awards and financial aid should be in touch with the Office of Student Financial Assistance.

How to Apply

Scholarship applicants must be current students at the College of Staten Island or must have applied for admission. Application forms and information about scholarships are available from the Office of Career Placement, Scholarships, and Awards and from department and student services offices. In the high schools, application forms are available from the College Adviser.

Notification to Recipients

Applicants are notified by the Scholarship Committee. An awards presentation ceremony brings together award recipients with donors who have made the awards possible.

Other Awards

Study Abroad: Scholarships and awards for study abroad are available through the Center for International Service. CSI students are also eligible for Study/Travel Opportunities for CUNY Students grants, a CUNY program promoting short-term (summer or January intersession) study abroad, and for scholarships offered by the College Consortium for International Studies. Information is available from the Center for International Service.

Graduate Students: Assistance is available in the form of financial aid and assistantships to selected students in master's degree programs: Adult Health Nursing, Biology, Cinema Studies, Computer Science, Education, English, Environmental Science, History, Liberal Studies, Physical Therapy. Graduate fellowships and assistantships are available to qualified students enrolled in doctoral programs offered in conjunction with the Graduate School. See the department chairperson or the graduate program coordinator for further information.

Commencement Awards: Awards and prizes have been established by the faculty to recognize the exceptional achievements of graduating students. Information on commencement awards is available from the Office of the Vice President for Student Affairs and from department chairpersons.
Divisions and Departments

Interrelationships between fields of knowledge are emphasized by grouping academic departments together within the larger categories of humanities and social sciences or science and technology. The Division of Humanities and Social Sciences includes the following departments: Business; Education; English, Speech, and World Literature; History; Media Culture; Modern Languages; Performing and Creative Arts; Political Science, Economics, and Philosophy; Psychology; and Sociology, Anthropology, and Social Work. The Division of Science and Technology includes the following departments: Biology, Chemistry, Computer Science, Engineering Science and Physics, Mathematics, and Nursing.

Offices of the division deans are located in the South Administration Building (1A): Acting Dean Francisco Soto, Division of Humanities and Social Sciences, and Dean José Torres, Division of Science and Technology; Offices of department chairpersons and faculty are located in department buildings.

Department of Biology

Biological Sciences/Chemical Sciences Building (6S) - South Academic Quadrangle
Jacqueline LeBlanc, Chairperson and Professor

The department offers the Bachelor’s degree in Biology, Biology with an option in Bioinformatics, and in Physician Assistant; a combined Bachelor of Science/Master of Science degree in Physical Therapy; a Master of Science degree in Biology; and the Associate’s degree in Medical Laboratory Technology. The department participates in the joint program for the Bachelor’s degree in Biochemistry and a minor in Biochemistry, and in the interdisciplinary program leading to the Bachelor’s degree in Medical Technology. The department participates in the University's Doctoral program in Biology (subprogram in Neuroscience). The Medical Technology program utilizes hospital affiliations accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS); the Physician Assistant program is accredited by the Commission on Accreditation of Allied Health Education; and the Physical Therapy program is accredited by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association.

The BS/MS program in Physical Therapy is coordinated by Professor Jeffrey Rothman. The MS program in Biology is coordinated by Assistant Professor Richard Veit. Associate Professor Elena C. McCoy serves as chair of the advisory committee for pre-medicine students.

Department of Business

Business Building (3N) - North Academic Quadrangle
Laura S. Nowak, Chairperson and Professor

The department offers the Bachelor of Science degree in Accounting and in Business with concentrations in Finance, International Business, Management, and Marketing; and the Bachelor of Science degree in Information Systems in collaboration with the Department of Computer Science. In cooperation with the Economics faculty, a Business Concentration is offered within the Bachelor's degree program in Economics. The BS degree program in Accounting prepares students for careers in accounting and advanced study toward the CPA examination. The CPA track is New York State accredited, permitting graduates entry to the examination. The associate’s degree is offered with options in Accounting, Finance, Information Systems, International Business, Management, and Marketing. Graduates with an AS degree may enter the job market directly or continue to study toward the bachelor's degree, and should consult an adviser and plan their programs accordingly.

Department of Chemistry

Biological Sciences/Chemical Sciences Building (6S) - South Academic Quadrangle
John Olsen, Chairperson and Associate Professor
Distinguished Professor: Fred R. Naider

The department offers the Bachelor's degree in Chemistry and participates in the joint program leading to the Bachelor's degree in
Biochemistry. Minors are offered in Chemistry and Biochemistry. The department also participates in the interdisciplinary program leading to
the Bachelor's degree in Medical Technology. The University’s Doctoral program in Polymer Chemistry is coordinated by Professor Nan-Loh
Yang.

Department of Computer Science

Computer Science/Engineering Science and Physics Building (1N) - North Academic Quadrangle
Emile Chi, Chairperson and Associate Professor
Professors: Syed A. Ahamed, Bernard Domsanski, Charles Giardina, Michael Kress, Robert Orchard, Mohamed Yousef. Associate Professors:
Natacha Gueorguieva, John Owens, Herbert Schanker, Deborah Sturm, Miriam Taunser. Assistant Professors: Xien Fan, Anatoly Gordonov,
College Lab Technician: Chang Guo. College Lab Technician: Orit Gruber.

The department offers programs leading to the Bachelor's and Master's degrees in Computer Science. The Bachelor’s degree in Computer
Science/Mathematics is offered jointly with the Department of Mathematics; the Bachelor's degree in Information Systems is offered jointly
with the Department of Business; and the department participates in the University doctoral program. Baccalaureate students majoring in
other disciplines may also minor in Computer Science. The department offers an Associate’s degree program in Computer Technology that
provides sound career preparation as well as a solid foundation for continued study in the field. Faculty in the department participate with
the Interdisciplinary Coordinating Committee for the Associate in Applied Science degree program in Electrical Engineering Technology. The
bachelor's degree program is accredited by the Computer Science Accreditation Commission (CSAC) of the Computing Sciences Accreditation
Board, Inc. Associate Professor Miriam Taunser is coordinator of the master’s degree program.

Department of Education

Education Building (3S) - South Academic Quadrangle
Susan Sullivan, Chairperson and Associate Professor
Professors: Igor Arievitch, David M. Poddell. Associate Professors: Deborah DeSimone, Eileen Donoghue, Kenneth Gold, Theodore Polito, Effie
P.M. Simmonds. Assistant Professors: Margaret E. Berci, Amy Z. Davies, Janine Kaste, Judit Kerekes, Jinyoung Kim, David Kritt, Peter Morgan,

The department provides initial preparation and graduate programs for teaching at the preschool level and in elementary and secondary
schools, and graduate programs in Childhood Education, Adolescence Education, Special Education, and Education Supervision and
Administration.

Graduate program coordinators are Assistant Professor Gregory Seals for the Master's degree program in Childhood Education, Associate
Professor Eileen Donoghue for the Master's degree program in Adolescence Education; Assistant Professor Eleni Tournaki for the Master's
degree program in Special Education, and Assistant Professor Ruth Silverberg for the Sixth-Year Certificate Program in Education Supervision
and Administration.

Department of Engineering Science and Physics

Computer Science/Engineering Science and Physics Building (1N) - North Academic Quadrangle
Syed A. Rizvi, Chairperson and Associate Professor
Professors: Vijendra Agarwal, Norbert Chencinski, Erlan H. Feria, Anshel Gorokhovsky, Alfred M. Levine, William Monaghan, Elliot Rothkopf,
William Schreiber, José Torres. Associate Professors: Satyaprakash Das, James M. Hladek, Chang-Min Kim, Anatoly Kulkov; Ebenezer Okeere,
Irving K. Robbins, Leonard Winkler. Assistant Professor: Anderson A. Olah. Chief College Lab Technician: Alan Benimoff. Senior College Lab
Technicians: Tracy J. Campbell, Keith Rowan, Ruben Velasquez. College Lab Technician: Jacqueline Figueroa.

The department offers programs leading to the Bachelor’s degrees in Engineering Science and in Physics and participates in the
University Doctoral program in Physics. The Associate’s degree is offered in Engineering Science and faculty in the department participate with
the Interdisciplinary Coordinating Committee for the Associate in Applied Science degree program in Electrical Engineering Technology.
Courses in astronomy, geology, and integrated science are offered by the department, and faculty in the department direct the programs and
research at the Astrophysical Observatory. The BS in Engineering Science is accredited by the Engineering Accreditation Commission of the
Accreditation Board for Engineering and Technology (ABET), and the engineering technology programs are accredited by the Technology
Accrediting Commission of ABET. The interdisciplinary Master's degree program in Environmental Science is coordinated by Professor Alfred
Levine.

Department of English, Speech, and World Literature

English, Speech, and World Literature/Modern Languages Building (2S) - South Academic Quadrangle
Arnold Kantrowitz, Chairperson and Professor
Associate Professors: Charlotte Alexander, William Bernhardt, Fahamisha Brown, Margery M. Comwell, Mui-Fong Dudley, David Falk, Stephan
The department offers the Bachelor's degree in English, with options in Literature, Writing, and Linguistics; and the master's degree. The department offers non-credit courses in reading and writing for both native and non-native speakers of English. A general course of study provides students in career programs and in baccalaureate programs with essentials in the important areas of writing and literature. A more advanced series of courses is available for students interested in obtaining a deeper and broader understanding of the discipline, including those students who will pursue English as a major. Students with majors in other disciplines may minor in English, or English with a literature, linguistics, or writing option. The department offers a program in Communications jointly with the faculty of the Department of Media Culture and programs in Dramatic Arts and Dramatic Literature jointly with faculty of the Department of Performing and Creative Arts. The master's degree program is coordinated by Professor Richard Currie.

Department of History

History/Political Science, Economics, and Philosophy Building (2N) - North Academic Quadrangle
Howard Weiner, Chairperson and Associate Professor

The department offers a Bachelor's degree and a Master's degree in History. Its courses combine the traditional function of the scholarly examination of the past for its value in general education with the utilitarian concern for preparing students with the basic skills to enable them to live more meaningfully. It seeks to train future historians, to update the teaching of history by secondary school teachers, and to provide opportunities for lifelong education. History may also be taken as a minor. Associate Professor Richard Lufrano coordinates the Master's degree program in History and Professor David Traboulay coordinates the interdisciplinary Master's degree program in Liberal Studies.

Department of the Library

Library (1L) - South Academic Quadrangle
Wilma L. Jones, Acting Chief Librarian and Associate Professor

The Library supports the entire range of academic programs at the College through its collections, periodical subscriptions, and microforms. Computer facilities for database searching provide access to City University and national catalogs. The Library's own resources are supplemented by an array of modern networking arrangements at regional, state, and national levels. The Library is the center for the implementation of multimedia programs in pedagogy.

Department of Mathematics

Mathematics Building (1S) - South Academic Quadrangle
Arundhati Raychaudhuri, Chairperson and Professor

The department offers the Bachelor of Science degree in Mathematics and the Bachelor of Science degree in Computer Science-Mathematics jointly with the Department of Computer Science. A minor in Mathematics is available for students with majors in other disciplines.

Department of Media Culture

Center for the Arts (1P)
Edward Miller, Chairperson and Assistant Professor

The department offers the Bachelor's degrees in Cinema Studies and Communications and a Master's degree program in Cinema Studies. Programs in this department focus on the principles of media, interactions with the media, and the cultures dependent upon communications technologies. The department serves students interested in the history and theory of film and various electronic and
computer-related media and in producing work with these media. The program in Communications is offered in collaboration with the Department of English. A minor is also awarded in the baccalaureate programs. The Master's degree program in Cinema Studies is coordinated by Assistant Professor David Gerstner.

**Department of Modern Languages**

English, Speech, World Literature/Modern Languages Building (2S) - South Academic Quadrangle
Kathryn M. Talarico, Chairperson and Professor

The department offers the Bachelor's degree in Spanish and courses in French and Italian. Minors in these languages are also offered. Courses in American Sign Language are under the aegis of the department. In addition to mastery of the language, through classroom and language laboratory work, the literature, culture, and history of the countries are studied.

**Department of Nursing**

Marcus Hall (5S) - South Academic Quadrangle
Linda Reese, Chairperson and Associate Professor

The department offers an upper-division program leading to the Bachelor of Science degree in Nursing and a Master of Science degree program in Adult Health Nursing. The department also offers an associate's degree program that prepares students for the New York State Board of Nursing Examination for license as a Registered Nurse. The associate's and bachelor's degree programs are accredited by the National League for Nursing Accrediting Commission, 61 Broadway, New York, NY 10006, 1.212.363.5555, and all programs hold New York State Certification. Health education courses and courses fulfilling the Physical Education requirement are offered by this department. Assistant Professor Roberta Cavendish serves as co-chair of the pre-medicine advisory committee. Professor Margaret Lunney is coordinator of the Master's program in Adult Health Nursing.

**Department of Performing and Creative Arts**

Center for the Arts (1P)
Chairperson and Associate Professor Sylvia Kahan

The department offers Bachelor's degrees in Art, Dramatic Arts, and Music; a concentration in Photography with the Art major; a concentration in Electrical Technology with the BS in Music; and a Dramatic Literature concentration jointly with the Department of English. Students may minor in Art, Dance, Dramatic Arts, and Music; a program for Psychology majors interested in dance therapy provides for a minor in Dance.

The department serves the needs of students who wish to pursue both the practice and the theory of the arts. In addition to preparing students majoring in the arts and those planning to continue in graduate school, the department's courses meet the needs and interests of students in the liberal arts and sciences and in career programs, and foster the role of the arts within the framework of a liberal education.

**Department of Political Science, Economics, and Philosophy**

History/Political Science, Economics, and Philosophy Building (2N) - North Academic Quadrangle
Vasilios Petratos, Chairperson and Associate Professor
Professors: Samuel Schwarz, Peter Simpson. Associate Professors: Deborah Popper, Michaela Richter, Ming Xia. Assistant Professors: Richard Flanagan, Yale Meltzer, John U. Osakue, Simone Wegge, Mark D. White. Lecturer: Jonathan McFall.

The department offers Bachelor's degrees in Economics, Political Science, and Philosophy; and it offers Bachelor's degree programs in Economics with a Business specialization and a Finance specialization jointly with the Department of Business. A dual major is offered in Philosophy and Political Science. Minors are offered in Economics, Philosophy, Political Science, and Public Administration; and geography and legal studies courses are offered by this department. Courses meet the needs of students in a variety of programs in the liberal arts and sciences, and the department's programs provide a solid background for a number of careers as well as for graduate or professional school. Professor Emeritus Larry Nachman and Assistant Professor Richard Flanagan serve as advisers to students planning to apply to law school.
Department of Psychology

Psychology/Sociology, Anthropology, and Social Work Building (4S) - South Academic Quadrangle
Wallace Orlowsky, Chairperson and Associate Professor

The department offers the Bachelor's degree and a minor in Psychology. Students interested in dance therapy may minor in a program offered with the Department of Performing and Creative Arts. The department also participates in the College's Master's program in Neuroscience.

Department of Sociology, Anthropology, and Social Work

Psychology/Sociology, Anthropology, and Social Work Building (4S) - South Academic Quadrangle
Sheying Chen, Chairperson and Professor
Professors: Roslyn W. Bologh, David Goode, Sonia Ragir, Gerald Sider. Associate Professors: Sondra Brandler, Thomas Bucaro, Kate Crehan, Clara Melman, Phil Sigler. Assistant Professors: Stefano M. Harney, Lisa J. Moore, Maria Vouyouka-Sereti.

The department offers a combined Bachelor's degree in Sociology/Anthropology, and the Bachelor's degree in Social Work. A minor is offered in Sociology. The department also participates in interdisciplinary major/minors in Disability Studies; Liberal Studies (MA); Science, Letters, and Society; and Women's Studies.

Department of Student Services

South Administration Building (1A)
Carol Jackson, Chairperson, Professor, and Vice President for Student Affairs
Professors: Ivan Smodlaka, Roberta B. Vogel. Assistant Professors: David Campbell, Gloria Garcia.

The department offers courses in new student orientation, career development, and personal growth and development. The SEEK Program and Counseling Center are located in the South Administration Building.
Division of Student Affairs
Vice President Carol Jackson, South Administration Building (1A), Room 301
Associate Dean, Michael R. Daniels

The Division of Student Affairs is concerned with all aspects of student life at the College and provides a comprehensive program of support services that includes orientation, counseling, career development, job placement, and the SEEK program. The Division coordinates student recruitment and admissions, student activities, services for disabled students, the CLUE program, pluralism and diversity programming, the scholarship and student awards programs, health services, intercollegiate and intramural sports, and the Commencement exercises. Management of the Sports and Recreation Center and the Campus Center are under the auspices of the Division. The Department of Student Services offers courses in Issues in College Life, Career Development, and Personal Growth and Development, and internships.

Campus Center

The Campus Center is the focal point of extra- and co-curricular student life. It houses the Office of Student Life, the CSI Student Government, student clubs, student publications, the CSI Association Inc., and the Auxiliary Services Corporation. Such services as the Bookstore, Cafeteria, Park Café, the College Health Center, the Wellness Program, and the Peer Drop-in Center are located in the Campus Center. Lounges for entertainment and studying, a computer lab, a video game room, conference and meeting rooms, and locker rentals are available for student use. WSIA-FM (88.9) broadcasts from the Campus Center. Questions regarding use of facilities and locker rentals may be directed to the Campus Center, Room 201. The telephone number is 1.718.982.3071.

Career Placement, Scholarships, and Awards

The Office provides current students and graduates with career, internship, and placement services such as résumé referral, job fairs, the Mentor Program, the Senior Employment Referral Program, on-campus interviews, and a computer database of full- and part-time jobs, internships, and fellowships. Help is available for organizing job search campaigns, preparing résumés and cover letters, and improving interview skills. Seniors may maintain a dossier file for job referrals at the Office.

Career-related workshops are given throughout the year, and the Office maintains a library of company literature, magazines, and videotapes. The placement Webpage allows students to explore Internet links for employment opportunities with the capability of uploading résumés for employer review.

The Office staff assists with applications and preparation for fellowships, scholarships, and awards, and with writing personal essays and mission statements.

Children’s Center

The Children’s Center is sponsored by the CSI Association and provides educational childcare services for students who may be attending classes, working, participating in other school-related activities, or who need personal time. The programs for infants/toddlers and preschool children are licensed by the Bureau of Day Care of the NYC Department of Health and Mental Hygiene. The program for school-age children is registered with the School Age Division of the NYS Office of Children and Family Services. The Center is funded through the student activity fee; city, state, and federal grant money; and parent fees. The Center is located in Building 2R, adjacent to the Sports and Recreation Center Building, and the telephone number is 1.718.982.3190.

Clubs, Organizations, and Publications

The CSI Student Government and the Office of Student Life charter and recognize student clubs, organizations, and publications. Any group of students with a common interest may request a charter for a student club, organization, or publication from the Student Government Office, and students may join any of the existing groups that receive a charter each year. Members of clubs associate around a broad range of interests and identifications. Approximately 40 clubs are organized by student groups with common interests rising out of academic studies, social commitments, or personal values. Sports-related clubs file for a charter initially with Student Government before applying for funding from the Intramural and Recreation Program. The telephone number is 1.718.982.3088.

College of Staten Island Association, Inc.

The College of Staten Island Association, Inc. is a non-profit corporation that administers the student activity fee. The Association is governed by a board of directors comprised of six students, three administrators, three faculty, and the President or designee. The Association allocates designated portions of the fee, traditionally applied to graduation exercises, intercollegiate athletics, intramural programs, the Children’s Center, Health and Wellness, WSIA, and the Program Development Committee.

Counseling Services

Comprehensive academic and personal counseling services are provided by professionally trained counselors to help students achieve
academic success. In individual or group sessions, students are assisted in improving their study skills, choosing a curriculum compatible with their interests and career goals, and handling problems that impede their progress toward a degree. Career counseling services help students to gain a better understanding of themselves, their career options, and the world of work. Individual counseling may include testing and other assessment techniques. Information and counseling in preparation for graduate and professional schools is also provided by counselors. The office maintains a library of information on careers and job market resources.

Disability Services

The Office of Disability Services has responsibility for providing services for students with a documented disability. All documentation is kept confidential and should be submitted directly to the Office. Services include pre-admissions counseling and accessibility information, advisement, priority registration, and testing accommodations. Software for tutorial programs, personal computers, scientific calculators, tape recorders, and a Braille writer are available. The Resource Center for the Deaf serves the specific needs of deaf and hard of hearing students by providing interpreters, tutors, and notetakers. Interpreters are available for academic advisement, teacher conferences, or College business. The College's policy for students with disabilities conforms to federal guidelines and the Office offers services mandated by federal and state law. All students with disabilities are encouraged to use the services of the Office. Services are available also to students who are temporarily disabled. The Office is located in the Center for the Arts, Room 101.

Health Services

The College Health Center, located on the main floor of the Campus Center, Room 112, is staffed by part-time nurse practitioners (funded by the student activity fee) in collaboration with Staten Island University Hospital and College personnel. Nurse Practitioners and a full-time Registered Nurse are available for College physicals, emergency care, consultations, immunizations, smoking cessation, HIV/AIDS counseling and testing, contraception and pregnancy counseling, and other services. The telephone is 1.718.982.3045; TTY 1.718.982.3315.

Intercollegiate and Intramural Athletics

CSI fields women's and men's teams in competition throughout the East Coast, primarily in the New York/New Jersey metropolitan area. Team and individual sports include baseball, basketball, soccer, softball, swimming, tennis, and volleyball. The College is a member of the National Collegiate Athletic Association (NCAA Division III), the Eastern College Athletic Conference (ECAC), and the City University of New York Athletic Conference (CUNYAC). The intercollegiate athletic program is supported by funding from the CSI Association.

To be eligible for intercollegiate competition, a student must be matriculated as a full-time student. The following criteria must also be met:
1. Proof of good health: physician's examination and review by CSI medical staff;
2. Academic qualification:

<table>
<thead>
<tr>
<th>Credits Attempted</th>
<th>Minimum Cumulative GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-12</td>
<td>1.50</td>
</tr>
<tr>
<td>13-24</td>
<td>1.75</td>
</tr>
<tr>
<td>25-graduation</td>
<td>2.00</td>
</tr>
</tbody>
</table>
3. Maintenance of satisfactory progress toward completion of a bachelor's degree.

The recreation and intramural sports program provides opportunities for all students to participate in individual and team sports, including competitive, non-competitive, and recreational.

Liberty Partnerships Program

The program is a collaborative effort of the College and the Staten Island Branch of the New York Urban League, the local school district, and community-based organizations and individuals that provides a broad range of educational and social services for high school and junior high school students who are at risk of dropping out of school.

Ombudsperson

Reporting to the Vice President for Student Affairs, the Ombudsperson is authorized to investigate student concerns and to make recommendations regarding the outcome of those investigations. The Ombudsperson, available to all students enrolled at the College, is a source of information about College policies and procedures and, in certain situations, will provide mediation and advocacy services. Students may be advised to visit other College offices to file official student concerns as well.

The Ombudsperson helps students to develop positive strategies to resolve problems and conflicts and acts as a neutral party to hear any type of student concern or dispute related to the College.

The Office deals with academic matters such as grade appeals, accusations of cheating and plagiarism, faculty/student disputes, and non-academic matters such as billing disagreements, conduct issues, campus issues, and interpersonal conflict. This is not a comprehensive list, as it is understood that each individual may have concerns and needs that are unique.
Students can file an official complaint or put information “on the record” at the Office of the Ombudsperson in the South Administration Building (1A), Room 301.

New Student Orientation/College Life Unit Experience (CLUE) Program

The New Student Orientation/CLUE Office maintains up-to-date records on students’ progress toward meeting the New Student Orientation Requirement as described in the Catalog section on Degree Requirements. Students may obtain information about current and planned CLUE-certified events, programs, and activities, and may also check on their status in meeting the requirement. Two enrichment programs called CLUE Challenge and CLUE Pathways encourage students to commit themselves to a broad involvement in the out-of-the-classroom life of the College and its surrounding community. Information about orientation and the CLUE program is available at the Office, North Administration Building (2A), Room 208.

Pluralism and Diversity

The Office of Pluralism and Diversity seeks to develop in all aspects of the College’s activities a climate that fosters respect for the pluralism and diversity of American society. The Office offers programming, workshops, and training sessions on sensitivity and diversity.

Program Development Committee (PDC)

The Program Development Committee, a joint committee of the CSI Association and the CSI Student Government, is a student programming board that allocates a designated portion of the student activity fee for social, cultural, and educational programs. The Committee develops programs that culturally enlighten, intellectually stimulate, and entertain. The planning and decision-making process is one in which students learn many skills, especially those related to working with other students on campus-wide projects. Proposals for programs, events, and activities may be made by students and members of the College community. The telephone number is 1.718.982.2814.

Publications

Students at CSI publish a bi-weekly newspaper, The Banner; a political journal, The College Voice; a politics and literary arts magazine, Third Rail; a literary journal focusing on women’s studies, All Ways a Woman; a literary magazine, The Serpentine; and the Dolphin yearbook. Publications are funded by student activity fees allocated through the Publication Board. Students interested in participating in the production of these publications as writers, photographers, editors, or layout artists are invited to visit the publications’ offices or the Office of Student Life in the Campus Center.

SEEK Program

SEEK (Search for Education, Elevation, and Knowledge) is a special program designed to provide higher education opportunity, through academic and financial support services, for eligible students. The SEEK Program provides intensive remediation in basic skills, including special summer classes; special testing, guidance, and counseling; supplemental instruction and tutoring; and financial assistance for students accepted to the program.

Sports and Recreation Center

The Sports and Recreation Center houses a full range of facilities and equipment for individual and team sports and games: a gymnasium with seating capacity for 1,200 spectators, an auxiliary gymnasium, two fitness rooms, racquetball courts, and a 25-meter pool. Outdoor facilities include a track, tennis courts, and ball fields.

Student Life

The Office of Student Life assists and advises students involved in student organizations, governance committees, and campus activities to develop a rich and diverse co-curricular campus life. The Student Life team involves also staff from the CSI Association, the Student Government, and the Program Development Committee. The Office sponsors leadership programs for chartered clubs and the general student population and is responsible for the operations of the Campus Center. The telephone number is 1.718.982.3088.

Student Government

The College of Staten Island Student Government is composed of 20 representatives (senators) elected by the student body each spring semester. Organized into commissions with a specific mandate (e.g., Academic and Curricular Affairs; Clubs; Elections; Finance; Part-time, Evening, and Weekend Students; Publications; Student Center; and Student Services), the Student Government represents student interests to the administration and faculty of the College and serves as an advocate for student services. Through its commissions, the Student Government charters and funds all student clubs and associations, administers student elections, allocates a designated portion of the student activity fee, advocates for the special needs of students, and advises the College on the utilization of Campus Center space to serve students in
their co-curricular activities. Student Government senators serve on planning and decision making committees with faculty and members of the CSI administration. The telephone number is 1.718.982.3082.

**Wellness Program**

The Wellness Program Office presents an integrated array of special events, seminars and workshops, and counseling services with a common goal of educating the College community about wellness issues. Professional counseling and intervention services concerning substance abuse, HIV/AIDS, domestic violence, stress management, date rape, and other wellness issues are coordinated by this Office. A Peer Drop-In Center is staffed by trained Peer Educators who meet with students and provide information.

**WSIA - 88.9 FM**

WSIA, the only radio station on Staten Island, is licensed to the College. The station is staffed by student volunteers working under the guidance of professional broadcasters and broadcasts at 88.9 FM. The state of the art studios, located in the Campus Center, include a digital recording facility, music studio, computerized news operation, and a 40,000-volume record and CD collection. Station programming emphasizes diverse and creative music, local news and public affairs, and Staten Island sports. Students interested in working as DJs, newscasters, sportscasters, and engineers should visit the studio in Room 106 of the Campus Center and fill out an application. The telephone number is 1.718.982.3050.

**Email Accounts**

Students seeking to establish a College of Staten Island student email account may apply at the Office of Information Technology, Library (1L), Room 204. For more information, please call 1.718.982.4080. A validated student ID card is required. To provide the college with your preferred email address, visit [www.csi.cuny.edu/currentstudents](http://www.csi.cuny.edu/currentstudents) and select the link “Update email and change pin number.”
Academic Advisement

Director, Dr. Marianne B. Carlin, South Administration Building (1A), Room 101
The Office of Academic Advisement serves new students as well as those who have not declared a major. Advisement is provided to students in groups and individually. The Office staff also provides students with individualized degree program plans each semester to guide them in their course selections.

Adults Returning to College Program (ARC)

Coordinator, Ms. Kris Johnson, North Administration Building (2A), Room 202
The College offers a gateway program for adults returning to college after a hiatus or entering college for the first time. The ARC program provides personalized, comprehensive support services from pre-admission counseling to registration in ARC classes as well as other college courses. The goals of the ARC program are to ease the process of enrolling at the College and to facilitate the transition of adult students into the College.

Center for the Arts

Artistic and Managing Director, Ms. Lisa Reilly, Center for the Arts (1P), Room 116
The Center for the Arts contains, in the instructional wing, the Department of Performing and Creative Arts, the Department of Media Culture, studios, performance and rehearsal spaces, a screening room, a studio theater, film and video production facilities, and laboratories for communications and graphics. The workshops include facilities for print making, painting, sculpture, photography, electronic music, and recording.

The Center for the Arts houses the Clara and Arleigh B. Williamson Theatre, a 450-seat, proscenium-stage theater; a 900-seat concert hall; a 150-seat recital hall; a 150-seat lecture hall, and an art gallery. It sponsors an annual performance series, which includes a wide variety of music, theater, comedy, and family programming.

Center for International Service

Director, Ms. Ann Helm, North Administration Building (2A), Room 206
The Center for International Service encourages and supports the international component of the academic life of the College. The Center provides direction and assistance in matters affecting the College’s international student population; sponsors study abroad programs; directs scholar and student exchange programs; and facilitates international development programs. Guidance for the Center’s activities is provided by a faculty advisory committee.

English Language Institute
The Institute, a member of the American Association of Intensive English Programs, offers intensive English language study and programs in American language and culture to international students and professionals. The Institute is supported by course fees. Admission to the English Language Institute does not constitute admission to the College.

Foreign Student and Scholar Services
The staff, serving foreign students and scholars, processes immigration documentation; facilitates admission procedures; provides academic advisement, counseling, and college orientation; and assists in off-campus adjustment.

International Faculty Development Programs
The Center coordinates a faculty exchange program with Shanghai University in China on behalf of the City University. The Center has responsibility also for CSI exchange programs and faculty development projects in various countries. On-campus programs for faculty and students are offered by the Eastern European Working Group, the Southeast Asia Working Group, and the World on Wednesday lecture series.

Study Abroad
The Center offers year-round programs in Barbados, China, Denmark, Ecuador, England, Greece, and Italy with partner institutions: the University of the West Indies in Barbados; Nanjing University in China; the Danish International Studies Program (DIS) in Copenhagen, Denmark; the Catholic University of Guayaquil and the University of San Francisco de Quito in Ecuador; Middlesex University in England; the American College of Thessaloniki in Greece; Scuola Lorenzo de Medici in Florence and the American University of Rome in Italy. Overseas study programs in more than 25 countries are open to CSI students through membership in the College Consortium for International Studies.

There is no foreign language prerequisite for overseas programs. However, students are required to study the language of the country and are placed in courses suitable to their level of ability. A minimum grade point average of 2.5 is required for participation in most of the CSI-sponsored study abroad programs. The staff of the Study Abroad program provides assistance and information about admissions, financial aid and scholarships, orientation, and re-entry. To prepare effectively for participation in the program, students are encouraged to investigate the overseas study opportunities early in their academic careers. Most student financial aid plans are applicable to Study Abroad programs and special scholarship funds are available for eligible students.
Evening, Weekend, and Summer Sessions

Acting Director, Ms. Dorothy Brower, North Administration Building (2A), Room 204

The Office of Evening, Weekend, and Summer Sessions provides administrative assistance and academic advisement for evening, weekend, and summer students, and advocates the special needs of this student population within the College community.

The College regularly schedules a wide choice of courses in the evening and on the weekend. These courses accommodate students in graduate, baccalaureate, and associate’s degree programs who prefer to take classes at these times. Classes in the evening session start at 6:30 pm or later; weekend session classes are scheduled on Saturday mornings and afternoons, as well as on Sunday afternoons.

The Summer Session offers courses in a mix of schedules: four-week courses meet day and evening in June and July; six-week courses meet Saturday and Sunday mornings during June and July; eight-week courses meet day and evening during June and July. The varied summer session course schedule provides an opportunity for students to accelerate completion of their degree programs.

The FIRST Program

Coordinator: Dr. Allyson Straker-Banks, Office of Instructional Support Services, Library (1L), Room 117

The College offers a special program to well-prepared first-year students called Freshman Integrated Resources, Support, and Teaching (FIRST). The program consists of thematic learning communities that share blocked general education courses. FIRST is designed to make the transition from high school to college a positive experience. Students make friends and work closely with faculty and counselors in small groups while fulfilling degree requirements.

Freshman Workshop Program

Coordinator: Associate Professor Rose Ortiz, English, Speech, and World Literature/Modern Languages Building (2S), Room 213

The Freshman Workshop Program assists students who require comprehensive instruction in reading and writing for college by allowing them to enroll in a block of two or three linked courses: a remedial or English as a Second Language (ESL) reading and/or writing course and a specified compensatory section of an introductory 100-level course such as COM 100, PSY 100, or HST 100. Some blocks may also include a math course.

The compensatory sections incorporate the full content of the regular introductory courses, but they are offered on a four-hour/three-credit basis for four equated credits. The additional hour is devoted to providing instructional support and assisting students with course readings and writing assignments. The linked courses in the block are coordinated to enhance the development of the students’ skills. Students must also attend the Writing Center for at least one hour each week for tutoring.

Honors College

Acting Coordinator: Associate Professor Jonathan Sassi, South Administration Building (1A), Room 206

Introduced at the College in 1997, the Honors College is designed for capable and highly motivated students who meet rigorous admissions criteria. During their first and second years, Honors College students enroll in a variety of innovative and challenging courses and develop with their faculty a cohesive intellectual community. In their third and fourth years, Honors College students pursue their fields of study in a wide range of majors and specializations, and may elect to meet a program’s criteria for graduation with honors.

The College participates in the CUNY Honors College: University Scholars Program. Students who have been accepted into the CUNY Honors Program will participate simultaneously in the Honors Colleges of CSI and the University.

Please see the sections on Admissions and on Programs and Course Descriptions for details about the requirements. Currently enrolled CSI students and transfer students should make inquiries with the Director of the Program.

Laboratories

The Biological Sciences/Chemical Sciences Building (6S), home of the Department of Biology, the Department of Chemistry, the Center for Environmental Science, and the Center for Developmental Neuroscience and Developmental Disabilities, contains 74 state of the art laboratories for study and research. The ten departmental buildings in the academic quadrangles house instructional, tutorial, and research laboratories; and personal computer classrooms.

Library/Media Services

Acting Chief Librarian, Associate Professor Wilma L. Jones, Library (1L), Room 109

The Library is the focal point of the South Academic Quadrangle. The building, with its distinctive rotunda, is the home for five central services: a study center for the campus community; a broad collection of books and journals in the liberal arts and sciences; computer facilities and online services and databases that serve as point-of-access to informational resources beyond the walls of the Library; an instructional facility for the teaching of information retrieval and information literacy; and media distribution services in support of instruction.

Seventy-five computer workstations for student use are available throughout the building. The general reference area is located on the
first floor, as is the faculty Center for Excellence in Learning Technology. The second floor leads to the elegant archives facility, the distance-learning center, the microform area, the Library instruction facility, and the Media Services unit. The circulating book collection and the print journal holdings are housed on the third floor.

Hours of Service:

- Monday—Thursday: 8:00 a.m. — 10:00 p.m.
- Friday: 8:00 a.m. — 8:00 p.m.
- Saturday: 8:30 a.m. — 5:00 p.m.
- Sunday: 12:00 noon — 5:00 p.m.

Hours of service during summer session, intersession, and holidays are posted at the Library entrance and on the Library homepage, [www.library.csi.cuny.edu](http://www.library.csi.cuny.edu).

Borrowing Privileges: Students and faculty from CSI and other CUNY colleges must present current ID cards in order to borrow books. Students and faculty may obtain ID cards from the College Office of Public Safety. Overdue books, lost books, or unpaid fines may result in the suspension of borrowing privileges.

The Collection: The holdings include 210,000 bound volumes of books, 96 online databases (of which more than 30 are full text), 1,100 current print journal subscriptions, 800 titles in microform, 2,000 videos, and over 4,000 sound recordings.

The Online Catalog: The CSI Library is a member of the CUNY-wide integrated library system. Access to CUNY+, the online union catalog portion of the system, is available throughout the campus as well as from offsite.

Reference librarians provide service at the General Reference Desk on the first floor at all times when the library is open. The library instruction service includes orientation tours, open workshops, presentations to classes by reference specialists in connection with specific course assignments, and the compilation of bibliographic aids.

Media Services

Director: Mr. Mark Lewental, Library (1L), Room 201

Media Services provides viewing and listening facilities and classroom services for its collections of videotapes, DVDs, slides, audiotapes, and recordings. The Media Distribution System provides access to the media collections via fiber-optic technology, connecting over 40 classrooms, laboratories, and conference rooms. Media Services operates the Videoconferencing Lab, a network of wireless laptops for use in the Library, and oversees the Center for Excellence in Learning Technology, which assists faculty in using technology to promote better learning.

Testing Services

Director, Professor Ivan Smodlaka, South Administration Building (1A), Room 104

The Testing Office tests in the following areas: the CUNY Basic Skills Tests in writing, reading, and mathematics; the departmental placement examination in Biology; the CUNY Proficiency Examination; occupational/career and interest testing; tests required for graduate school admission or for certification purposes (GRE subject tests, LSAT, MCAT, PRAXIS); and the test that enables students to earn college credits, the College Level Examination Program (CLEP).

The Writing Center

The Writing Center is under the supervision of the Department of English, Speech, and World Literature and is located in the English, Speech, and World Literature/Modern Languages Building (2S), Room 216. The Center provides assistance to students who need to enhance their writing and reading skills. Instructors from any discipline may refer students to The Writing Center, or students themselves may choose to visit it and make appointments to work with tutors. Tutors do not edit papers or do homework assignments for students, but help them to work on the skills they need to develop. The Writing Center serves students for whom English is a first or second language.

Office of College Advancement

Vice President for College Advancement, Mr. Richard Truitt, South Administration Building (1A), Room 401

The Office of College Advancement is responsible for advancing the mission of the College and developing financial support for the College from alumni, faculty and staff, the community, and private industry. The CSI Foundation, Inc., was established to provide leadership and volunteer assistance to the College in its fundraising programs.

Alumni Relations

Director, Ms. Francine Raggi, South Administration Building (1A), Room 110

The Office of Alumni Relations maintains communication with alumni through activities and newsletters. The Office also assists the CSI Alumni Association, which was established in 1977 to develop and maintain a partnership among alumni, students, faculty, and staff of the College. All persons who have received a degree or certificate from the College of Staten Island or its antecedent institutions, Richmond College and Staten Island Community College, are eligible for membership in the Alumni Association. An elected Alumni Council provides leadership for the Association.
Office of Information Technology

Assistant Vice President for Technology Systems, Professor Michael Kress, North Administration Building (2A), Room 303

The Office of Information Technology (OIT) advances and supports the use of information technology at the College. OIT administers 20 general purpose computer laboratories and 23 specialized computing laboratories in conjunction with academic departments for student use. The microcomputers, approximately 2,500 on campus, are connected through a high-speed local area network. This hardware configuration allows students, faculty, and staff full access to specialized software, the Internet, online library resources, and email. Forty-five classrooms, two conference rooms, and two portable units are equipped to run multimedia presentations from a central location. One of the conference rooms is equipped for two-way videconferencing. Most microcomputers on campus use Windows 2000 or Windows 98. The OIT homepage is www.csi.cuny.edu/helpdesk/.

Office of Instructional Support Services

Director, Dr. Allyson Straker-Banks, Library (1L), Room 117

The Office of Instructional Support Services offers a variety of programs to enhance the academic preparation of all students, with a special emphasis on first-year students. The Office coordinates the FIRST Learning Communities, an initiative that places new students who have passed all three assessment tests in groups of integrated courses in their first semester. The Immersion Programs are also offered, providing intensive reading, writing, and mathematics workshops for newly admitted freshmen or qualified post-freshmen who have not passed one or more of the CUNY Basic Skills Tests. Preparatory workshops for the College Proficiency Examination are offered to students. In addition, a broad range of support services, including tutoring, study groups, and supplemental instruction, are provided to students throughout the academic year.

Discovery Institute

Director, Professor Leonard Ciaccio, South Administration Building (1A), Room 211

The Discovery Institute offers several pre-college programs that strengthen the academic preparation of students while they are still in high school and others that encourage college students to consider teaching careers. The Institute also provides opportunities for teachers to develop new teaching strategies. The programs are supported by the resources of the College and by grants from a variety of state, federal, and private institutions.

Collegiate Science and Technology Entry Program (CSTEP)

CSTEP provides academic support and enrichment for minority and/or economically disadvantaged freshmen students considering careers in science and technology.

Science and Technology Entry Program (STEP)

STEP provides pre-college preparation in science and technology for minority and economically disadvantaged high school students and staff development for teachers.
This chapter covers College policies that govern meeting the academic standards and requirements to maintain matriculated status and to qualify for a degree.

Grades

Grading Symbols

The following grading symbols are used:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Identification</th>
<th>Quality Points per Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>4.0</td>
</tr>
<tr>
<td>A-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B+</td>
<td></td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
<td>3.0</td>
</tr>
<tr>
<td>B-</td>
<td></td>
<td>2.7</td>
</tr>
<tr>
<td>C+</td>
<td>Satisfactory</td>
<td>2.3</td>
</tr>
<tr>
<td>C</td>
<td></td>
<td>2.0</td>
</tr>
<tr>
<td>D</td>
<td>Pass</td>
<td>1.0</td>
</tr>
<tr>
<td>F</td>
<td>Failing/unsuccssful completion of course</td>
<td>0.0</td>
</tr>
<tr>
<td>P</td>
<td>Passing</td>
<td>-</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawed with no penalty</td>
<td>-</td>
</tr>
<tr>
<td>WA</td>
<td>Administrative Withdrawal</td>
<td>-</td>
</tr>
<tr>
<td>WU</td>
<td>Withdrawed Unofficially (counts as failure)</td>
<td>0.0</td>
</tr>
<tr>
<td>INC</td>
<td>Incomplete (temporary grade)</td>
<td>-</td>
</tr>
<tr>
<td>AUD</td>
<td>Auditor</td>
<td>-</td>
</tr>
<tr>
<td>Z</td>
<td>No grade submitted by instructor</td>
<td>-</td>
</tr>
<tr>
<td>PEN</td>
<td>Grade Pending</td>
<td>-</td>
</tr>
<tr>
<td>FIN</td>
<td>Failure (changed from Incomplete)</td>
<td>0.0</td>
</tr>
</tbody>
</table>

A brief explanation of the grades receiving no quality points follows:

F  No credit is received for a course in which the student is assigned a grade of F. If a student wishes to receive credit for the course, it must be repeated with a passing grade; however, the F remains on the transcript (see section on Repeating Courses).

P  Course requirements have been satisfied. This grade is used only for specially designated courses and for courses taken at another college for which a student receives advanced standing.

W  Students may withdraw without academic penalty from any course up to the end of the ninth week of the semester (see College calendar for date); a grade of W will be assigned. After that date, students may petition the instructor and the chairperson for permission to withdraw until the last day of classes. Consult the Office of the Registrar for the procedures to be followed when withdrawing from a course. If these procedures are not followed, students may receive a penalty grade of WU. In cases of illness, students may apply to the Medical Office for a medical withdrawal. Under no circumstances will a W be assigned after the last day of classes without positive action by the Committee on Course and Standing or its designee.

WA  Students not in compliance with the New York State immunization requirement receive the grade of WA. This grade carries no academic penalty.

WU  An unofficial withdrawal results in a grade of WU. No credit is received for a course in which this grade is assigned; it is equivalent to a grade of F.

INC  The grade INC is a temporary grade assigned when, in the instructor’s judgment, course requirements are not completed for valid reasons. Recipients of INC are required to complete all assignments before the end of classes during the succeeding semester. Students should not register a second time for a course in which an INC is given. Rather, arrangements should be made with the instructor to complete the remaining work. If a student registers again for a course in which an INC was awarded, the INC will become a FIN and the course will appear a second time on the student's transcript with the grade earned.

FIN  If a grade of INC is not changed before the last day of classes of the succeeding semester, it will automatically be changed to a grade of FIN. If the required work is not completed for continuing valid reasons, the course instructor may grant an extension. Such extensions shall not exceed a period of more than two years beyond the original due date of the uncompleted work.

AUD  Students may audit courses for which they are registered by presenting a written statement to the Registrar declaring their status as auditors within the first three weeks of the semester. This statement must be countersigned by the instructor of the course. No credit is received for an audited course.

Z  An administrative symbol assigned when no grade has been submitted by the instructor.

PEN  The pending grade is used in the first semester of a two-semester course.
Grade Appeals

Students wishing to appeal a grade other than WU or FIN must do so within 60 school days, excepting summer session, following the end of the semester. Appeals must be submitted in writing to the chairperson of the department in which the course was offered. Upon receipt of the appeal, the chairperson shall direct the student to discuss the issue with the instructor who assigned the grade. If the issue remains unresolved, the student may request a review by the Department Committee on Grade Appeals.

This Committee on Grade Appeals shall review all information presented by the student and shall meet with the instructor. The committee shall render a decision within 30 days after the student requested the grade review by the committee because the student and instructor had not resolved the matter. If the committee upholds the appeal by a vote of 3-0, the chairperson shall change the grade to reflect the decision of the committee. If the committee does not uphold the student, there is no further appeal within the College.

In all deliberations on grade appeals, the burden shall be on the student to prove that a violation of the College’s regulations occurred or that the instructor’s own stated criteria for grading, which shall have been enunciated at the beginning of the semester, have not been followed. Students needing advice on the procedure may consult an academic and personal counselor.

Students wishing to appeal a WU or a FIN grade must file a written petition supported by documentation to the Committee on Course and Standing.

Grade Point Average (GPA)

The grade point average (GPA) is determined by dividing the total quality points earned by the total number of credits attempted. All credits for which the student is officially registered after the change of program period of each semester shall be considered “attempted credits,” except where the grades carry no penalty (i.e., grades of W, WA, INC, AUD, and PEN). For example:

<table>
<thead>
<tr>
<th>Course</th>
<th>Grade</th>
<th>Credits</th>
<th>Quality Points per credit</th>
<th>Total Quality Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111</td>
<td>A</td>
<td>3</td>
<td>x</td>
<td>4</td>
</tr>
<tr>
<td>COR 100</td>
<td>B</td>
<td>4</td>
<td>x</td>
<td>3</td>
</tr>
<tr>
<td>ART 100</td>
<td>C</td>
<td>3</td>
<td>x</td>
<td>2</td>
</tr>
<tr>
<td>ANT 100</td>
<td>D</td>
<td>3</td>
<td>x</td>
<td>1</td>
</tr>
<tr>
<td>PED 190</td>
<td>F</td>
<td>1</td>
<td>x</td>
<td>0</td>
</tr>
</tbody>
</table>

Total Credits 14

GPA = \( \frac{33}{14} = 2.36 \)

Students may calculate current and prospective grade point averages using the GPA calculator feature on the College’s Website, www.csi.cuny.edu.

Transcripts and Grade Reports

At the end of each semester, students receive grade reports that reflect academic work undertaken.

Students may request that their transcript be sent to other institutions (see Fee Schedule). To be official, transcripts must be signed and sealed by the Registrar.

Students may access their transcript records and review semester grades via the College’s Website (www.csi.cuny.edu) by clicking first on Current Students and then on Registrar’s Information.

The Major

Declaration of Major

Each matriculated student in the College is recorded in the Registrar’s Office as enrolled in a specific curriculum or major leading to a degree. Students are responsible for informing the Registrar of their specific curriculum or major. Assignment of an academic adviser is based upon this official listing. All students who have completed 60 credits and who expect to receive a bachelor’s degree from the College should declare a bachelor’s degree major. Students who have completed fewer than 60 credits may also declare a bachelor’s degree major provided they meet the following criteria:

- have passed the three CUNY Basic Skills Tests
- 13—24 credits completed and 3.0 Grade Point Average
- 25—39 credits completed and 2.5 Grade Point Average
- 40—59 credits completed and 2.0 Grade Point Average

Change of Curriculum or Major

Students who wish to change their major or whose academic advisement plan or transcript shows that they are recorded incorrectly in a curriculum or major should file a Change of Curriculum or Major form with the Registrar’s Office. There is no fee.
Credits toward the Major

All courses listed as major requirements, including courses that apply toward concentrations, specializations, or options are counted toward completion of the minimum credits meeting requirements for the major. Credits for pre-major courses are not included.

GPA in the Major

The GPA in the major is calculated in the same manner as the overall GPA using only the courses that fulfill major requirements: all courses listed in the major requirements, including courses in concentrations, specializations, options, and all courses taken in the discipline other than those in the pre-major. Students are required to achieve at least a 2.0 GPA in their core or major requirements in order to earn an undergraduate degree. Some programs require a GPA higher than 2.0.

Second Major

Students wishing to declare a second major may do so by completing a form available from the Office of the Registrar.

Academic Standing

Credit Load

Students may attend full-time or part-time as either matriculated or non-degree students. They may attend day, evening, or weekend sessions in any combination.

A full-time student is one registered for 12 or more equated credits in a semester; six must be degree credits (three in the case of first-time freshmen). Equated credits are generally the same as degree credits except for courses below the 100 level. In courses below the 100 level, equated credits are equivalent to the contact hours of the course.

Students with less than a 3.0 (B) average and/or fewer than 30 credits who wish to take more than 18 credits must request permission. The Registrar’s Office, North Administration Building (2A), Room 110, will direct such students to the appropriate office. Students on academic warning or probation may not register for more than 14 credits a semester. In the summer sessions, they may not register for more than a total of eight credits and may not register for two four-week courses simultaneously.

Class or Standing

Class, or standing, as freshman, sophomore, junior, and senior is determined by the number of credits completed:

- Freshman: 0 - 27.5 credits completed
- Sophomore: 28 - 60.5 credits completed
- Junior: 61 - 93.5 credits completed
- Senior: 94+ credits completed

Standing is sometimes listed as a course prerequisite.

Dean’s List

A matriculated undergraduate student, full-time or part-time, merits inclusion on the annual dean’s list by: a) for full-time, attaining a GPA of 3.5 or above during the preceding academic year, provided at least 24 credits were earned during that period; b) for part-time, attaining a GPA of 3.5 or above over the last two academic years, provided at least 24 credits were earned during that period. Only credits earned at the College of Staten Island will enter the computation. Students who have received a grade of F, WU, or INC during the period under consideration are not eligible.

Committee on Course and Standing

The Committee on Course and Standing is chaired by the Vice President for Academic Affairs or a designee; and its membership consists of the Registrar and one member of the faculty from each instructional department. In addition to reviewing student records, the Committee considers student appeals related to readmission and graduation.

Students can petition the Committee through an appeals counselor in the Division of Student Affairs. The appeals counselors, whose names are available through the Registrar’s Office, will advise the students in the preparation of their petition, which will then be referred to the Committee.

Minimum GPA

Students are expected to maintain a minimum GPA of 2.0 (C) throughout their academic careers at the College. Whenever a student’s GPA falls below 2.0, the student’s record will be reviewed by the Committee on Course and Standing. Students must achieve a GPA of 2.0 in the courses in the core or major requirements; some majors require a higher minimum GPA.

Midterm Warnings

Students with an excessive number of absences and students with grades of D or F in 200- or lower-level courses receive midterm warnings. Students receiving a warning are expected to consult their course instructor; they may also wish to consult their faculty adviser.
Academic Standards Policy

At the end of each semester, students must meet the following academic standards:

<table>
<thead>
<tr>
<th>Credits attempted</th>
<th>Minimum Grade Point Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-12</td>
<td>1.50</td>
</tr>
<tr>
<td>13-24</td>
<td>1.75</td>
</tr>
<tr>
<td>25-above</td>
<td>2.00</td>
</tr>
</tbody>
</table>

**Academic Warning**

Students with 0 to 24 credits attempted will be placed on academic warning if they meet the academic standards (above) but fail to achieve a 2.00 grade point average.

**Academic Probation**

Students will be placed on academic probation if their grade point average falls below the minimum grade point average for the number of credits attempted: 0-12 attempted credits, 1.50 grade point average; 13-24 attempted credits, 1.75 grade point average; 25 credits-above, 2.00 grade point average.

Students on academic probation who meet the College's academic standards at the end of the probation semester will be removed from academic probation. Students on academic probation will not be dismissed but automatically continued on probation as long as they achieve a grade point average of 2.5 or better each semester until they have reached the required minimum grade point average. Students who fail to achieve the minimum 2.5 grade point average for any semester while on probation will be dismissed.

Students on academic warning or academic probation may not register for more than 14 credits a semester. Summer session students may not register for more than a total of eight credits in the summer session and may not register for two four-week courses simultaneously.

**Academic Dismissal**

Students who do not meet the academic standards outlined above at the end of the probation semester will be dismissed from the College.

**Readmission after Academic Dismissal**

Students dismissed from the College for failure to meet the standards set forth in this policy may apply for readmission after a separation from the College of at least one fall or spring semester. Students who apply for readmission after this separation period must have their application reviewed by the Committee on Course and Standing. Students wishing to apply for readmission should obtain information from the Counseling Center, South Administration Building (1A), Room 109.

**Testing**

**CUNY Basic Skills Tests**

Each undergraduate student must successfully complete the City University of New York Basic Skills Tests in reading, writing, and mathematics. All students, including transfer students, must take the tests before they may register for the first time as matriculated students.

Students are exempted from taking the CUNY/ACT Basic Skills Tests in reading and writing if their verbal score on the SAT is 480 or higher; if their verbal score on the ACT is 20 or higher; or if their score on the New York State Regents Examination in English is 75 or higher. Students are exempted from taking the CUNY Mathematics Assessment Test if their mathematics score on the SAT is 480 or higher; if their mathematics score on the ACT is 20 or higher; or if their score on the New York State Regents Examination in Mathematics A or Sequential II or III is 75 or higher. However, all students must take Parts III, IV, and V of the CUNY Mathematics Assessment Tests for placement into appropriate mathematics courses.

External, non-CUNY transfer students who have completed 45 or more credits at another institution are exempted from all three tests provided that the students are transferring from United States accredited colleges or universities. Transfer students who anticipate taking mathematics courses must take Parts III, IV, and V of the CUNY Mathematics Assessment Tests for placement. External transfer students with foreign credentials are subject to the basic skills testing upon entry.

Students admitted to associate’s degree programs who fail one or more of the tests are expected to complete the remedial courses that qualify them to enter college-level writing and mathematics courses in one year, which may include, in addition to semesters, a pre-freshman and a post-freshman summer immersion course and a winter intersession workshop. Students for whom English is a second language (ESL students) have two academic years to pass the basic skills tests in reading and writing. The tests are administered at the end of every academic intervention that students complete (remedial or ESL courses, summer immersion, January intersession, or tutorial workshops). Students who do not pass the basic skills tests within this time limit will be dismissed from the College.

Students may not enroll in college-level English or mathematics courses until the appropriate test has been passed. In addition, some courses require passage of one or more of the tests as prerequisites. A passing score on the CUNY/ACT reading skills test is a prerequisite to all courses at the 200 level or higher.

No associate’s or bachelor’s degree will be awarded unless the tests have been passed.
C/ARST

Students who fail the CUNY/ACT Reading Skills Test (C/ARST) on entrance are required to take the appropriate 0-level reading course in their first semester.

C/AWST

Students who score 6 on the CUNY/ACT Writing Sample Test (C/AWST) on entrance are required to take the appropriate 0-level writing course within their first 12 equated credits. Students who score 5 or below on the C/AWST on entrance are required to take the appropriate 0-level writing course within their first eight equated credits.

CMAT

Students who have not passed the first two parts of the CUNY Mathematics Assessment Test (CMAT) are required to take the appropriate 0-level mathematics course.

Placement Examinations

Placement examinations are offered by the Department of Biology and the Department of Modern Languages. These examinations determine placement at the appropriate course level. Students entering the Health Sciences programs in which BIO 150 Human Anatomy and Physiology I is pre-major requirement must take the Biology Department Placement Examination. Students are referred to the Testing Office for information.

See the section on Attendance Policies for information on the special attendance policies that apply to 0-level courses.

CUNY Proficiency Examination

Effective fall 2003, all students admitted to a degree program, regardless of date of entry, are required to pass the CUNY Proficiency Examination to graduate from associate’s degree programs, transfer into a senior college, or advance from the lower division to the upper division of a senior college.

Exemptions are granted to students holding bachelor’s or other advanced degrees from an accredited institution. Exemptions may be granted for accommodations to comply with Section 504 of the Rehabilitation Act.

The University will administer the Proficiency Examination at the College several times each year. For information concerning the examination, students should consult the Testing Office, Room 1A-104.

Graduation

Application for Graduation

Students must file for graduation by the date published in the College academic calendar in the Schedule of Classes. There is no fee for this application. Application cards for graduation may be obtained at the Registrar’s Office or from the College’s Website. Bachelor’s degree candidates who have completed a second major or a minor and wish it to appear on their transcript should list the second major or minor on their application for graduation.

Students who have satisfied the degree requirements but wish to take additional credits beyond the degree will be charged the higher non-degree rate per credit unless they have filed for a second degree prior to the first day of classes. A change from non-degree to degree status on or after the first day of classes will not take effect until the next semester for tuition billing purposes. Non-degree students are not entitled to state or federal financial aid including federal loans.

Requirements for Graduation

Bachelor’s degree programs require a minimum of 120 credits with a minimum grade point average of 2.0 (C). Associate’s degree programs require a minimum of 60 credits with a minimum grade point average of 2.0 (C). All degree programs require at least a 2.0 grade point average in the core or major course requirements to qualify for the degree. Some majors require a grade point average above 2.0. Please consult the specific degree program. The successful completion of the College Preparatory Initiative (CPI) and all general education and core or major requirements is required for graduation.

Minimum Credits in Residence Requirement

To obtain a degree, associate’s or baccalaureate, from the College of Staten Island, students must earn a minimum of 30 credits through courses taken at the College. To qualify for a bachelor’s degree from the College, students must also earn at least half (50%) of the credits required for the major through courses taken at the College. To obtain a One-Year Certificate from the College of Staten Island, at least half (50%) of the required credits must be earned in courses taken at the College.

En-Route Associate’s Degree

The associate’s degree will be awarded to matriculated students who have neither applied for nor been awarded the AA, AS, or AAS degree but who have completed all of the degree requirements including at least 30 credits earned in residence. Students who meet these requirements will be notified of their eligibility for the degree and given the opportunity to decline.

Graduation with Honors

Undergraduates who meet the qualifications will receive the associate’s or bachelor’s degree summa cum laude, magna cum laude, or
cum laude as follows:

- Cumulative GPA of at least 3.90: summa cum laude
- Cumulative GPA of at least 3.75: magna cum laude
- Cumulative GPA of at least 3.50: cum laude.

Students who have completed all the requirements for the bachelor’s degree may graduate with honors in their major provided they meet the requirements of the department as explained in the section on Degree Requirements.

**Second Degree Requirements**

To receive a second baccalaureate degree or a second associate degree from the College of Staten Island, students must complete a minimum of 30 credits in addition to the number of credits required for the first degree.

**The “Grandfather” Clause**

Requirements in this Catalog were approved effective September 1, 2003. The “Grandfather” clause is designed for students who matriculated in a degree program, major or curriculum prior to that date. This provides that students may meet degree requirements in effect the year of their matriculation in a particular program, curriculum, or major, provided the student has not had an interruption in matriculation exceeding four consecutive fall and spring semesters.

Students changing major or curriculum are subject to the requirements in effect the year of the change. For general education degree requirements only, students may choose to follow requirements of the Catalog in effect the first time they matriculated at the College, provided that no more than ten years have elapsed from initial matriculation to the change of major or curriculum. Students must notify the Registrar in writing that they are exercising this option.

Students who hold the associate in arts degree, students who hold the associate in science degree, or students who hold a baccalaureate degree from an accredited post-secondary institution are considered to have completed general education requirements. Students who hold the associate in applied science degree must complete the general education requirements specified by further degrees.

**General Policies**

**Attendance Policies**

Instructors are required to keep an official record of class attendance. Students are expected to attend all sessions. A student who is absent for more than 15 percent of the class hours in the semester will be assigned a grade of WU (withdrawn unofficially), subject to the discretion of the instructor.

Special attendance policies apply to all remedial courses in reading, writing, mathematics, and in English as a Second Language, as follows:

1. for courses meeting four hours per week, seven hours of absences will be allowed; students with an eighth hour of absence will be considered excessively absent and will receive a WU grade, unless excused by the instructor;
2. for courses meeting three hours per week, four hours of absences will be allowed; students with a fifth hour of absence will be considered excessively absent and will receive a WU grade, unless excused by the instructor.

**Withdrawal from College and Leave of Absence**

Students who leave the College before the end of a term must file an official withdrawal request. Failure to do so will result in WU grades for all courses in progress, and the result will be a negative impact on the grade point average. Students intending to withdraw from the College must see a counselor and complete the required forms. There is no fee. Registration materials for the semester following withdrawal will be sent automatically. There is no formal leave of absence from the College for undergraduates.

**Readmission**

Undergraduate students who do not register for a semester and then decide to return must file an application for readmission to qualify for a priority registration appointment. Generally, readmission is routine. Students requesting a change in curriculum or major may be subject to a review of qualifications. To qualify for early registration, application for readmission must be filed by the deadline specified in the academic calendar published in the Schedule of Classes. Students who do not apply for readmission by the deadline may be readmitted and register during the walk-in registration dates published in the Schedule of Classes. Students who have been academically dismissed by the College will be readmitted only upon successful appeal to the Committee on Course and Standing.

**Repeating Courses**

Remedial courses: Students may repeat a given remedial course only once.

Passing Grade: Students who receive a passing grade in a course (D or better) sometimes wish to repeat the course in the expectation of improving the grade. If a course is repeated, both grades will remain on the student’s transcript and both grades will be computed in the student’s grade point average, but the student will receive credit only once for the course. For example: a student takes HST 100 for three credits and receives a D; then repeats the course and receives a B. The transcript will list HST 100 with the grade of D for the first time and with a grade of B for the second. The student will receive a total of three credits for HST 100, not six, but the three credits of D and the three credits of B will be calculated in the student’s grade point average. The repeated course may not count toward the 12 credits required for full-time and TAP status unless the Catalog states that the course must be repeated.
Failing Grade: An undergraduate student may repeat up to 16 credits of failed courses; if the subsequent grade is C or higher, this subsequent grade will be included in the calculation of the cumulative GPA. The failing grade(s) will not be included (although the course and the grade remain on the record). The cumulative GPA will be used in determining college admissions, progress, and graduation standards. F grades will be used in calculating the GPA for graduation honors and may affect the determination of admission to specific programs and progress in specific majors. If the subsequent grade is a D, both the original F and the subsequent D will be included in the GPA calculation.

This policy is subject to the following limitations:

a) The course in which the failing grade was received must have been originally taken after September 1, 1984 and repeated after September 1, 2002. Courses repeated between September 1, 1990 and August 31, 2002 will be governed by the policy in the 2001-2002 Catalog.

b) No more than 16 credits of failing grades may be recalculated in the above manner.

c) The 16-credit limit applies cumulatively to courses taken in all CUNY colleges.

d) If two or more failing grades have been received for the same course and a grade of C or better is subsequently earned, all the failing grades may be recalculated, subject to the 16-credit limit.

e) The repeated course must be taken at the same college as the initially failed course.

f) The failing grades remain on the academic record.

g) The regulation applies to undergraduates only.

Auditing a Course

A student may audit a course by registering for the course and presenting a written statement of intent to audit the course, signed by the instructor, to the Registrar within the first three weeks of class. The Registrar will record a final grade of AUD, effective at the end of the semester. Once the declaration to audit has been made, the student may no longer choose to receive credit for the course. The regular tuition and fee schedule applies to audited courses.

Undergraduate Students in Graduate Courses

Undergraduate students with 90 or more credits and a 3.0 GPA may be granted permission to register for a graduate course for undergraduate credit. Permission is required from the course instructor and the coordinator of the graduate program offering the course; and must be noted on the registration form.

Permission to Take Courses at Other Colleges

Students wishing to take a course at another college must receive permission in advance if the course is to be credited toward a degree at the College of Staten Island. Permission to take courses at other colleges is granted only to currently enrolled matriculated students. Applications for permit, which require the approval of the department chairperson and the Registrar, are available in the Registrar's Office. Tuition for courses taken on permit at other CUNY colleges must be paid at the College of Staten Island during the regular registration period. The Bursar's receipt for this registration, together with the approved permit form, will enable students to register at another CUNY college. Tuition and fees for a course taken on permit at a non-CUNY school must be paid directly to the host school. Courses taken on permit will be transferred to CSI with the grade assigned by the host college.

Students on permit must request that a transcript be sent from the host college to the Registrar at the College of Staten Island. A student who registers for permit courses but who is unable to complete the course registration at the host college should officially withdraw from the permit course(s) promptly. The University refund schedule applies to dropping permit credits unless the student presents a letter from the host college that the student was unable to register for the permit courses.

Independent Study, Internships, and Experiential Learning

Current matriculated students may arrange independent study and internships in most of the fields of study in the College’s curriculum. To arrange for such courses, students must take the initiative in approaching faculty sponsors and in defining the project.

Independent study and internship forms are available in the Registrar's Office. Independent Study undergraduate courses are numbered 591-594 and Internships are numbered 595-598. Both are awarded one to four credits.

The following definitions and policies apply:

Independent Study (numbered 591-594 in the discipline)

Independent Study is defined as an individual library or laboratory research or creative arts project under the direct supervision of a full-time faculty member. All Independent Study courses will be designated as liberal arts and sciences courses.

Internships (numbered 595-598 in the discipline)

Internships are experiences in a work situation that integrate an academic area of study with work experience. Courses designated Internships are individual, non-classroom, extended learning projects. They require an on-site supervisor as well as a full-time faculty member as project sponsor. Internships require a daily log of activities, an assigned reading list or preparation of a relevant bibliography, and a final paper that summarizes the way in which goals were achieved and demonstrates the relationship of academic material to the work done during the internship.

Internship courses are considered non-liberal arts and sciences. Internship students may not receive credit for paid employment unless
they demonstrate the relationship of an appropriate body of academic material to the work required in their employment. The policy on individual Internship projects does not govern the regularly established professional internships (e.g., medical technology, communications).

**Policies on Independent Study and Internships**

1. Credit for Independent Study is awarded for study or research outside normal course offerings; credit for Internships is awarded for work experience related to an academic program, not for performing a job.
2. Students must have at least one introductory course or equivalent experience in an area as a prerequisite to Independent Study and Internships. Independent Study students are required to spend at least three hours of work per week per credit. Internship students are expected to spend at least two hours per week per credit at the on-site location and at least one additional hour per week per credit in reading, study, and preparation.
3. No more than four credits will be granted for an Independent Study or Internship. Credit will be granted only once for the same or a similar work situation or placement. No more than nine credits of Independent Study and Internship coursework will be accepted toward the 60+ credits required for the associate’s degree; no more than 15 credits of Independent Study and Internship coursework will be accepted toward the 120+ credits for the baccalaureate degree. The nine and 15 credit limits are the maximum for the combined number of Independent Study and Internship credits. Enrollment in more than four credits of coursework in Independent Study and an Internship in any given semester is not encouraged; permission will be granted only in unusual circumstances.
4. Students interested in Independent Study or an Internship must make arrangements with a full-time faculty member to sponsor the project. Internship students also require an on-site supervisor to evaluate their project. The individuals involved will sign a contract stipulating the expectations for completion of the course, evaluation criteria, and awarding of credit.
5. Arrangements for Independent Study and Internships must be made during the semester before the student wishes to enroll in these courses and must be approved by the faculty sponsor, on-site supervisor (where applicable), and the chairperson of the department or coordinator of the program.
6. For Internships, at least one on-site visit must be made by the faculty sponsor during the semester. At this time a joint conference with all participants in the project will be held for evaluation. For all Independent Study and Internship students a meeting and an evaluation of progress with the faculty sponsor is expected at least bimonthly.
7. Independent Study and Internship proposals are kept on file in the Registrar’s Office.
8. Independent Study and Internship courses may not be used to satisfy general education requirements for any degree program. Independent Study and Internship courses may be used as electives in fulfillment of core or major requirements only if the application explicitly states that the course may so be used.

**Experiential Learning**

Matriculated students who have completed 15 credits may receive a maximum of 15 credits for experiential learning. This learning must be at college level; it may match the content of specific courses or not. Credit is awarded by the appropriate department after detailed assessment of the documentation provided by the student to that department. Further information is available for the Office of Recruitment and Admissions, North Administration Building (2A), Room 406.

**Credit by Examination**

**External Agencies:**

The College will grant matriculated students a maximum of 30 credits on the basis of, among others, the following: Advanced Placement Courses (AP), Regents College Examinations, American College Testing Proficiency (ACT-PEP), and College Level Examination Programs (CLEP).

The College grants credit for designated CLEP General Examinations. For CLEP introductory subject exams with separate essay test, the College requires that students take both the multiple-choice objective test and the separate essay test. Award of credit is based on performance on both parts of the subject exam. In order to receive credit, students must pass the subject examinations with a scaled score in at least the 50th percentile and minimally equivalent to a passing grade of C.

Academic departments or programs may authorize the assignment of specific course equivalents for credit-by-examination through outside agencies. Otherwise, such credits will be acceptable only as elective credits. Credits granted by examination through outside agencies will appear on student records appropriately identified by type of exam, subject, number of credits, and P (passing) grade. No credit will be awarded for a subject area examination in which the student has already taken an equivalent college course or completed a higher level, more advanced college course. Based on faculty review and recommendations, the Office of Recruitment and Admissions monitors and coordinates the awarding of credit by examinations taken through outside agencies and the implementation of uniform College policy on credit-by-examination.

**Departmental Challenge Examinations**

At the discretion of academic departments or programs, students may take departmental challenge examinations to demonstrate college-level competency in courses that have not been taken at CSI (or at any other college), and for which no credit has already been received.
Academic Integrity, Plagiarism, and Cheating

Integrity is fundamental to the academic enterprise. It is violated by such acts as borrowing or purchasing assignments (including but not limited to term papers, essays, and reports) and other written assignments; using concealed notes or crib sheets during examinations; copying the work of others and submitting it as one’s own; and misappropriating the knowledge of others. The sources from which one derives one’s ideas, statements, terms, and data, including Internet sources, must be fully and specifically acknowledged in the appropriate form; failure to do so, intentionally or unintentionally, constitutes plagiarism.

Violations of academic integrity may result in a lower grade or failure in a course and in disciplinary actions with penalties such as suspension or dismissal from the College.

Academic Freedom

The City University subscribes to the American Association of University Professors 1940 Statement of Principles on Academic Freedom, and the College of Staten Island respects academic freedom for faculty and students as well as freedom in their personal lives for all individuals in the campus community.
Degree Programs

Associate In Arts (AA)
  Liberal Arts and Sciences

Associate in Science (AS)
  Architectural Studies
  Engineering Science
  Liberal Arts and Sciences

Associate in Applied Science (AAS)
  Business
  Computer Technology
  Electrical Engineering Technology
  Medical Laboratory Technology
  Nursing

Bachelor of Arts (BA) and Bachelor of Science (BS)
  Accounting (BS)
  African American Studies (BA)
  American Studies (BA)
  Art (BA) and (BS)
    Art/Photography Concentration
    Biochemistry (BS)
    Biology (BS)
      Bioinformatics Option
  Business (BS)
    Business/Finance Concentration
    Business/International Business Concentration
    Business/Management Concentration
    Business/Marketing Concentration
  Chemistry (BS)
  Cinema Studies (BA)
  Communications (BS)
  Computer Science (BS)
  Computer Science-Mathematics (BS)
  Dramatic Arts (BS)
  Economics (BA) and (BS)
    Economics/Business Specialization (BS)
    Economics/Finance Specialization (BS)
  Education (Education students major in an academic discipline)
  Engineering Science (BS)
  English (BA)
    English/Dramatic Literature Concentration
  History (BA)
  Information Systems (BS)
  International Studies (BA)
  Mathematics (BS)
  Medical Technology (BS)
  Music (BA) and (BS)
    Music/Electrical Technology Concentration (BS)
  Nursing (BS)
  Philosophy (BA)
  Philosophy/Political Science (BA)
  Physical Therapy (BS/MS)
  Physician Assistant (BS)
  Physics (BS)
  Political Science (BA)
  Psychology (BA)
Science, Letters, and Society (BA)
Social Work (BA)
Sociology-Anthropology (BA)
Spanish (BA)
Women’s Studies (BA)

Graduate Degrees and Professional Certificate Program
(See Graduate Catalog for details.)
Biology (MS)
Cinema Studies (MA)
Computer Science (MS)
Education
  Childhood Education (MSEd)
  Adolescence Education (MSEd)
  Special Education (MSEd)
  Education Supervision and Administration (Sixth-Year Professional Certificate)
English (MA)
Environmental Science (MS)
History (MA)
Liberal Studies (MA)
Neuroscience, Mental Retardation, and Developmental Disabilities (MS)
Nursing, Adult Health (MS)
Physical Therapy (BS/MS)
Computer Science (PhD) offered with the CUNY Graduate Center
Learning Processes (PhD) offered as a subprogram of the Psychology program of the CUNY Graduate Center
Neuroscience (PhD) offered as a subprogram of the Biology program of the CUNY Graduate Center
Physics (PhD) offered with the CUNY Graduate Center
Polymer Chemistry (PhD) offered jointly with Brooklyn College and the CUNY Graduate Center
This chapter provides detailed information on college preparation, testing, and orientation; requirements applicable to all degree programs—general education, liberal arts and sciences, core/major, minor, and honors—and information about the course numbering system at CSI.

**College Preparatory Initiative (CPI)**

The College Preparatory Initiative (CPI) is a collaborative effort between CUNY and the New York City Board of Education designed to strengthen the academic preparation of high school students.

Bachelor’s degree students and associate’s degree students entering CSI are expected to have a minimum of 16 CPI units, including four units of English, three units of mathematics, two units of laboratory science, four units of social sciences, two units of foreign language, and one unit of fine arts.

**CUNY Basic Skills Tests**

**ENGLISH:** Each student must successfully complete the City University of New York/American College Testing Reading Skills Test (C/ARST). Each student must successfully complete the City University of New York/American College Testing Writing Sample Test (C/AWST).

**MATHEMATICS:** Each student must successfully complete the City University of New York Mathematics Assessment Test (CMAT), which tests proficiency in basic mathematics skills.

(See section on Testing in the chapter on Academic Policies and Procedures.)

Students needing remediation are expected to complete the remedial courses that qualify them to enter college-level writing and mathematics courses in one year, which may include, in addition to two semesters, a pre-freshman and a post-freshman summer immersion course and a winter intersession workshop.

**New Student Orientation Requirement**

Students who enter the College with fewer than six credits are required to complete the orientation requirement. Students are expected to complete this requirement during their first semester or prior to the completion of 12 equated credits.

To satisfy the requirement, students may choose between two options:

(A) Successful completion of a one-credit freshman orientation course:

- **SPD 101 Issues in College Life** (2 hours; 1 credit)

  or

- **SKO 100 Freshman Orientation** (2 hours; 1 credit)

  (open only to SEEK students)

  or

(B) Complete the five components of the non-credit College Life Unit Experiences (CLUE) program, which include:

  Attendance at a general orientation session on such topics as the purposes of higher education, an overview of College policies and services, and an appreciation of diversity. Students should attend the orientation session prior to the beginning of classes.

  and

  Attendance at four CLUE-certified events: two Personal Growth Experiences and two Co-curricular Experiences. Personal Growth topics include study skills, career development, self-development, substance abuse, and pluralism. Co-curricular Experiences include events offered in conjunction with the scholarly, cultural, and civic programs presented regularly at the College.

**Credit Requirements**

With some exceptions, baccalaureate degree programs require the successful completion of 120 credits and associate’s degree programs require the successful completion of 60 credits. Exceptions are the following programs: Bachelor of Science (BS): Computer Science, Engineering Science, Physician Assistant; Associate in Applied Science (AAS): Computer Technology, Electrical Engineering Technology, Medical Laboratory Technology, Nursing; Associate in Science (AS): Architectural Studies.

**General Education**

Students in American colleges and universities are required to take courses in what is called general education. These courses provide a broad and comprehensive introduction to knowledge as it is organized by academic disciplines. General education provides students with the skills and knowledge expected of educated persons:

- to read challenging texts in English and to write clearly and expressively;
- to experience at least one laboratory science as well as mathematics;
- to explore one or more social sciences and to comprehend their different perspectives on individuals and societies;
- to have an introduction to the systematic study of literature and the arts;
- to gain competence in at least one foreign language and knowledge of its cultural contexts;
- to understand the historical development of United States institutions and relationships among Western and non-Western cultures.

General education also serves as an introduction to more specialized kinds of knowledge. Students finish general education courses with the skills and vocabulary that enable them to complete successfully courses in their majors in both associate’s and bachelor’s degree programs.

**Writing Across the Curriculum**

Students develop college-level writing skills in courses that are chosen across the curriculum. Quality writing skills are learned in courses that include a significant writing component in the laboratory sciences, social sciences, literature, and languages.

**General Education Requirements**

The general education requirements at CSI are arranged in the following categories: Required Courses; Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Foreign Language; and Pluralism and Diversity.

The general education courses comprise 21 to 47 credits of the total credits required for associate’s and bachelor’s degrees. Some of the courses are to be taken within the student’s first 36 credits; all general education courses should be taken within the student’s first 60 credits.

To receive an Associate in Arts, a Bachelor of Arts, or a Bachelor of Science degree at the College of Staten Island, students must complete the general education requirements as indicated below, including four required courses that should be completed within the first 36 credits. These required
courses are: ENG 111, ENG 151, COR 100, and PED 190. In addition, each associate's and bachelor's degree offered by the College has a set of requirements providing for courses outside the student's major field of study. These course offerings are grouped in the categories listed above; the category each course satisfies is identified in the course descriptions by the designation in parenthesis. Whenever possible, all the general education courses should be completed within the first 60 credits.

With the exception of the Pluralism and Diversity requirement, courses used to meet the general education requirements may not count toward core or major requirements.

For the Honors College and for the Associate in Science and Associate in Applied Science degree programs, the general education requirements vary. Please see the descriptions for the following programs: Associate in Science (AS): Architectural Studies, Engineering Science, Liberal Arts and Sciences; Associate in Applied Science (AS): Business, Computer Technology, Electrical Engineering Technology, Medical Laboratory Technology, and Nursing.

**Required Courses: 12 credits**

- ENG 111 Communications Workshop
  4 hours; 3 credits
- ENG 151 College Writing
  4 hours; 4 credits
- Students who enter the Baccalaureate Program as freshmen are enrolled in baccalaureate sections of ENG 111 and ENG 151.
- COR 100 United States: Issues, Ideas, and Institutions
  4 hours; 4 credits
- PED 190 Fitness for Life
  2 hours; 1 credit

**Associate in Arts; Bachelor of Arts:Bachelor of Science in Art, Communications, Dramatic Arts, Information Systems, Music, 28-47 credits**

**Scientific Analysis: 11 credits**

A. Science and Technology: 8 credits

Courses fulfilling this requirement are in the disciplines of astronomy, biology, chemistry, electrical technology, geology, integrated science, and physics. One group of courses is designated as appropriate for students who do not intend to continue with advanced courses; another group is for students who do intend to continue.

Two semesters of laboratory science at the 100 level chosen from among the courses listed below, all of which have MTH 020 or its equivalent through placement as a prerequisite. Where appropriate, these courses will have experiments that incorporate the use of computers. They subscribe to the principle of writing across the curriculum and to the use of word processing in laboratory reports. Courses satisfying this requirement are marked (science) at the end of the course descriptions.

B. Mathematics: 3 credits

Courses fulfilling this requirement are broadly divided into four categories and choices should be based on the student's intended field of study. In selecting a course appropriate to a specific major, refer to the section on Mathematics for information on placement tests, course descriptions, and prerequisites. Courses numbered at 100 or higher that fulfill this requirement are marked (math) at the end of the course description.

**Social Scientific Analysis: 7 - 8 credits**

Courses fulfilling this requirement are in the disciplines of African American studies, American studies, anthropology, communications, economics, geography, history, philosophy, political science, psychology, sociology, and women's studies.

Two courses to be selected from those offered in the social sciences, at least one of which must be at the 200 level. The 200-level courses have a significant writing component and subscribe to the principle of writing-across-the-curriculum. Courses satisfying this requirement are marked (social science) at the end of the course description.

**The West and the World: 4 credits**

A 200-level course to be selected from the list below. These courses have ENG 111 and COR 100 as prerequisites and have a significant writing component and subscribe to the principle of writing-across-the-curriculum. Courses satisfying this requirement are marked (West and World) at the end of the course description.

**Textual, Aesthetic, and Linguistic Analysis: 6 - 8 credits**

Two courses, one from the list of offerings in literature and one from the list of offerings in the arts or communications at the 100 and 200 level, with ENG 111 and, in some cases, ENG 151 as prerequisite for the 200-level course. Courses included in this category are of a general, fundamental nature. The 200-level courses have a significant writing component and subscribe to the principle of writing-across-the-curriculum. Courses satisfying this requirement are marked (literature) or (arts & com.) at the end of the course description.

**Pluralism and Diversity: 0 - 4 credits**

One course at the 200 level or above, which subscribes to the principle of writing-across-the-curriculum, to be selected either from those courses marked with an asterisk on the lists for Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; or from among those listed under Pluralism and Diversity. These courses deal significantly with pluralism and diversity. They may be selected so as to fulfill one of the other requirements as well. Courses satisfying this requirement are marked (P&D) at the end of the course descriptions.

**Foreign Language: 0 - 12 credits**

Demonstration of proficiency through the intermediate level, 213. Students may complete this requirement by achieving a passing grade on the proficiency examination (see below); or by taking three or fewer four-credit courses through level 213, depending on the results of their placement examination.

The Department of Modern Languages offers proficiency examinations in French, Italian, and Spanish. Students continuing with a language taken in high school are required to take the proficiency examination administered through the Modern Languages Media Center, Room 2S-114.

Other students may take the proficiency examination to receive exemption from the language requirement or to be placed at an appropriate level to fulfill the requirement. Students wishing to demonstrate proficiency at the 213-level in a language for which CSI does not administer an exam may take exams elsewhere. In all cases, students who pass a proficiency exam at the 213-level will receive an exemption only. No credit will be granted.
Students possessing a foreign high school degree from a non-English speaking country will receive an automatic exemption from the foreign language requirement, although they will receive no credit toward their degree.

Courses satisfying this requirement are marked (foreign lang.) at the end of the course description. (Not required for BS degree program in Information Systems.)

Bachelor of Science with the exception of the Bachelor of Science in Art, Communications, Dramatic Arts, Information Systems, and Music, 21 - 27 credits

Scientific Analysis: 11 credits
Same as listed above for the AA, BA, and other BS degrees

Social Scientific Analysis: 3 - 4 credits
One course at the 100 or 200 level from the lists of those offered in the social sciences, with ENG 111 as prerequisite for the 200-level course. The 200-level courses have a significant writing component and subscribe to the principle of writing-across-the-curriculum. Courses satisfying this requirement are marked (social science) at the end of the course description.

The West and the World: 4 credits
Same requirement as shown above for the AA, BA, and other BS degrees.

Textual, Aesthetic, and Linguistic Analysis: 3 - 4 credits
One course at the 100 or 200 level from the lists of those offered in literature, the arts, or communications with ENG 111 as prerequisite for the 200-level course.

Pluralism and Diversity: 0-4 credits
Same requirement as shown above for the AA, BA, and other BS degrees.

Courses Meeting the General Education Requirements

With the exception of courses used to fulfill the Pluralism and Diversity requirement, courses used to fulfill the general education requirements may not be used to fulfill core or major requirements.

Courses that are marked with an asterisk (*) may also fulfill the Pluralism and Diversity requirement.

Scientific Analysis Courses
Science and Technology: courses are identified as (science) at the end of the course descriptions.

Courses designed for students seeking an introduction to the sciences whose curriculum does not require the study of science beyond the introductory level; these courses are not suitable as prerequisites for further study in the sciences:

- BIO 102 Human Body
- BIO 106/107 Principles of Biology I/Laboratory
- BIO 108/109 Principles of Biology II/Laboratory
- CHM 106/107 Chemistry for Today I/Laboratory
- CHM 108/109 Chemistry for Today II/Laboratory
- GEO 105 Environmental Geology
- PHY 102 Sound and Light
- PHY 103 Matter and Antimatter
- PHY 105 Galileo to Newton and Beyond
- PHY 107 Maxwell to Einstein and Beyond
- INS 100/101 Integrated Physical Science I/Laboratory
- INS 110/111 Integrated Physical Science II/Laboratory

Courses that provide the foundation for further study in the sciences:

- AST 100/101 Contemporary Theories of the Solar System/Planetary Laboratory
- AST 102/103 Contemporary Theories of the Universe/Galactic Laboratory
- AST 105 Observational Astronomy
- AST 120 Space Science I
- AST 160 Space Science II
- BIO 170/171 General Biology I/Laboratory
- BIO 180/181 General Biology II/Laboratory
- CHM 141/121 General Chemistry I/Laboratory
- CHM 142/127 General Chemistry II/Laboratory
- GEO 100/101 Physical Geology/Laboratory
- GEO 102/103 Historical Geology/Laboratory
- PHY 120/121 General Physics I/Laboratory
- PHY 160/161 General Physics II/Laboratory

Courses designed as introductory science sequences for students in particular programs; these courses are intended to be taken only by students in the programs for which they have been designed:

- CHM 110/111 Principles of Chemistry I/Laboratory
- CHM 116/117 Principles of Chemistry II/Laboratory (for Nursing and Physician Assistant students)
- PHY 110/111 College Physics I/Laboratory
- PHY 150/151 College Physics II/Laboratory
- PHY 153 Waves, Optics, and Modern Physics (for Engineering Technology students)
- PHY 114 Introduction to Physics (for Nursing students)
- PHY 116 Physics I
- PHY 156 Physics II (for Health Science and Life Science students)

Courses designed to introduce students to the application of science in technology:

- ELT 102 Introduction to Electrical and Electronic Technology
- ELT 124/121 Principles of Electricity Fundamentals/Laboratory
- ELT 240/241 Principles of Digital Electronics/Laboratory
- SCI 106 Power, Pollution, and Energy

Mathematics:
Courses are identified as (math) at the end of the course descriptions.

One course numbered 100 or higher with 3 credits or more:

100-level courses that satisfy this requirement:

- MTH 102 Mathematics for Liberal Arts Students
- MTH 109 Mathematics and the Environment
- MTH 113 Introduction to Probability with Statistics and Computer Applications

Courses that are marked with an asterisk (*) may also fulfill the Pluralism and Diversity requirement.

- MTH 121 Finite Mathematics
- MTH 123 College Algebra and Trigonometry
- MTH 130 Pre-Calculus Mathematics

200-level courses that satisfy this requirement include:

- MTH 230 Calculus I with Pre-Calculus
DEGREE REQUIREMENTS

MTH 231 Analytic Geometry and Calculus I

Students should consult the Department of Mathematics to determine appropriate placement in this sequence of courses for further study of mathematics. Please note that some degree programs have specific requirements in mathematics.

Social Scientific Analysis Courses

Courses are identified as (social science) at the end of the course descriptions. Courses that are marked with an asterisk (*) also fulfill the Pluralism and Diversity requirement and are identified as (P&D) at the end of the course descriptions.

100-level courses

AFA 160/
HST160 African American History: 1619 to the Present
AMS 101 America: An Introduction
ANT 100 Introduction to Anthropology
ECO 101 Introduction to Economics
GEG 100 Introduction to Geography
HST 100 Past and Present
HST 116 Freshman Seminar in History
INT 100 International Studies
PHL 101 Introduction to Philosophy
PHL 130 Introduction to Ethics
POL 100 American Government and Politics
POL 103 Understanding the Political World: An Introduction to Political Science
PSY 100 Introduction to Psychology
SOC 100 Introduction to Sociology
WMS 100/
HST 182 Women’s History and Feminist Theory

200-level courses with ENG 111 as a prerequisite (see course description for other prerequisites, which may include COR 100):

AFA 211*/
AMS 211 American Culture in Black and White
AMS 262*/
HST 262 African American History: 1619-1865
AMS 263*/
HST 263 African American History: 1865-Present
AMS 265*/
HST 265 History of the Caribbean
AMS 269*/
HST 269 Blacks in Urban America: 1900-Present
AMS 210/
PHL 210 American Philosophy
AMS 212 Twentieth-Century America
AMS 214 America in the World
AMS 221 The American Dream
AMS 222 The City in American Culture
AMS 224/
HST 246 Religion in America
AMS 231 American Myths and Realities
AMS 251/
HST 240 American Ideas
ANT 201* Cultural Anthropology
ANT 202 Physical Anthropology
ANT 225*/
COM 225 Multicultural Literacy
CIN 204/
POL 219 Politics and Film
ECO 257* Japanese Economy
ECO 285 Economics for Engineers
GEG 223/
HST 223 American Landscapes
GEG 222 Geography of the United States
GEG 250 Conservation and Humanity
GEG 260 Urban Geography
HST 201 History of Western Civilization I
HST 202 History of Western Civilization II
HST 204* Introduction to Asian Civilization
HST 208* History of Modern Latin America
HST 210* History of Modern India
HST 211* Japanese Civilization
HST 212 History of the Ancient Near East
HST 213* Chinese Civilization
HST 214 Greece and the Hellenistic World
HST 215 The Origins of Western Europe: 400-100CE
HST 216 Byzantine Thought and Civilization
HST 218 The Roman World
HST 220 Medieval Thought and Civilization
HST 224 Jewish History
HST 225 History of Christianity
HST 228 Renaissance-Reformation Europe
HST 230 Early Modern England
HST 235* The Modern Middle East
HST 236* Asian American History
HST 244 U.S. History: 1607-1865
HST 245 U.S. History: 1865-Present
HST 248* N.Y.C.: History and Problems
HST 249* Italian American History
HST 251 History of the U.S. City
HST 252*/
EDD 252 History of Education in the U.S.
HST 257* The History of American Immigration
HST 270 Modern British History: 1700-1900
HST 272 Modern Germany
HST 274 History of Modern Russia
HST 276 History of Italy
HST 277 Europe: 1815-1914
HST 278 Twentieth-Century Europe
HST 286*/
WMS 286 History of American Women
PHL 213 Existentialism
PHL 216 Ideas of the World: 600 BC-1600 CE
PHL 217 Ideas of the World: 1600 to the Present
PHL 220 Experience and Knowledge
PHL 221 Logic and Scientific Method
PHL 223 Philosophical Thinking
PHL 236 Life and Death
PHL 237 The Tragic Dilemma
## Degree Requirements

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<thead>
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<th>Course Code</th>
<th>Course Title</th>
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<td>PHL 243*</td>
<td>Comparative Religion</td>
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<td>POL 201/</td>
<td>Early Political Theory</td>
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<td>PHL 202</td>
<td>Modern Political Theory</td>
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<td>POL 222</td>
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<td>PHL 204</td>
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<td>POL 221</td>
<td>The American Presidency</td>
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<td>MGT 223</td>
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<td>POL 233</td>
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<td>SLS 235</td>
<td>The American Political System</td>
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<td>POL 241</td>
<td>Western European Politics: United Kingdom, France, Italy, Germany</td>
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<td>POL 244</td>
<td>From the Soviet Union to the Commonwealth of Independent States</td>
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<td>POL 246</td>
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<td>POL 256*</td>
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<td>POL 264/</td>
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<tr>
<td>GEG 264</td>
<td>Political Geography</td>
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<td>PSY 202</td>
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<td>PSY 226</td>
<td>Theories of Personality</td>
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<td>PSY 242</td>
<td>Developmental Psychology</td>
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<tr>
<td>SLS 225/</td>
<td>Social Thought</td>
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<td>SLS 230*</td>
<td>American Society</td>
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<tr>
<td>SLS 245/</td>
<td>Contemporary Social Issues</td>
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<tr>
<td>SOC 202*/</td>
<td>Gender, Race, Ethnicity, and Class</td>
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<td>SOC 210</td>
<td>Sociology of Health and Medicine</td>
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<td>SOC 212</td>
<td>Criminology</td>
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<td>SOC 220</td>
<td>Marriage and the Family</td>
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<td>SOC 226</td>
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<td>SOC 230*/</td>
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<td>Sociology of Women</td>
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<td>SOC 232</td>
<td>Sociology of Aging</td>
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<td>SOC 238*/</td>
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<td>SOC 250</td>
<td>Sociology of Religion</td>
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<td>SOC 255</td>
<td>Sociology of the Arts</td>
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<td>Class, Status, and Power</td>
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<td>SOC 270</td>
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<td>SOC 274/</td>
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<td>SOC 275</td>
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<td>SOC 280</td>
<td>Sociology and Politics</td>
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<tr>
<td>SOC 292</td>
<td>The Individual in Society</td>
</tr>
</tbody>
</table>

## The West and the World Courses

These courses have ENG 111 as a prerequisite (see course descriptions for other prerequisites, which may include COR 100):

Courses are identified as (West and World) at the end of the course descriptions. Courses that are marked with an asterisk (*) also fulfill the Pluralism and Diversity Requirement and are identified (P&D) at the end of the course descriptions.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>AFA 260*/</td>
<td>History of Africa</td>
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<tr>
<td>ANT 205*</td>
<td>Native American Societies</td>
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<td>ECO 250</td>
<td>International Economics</td>
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<td>ECO 251*/</td>
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<td>ECO 256*/</td>
<td>Analysis of Underdeveloped Areas</td>
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<td>GEG 252/</td>
<td>Economic Geography</td>
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<td>GEG 264/</td>
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<td>PHL 266</td>
<td>Environmental Ethics</td>
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<td>HST 203</td>
<td>World since 1914</td>
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<tr>
<td>HST 204*</td>
<td>Introduction to Asian Civilization</td>
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<tr>
<td>HST 206*</td>
<td>Modern China</td>
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<tr>
<td>HST 208*</td>
<td>History of Modern Latin America</td>
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<tr>
<td>HST 209*</td>
<td>Modern Japan</td>
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<td>HST 210*</td>
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<td>HST 234*</td>
<td>Asian Tigers since 1945</td>
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<td>HST 235*</td>
<td>The Modern Middle East</td>
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<td>HST 279</td>
<td>Introduction to the Balkans: 1699 to Present</td>
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<td>HST 290</td>
<td>The West and the World: Africa Encounters Europe</td>
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<td>HST 291</td>
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<td>HST 292</td>
<td>The West and the World: Cross-Cultural Encounters in the Medieval World</td>
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<td>INT 200*</td>
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<td>INT 201</td>
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<td>POL 240*</td>
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<td>POL 256*</td>
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<td>POL 260</td>
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<td>POL 261</td>
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<td>SOC 240*</td>
<td>Minority Groups</td>
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<tr>
<td>SOC 260*</td>
<td>Class, Status, and Power</td>
</tr>
</tbody>
</table>

## Textual, Aesthetic, and Linguistic Analysis Courses

These courses have ENG 111, and in some cases ENG 151, as prerequisite. Literature: 200-level

Courses are identified as (literature) at the end of the course descriptions. Courses that are marked with an asterisk (*) also fulfill the Pluralism and Diversity Requirement and are identified (P&D) at the end of the course descriptions.

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<tr>
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<tbody>
<tr>
<td>AFA 221</td>
<td>African American Literature</td>
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<td>AFA 225</td>
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<td>AMS 243</td>
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<td>DRA 215/</td>
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<td>ENH 212</td>
<td>Modes of Drama</td>
</tr>
</tbody>
</table>
DEGREE REQUIREMENTS

DRA 260  History of Theater I
DRA 261  History of Theater II
ENH 201  English Literature to 1800
ENH 202  English Literature since 1800
ENH 203  Literary History of the U.S. to 1855
ENH 204  Literary History of the U.S. since 1855
ENH 205  Classics of European Literature
ENH 206  Classics of Modern World Literature
ENH 207*  Classics of Asian Literature
ENH 208  Contemporary Literature
ENH 210  Modes of Fiction
ENH 211  Modes of Poetry
ENH 213  Nonfiction
ENH 214  Trends in Literature and Film
ENH 215  Literature and Humanities
ENH 216  The Bible and Later Literature
ENH 217  Introduction to Shakespeare
ENH 222/*  Women and Literature
ENH 223/*  Mythology of Women
ENH 224*  U.S. Literature: Multicultural Perspectives
LNG 266/*  Women in European Literature to the Renaissance
LNG 267/*  Women in Literature after the Renaissance

Any 300- or 400-level course in foreign literature (FRN, ITL, SPN) or equivalent courses in other languages if offered. Some of these courses require a reading knowledge of the language; others allow students without knowledge of the language to read the works in English translation. Foreign language courses at the 300- or 400-level are included since many students place directly into these upper-level courses and need not pass through the prerequisite language courses.

Arts and Communications: 100-level
Courses are identified as (arts & com.) at the end of the course descriptions:
ART 100  Introduction to the Visual Arts
ART 103  History of Art to the Renaissance
ART 104  History of Art after the Renaissance
ART 120  Introductory Drawing
ART 130  Introductory Painting
ART 150  Introductory Sculpture
AMS 150/  Dance History: Twentieth-Century Survey
CIN 100  Introduction to Film
CIN 111  Basic Video Production
COM 100  Introduction to Media
DRA 100  Introduction to the Theater
MUS 105  World Music
MUS 108  Introduction to Jazz History
MUS 110  Introduction to Music History
MUS 120  Rudiments of Music

Arts and Communications: 200-level
Courses are identified as (arts & com.) at the end of the course descriptions:
AMS 209/  Art and Society in America
AMS 230/  American Film and American Myth
AMS 236/  Music in American Life
AMS 237/  American Musical Theater
AMS 241  Popular Culture and Mass Society
AMS 252  American Art
ART 203  Art of the Ancient World
ART 207  Nineteenth-Century Art
ART 208  Twentieth-Century Art
ART 210  The Architect and Society
CIN 204/  Politics and Film
COM 200  Media and Culture
COM 201  History and Theory of Television
COM 225/*  Multicultural Literacy

Arts and Communications: 200-level
Courses are identified as (arts & com.) at the end of the course descriptions:
AMS 209/  Art and Society in America
AMS 230/  American Film and American Myth
AMS 236/  Music in American Life
AMS 237/  American Musical Theater
AMS 241  Popular Culture and Mass Society
AMS 252  American Art
ART 203  Art of the Ancient World
ART 207  Nineteenth-Century Art
ART 208  Twentieth-Century Art
ART 210  The Architect and Society
CIN 204/  Politics and Film
COM 200  Media and Culture
COM 201  History and Theory of Television
COM 225/*  Multicultural Literacy

Pluralism and Diversity Courses
One course to be selected either from those marked with an asterisk (*) in the lists above or from among the following. These courses can be selected so as to fulfill one of the other requirements as well.
Courses are identified (P&D) at the end of the course descriptions:
AFA 247/  Peoples and Cultures of Africa
AFA 253/  African Politics
AFA 323/  The Black Writer in the Modern World
AFA 361/  The Heritage of Marcus Garvey and W.E.B. DuBois
HST 361  The Heritage of Marcus Garvey and W.E.B. DuBois
HST 266  The Black Writer in the Modern World
POL 253  African Politics
POL 371  Minority and the Media
ENL 335  Modern Asian Literature
ENL 348/  Modern Asian Literature
ENL 359  The Black Writer in the Modern World
ENL 366  Walt Whitman
ENL 384/  Major Woman Author I
WMS 384/  Major Woman Author I
DEGREE REQUIREMENTS

ENL 385/WMS 385 Major Woman Author II
ENL 386/WMS 387 Major Woman Author III
ENL 390/WMS 390 Studies in Women in Literature and the Arts
ENL 391/WMS 391 Woman as Hero
ENL 392 The Black Writer in the Modern World
ENL 395 Mythic Concepts and Archetypes in Literature
ENL 396/LNG 396 Studies in Global Literature I
ENL 397/LNG 397 Studies in Global Literature II
ENL 398 Cultural Variety in the Literature of the United States
HST 238/SLS 240 World Civilization I
HST 239/SLS 241 World Civilization II
HST 251 History of the U.S. City
HST 386/WMS 386 The Recovery of Women’s Past
HST 389/WMS 389 Themes in American Women’s History
PHL 344 Eastern Philosophy
POL 338 Civil Rights and Liberties
POL 342 Comparative Politics of Developing Countries
POL 349 Comparative Human Rights
POL 353 China: Politics and Foreign Relations
PSY 213 Cross-Cultural Psychology
SOC 260 Class, Status, and Power
SOC 330/WMS 330/AANT 331 Women and Work
SOC 340 Ethnicity and Immigration
SOC 350 Psychosocial Aspects of Disability
SPN 325 The Civilization of Pre-Columbian Spanish America
SPN 330 The Civilization of Spanish America
SPN 350 Introduction to Spanish-American Literature
SPN 480 Literature of the Hispanic Caribbean

Core/Major Requirements

Programs leading to a degree (with the exception of the AA and AS degrees in Liberal Arts and Sciences) require a concentrated study of a particular subject. This requirement is called the core requirement for associate’s degrees and the major requirement for bachelor’s degrees. The core and major requirements for each degree are listed under the degree.

GPA

All students are required to achieve at least a 2.0 grade point average in their core or major requirements in order to earn an undergraduate degree at the College. Some programs require a higher GPA. Some cores and majors require courses that must be taken during the freshman and sophomore years to provide the background necessary for the required core or major courses. These courses are identified as pre-major and listed under the degree description.

Courses used to fulfill pre-major requirements may also be used to fulfill general education requirements but may not be used to fulfill major requirements.

Courses used to fulfill core or major requirements may also be used to fulfill the Pluralism and Diversity requirement but may not be used to fulfill other general education requirements.

Electives

Each associate’s and bachelor’s degree program requires a specified total number of credits. Credits not counted toward general education, pre-major, or core/major requirements are electives. Students may freely choose their elective courses from among the courses offered at the College. However, students should keep in mind the liberal arts and sciences requirement; in some programs it may be necessary to choose as electives only those courses that are designated as liberal arts and sciences courses in order to accumulate the required number of liberal arts and sciences credits to qualify for the degree. Several programs have particular courses or groups of courses that are recommended as electives. Students should consult their adviser when choosing elective courses.

Liberal Arts and Sciences Requirements; AA, BA, 3/4; AS, BS, 1/2; AAS, 1/3

Courses are classified as liberal arts and sciences or as non-liberal arts and sciences. For undergraduate degrees, the New York State Department of Education requires that a portion of the credit hours in the degree program must be in the liberal arts and sciences. These requirements are:

1) Associate in Arts (AA) and Bachelor of Arts (BA), three-quarters of the credits shall be in the liberal arts and sciences;
2) Associate in Science (AS) and Bachelor of Science (BS), one-half of the credits shall be in the liberal arts and sciences;
3) Associate in Applied Science (AAS), one-third of the credits shall be in the liberal arts and sciences.
CSI courses are classified as follows:

**Liberal Arts and Sciences Courses**

- AFA African American Studies (except AFA 122, 230)
- AMS American Studies
- ANT Anthropology
- ART Art History (ART 100, 103, 104, 105, 203, 207, 208, 209, 210, 300, 301, 303, 304, 308, 440, 441)
- AST Astronomy
- BIO Biology (except BIO 316)
- CHM Chemistry
- CIN Cinema Studies (CIN 100, 210, 220, 301, 302, 303, 304, 401, 402, 403, 404, 405, 406, 407, 408)
- COM Communications (COM 100, 200, 201, 203, 211, 214, 220, 225, 230, 241, 277, 312, 370, 371, 374, 400, 412, 438, 445, 465, 475, 480, 490)
- COR General Education
- DAN Dance (only DAN 150)
- DRA Dramatic Arts (DRA 100, 101, 260, 261, all DRA/ENG, DRA/ENH, DRA/ENL, DRA/FRN, and DRA/SPN courses)
- ECO Economics
- EDC Early Childhood Education (EDC 215, 216)
- EDD Education (EDD 252)
- EDE Elementary Education (EDE 200, 260)
- EDS Secondary Education (EDS 200)
- ENG English
- ENH English
- ENL English
- ENS Engineering Science (ENS 250, 309, 310, 316, 350, 356, 383, 384, 450)
- FNC/ECO Finance/Economics (FNC/ECO 213, 214, 240, 315, 345, 360, and 370)
- FRN French
- GEG Geography
- GEO Geology
- HSS Honors College/Honors Seminar
- HST History
- INS Integrated Science
- INT International Studies
- ITL Italian
- LNG Language
- MGT/ECO Management/Economics (only MGT/ECO 230, 261)
- MGT/POL Management/Political Science (only MGT/POL 223, 323, 339)
- MTH Mathematics
- PHL Philosophy
- PHY Physics
- POL Political Science (except POL 335, 394)
- PSY Psychology (except PSY 103, 211, 318, 340, 368)
- SCI Science (only SCI 106)
- SLS Science, Letters, and Society
- SOC Sociology
- SPN Spanish
- WMS Women’s Studies

**Non-Liberal Arts and Sciences Courses**

- ACC Accounting
- AFA African American Studies (only AFA 122, 230)
- ARC Architecture
- BIO Biology (only BIO 316)
- BUS Business
- CIN Cinema Studies (CIN 111, 112, 113, 211, 311, and 411)
- CET Civil Engineering Technology
- COM Communications (COM 210, 240, 249, 250, 251, 260, 261, 270, 271, 290)
- CSC Computer Science
- DAN Dance (except DAN 150)
- EDC Early Childhood Education (except EDC 215, 216)
- EDD Education - General (except EDD 400)
- EDE Elementary Education (except EDE 200, 260)
- EDP Special Education
- EDS Secondary Education (except EDS 200, 201, and 202)
- ELT Electrical Engineering Technology
- FNC Finance (only FNC 220, 350)
- HED Health Education
- LGS Legal Studies
- MGT Management (except MGT/POL 223, MGT/ECO 230, MGT/ECO 261, MGT/POL 323, MGT/POL 339)
- MKT Marketing
- MDT Medical Technology
- HMA Medical Assistant
- ENT Engineering Technology
- NRS Nursing
- PAT Physician Assistant
- PED Fitness for Life
- PHO Photography
- PHT Physical Therapy
- POL Political Science (only POL 335, 394)
- PSY Psychology (only PSY 211, 318, 340, 368)
- SKO SEEK Orientation
- SPD Student Services
- SWK Social Work

Internships and field study courses are non-liberal arts and sciences.

**Double Majors/Double Degrees**

For students who wish to major in more than one field of study, complete a double major; or to earn two degrees (double degrees), the following policies apply:

To major in more than one field of study, students must complete...
all of the core or major requirements for each of the fields. If the general education requirements of the two fields differ, the student must complete the more restrictive and demanding of the two. If the total credits required differ, the student must complete the larger number. To have the second core or major recorded on the final transcript the student must apply for both fields when filing for graduation. Upon satisfactory completion of the requirements, both fields of study will be recorded on the final transcript.

To receive a second degree, it is necessary to complete the requirements of the second field of study and to complete at least 30 credits more than the number of credits required to complete the first degree.

**Minor Requirements**

In addition to completing the requirements of a major for a bachelor's degree, students may choose to minor in a discipline related to or complementary to their major field of study. Minors may be completed in almost all areas of study offered by the College. Requirements for completing a particular minor may be found in the section describing programs and courses in that field. Students are encouraged to consider taking a minor to guide their choice of elective courses into a coherent package and to enhance their career opportunities.

To have a minor recorded on the student's final transcript, the student must apply for the minor when filing for graduation.

**Honors Requirements**

**Departmental Honors**

Students may graduate with honors in their field of study in most bachelor's degree majors. To receive honors, the student must have at least a 3.5 grade point average in courses taken in the major and/or pass a comprehensive examination in the subject. The student must also complete an honors thesis or project. This last requirement is the heart of the honors program, for each student must work closely with a faculty member to define the project, carry out the research and investigation, and write the final report or prepare the final project. Students may receive credit through independent study for their work on an honors project. The projects must be accepted by the department. Students who successfully complete these requirements will receive the notation on their transcript that they have graduated with honors in their field of study. For specific requirements, see the section on Honors Requirements under the bachelor's degree program description.

**Graduation with Honors**

Undergraduates who meet the qualifications will receive the associate's or bachelor's degree summa cum laude, magna cum laude, or cum laude as follows:
- Cumulative GPA of at least 3.90: summa cum laude
- Cumulative GPA of at least 3.75: magna cum laude
- Cumulative GPA of at least 3.50: cum laude.

**Course Numbering**

**ALPHA Designation**

The section on Programs and Course Descriptions lists the requirements and courses for the degree programs in alphabetical order by the ALPHA designation for the courses in the discipline, from ACC for Accounting to WMS for Women's Studies. The description of core or major requirements is followed by the course descriptions in numerical order from 00X to 400-level courses.

**500-Level Courses**

Topics courses, independent study, and individual internships are designated at the 500 level with the alpha symbol for the discipline. 500-level courses, by their very nature, have no registered description and are not listed under courses descriptions for the disciplines. Topics courses may be taught for a maximum of three semesters and may not be used to fulfill requirements. The designations are topics courses: 500-590 (1 - 4 credits); independent study courses, 591-594 (1 - 4 credits); internships, 595-598 (1 - 4 credits).
Accounting

(Bachelor of Science, Minor)
Department of Business
Chair, Professor Laura Nowak, Business Building (3N), Room 219
The program offers preparation for careers in finance and accounting and
meets the New York State education requirements for sitting for the CPA
examination. A minimum GPA of 2.5 is required for admission to and
continuation in the Accounting major and for graduation. A 2.5 GPA is not
a requirement for students to enroll in the AAS program, for students
pursuing an Accounting minor, or for students enrolling in individual
courses.

Accounting (BS)

General Education Requirements for the BS
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 21-27 credits
Whenever possible, these courses should be completed within the first 60 credits.

1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)
      Chosen from: MTH 121, MTH 123, MTH 130, MTH 230, MTH 231, MTH 235

2. Social Scientific Analysis: (3-4 credits)
   ECO 101 Introduction to Economics required

3. The West and the World: (4 credits)

4. Textual, Aesthetic, and Linguistic Analysis: (3-4 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
   c. Arts and Communications: 200-level

5. Pluralism and Diversity Requirement: (0-4 credits)
See section on general education requirements for approved course lists and complete details.

Pre-Major Requirements: 35-38 credits

Business Courses
MGT 110 Organizational Theory and Management 3 credits
MKT 111 Marketing 3 credits
FNC/ ECO 240 Managerial Finance I 3 credits
Economics Courses
ECO 210 Price Theory 4 credits
ECO 212 Income and Employment Theory 4 credits
Quantitative and Computer Courses
ACC 114 Introduction to Accounting I 4 credits
ACC 121 Introduction to Accounting II 4 credits
BUS 150 Essential Software Tools for Business 3 credits or
CSC 102 Computing for Today 4 credits
or
CSC 126 Introduction to Computer Science 4 credits
MGT/ ECO 230 Introduction to Economic and Managerial Statistics 4 credits
One mathematics course following the course taken to fulfill the Mathematics General Education requirement chosen from:
MTH 130 Pre-Calculus Mathematics
MTH 221 Applied Finite Mathematics and Business Calculus
MTH 223 Technical Calculus
MTH 230 Calculus I with Pre-Calculus
MTH 231 Analytic Geometry and Calculus I
MTH 232 Analytic Geometry and Calculus II
MTH 236 Accelerated Calculus II 3-5 credits

Major Requirements: 40 credits

A. Accounting 40 credits
ACC 215 Intermediate Accounting I 4 credits
ACC 225 Intermediate Accounting II 4 credits
ACC 241 Federal Income Taxation I 3 credits
ACC 310 Cost Accounting I 3 credits
BUS 160 Business Law I 3 credits
BUS 260 Business Law II 3 credits
FNC/ ECO 345 Managerial Finance II 4 credits
Plus 16 additional credits in related subjects chosen with the written approval of the student’s adviser.

B. Certified Public Accountancy
Accounting majors who wish to apply for admission to the State examination for public accountancy must complete all courses specified under the accounting concentration and must include the following among the 16 credits of related subjects:
ACC 414 Advanced Accounting 4 credits
ACC 422 Standards and Procedures of Financial Audits 4 credits

Managerial Accounting
Note: Accounting majors may wish to take the examination for Certified Managerial Accountant.

Electives: 3 - 12 credits
Total Credits Required: 120

Honors
To graduate with Honors in Accounting a student must have a 3.5 grade point average in business courses and must have a 3.25 grade point average overall. An honors thesis or project supervised by a member of the business faculty must be completed.

Minor
At least 18 credits of courses including:
ACC 114 Introduction to Accounting I 4 credits
ACC 121 Introduction to Accounting II 4 credits
ACC 215 Intermediate Accounting I 4 credits
Two courses in accounting at the 200 or 300 level 6 credits
Courses

ACC 114 Introduction to Accounting I
4 hours; 4 credits
Introduction to the concepts and principles of accounting. Data accumulation technique. Emphasis on preparation and interpretation of financial statements. Areas of concentration include the accounting cycle, accounting for sole proprietorship, and introduction to partnership and corporate accounting.
Prerequisite: MTH 020 or an appropriate score on the CUNY Math Assessment Test, and successful completion of C/ACT Writing Skills test, and C/ACT Reading Sample Test or the equivalent.

ACC 121 Introduction to Accounting II
4 hours; 4 credits
A continuation of ACC 114. Partnership, corporations, and an introduction to cost accounting. Other topics discussed are current and long-term liabilities and statements of cash flow.
Prerequisite: ACC 114

ACC 215 Intermediate Accounting I
4 hours; 4 credits
Intense coverage of accounting principles, valuation, and accounting for current assets, plant assets, acquisitions, disposals, depreciation and depletion, intangible assets, current and long-term liabilities, and concepts of present and future value. Emphasis is placed on pronouncements of the Financial Accounting Standards Board and Accounting Principles Board.
Prerequisite: ACC 121
Pre- or corequisite: BUS 150 or CSC 102 or CSC 126

ACC 225 Intermediate Accounting II
4 hours; 4 credits
In-depth examination of long-term liabilities, stockholders’ equity, and income determination. Topics include bonds, stock issuance, retained earnings, leases, pensions, deferred taxes, and analysis of the statement of cash flow.
Prerequisite: ACC 215

ACC 235 Government and Not-for-Profit Accounting
3 hours; 3 credits
Thorough discussion and analysis of accounting for state and local governments and other not-for-profit institutions such as universities, hospitals, and voluntary health and welfare organizations. Topics discussed will include budgetary accounting, fund accounting, account groups, and financial statements.
Prerequisite: ACC 215

ACC 241 Federal Income Taxation I
3 hours; 3 credits
A comprehensive study of federal income tax principles and concepts as they apply to individuals. Tax treatment of the individual is stressed initially with emphasis on rates and exemptions, concepts of gross income, recognition and realization of income and capital gain and loss concepts. Additional topics include exclusions, deductions and credits, analysis of property transactions, federal tax research, preparation of individual federal income tax returns, and computer tax returns.
Prerequisites: ACC 121

ACC 250 Accounting Information Systems
4 credits; 4 hours
This course introduces the concept of computer information systems in accounting. The course has a two-pronged approach. First, the general accounting cycles (general ledger, A/R, A/P, etc.), in an accounting information system are introduced. Second, the accounting cycles are then related to the use of computer information technology. Concepts such as flow charting, data flow diagrams, security, and control are stressed.
Prerequisites: ACC 121 and one of the following: BUS 150, CSC 102, or CSC 108/116/118, or CSC 126

ACC 251 Federal Income Taxation II
3 hours; 3 credits
A broad study of the federal income tax pertaining to corporations and partnerships. A comprehensive study of tax accounting principles as applied to corporations and partnerships, corporate organization and reorganizations, corporate liquidations, corporate distributions, and special classes of corporations. Includes such areas as special deductions and computation of the normal tax, surtax, and tax on net long-term capital gains.
Prerequisite: ACC 241

ACC 300 International Accounting
4 hours; 4 credits
An overall view of the significant areas of transnational accounting that are relevant to accounting practices, procedures, and requirements of enterprises engaged in international operations. These areas include: foreign currency translation, accounting for inflation, financial reporting and disclosure, analyzing foreign financial statements, transfer pricing, and international taxation. (Offered only at the American University of Rome.)
Prerequisites: ACC 114 and ACC 121

ACC 310 Cost Accounting I
3 hours; 3 credits
Principles of cost accounting applicable to job order and process cost systems. Additional topics include cost-volume-profit relationships, standard costing, variable costing, and budgets.
Prerequisite: ACC 121

ACC 315 Analysis of Financial Statements
3 hours; 3 credits
The tools and techniques needed to explore the balance sheet, income statement, and the statement of cash flow. Heavy emphasis is on the use of ratios to evaluate the statements.
Prerequisite: ACC 225

ACC 318 New York State and Local Taxes
3 hours; 3 credits
A comprehensive study of various forms of State and municipal taxation, including personal income, unincorporated business, franchise, unemployment insurance, and occupancy taxes.
Prerequisite: ACC 121

ACC 414 Advanced Accounting
4 hours; 4 credits
An intensive course in specialized areas of accounting. Current topics, which have influenced the accounting profession and the financial community, such as partnerships, accounting for business combinations, government accounting, and foreign operations, are studied. Emphasis is placed on areas stressed on the CPA examination. The authoritative pronouncements of the Financial Accounting Standards Board and of its predecessor, the Accounting Principles Board, are interwoven into class discussions and problems assigned throughout the course. The application of advanced accounting theories to complex, practical problems is an integral part of the course.
Prerequisite: ACC 225
ACC 415  CPA Problems and Current Issues  
3 hours; 3 credits  
An analysis of the current areas of controversy in the accounting profession such as pensions and deferred taxes. The course will also serve as an intensive review for the F.A.R.E. and A.R.E. portions of the CPA examination.  
Prerequisite: ACC 225  

ACC 422  Standards and Procedures of Financial Audits  
4 hours; 4 credits  
Ethics, theory, procedures, and techniques of planning and performing the audit. Examines the attest function, generally accepted accounting principles, auditing and professional standards, and statistical testing techniques.  
Prerequisites: ACC 225, MGT/ECO 230, and BUS 150 or CSC 102, or CSC 126  

African American Studies  
(Bachelor of Arts, Minor)  
Interdisciplinary Program  
Coordinator: Professor Calvin Holder, History/Political Science, Economics, and Philosophy Building (2N), Room 210  
The purpose of this interdisciplinary program is to provide an understanding of selected aspects of African civilization, socio-cultural and political institutions, contributions of African Americans, and their unique role in the United States.  
The program includes courses in the history, music, art, drama, literature, and social-political life of Africa and the African Americans. The interdisciplinary approach is based on the premise that genuine understanding of the historical and cultural heritage of African Americans requires thorough and systematic training, control of the theoretical and methodological aspects of particular disciplines, as well as knowledge of the major assumptions of related disciplines. The program stresses the African continuity and the concept of the "African Diaspora."  

African American Studies (BA)  
General Education Requirements for the BA  
ENG 111, ENG 151, COR 100, PED 190: 12 credits  
Whenever possible, these four courses should be completed within the first 36 credits.  

Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 28-47 credits  
Whenever possible, these courses should be completed within the first 60 credits.  
1. Scientific Analysis: (11 credits)  
a. Science and Technology: (8 credits)  
b. Mathematics: (3 credits)  
2. Social Scientific Analysis: (7-8 credits)  
3. The West and the World: (4 credits)  
4. Textual, Aesthetic, and Linguistic Analysis: (6-8 credits)  
a. Literature: 200-level  
b. Arts and Communications: 100-level  
   Arts and Communications: 200-level  
5. Pluralism and Diversity Requirement: (0-4 credits)  
6. Foreign Language: (0-12 credits)  
See section on general education requirements for approved course lists and complete details.  

Major Requirements: 31 credits  
Students majoring in African American Studies must complete:  
1. AFA/HST 160 African American History: 1619 to Present 3 credits  
2. Five courses at the 200 level including at least one in each of the following categories:  
   Africa: AFA 247, 253, 260  
   Caribbean: AFA 223, 225, 265  
   United States: AFA 202, 204, 221, 229, 262, 263, 267, 269, 323, 361, 363  
   20 credits  
3. Two courses at the 300 level or above, one of which may be an independent study course 8 credits  

Electives: 48 credits  
Total Credits Required: 120  

Minor  
Sixteen credits at the 200 level or above including one course on each of the following: Africa, the Caribbean, the United States.  

Courses  
AFA 122  Black Dance Workshop  
(Also DAN 122)  
4 hours; 3 credits  
Based on traditions of the peoples of Africa and the Caribbean, this course develops the technical language of black dance, emphasizing the cultural interaction of native tradition and Western influence; the retelling of legends and tales through dance while weaving intricate designs and rhythms disguised in unrecognized symbolism.  

AFA 160  African American History: 1619 to the Present  
(Also HST 160)  
3 hours; 3 credits  
From the forced migration of the first Africans in the seventeenth century to the contemporary struggles for equality; emphasis on such topics as slavery, abolition, Reconstruction, the origins of Jim Crow, urban migrations, the struggle for civil rights, non-violence, and the new militancy. (social science)  

AFA 202  African American Drama  
(Also DRA 202)  
4 hours; 4 credits  
A study of the emergence of the black theater in the United States and an examination of the theater as a manifestation of the black genius.  

AFA 203  Workshop in Black Theater  
4 hours; 4 credits  
A workshop expressly designed to explore experimental improvisational techniques and methods by utilizing a wide range of movements, sources, and materials. The workshop is concerned with the development of individual awareness and creativity through the active and personal discovery of movement and is open to all students interested in the potentialities of ethnic dance for attaining freedom of movement.  

AFA 204  Ethnomusicology of African Americans  
4 hours; 4 credits  
History of African American music with emphasis on its relation to religion
and culture. Examination and analysis of the musical styles of spirituals, gospel hymns, blues, and jazz in their cultural setting.

AFA 205 African American Musical Theater
(Also DRA 205)
4 hours; 4 credits
A study of the musical theater of African Americans from its early beginnings in African culture to genius manifested in the nineteenth century, its influence on early vaudeville, its unique contribution to American musical theater, and the present-day popularity of its style. Current productions will be attended by the class and studied in detail when available.

AFA 211 American Culture in Black and White
(Also AMS 211)
4 hours; 4 credits
Mutual perceptions of blacks and whites in nineteenth- and twentieth-century America; how these perceptions were born, and how they have changed. (social science) (P&D)
Prerequisites: ENG 111, COR 100

AFA 221 African American Literature
(Also ENH 221)
4 hours; 4 credits
A sociological examination of African American literature as it has developed from the dynamic interaction between black and white communities and movements within the black community. Works by African American authors will be analyzed with respect to the dominant social forces of their times and the ideas about the historically persistent polemics of assimilation, separation, or cultural pluralism; and their relevance for Africans of African descent in their struggle for equality. (literature) (P&D)
Prerequisites: ENG 111, ENG 151

AFA 223 Comparative Black Literature
4 hours; 4 credits
The works of African, African American, and Caribbean writers are examined. The poetry and fiction of modern African writers are considered with particular reference to the African personality, presence africaine, and negritude, the vision and image of Africa.
Prerequisite: ENG 111

AFA 225 Contemporary Third World Literature
4 hours; 4 credits
A study of the literature of the world of the politically and economically oppressed and exploited. The course will deal with such themes as oppression and protest; violence; the crisis of identity; music, language, and rhythm; humorous distance; ritual and magic; and conceptualization and abstraction. (literature)
Prerequisite: ENG 111

AFA 247 Peoples and Cultures of Africa
(Also HST 266)
4 hours; 4 credits
A descriptive survey of the peoples and cultures of the African continent. Emphasis is on those features and/or qualities of the African pattern of life that are common to the African people as a whole. (P&D)
Prerequisites: ENG 111, plus any college-level history course or COR 100

AFA 253 African Politics
(Also POL 253)
4 hours; 4 credits
An examination of the colonial and post-colonial problems of Africa, and the developmental process in general. Other topics to be discussed include the socio-political and historical-philosophical appeal of communism to Africa; ideology, strategy; and the communist model of development; and the idea of revolution as an agent of rapid transformation versus the Euro-American model of evolutionary change. (P&D)

AFA 260 History of Africa
(Also HST 207)
4 hours; 4 credits
Nineteenth-century African history, the story of European imperialism, and the emergence of modern, independent Africa and its problems. (West and the World) (P&D)
Prerequisites: ENG 111, and COR 100 or any college-level history course

AFA 262 African American History: 1619-1865
(Also HST 262)
4 hours; 4 credits
A study of the African American experience in the Western hemisphere. Emphasis on the slave trade, slave life, slave revolts, and the struggle for freedom. For history majors and minors, this is designated as a United States history course. (social science) (P&D)
Prerequisites: ENG 111, and COR 100 or any college-level history course

AFA 263 African American History: 1865 to the Present
(Also HST 263)
4 hours; 4 credits
Continuing role of African Americans in the building of their own nations. Emphasis on freedom movements as shown in literature, in civil rights movements, in nationalist and other political organizations. (social science) (P&D)
Prerequisites: ENG 111, and COR 100 or any college-level history course

AFA 265 History of the Caribbean
(Also HST 265)
4 hours; 4 credits
Precolonial and colonial history of the Caribbean; an examination of the policies of the metropolitan powers, and the emergence of anticolonialist movements. For history majors and minors, this is designated as a World history course. (social science) (P&D)
Prerequisites: ENG 111, and COR 100 or any college-level history course

AFA 267 The Black Experience
4 hours; 4 credits
A workshop designed especially for teachers, students, and professionals working in the black community. The course will cover a wide range of topics in literature, music, dance, drama, economics, history, and anthropology.

AFA 269 Blacks in Urban America: 1900-Present
(Also HST 269)
4 hours; 4 credits
An examination of various aspects of black life in major American cities. Particular emphasis will be placed on the causes of the migration; ecological development of black communities; urban violence; blacks’ participation in conventional and radical politics; blacks in the labor force; and the impact of urbanization on the black family. For history majors and minors this is designated as a United States history course. (social science) (P&D)
Prerequisites: ENG 111, and COR 100, or any college-level history course
AFA 323  The Black Writer in the Modern World  
(Also ENL 392)  
4 hours; 4 credits  
An intensive study of various recent and contemporary black authors, writing in all the literary genres, and their grappling with traditional and changing environments. (P&D)  
Prerequisite: An ENH 200-level course  

AFA 361  The Heritage of Marcus Garvey and W.E.B. DuBois  
(Also HST 361)  
4 hours; 4 credits  
Marcus Garvey, the man and the idealist, his influence on African American consciousness; W.E.B. DuBois, the man and the thinker, his influence on African American consciousness and Pan-Americanism. (P&D)  
Prerequisites: Any 200-level history course and ENG 151

**American Sign Language Courses**

Department of Modern Languages  
Chair: Professor Kathryn Talario, English, Speech, and World Literature/Modern Languages Building (2S), Room 109  

ASL 113  American Sign Language I  
4 class hours, 2 laboratory hours; 5 credits  
An introduction to the fundamentals of American Sign Language (ASL) with particular attention to the grammar of the language and the culture of American deaf persons. Two additional language laboratory hours per week are required. (foreign lang.)  

ASL 114  American Sign Language II  
4 class hours, 2 laboratory hours; 5 credits  
A continuation of American Sign Language I emphasizing vocabulary development and increased fluency in the language's structure; regional and stylistic variations in ASL. Advanced work in deaf culture, folklore, and literature. Two additional language laboratory hours per week are required. (foreign lang.)  
Prerequisite: Successful completion of ASL 113 or equivalent  

ASL 213  American Sign Language III  
4 class hours, 2 laboratory hours; 5 credits  
A continuation of American Sign Language II emphasizing stylistic variations; a command of the various registers available in the language; and expanded use of classifiers. Advanced work in deaf culture, folklore, and literature. Two additional language laboratory hours per week are required. (foreign lang.)  
Prerequisite: Successful completion of ASL 114 or equivalent  

ASL 215  American Sign Language IV  
4 class hours, 2 laboratory hours; 5 credits  
A continuation of American Sign Language III preparing students to enter interpreter education programs. An analysis of the discourse of native signers emphasizing language variation as it correlates with varying life experiences of deaf people. Two additional language laboratory hours per week are required. (foreign lang.)  
Prerequisite: Successful completion of ASL 213 or equivalent  

**American Studies**

(Bachelor of Arts, Minor)  
Interdisciplinary Program  
Coordinator: Assistant Professor Catherine Lavender, History/Political Science, Economics, and Philosophy Building (2N), Room 203  
American Studies is the interdisciplinary study of American cultures, both past and present. American Studies courses examine the arts, literature, history, and popular culture of the United States and, more generally, North America. American Studies provides a strong foundation and essential skills for those preparing for careers in law, government, public history, archival management, education, social service, journalism, publishing, and communications. Individual courses in American Studies are recommended as cultural background for students in any major.

**American Studies (BA)**

General Education Requirements for the BA  
ENG 111, ENG 151, COR 100, PED 190: 12 credits  
Whenever possible, these four courses should be completed within the first 36 credits.

- **Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 28-47 credits**  
  Whenever possible, these courses should be completed within the first 60 credits.  
  1. Scientific Analysis: (11 credits)  
     a. Science and Technology: (8 credits)  
     b. Mathematics: (3 credits)  
  2. Social Scientific Analysis: (7-8 credits)  
  3. The West and the World: (4 credits)  
  4. Textual, Aesthetic, and Linguistic Analysis: (6-8 credits)  
     a. Literature: 200-level  
     b. Arts and Communications: 100-level  
     Arts and Communications: 200-level  
  5. Pluralism and Diversity Requirement: (0-4 credits)  
  6. Foreign Language: (0-12 credits)  

See section on general education requirements for approved course lists and complete details.

**Pre-Major Requirements: 3 credits**

AMS 101  America: An Introduction  
3 credits

**Major Requirements: 32 credits**

American literature (8 credits):  
- ENH 203  Literary History of the United States to 1855  
  4 credits  
- ENH 204  Literary History of the United States since 1855  
  4 credits

American history (8 credits):  
- HST 244  United States History: 1607-1865  
  4 credits  
- HST 245  United States History: 1865-present  
  4 credits

American Studies (16 credits):  
16 credits beyond AMS 101, including at least two courses at the 300 level or above.
Electives: 47 credits
Total Credits Required: 120

Minor

AMS 101 America: An Introduction 3 credits
American literature (8 credits):
ENH 203 Literary History of the United States to 1855 4 credits
ENH 204 Literary History of the United States since 1855 4 credits
American history (8 credits):
HST 244 United States History: 1607-1865 4 credits
HST 245 United States History: 1865-present 4 credits
American Studies (4 credits)

Courses

AMS 101 America: An Introduction
3 hours; 3 credits
Classic interpretations of American culture through a broad interdisciplinary survey of the men and women, ideas, and events that have contributed to the American experience. The abiding ideas, values, and myths that have shaped the nation's arts, actions, and beliefs, drawing from painting, architecture, film, music, history, and literature. From 17th-century witchcraft to 20th-century witch hunts, from General Washington to General Hospital, from the assembly line to assembler language, from Revere to Rambo. (social science)

AMS 150 Dance History: Twentieth-Century Survey
(Also DAN 150)
4 hours; 3 credits
Concentrating on the “pioneers of modern dance” -- Duncan, Denishawn, Graham, Humphrey, Weidman and others -- as well as on the experimental and avant-garde, using lectures, demonstrations, video, and film to illustrate examples of outstanding choreography. The course includes the dance of India and black dance coordinated with professional concerts and student reports. Includes “Happenings in Today’s World of Dance.” No dance background required. (arts & com.)

AMS 209 Art and Society in America
(Also ART 209)
4 hours; 4 credits
Three hundred years of American art, studied as an expression of American life. Works of art are viewed in terms of style and as guides to the complexities of American history and culture. (arts & com.)
Prerequisites: ENG 111, COR 100, and ART 100 or ART 103 or ART 104 or AMS 101

AMS 211 American Culture in Black and White
(Also AFA 211)
4 hours; 4 credits
Mutual perceptions of black and whites in nineteenth- and twentieth-century America; how these perceptions were born, and how they have changed. (social science) (P&D)
Prerequisites: ENG 111, COR 100

AMS 212 Twentieth-Century America
4 hours; 4 credits
An examination of selected works that are landmarks in the development of twentieth-century American culture. Authors will include Hemingway; Faulkner, Ellison, Wright, Miller, Mailer, and Beattie; Harrington, Friedan, and Galbraith. (social science)
Prerequisites: ENG 111, COR 100

AMS 214 America in the World
4 hours; 4 credits
Cross-cultural perspectives on American values, arts, and events. What foreign observers have thought about the United States. How our experience has paralleled, or differed from, that of Europe since the eighteenth century. What the important similarities, differences, and influences are between Western and Eastern cultures. (social science)
Prerequisites: ENG 111 and COR 100 or any American Studies or history course

AMS 221 The American Dream
(Also HST 221)
4 hours; 4 credits
The hopes, the frustrations, and, particularly, the dreams of American society as observed by foreign and native commentators in the past and present. This course will attempt to assess not only the idealization of the American dream but also disillusionment with it as expressed by such writers as Franklin, Tocqueville, Emerson, Whitman, Henry Adams, and Norman Mailer. (social science)
Prerequisites: ENG 111 and COR 100 or any American Studies or history course

AMS 222 The City in American Culture
4 hours; 4 credits
Impressions and analyses (literary, social, historical, cinematic, and photographic) of the varied cultures, institutions, and environments that are the substance of American urban life. A course that poses few facile solutions to the urban crisis but knows which questions are to be asked and which myths must be demolished if cities are ever to become humane and pleasurable organisms rather than death- and profit-bound ones. (social science)
Prerequisites: ENG 111, COR 100

AMS 224 Religion in America
(Also HST 246)
4 hours; 4 credits
Addresses the development of religion—Protestant, Catholic, Jewish, and others—in the context of American social, cultural, and intellectual history. (social science)
Prerequisites: ENG 111, COR 100

AMS 230 American Film and American Myth
(Also CIN 230)
4 hours; 4 credits
The American film and its relationship to American myth, society, and culture. Topics to be included are: the American West, the gangster, rural
and urban life, the nature of war, race and class, comic views of America. 
(arts & com.)
Prerequisite: ENG 111

AMS 231 American Myths and Realities
4 hours; 4 credits
American society, chiefly in the nineteenth and twentieth centuries, and its
problems, including democracy in an industrial order, the city, class
stratification, and racial conflict, as seen by such representative realistic
writers as Henry James, Dreiser, Veblen, William Dean Howells, and W.E.B.
DuBois. (social science)
Prerequisites: ENG 111, COR 100

AMS 236 Music in American Life
(Also MUS 236)
4 hours; 4 credits
The music-making and listening habits of the American people, examining
the musical activities, the musicians, and the social setting. The course
focuses on the history and significance of rock as an American and
international phenomenon, exploring issues of gender, race, and the
multicultural musical traditions that have enriched American popular
music. This course develops the ability to understand music as an
expression of cultural values, and does not require instrumental training or
the ability to read music. This course does not meet requirements for the
major or the minor in music. (arts & com.)
Prerequisite: ENG 111

AMS 239 The American Civil War
(Also POL 239)
4 hours; 4 credits
The course focuses on the civil and military aspects of the Civil War,
including the events and issues leading up to the war, the struggle over the
expansion of slavery, the Union’s and the Confederacy’s military strategies,
and analysis of key battles. The course will examine the presidency of
Lincoln and will explore major constitutional issues, such as the right of
secession and the problems of maintaining civil liberties during a civil war.
Prerequisites: ENG 111, COR 100

AMS 241 Popular Culture and Mass Society
4 hours; 4 credits
Popular entertainment as the expression of American cultural values:
television, radio, music, and sports; westerns, detective stories, and soap
operas. Functional analysis of entertainment as the myth and ritual of mass
society. The problems of aesthetic standards in a culture dominated by
commercialized taste. Relationships between popular entertainment and
political values. Readings from Durkheim, Ellul, McLuhan, Nye, and
Browne. (arts & com.)
Prerequisite: ENG 111

AMS 243 American Humor
4 hours; 4 credits
Humor in America shares some characteristics found in all cultures, past
and present, and sometimes has seemed peculiarly “native.” This course
traces the variety and development of American humor from colonial days
to the present through literature, drama, art, cartoons, and film. Humor
will be examined as psychological phenomenon, as philosophical outlook,
and as intellectual history. (literature)
Prerequisite: ENG 111

AMS 251 American Ideas
(Also HST 240)
4 hours; 4 credits
A major idea in American intellectual history will be examined from the
perspective of two or more disciplines. This course will demonstrate the
interdisciplinary method and philosophy of American Studies. Puritanism,
transcendentalism, the idea of freedom, social Darwinism, Freudianism,
and socialism are possible topics. (social science)
Prerequisites: ENG 111, and COR 100 or AMS 101 or any history course.

AMS 252 American Arts
4 hours; 4 credits
A major artistic theme will be traced through two or more of the American
arts. This course will demonstrate the interdisciplinary method and
philosophy of American Studies. Realism and romanticism, functionalism
and formalism, naturalism and the genteel tradition, and organic form are
possible topics. (arts & com.)
Prerequisites: ENG 111 and COR 100

AMS 258 Vietnam and America: 1945-1975
(Also HST 258)
4 hours; 4 credits
An examination of the history of American involvement in Vietnam, the
experience of Americans and Vietnamese who fought the Second Indochina
war on American society. For history majors and minors, this is designated
as a United States history course. (social science)
Prerequisites: ENG 111, COR 100 or any college-level history course

AMS 308 American Art since 1945
(Also ART 308)
4 hours; 4 credits
The course will examine the development of American painting and
sculpture since the end of World War II. In addition to providing an
historical and critical perspective for understanding the variety of styles that
emerged in this period, as well as related social and political issues, the
course will attempt to provide an opportunity for students to meet with
some of the artists, dealers, and curators who have contributed to recent
developments.
Prerequisite: ART 100 or ART 103 or ART 104 or permission of the instructor

AMS 311 The American Cultural Experience
4 hours; 4 credits
A senior seminar for American Studies majors who will do independent
research on a common theme of the American experience and meet to
discuss and analyze their findings. Examples of such topics are Puritan
religion, the frontier, slavery, reform, feminism, big business, radicalism,
literary naturalism, imperialism, and popular culture.
Prerequisite: A 200-level American Studies course.
ANT 335  Society and Culture in the United States
(Also HST 335)
4 hours; 4 credits
Major artistic and intellectual developments in America from the eighteenth century to the present, and their relationship to changing social and political realities. For history majors and minors, this is designated as a United States history course.
Prerequisites: Any 200-level history course or any 200-level American Studies course and ENG 151

Anthropology Courses
(See Sociology-Anthropology for Bachelor of Arts degree.)
Department of Sociology, Anthropology, and Social Work
Chair: Professor Sheying Chen, Psychology/Sociology, Anthropology, and Social Work Building (4S), Room 223

Courses

ANT 100  Introduction to Anthropology
3 hours; 3 credits
An overview of human physical and social evolution, and the range of diversity in contemporary human societies. The development of language and communication; tribal and peasant societies in the modern world; ethnicity, race and gender, migration and urbanization. (social science)

ANT 201  Cultural Anthropology
4 hours; 4 credits
Case studies of specific societies—tribal, peasant, and urban—to illustrate the variety of anthropological approaches to understanding social relations. Discussion of contemporary social issues in comparative perspective. (social science) (P&D)
Prerequisites: ENG 111, COR 100, and either ANT 100 or SOC 100

ANT 202  Physical Anthropology
4 hours; 4 credits
The evolution of non-human primates and human populations, with special focus on physical variation and its sources among contemporary human groups. The emergence of human forms of social organization and symbolic communication. (social science)
Prerequisites: ENG 111, COR 100, and either ANT 100 or SOC 100

ANT 205  Native American Societies
4 hours; 4 credits
Origins of Native North American societies and their transformation following contact with Europeans. Special emphasis on the diverse ways native people have coped with, adapted to, and resisted continually changing circumstances from colonial times to the present. (P&D) (west & world)
Prerequisites: ENG 111, COR 100, and either ANT 100 or SOC 100

ANT 225  Multicultural Literacy
(Also COM 225)
4 hours; 4 credits
This course will explore the nature of culture as it is defined by various disciplines and affected by class, race, gender, and ethnicity. Readings will include texts in anthropology, sociology, literary theory, media studies, and women's studies. (social science) (P&D) (arts & com.)

ANT 331  Women and Work
(Also SOC 330, WMS 330)
4 hours; 4 credits
The social and cultural constraints affecting women’s participation and attainments in the world of work. Conflicts between work role expectations and gender role expectations (e.g., femininity, nurturance, maternity). The effects of class background and race/ethnicity on women’s occupations, professions, and incomes. (P&D)
Prerequisites: Any 100-level sociology or anthropology course and any 200-level sociology or anthropology course or permission of the instructor

ANT 345  Early Civilizations
4 hours; 4 credits
Case studies in the rise of civilization, in light of anthropological theory, using examples from Mesopotamia, Egypt, India, China, and Central and South America. The social and cultural changes associated with the rise of cities and empires, slavery, the emergence of writing and monumental architecture.
Prerequisites: ANT or SOC 100 and any of the following: ANT 201, SOC 200, SLS 240, or permission of the instructor

ANT 350  Foraging Societies
4 hours; 4 credits
Studies of small bands of hunters and gatherers in which basic human biological evolution and cultural development have taken place over three million years. Their social organization, gender and family relations, the tensions and alliances of gift-based economies, religions without leaders, and politics without chiefs. The contemporary situation of such societies. (P&D)
Prerequisites: ANT or SOC 100 and either ANT 201 or permission of the instructor

ANT 365  Political Anthropology
4 hours; 4 credits
The central topic in political anthropology is the emergence of the state and urban society from tribal societies. This course will examine different explanations for the emergence of states and show the importance of this problem to anthropology as a whole.
Prerequisites: Any 100-level sociology or anthropology course and any 200-level sociology or anthropology course or permission of the instructor

ANT 370  Urban Anthropology
4 hours; 4 credits
The social and cultural organization of urban life examined from two perspectives: detailed and comparative studies of households, neighborhoods, homeless shelters, and other urban institutions, and the transformations in the Third World involving mass migrations and industrial relocation.
Prerequisites: Any 100-level sociology or anthropology course and any 200-level sociology or anthropology course or permission of the instructor

ANT 390  Human Evolution
4 hours; 4 credits
The evolution of Homo sapiens. Close reference to the actual fossil record and archaeological sites as grounds for inferences that can be drawn concerning the social life of prehistoric peoples and the development of language and culture.
Prerequisites: ANT 202 or BIO 108 or BIO 180, or permission of the instructor
ANT 450  Anthropology of Philosophy and Religion  
4 hours; 4 credits 
The intellectual confrontation with nature and the attempt to reduce nature to a knowable and controllable form. A survey of philosophical and religious systems as efforts by people to define their place in the world. Special topics will include witchcraft, magic, ritual, and esoteric religious systems. 
Prerequisite: Any 100-level sociology or anthropology course and any 200-level sociology or anthropology course or permission of the instructor.

ANT 460  Personality and Culture  
4 hours; 4 credits 
Examination of the different ways of understanding “human nature” in specific social contexts. Topics will include the development of anthropological theories of personality and culture, and Western and non-Western concepts of personhood and mental health. (P&D) 
Prerequisites: ANT 201 and any of the following: PSY 212, PSY 226, PSY 236, PSY 242, SOC 200, SOC 201, SOC 226, SOC 292, or permission of the instructor.

Architectural Studies  
Department of Performing and Creative Arts  
Program Coordinator: Associate Professor Frank Galati, Engineering Technologies Building (5N), Room 213  
The Associate in Science degree program in Architectural Studies provides a fundamental and broad educational background as preparation for continuation of study toward the BS degree in Architecture. The curriculum provides seamless articulation with the BS degree program in Architecture at the City College of New York. It offers as well, preparation for entry-level work as an architect assistant.

Architectural Studies (AS)  
Retention standards:  
Students must maintain a minimum GPA of 2.5 upon completion of 32 credits, which include the following courses: ARC 111, ARC 200, ENG 111, MTH 123.

General Education Requirements for the AS  
ENG 111, ENG 151, PED 190: 8 credits  
Whenever possible these three courses should be completed within the first 36 credits.
1. Scientific Analysis  
a. Science and Technology (4 credits)  
PHY 110 College Physics I  
PHY 111 College Physics Laboratory I  
or  
PHY 116 Physics I  
b. Mathematics (4 credits)  
MTH 123* College Algebra and Trigonometry  
MTH 123* College Algebra and Trigonometry  
2. Social Scientific Analysis (3 credits)  
PHL 103 Introduction to Philosophy  
3. Textual, Aesthetic, and Linguistic Analysis (2 credits)  
ART 120 Introductory Drawing  
4. Pluralism and Diversity (8 credits)  
HST 238 World Civilization I  
HST 239 World Civilization II

Core Requirements: 31 credits
ARC 111 Architectural Graphics Workshop 2 credits  
ENT 110 Engineering Graphics 2 credits  
ENT 101 Introduction to Measurement and Instrumentation 2 credits  
ARC 112 The Built Environment of New York City 2 credits  
ARC 200 Environmental Concepts I 4 credits  
ARC 212 History, Theory, and Technology of the Built Environment 2 credits  
ARC 300 Environmental Concepts II 4 credits  
ARC 400 Environmental Concepts III 4 credits  
CET 230 Statics 2 credits  
CET 360 Strength of Materials 3 credits  
MTH 223* Technical Calculus 4 credits  

* MTH 123 or any regular mathematics sequence of no less than eight credits ending with the calculus mathematics courses of either MTH 223 or MTH 230 or MTH 231 or equivalent or higher.

Guided Electives:  
SLS 301 Humanities: Ancient Culture 4 credits  
SLS 302 Humanities II: Medieval/Early Modern Culture 4 credits  

Total Credits Required: 68  
All courses designated ARC, ENT, CET are non-liberal arts and sciences.

Courses

ARC 111  Architectural Graphics Workshop  
4 hours; 2 credits  
Students will be introduced to and will learn to use fundamental verbal and graphic skills necessary for recording and transmitting ideas about architecture and the urban environment. Short exercises using verbal and graphic techniques learned in the workshop will introduce the student to basic concepts in design and presentation. The student will develop skills in diagramming, sketching, drafting, and perspective drawing, and will make models for interpreting such conceptual images as activity patterns, circulation systems, and built form.

ARC 112  The Built Environment of New York City  
2 hours; 2 credits  
Exploring the conditions and factors that have led to the development of New York City and its world renowned architecture and open spaces. Field trips, papers, and investigation of the creation of New York City.

ARC 200  Environmental Concepts I  
8 hours; 4 credits  
The course will focus on the analysis, description, and design of the student’s personal physical surroundings such as room, house, and school. Students will develop communication skills such as architectural drawing, sketching, diagramming, model making, and photography and will analyze and discuss environmental design problems. The student will become familiar with problem solving methods and a variety of design concepts and will propose design solutions. The presentation of these ideas will be verbal as well as graphic, using techniques learned in class. 
Prerequisite: ARC 111
ARC 212 History, Theory, and Technology of the Built Environment
2 hours; 2 credits
Survey of architecture, building traditions, and technologies from the Medieval Period through the Renaissance culminating in the twentieth century with the development of modern architecture.
Prerequisite: ENG 111 or permission of the instructors

ARC 300 Environmental Concepts II
8 hours; 4 credits
Students will analyze, describe, and design the physical settings of family and small group activities, such as an office, an apartment, a daycare center, and related open spaces and landscaping. They will learn to develop written and diagrammatic programs of user requirements and space needs for the activities in such settings. Physical design solutions meeting the criteria developed will be proposed and presented. Such presentations will make use of both previously developed communication skills and additional skills including the use of presentation models. Problem solving methods and technology used for buildings, open space, and landscape will be further developed.
Prerequisite: ARC 200

ARC 400 Environmental Concepts III
8 hours; 4 credits
Students will analyze, describe, and design the physical settings for neighborhood and city-wide activities such as community facilities and transportation networks. Problem identification and the development and presentation of physical design solutions for buildings; open space, landscape, and urban design aspects of these problems will be studied.
Prerequisite: ARC 300

Art
(Bachelor of Arts, Bachelor of Science, Photography Concentration, Minor)
Department of Performing and Creative Arts
Chair: Associate Professor Sylvia Kahan, Center for the Arts (1P), Room 203
The Art program is designed for students interested in both studio art and art history. The department is located in the Center for the Arts with outstanding studio and workshop spaces.

Art (BA or BS)

General Education Requirements for the BA and BS
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 28-47 credits
Whenever possible, these courses should be completed within the first 60 credits.
1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)
2. Social Scientific Analysis: (7-8 credits)
3. The West and the World: (4 credits)
4. Textual, Aesthetic, and Linguistic Analysis: (6-8 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
      Arts and Communications: 200-level
5. Pluralism and Diversity Requirement: (0-4 credits)
6. Foreign Language: (0-12 credits)
See section on general education requirements for approved course lists and complete details.

Pre-Major Requirements: 12 credits
Students planning to major in art must complete the following pre-major courses, some of which may also satisfy general education requirements:

ART 103 History of Art to the Renaissance 3 credits
ART 104 History of Art since the Renaissance 3 credits
ART 120 Introductory Drawing 2 credits
ART 130 Introductory Painting 2 credits
ART 150 Introductory Sculpture 2 credits
or
ART 275 Studio Art Theory and Practice 3 credits
ART 375 Intermediate Studio Art Theory and Practice 3 credits

Major Requirements: 34 credits
At least eight credits of art history courses beyond the 100 level. (ART 203, 207, 208, 209, 210, 300, 301, 303, 304, 308, 440, 441) At least six credits of studio art courses beyond the 100 level. (ART 220, 230, 245, 250, 275, 280, 285, 320, 330, 345, 350, 375, 380, 445) An additional 20 credits from art history or studio art courses beyond the 100 level.

Electives: 33 credits
Total Credits Required: 120

Liberal Arts and Sciences Requirement
All studio art courses are non-liberal arts and sciences.

Art (BA or BS) Photography Concentration
This concentration allows students interested in photography to receive the bachelor's degree in art with a concentration in courses dealing with photographic technique, theory, and history.

General Education Requirements listed above for BA or BS

Pre-Major Requirements: 13 credits
Students planning to major in art with the photography concentration must complete the following pre-major courses, some of which may also satisfy general education requirements.

ART 103 History of Art to the Renaissance 3 credits
ART 104 History of Art since the Renaissance 3 credits
PHO 120 Basic Photography 3 credits
and two of the following: 4 credits
ART 120 Introductory Drawing
ART 130 Introductory Painting
ART 150 Introductory Sculpture

Major Requirements: 34 credits
At least eight credits of art history courses beyond the 100 level including ART 303 History of Photography. The remaining course may be chosen from ART 203, 207, 208, 210, 300, 304, 305, and 308.
To graduate with Honors in Art a student must have a 3.5 grade point average in art courses and must complete a body of independent work approved by one or more full-time art faculty advisers. The work should be presented in an exhibition if possible.

Art history students may undertake the writing of a research paper with the approval and supervision of a faculty adviser.

**Minor**

Prerequisite Courses: 6 credits

- ART 103 History of Art to the Renaissance 3 credits
- ART 104 History of Art since the Renaissance 3 credits

**Requirements: 12 credits**

At least 12 credits chosen from ART 203, 207, 208, 209, 210, 300, 301, 304, 305, 308.

**Courses**

(See Photography for photography course descriptions.)

**ART 100 Introduction to the Visual Arts**

3 hours; 3 credits

A selective examination of the materials and forms of painting, sculpture, and architecture, and cinema designed to provide students with a critical and historical framework for evaluating visual experience. The course will combine slide lectures and films with a number of museum and gallery visits. (arts & com.)

**ART 103 History of Art to the Renaissance**

3 hours; 3 credits

This survey course will trace the development of painting, sculpture, architecture, and cinema designed to provide students with a critical and historical framework for evaluating visual experience. The course will combine slide lectures and films with a number of museum and gallery visits. (arts & com.)

**ART 104 History of Art after the Renaissance**

3 hours; 3 credits

A continuation of ART 103, this survey course traces further developments in the visual arts from the Renaissance to the works of the twentieth-century masters. (arts & com.)

**ART 105 Art in Rome**

3 hours; 3 credits

A course designed to familiarize students with the vast artistic patrimony of Rome. Visits to archaeological sites, churches, palaces, museums, and galleries. The course is for the non-art major. It is conducted almost entirely on site. (Offered only at the American University of Rome.)

**ART 120 Introductory Drawing**

4 hours; 2 credits

Drawing as an essential tool of vision; fundamentals of anatomy, perspective, and life drawing; some work in landscape and still life; contour drawing in pencil and charcoal. (arts & com.)

**ART 125 Portrait Drawing I**

4 hours; 2 credits

Basic study of the human head and facial expressions with particular attention to the problems of portraiture. For beginning students.

**ART 130 Introductory Painting**

4 hours; 2 credits

Familiarization with materials and equipment; simple representational problems working to achieve three-dimensional form in space. (arts & com.)

**ART 150 Introductory Sculpture**

4 hours; 2 credits

An examination of the relationship between two-dimensional design and three-dimensional structures. Ideas will be realized through work in a series of media. Flat simple drawings will be converted into digital images on the computer; these will be turned into oaktag models, and finally reproduced in metal. Students will be required to build a minimum of two finished steel sculptures and two color digital images. (arts & com.)

**ART 203 Art of the Ancient World**

4 hours; 4 credits

An examination of the art and architecture of predynastic Egypt, the Near East, the Aegean, mainland Greece, and Republican and Imperial Rome. While the course is, of necessity, a survey, particular emphasis will be placed on the evolution of the classical tradition. (arts & com.)

Prerequisites: ART 100 or 103 or 104 or permission of the instructor and ENG 111

**ART 207 Nineteenth-Century Art**

4 hours; 4 credits

An analysis of the principal currents of European and American art from the revolutionary period through the origins of modernism in the last years of the century. Topics to be covered include Neoclassicism, Romanticism, Realism, and Impressionism. (arts & com.)

Prerequisites: ART 100 or 103 or 104 or permission of the instructor and ENG 111

**ART 208 Twentieth-Century Art**

4 hours; 4 credits

An analysis of the principal developments in art from the end of the nineteenth century through the 1970s. In addition to painting, sculpture, and architecture, the course will consider the contributions of photography and cinema to the formation of the modernist aesthetic. (arts & com.)

Prerequisites: ART 100 or 103 or 104 or permission of the instructor, and ENG 111

**ART 209 Art and Society in America**

(Also AMS 209)

4 hours; 4 credits

Three hundred years of American art, studied as an expression of American life. Works of art are viewed in terms of style and also as guides to the complexities of American history and culture. (arts & com.)

Prerequisites: ENG 111, and ART 100 or ART 103 or ART 104 or AMS 101
ART 210  The Architect and Society
4 hours; 4 credits
A selective review of the practice of architecture from antiquity to the present. The course will analyze changing formal and aesthetic concepts in the light of contemporaneous social and economic factors. (arts & com.) Prerequisites: ENG 111, and ART 100 or 103 or 104 or permission of the instructor

ART 220  Intermediate Drawing
4 hours; 3 credits
Concentrated study of the figure, complex problems in perspective and composition, detailed rendering in light and shade, and work in ink with brush and pen. Prerequisite: ART 120

ART 225  Portrait Drawing II
4 hours; 3 credits
Basic study of the human head and facial expressions with particular attention to the problems of portraiture. For intermediate students. Prerequisite: ART 125

ART 230  Intermediate Painting
4 hours; 3 credits
Representation of complex textures, problems of color, composition from figurative to abstract, and expression in the medium. Prerequisite: ART 130

ART 240  Women and the Fine Arts
(Also WMS 270)
4 hours; 4 credits
This course examines the two-fold relationship of women to the fine arts; their role as subjects and as artists. Topics such as the portrayal of women as goddess, mother, and housewife, and as artist will be undertaken with a view to the social and historical input and implication of this imagery. The circumstances of women artists from the Renaissance to the present will also be considered. Prerequisites: ENG 111, and WMS 100 or ART 100 or 103 or 104 or permission of the instructor.

ART 245  Printmaking
4 hours; 3 credits
Instruction and practice in the fundamentals of the intaglio process; its relationship to the design and meaning of the print.

ART 250  Intermediate Sculpture
4 hours; 3 credits
Further techniques in subtractive and additive sculpture through production of works in stone and/or wood. Prerequisite: ART 150

ART 275  Studio Art Theory and Practice
4 hours; 3 credits
The aim of this course is to open a thorough understanding of two-dimensional organization in painting and drawing and, by extension, of three-dimensional concepts in sculpture. The study will involve a design analysis of selected paintings from the fifteenth and sixteenth centuries. Students are expected to produce drawings and paintings based on these explorations. Prerequisite: ART 120

ART 300  Medieval and Renaissance Art
4 hours; 4 credits
An attempt to differentiate and define the major stylistic developments in medieval and Renaissance art and architecture and to locate them within the broader context of contemporaneous European culture. Prerequisites: ENG III, and ART 100 or 103 or 104 or permission of the instructor

ART 301  Baroque Art
4 hours; 4 credits
An analysis of the Baroque style, which developed in Italy at the beginning of the seventeenth century and spread throughout Europe. Particular emphasis will be placed on discussion of the varying intellectual, religious, and socioeconomic factors that affected such important questions as the role of patronage. Prerequisites: ENG III, and ART 100 or 103 or 104 or permission of the instructor

ART 302  Garden Architecture in Italy
3 hours; 3 credits
An examination of the evolution of Italian garden architecture from the late Republican period to Neoclassicism with special emphasis placed on literary sources and with extensive site visits. (Offered only in the Study Abroad program at the Scuola Lorenzo di Medici in Florence.) Prerequisite: ART 100 or ART 103 or ART 104

ART 303  History of Photography
4 hours; 4 credits
A critical study of the history of photography from its beginning in the early nineteenth century through contemporary developments. Topics to be covered include the aesthetic relation of form and content, portraiture, the documentary and abstract approaches, and color photography. The primary emphasis will be on photography as an art, but emphasis will be given to the development of photographic equipment, materials, and techniques as they influence the art. Students will utilize slides and books to study the work of major artists. No previous study of photography is necessary. Prerequisites: ENG III, and ART 100 or 103 or 104 or permission of the instructor.

ART 304  History of Printmaking
4 hours; 4 credits
The history of printmaking from its origins in the fifteenth century to the present. While the main emphasis will be placed on the relation of printmaking to contemporaneous activity in paintings, an effort will be made to define the individual character of such techniques as woodblock printing, engraving, etching, mezzotint, aquatint, lithography, and screenprinting. The course will encourage connoisseurship by combining slide lectures with visits to museums and graphics studios. Prerequisites: ART 100 or ART 103 or 104 or permission of the instructor

ART 305  Museum and Gallery Training
4 hours; 4 credits
Students interested in studio art or art history are given an opportunity to combine theory and practical experience by working with an adviser at the College and in selected museums and private galleries in New York City. Since serious commitment is essential, prospective students will be interviewed by the adviser before registration. Hours will be arranged. This course may be repeated once for credit, with permission of the instructor. Prerequisites: ENG III, and ART 100 or 103 or 104 or permission of the instructor

ART 308  American Art since 1945
(Also AMS 308)
4 hours; 4 credits
The course will examine the development of American painting and
dimensional construction. In addition to providing a historical and critical perspective for understanding the variety of styles that emerged in this period, as well as related social and political issues, the course will attempt to provide an opportunity for students to meet with some of the artists, dealers, and curators who have contributed to recent developments. Prerequisite: ART 100 or ART 103 or ART 104 or permission of the instructor.

ART 310  Aspects of Renaissance Art
3 hours; 3 credits
This course examines the development of European art and architecture from 1400 to 1520, stressing the Italian contribution and focusing particularly on style, iconography, and patronage. (Offered only at the American University of Rome.) Prerequisites: ENG III, and ART 100 or 103 or 104 or permission of the instructor.

ART 311  Baroque Art and Architecture
3 hours; 3 credits
An analysis of the Baroque style that developed in Italy at the beginning of the seventeenth century and spread throughout Europe. Particular emphasis will be placed on discussion of the varying intellectual, religious, and socio-economic factors that affected such important issues as patronage. The role played by the city of Rome will be given particular consideration. (Offered only at the American University of Rome.) Prerequisite: ART 100 or 103 or 104 or permission of the instructor.

ART 319  The Role of Art in the Modern World
3 hours; 3 credits
A seminar exploring the current ideas and debates regarding art's role in the world. The class will investigate the nature of what the art activity was and is, as well as what purpose it served in the past and what purpose it serves currently. Oral presentations will be made. Concepts such as modernism, post-modernism, multiculturalism, and deconstruction will be introduced and discussed. Prerequisites: Any 200 or 300 level studio art course and ART 100 or ART 104, or permission of the instructor.

ART 320  Advanced Drawing
4 hours; 3 credits
Individual studio projects and advanced figure compositions in all drawing media. This course may be repeated for credit. Prerequisite: ART 220.

ART 325  Portrait Drawing III
4 hours; 3 credits
Basic study of the human head and facial expressions with particular attention to the problems of portraiture. For advanced students. This course may be repeated for credit. Prerequisite: ART 225.

ART 330  Advanced Painting
4 hours; 3 credits
Individual studio projects with emphasis on development of personal direction. This course may be repeated for credit. Prerequisite: ART 230.

ART 340  Design Workshop I
4 hours; 3 credits
Introduces the student to the basic conceptual and executional skills necessary in the field of graphic design. Areas to be covered will include two-dimensional space, color relationships, space relationships, and three-dimensional construction.

ART 341  Design Workshop II
4 hours; 3 credits
More advanced two- and three-dimensional problem solving with emphasis on the technical skills necessary for reproduction. Areas to be covered will include design problems and applications, typography, and methods of reproduction. Prerequisite: ART 340.

ART 345  Intermediate Printmaking
4 hours; 3 credits
Development of technical and expressive skills through selected areas of study in one or more of the graphic processes. Prerequisite: ART 245.

ART 350  Advanced Sculpture
4 hours; 3 credits
A continuation of ART 250 based upon a project approved by both student and instructor. Students will have the opportunity to work with an arc welder and plasma cutter, and to work in heavier steel. This course may be repeated for credit. Prerequisite: ART 250.

ART 375  Intermediate Studio Art Theory and Practice
4 hours; 3 credits
A continuation of the study of two-dimensional systems and concepts. The central focus will be an understanding of the development and structure of Cubism and fragmented patterns. Studies will be made in both black and white and in color. Students are expected to produce drawings and paintings that transpose realist paintings into Cubist manner. Prerequisite: ART 275.

ART 440  Contemporary Art Theory I
4 hours; 4 credits
A seminar for advanced students in the arts. Part I will review the historical developments that led to the establishment of the New York School. Prerequisite: Permission of the instructor.

ART 441  Contemporary Art Theory II
4 hours; 4 credits
The seminar will continue with an attempt to correlate individual student research on recent movements with the shifts in aesthetic theory from the 1930s to the present. Prerequisite: ART 440 or permission of the instructor.

ART 445  Advanced Printmaking
4 hours; 3 credits
Individual projects in one or more of the printmaking processes. Emphasis on the development of individual style with a mature level of expression and the compiling of a portfolio of prints. This course may be repeated for credit. Prerequisite: ART 345.

ART 475  Advanced Studio Art Theory and Practice
4 hours; 3 credits
This course will probe the inter-relationship of realist and abstract painting. Realism and abstraction will be compared and explored for the elements they share as well as for their differences. From a simple still life the student will develop studies that result in two distinct series of paintings, one abstract, the other realist. This course may be repeated for credit. Prerequisite: ART 375.
Astronomy Courses

Department of Engineering Science and Physics

Program Coordinator and Director of the Astrophysical Observatory: Associate Professor Irving Robbins, Computer Science/Engineering Science and Physics Building (1N), Room 231

Astrophysical Observatory: 16-foot dome observatory, equipped with a computerized 16” f/10 Meade Schmidt-Cassegrain Telescope and linked via ETHERNET to the astrophysical laboratory located in a neighboring building. The telescope is fully computer-controlled, has over 64,000 celestial objects in its memory, and is equipped with Charge Coupled Device (CCD) digital cameras.

AST 100 Contemporary Theories of the Solar System
3 hours; 3 credits
The nature of the sun, moon, planets, comets, meteors and meteorites; early and modern history of the earth; the origin of the solar system; evolution of life on earth and in the cosmos. Field trips and/or day and evening astronomical observation sessions will be required. Students may not receive credit for both INS 100 and AST 100. (science) Prerequisite: MTH 020 or an appropriate score on the CUNY Mathematics Assessment Test Corequisite: AST 101

AST 101 Planetary Laboratory
2 laboratory hours; 1 credit
Experiments on the properties of light and telescopes, the celestial sphere and time, eclipses, planetary orbits, meteors, sunspots, lunar geography, and observation work. (science) Corequisite: AST 100

AST 102 Contemporary Theories of the Universe
3 hours; 3 credits
A presentation of the galaxy, atomic structure, star populations, nuclear energy, stellar evolution, galactic structure, and the universe. Field trips and/or day and evening astronomical observation sessions will be required. (science) Prerequisite: MTH 020 or an appropriate score on the CUNY Mathematics Assessment Test Corequisite: AST 103

AST 103 Galactic Laboratory
2 laboratory hours; 1 credit
Experiments on atomic properties of matter, stellar atmosphere, variable and nova stars, galaxy classification, stellar clusters, and observation work. (science) Corequisite: AST 102

AST 105 Observational Astronomy
3 class hours, 2 laboratory hours; 4 credits
Topics covered are aligning and using computerized telescopes; celestial coordinate systems, time keeping, observations of the planets, moon, sun, asteroidal motions, and variable stars; astrophotography with CCD imaging cameras; photometric techniques. Day and evening astronomical observation sessions will be required beyond regularly scheduled hours. (science) Prerequisites: MTH 020 or an appropriate score on the CUNY Mathematics Assessment Test, AST 100 or AST 102 or permission of the instructor

AST 120 Space Science I
3 class hours, 2 laboratory hours; 4 credits
Observations and telescopes. The structure and origin of the solar system, the sun-Earth connection, and space physics. Field trips and/or day and evening astronomical observation sessions will be required. (science) Pre- or corequisite: MTH 230 or MTH 231

AST 160 Space Science II
3 class hours, 2 laboratory hours; 4 credits
Cosmology; the Big Bang and beyond. Laboratory emphasis will be on stellar photometry and spectroscopy. Field trips and/or day and evening astronomical observation sessions will be required. (science) Prerequisite: AST 120 Corequisite: MTH 232

AST 396 Introduction to Astrophysics
3 hours; 3 credits
Celestial mechanics, electromagnetic radiations; their detectors and remote sensing; special relativity, stellar pulsation, general relativity and black holes, the nature and evolution of galaxies, origins, Newtonian and relativistic cosmology. Field trips and/or day and evening astronomical observation sessions will be required. Prerequisite: AST 160

Biochemistry

(Bachelor of Science, Minor)

Department of Biology
Chair: Professor Jacqueline LeBlanc, Biological/Chemical Sciences Building (6S), Room 143

Department of Chemistry
Chair: Associate Professor John Olsen, Biological/Chemical Sciences Building (6S), Room 235

A degree in Biochemistry prepares students interested in working in the fast growing biotechnology field, in the chemical and pharmaceutical industries, in research, product development, marketing and sales, and in such related fields as teaching. For students who wish to pursue graduate study in the sciences or enter professional schools (medicine, dentistry, optometry, pharmacy), a BS degree in Biochemistry is viewed quite favorably by admissions committees.

Biochemistry (BS)

General Education Requirements for the B.S.
ENG 111, ENG 151, COR 100, PED 190; 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 21-27 credits
Whenever possible, these courses should be completed within the first 60 credits.
1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)
2. Social Scientific Analysis: (3-4 credits)
3. The West and the World: (4 credits)
4. Textual, Aesthetic, and Linguistic Analysis: (3-4 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
   c. Arts and Communications: 200-level
5. Pluralism and Diversity Requirement: (0-4 credits)

See section on general education requirements for approved course lists and complete details.

Pre-Major Requirements: 34 credits

Students planning to major in biochemistry must complete the following requirements. These courses may also be used to satisfy general education requirements. A detailed guide to course choices for biochemistry and chemistry majors is available from the Department of Chemistry.

- CHM 141 General Chemistry I 3 credits
- CHM 121 General Chemistry I Laboratory 1 credit
- CHM 142 General Chemistry II 3 credits
- CHM 127 General Chemistry II Laboratory 1 credit
- BIO 170 General Biology I 3 credits
- BIO 171 General Biology I Laboratory 1 credit
- BIO 180 General Biology II 3 credits
- BIO 181 General Biology II Laboratory 1 credit
- PHY 120 General Physics I 3 credits
- PHY 121 General Physics I Laboratory 1 credit
- PHY 160 General Physics II 3 credits
- PHY 161 General Physics II Laboratory 1 credit

Calculus sequence chosen from the following: 10 credits
- MTH 229 Calculus Computer Laboratory
- MTH 230 Calculus I and Pre-Calculus
  - or
- MTH 231 Analytic Geometry and Calculus I
  - and
- MTH 232 Analytic Geometry and Calculus II
  - or
- MTH 233 Analytic Geometry and Calculus III
  - or
- MTH 235 Accelerated Calculus I
- MTH 236 Accelerated Calculus II

Major Requirements: 40 credits

- CHM 250 Organic Chemistry I 4 credits
- CHM 256 Organic Chemistry II 4 credits
- CHM 240 Analytical Chemistry 4 credits
- CHM 257 Biochemistry Laboratory 4 credits
- BIO 370 Biochemistry I 4 credits
- CHM 376 Biochemistry II 4 credits
- CHM 330 Physical Chemistry: Equilibria 4 credits
- CHM 336 Physical Chemistry: Processes 4 credits
- CHM 337 Experimental Methods in Physical Chemistry 4 credits

Electives: 17 credits

All biochemistry majors are encouraged to take Independent Study (CHM 591-4 or BIO 591-4) as an elective.

Total Credits Required: 120

Honors

A student may be eligible for admission to the honors program in biochemistry if he or she enters the senior year with a 3.5 grade point average. With the concurrence of a faculty supervisor, the student must submit (by September 1) a one-page summary of a proposed research project. The chairperson of the department and the faculty supervisor will appoint a three-member committee to evaluate and/or modify the proposal (by September 15), then grant or deny admission to the honors program.

While pursuing honors research the student may receive eight credits for Independent Study (BIO 594 or CHM 594), four each in the fall and spring semesters. Additionally, it is highly recommended that the student begin work on the project during the summer or spring semester that immediately precedes the senior year. Progress of the research will be monitored as follows: (1) the student will meet with his or her committee by November 1 of the first semester; (2) the student will submit a five-page progress report by January 15; (3) the committee will recommend for or against continuation in the program by February 1; (4) the student will submit a thesis, following the style of major journals, by May 1; (5) the student will present an oral defense of the thesis to the committee, by the end of the final exam period.

The deadline dates noted above are based on a June graduation date, but corresponding guidelines may be designed for January graduation. In either case, it is expected that completion of the honors program will require at least one year of student research.

Minor

Prerequisite Courses:
- CHM 141, 121, 142, 127 8 credits
- BIO 170, 171, 180, 181 8 credits

Requirements

- CHM 240 Analytical Chemistry
  - or
- CHM 340 Instrumental Analysis 4 credits
- CHM 250 Organic Chemistry I 4 credits
- CHM 256 Organic Chemistry II 4 credits
- CHM 370 Biochemistry I 4 credits

Biochemistry Courses

Courses in biochemistry are listed under Biology and Chemistry.
Biology

(Bachelor of Science, Biology/Bioinformatics, Secondary Education Preparation, Master of Science - see Graduate Catalog for information on graduate programs)

Department of Biology
Chair: Professor Jacqueline LeBlanc, Biological/Chemical Sciences Building (6S), Room 143

Study of the biological sciences is a major requirement for students who wish to specialize in such fields as plant or animal research, and for students who plan to enter various health professions, such as medicine, nursing, dentistry, medical technology, physician assistant, and physical therapy. The Department offers a varied and balanced program for Biology and health profession majors, and three options in the BS degree program in Biology: biology major, biology/adolescence education, and bioinformatics.

Biology (BS)

General Education Requirements for the BS

ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 21-27 credits
Whenever possible, these courses should be completed within the first 60 credits.

1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)

2. Social Scientific Analysis: (3-4 credits)

3. The West and the World: (4 credits)

4. Textual, Aesthetic, and Linguistic Analysis: (3-4 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
   c. Arts and Communications: 200-level

5. Pluralism and Diversity Requirement: (0-4 credits)

See section on general education requirements for approved course lists and complete details.

Option I - Biology Major

Pre-Major Requirements: 15-19 credits

A. All four of the following courses:
   BIO 170 General Biology I 3 credits
   BIO 171 General Biology I Laboratory 1 credit
   BIO 180 General Biology II 3 credits
   BIO 181 General Biology II Laboratory 1 credit

B. One of the following three units:
   MTH 230 Calculus I with Pre-Calculus 6 credits
   MTH 229 Calculus Computer Laboratory 1 credit
   or
   MTH 231 Analytical Geometry and Calculus I 3 credits
   MTH 229 Calculus Computer Laboratory 1 credit
   or

C. One of the following two courses:
   MTH 214 Applied Statistics Using Computers 3 credits
   BIO 272 Biometrics 4 credits
   or
   BIO 360 Ecology 4 credits

Major Requirements: 63 credits

A minimum grade of C is required for a biology course to be used to satisfy a prerequisite for a biology course required for the major requirements for the BS in Biology.

A. Required courses
   BIO 205 General Physiology 4 credits
   BIO 312 Genetics 4 credits
   BIO 322 Evolution 4 credits
   BIO 352 Cell Biology 4 credits

   or
   BIO 360 Ecology 4 credits

B. One of the following courses:
   BIO 370 Biochemistry 4 credits
   BIO 372 Cell Biochemistry 4 credits
   BIO 213 Comparative Vertebrate Anatomy 4 credits
   BIO 215 Invertebrate Zoology and Paleontology 4 credits
   BIO 228 Botany 4 credits

C. One advanced six-hour laboratory course from the following: 3 credits
   BIO 450 Experimental Methods in Animal Physiology
   BIO 452 Experimental Methods in Behavioral Biology
   BIO 454 Advanced Methods in Cell Biology
   BIO 456 Experimental Methods in Ecology
   BIO 458 Experimental Methods in Cell Biochemistry
   BIO 460 Experimental Methods in Advanced Genetics

D. Four courses selected from the following: 12 credits
   Courses not selected in groups A, B, or C and these additional courses:
   BIO 222 Field Biology 4 credits
   BIO 240 Biology of Disease 4 credits
   BIO 314 General Microbiology 4 credits
   BIO 318 Histology 4 credits
   BIO 324 Developmental Biology 4 credits
   BIO 325/ MTH 415 Mathematical Biology 4 credits
   BIO 327 Molecular Biology 4 credits
   BIO 332 Advanced Physiology 4 credits
   BIO 338 Behavioral Biology 4 credits
   BIO 365 Principles of Neurobiology 4 credits
   BIO 415 Mathematical Biology 4 credits
   MTH 415 Mathematical Biology 4 credits
   BIO 420 Comparative Endocrinology 4 credits
   BIO 428 Plant Physiology 4 credits
   BIO 434 Comparative Physiology 4 credits
   BIO 442 Immunology 4 credits

E. Required related science courses:
   PHY 116 Physics I 4 credits
   PHY 156 Physics II 4 credits
   or (with appropriate mathematics background)
   PHY 120 General Physics I 4 credits
PHY 121 General Physics I Laboratory
PHY 160 General Physics II
PHY 161 General Physics II Laboratory 8 credits
CHM 141 General Chemistry I 3 credits
CHM 121 General Chemistry I Lab 1 credit
CHM 142 General Chemistry II 3 credits
CHM 127 General Chemistry II Lab 1 credit
CHM 250 Organic Chemistry I 4 credits
CHM 256 Organic Chemistry II 4 credits

Electives: 18-28 credits
Total Credits Required: 128

Option II - Biology/Adolescence Education, grades 7-12
In addition to completing the pre-major and major requirements in Option I above, students wishing to be recommended by the College for teacher certification must complete the following sequence of education courses for 24 credits:

EDS 201 Social Foundations of Secondary Education 4 credits
EDS 202 Psychological Foundations of Secondary Education 4 credits
EDS 304 The Teaching of Secondary School Curriculum in Science 4 credits
EDS 307 Discovery Learning and Interdisciplinary Instruction 4 credits
EDS 400 Student Teaching in Secondary Education 6 credits
EDS 401 Reflection and Analysis in Student Teaching in Secondary Education 2 credits

A minimum grade of C is required for a biology course to be used to satisfy a prerequisite for a biology course required for the major requirements for the BS in Biology/Adolescence Education.

Total Credits Required: 128

Option III - Biology/Bioinformatics
General Education Requirements: same as for Option I as shown above.

Pre-Major Requirements: 20-23 credits
A. All four of the following courses:
   BIO 170 General Biology I 3 credits
   BIO 171 General Biology I Laboratory 1 credit
   BIO 180 General Biology II 3 credits
   BIO 181 General Biology II Laboratory 1 credit
B. One of the following three units:
   MTH 230 Calculus I with Pre-Calculus 6 credits
   MTH 229 Calculus Computer Laboratory 1 credit
   or
   MTH 231 Analytical Geometry and Calculus I 3 credits
   MTH 229 Calculus Computer Laboratory 1 credit
   or
   MTH 235 Accelerated Calculus I 5 credits
   MTH 229 Calculus Computer Laboratory 1 credit
C. BIO 272 Biometrics 4 credits
D. CSC 126 Introduction to Computer Science 4 credits

Major Requirements: 81-82 credits
A minimum grade of C is required for a biology course to be used to satisfy a prerequisite for a biology course required for the major requirements for the BS in Biology/Bioinformatics.

A. Required Courses
   BIO 205 General Physiology 4 credits
   BIO 312 Genetics 4 credits
   BIO 322 Evolution 4 credits
   BIO 352 Cell Biology 4 credits
   or
   BIO 360 Ecology 4 credits

B. All of the following courses:
   BIO 327 Molecular Biology 4 credits
   CHM 370 Biochemistry I 4 credits
   BIO/CHM 376 Biochemistry II 4 credits
   BIO 326 Introduction to Bioinformatics 3 credits
   MTH/BIO 415 Mathematical Biology 4 credits

C. One advanced six-hour laboratory course from the following:
   BIO 450 Experimental Methods in Animal Physiology 3 credits
   BIO 452 Experimental Methods in Behavioral Biology 3 credits
   BIO 454 Advanced Methods in Cell Biology 3 credits
   BIO 456 Experimental Methods in Ecology 3 credits
   BIO 458 Experimental Methods in Cell Biochemistry 3 credits
   BIO 460 Experimental Methods in Advanced Genetics 3 credits

D. One elective from the following: 3-4 credits
   Courses not selected in groups A or C and these additional courses:
   BIO 213 Comparative Vertebrate Anatomy 3 credits
   BIO 215 Invertebrate Zoology and Paleontology 3 credits
   BIO 228 Botany 3 credits
   BIO 240 Biology of Disease 3 credits
   BIO 314 General Microbiology 3 credits
   BIO 318 Histology 3 credits
   BIO 324 Developmental Biology 3 credits
   BIO 325/MDT 325 Diagnostic Molecular Biology 3 credits
   BIO 332 Advanced Physiology 3 credits
   BIO 338 Behavioral Biology 3 credits
   BIO 365 Principles of Neurobiology 3 credits
   BIO 372 Cell Biochemistry 3 credits
   BIO 428 Plant Physiology 3 credits
   BIO 442 Immunology 3 credits

E. Required related science courses:
   CSC 220 Computers and Programming 4 credits
   CSC 228 Discrete Mathematical Structures 4 credits
   CSC 326 Information Structures 4 credits
   CSC 424 Database Management 4 credits
   PHY 116 Physics I 4 credits
   PHY 156 Physics II 4 credits
   or (with appropriate mathematics background)
   PHY 120 General Physics I 4 credits
   PHY 121 General Physics I Laboratory 4 credits
   PHY 160 General Physics II 4 credits
Prerequisite courses:

BIO 109

Corequisite: BIO 107

BIO 102 Human Body
3 class hours, 1 recitation hour, 2 laboratory hours; 4 credits
Survey course of gross anatomy and physiology with emphasis on the relation of structure to function and disease processes. Reading techniques and vocabulary problems of the biological sciences are emphasized. (science)
Prerequisite: MTH 020 or an appropriate score on the CUNY Mathematics Test
This course may not be used to satisfy major requirements for the BS in Biology.

BIO 105 Molecular Foundations of Cell Function
1 lecture hour, 1 recitation hour; 1 credit; the course meets four hours per week for one-half semester
This course offers an introductory survey of molecular biology, cellular metabolism, and cellular mechanisms. It is designed to run concurrently with BIO 150 Human Anatomy and Physiology I, and to provide the necessary background for the study of human anatomy and physiology.
Prerequisite: BIO 102 with a minimum grade of C or a satisfactory score on the Biology Placement Test.
Corequisite: BIO 150

Note: Students planning to enter the programs in Nursing, Physical Therapy, Physician Assistant, or the Nuclear Medicine option in Medical Technology are assigned this course by the Department of Biology on the basis of scores attained on the Biology Placement Test.

BIO 106 Principles of Biology I
3 hours; 3 credits
Introductory biology for non-science majors. Structure and function of the body and the effects of the environment on it. Fundamental biological principles and concepts and their applications to relevant concerns such as drug addiction, food additives, physical fitness, and the population explosion. Not credited toward Biology major. (science)
Prerequisite: MTH 020 or an appropriate score on the CUNY Mathematics Assessment Test
Corequisite: BIO 107

BIO 107 Principles of Biology I Laboratory
2 laboratory hours; 1 credit
Laboratory experiences illustrating principles and topics discussed in BIO 106. (science)
Corequisite: BIO 106

BIO 108 Principles of Biology II
3 hours; 3 credits
Introductory biology for non-science majors (continuation of BIO 106). The role of biology in the world around us and the effects of the modern world on living things including ecology, pollution, and the extinction of species. Diseases and their treatment through drugs and genetic engineering. Science and the role of the citizen. Not credited toward Biology major. (science)
Prerequisites: BIO 106, 107
Corequisite: BIO 109

Electives: 0-5 credits

Total Credits Required: 128

For all three Biology BS degree program options, with permission of the program coordinator, BIO 150 and BIO 160 Anatomy and Physiology I and II may be substituted for BIO 170 and BIO 171 General Biology I and Laboratory, but BIO 150 and BIO 160 may not be used to satisfy the Scientific Analysis requirement in general education.

A student who has educational background or work experience that may be equivalent to the stated pre- or corequisite for a biology course should contact the Chairperson of the Biology Department. If it is determined that a student has the appropriate background, a course requisite waiver will be issued.

Honors

The honors program in Biology is available to eligible seniors with a 3.5 grade point average or better. The program requires a minimum of one year to complete. The student may receive up to eight credits for independent study (BIO 594) while completing the honors program. However, students do not automatically gain entrance into the honors program by registering for independent study.

To be accepted into the honors program, the student must first obtain approval from a full-time member of the department to carry out an honors research project. This faculty member will then serve as the student’s adviser. Thereafter, the student will prepare and present a detailed written preliminary proposal of the honors research project for approval to a three-member departmental committee, consisting of the faculty adviser and two other faculty members. The committee will evaluate the proposal. After an oral presentation by the student and upon the recommendation of the committee, the student will be accepted into the program. The student will meet with his or her committee midway through the first semester for evaluation of the project. In addition, the student will submit a written progress report to the committee at the end of the first semester. On the basis of this report, the committee will decide whether the student should proceed further. If the student does not continue in the honors program, he or she may still acquire the credits for independent study.

When the research is completed, the student is required to write up the research in the form of a thesis that will be evaluated at early and final stages by the committee. The thesis format must adhere to that used by leading biological journals, or as outlined in the AIBS style manual. The ultimate decision on thesis format lies with the committee.

Because it will take at least one year to complete the honors program in Biology, it is suggested that the student begin work during the summer immediately following the junior year.
BIO 109  Principles of Biology II Laboratory
2 laboratory hours; 1 credit
Laboratory experiences illustrating principles and topics discussed in BIO 108. (science)
Corequisite: BIO 108

BIO 146  Nutrition
3 hours; 3 credits
This course presents fundamental principles, concepts, and applications of normal nutrition. Stress will also be placed on the relation of good nutrition to good health. Emphasis will be placed on the common restrictive diets generally used in medical office practice.
Open to non-Medical Assistant students as an elective. May not be used to satisfy major requirements for the BS in Biology.
Prerequisites: BIO 102 or BIO 170/171 or BIO 106/107 or BIO 150

BIO 150  Human Anatomy and Physiology I
3 class hours, 3 laboratory hours; 4 credits
The first half of a comprehensive two-semester course in human biology. Integrated lecture and laboratory sessions deal with the structure and function of cells, tissues, and the following systems: integumentary, musculoskeletal, blood-cardiovascular, immune, and respiratory. May not be used to satisfy general education degree requirements, except for Nursing AAS students.
Prerequisite: BIO 102 with a minimum grade of C or a satisfactory score on the Biology Placement Test
Pre- or corequisite: BIO 105 or a satisfactory score on the Biology Placement Test

Note: Students who have previously registered two or more times for BIO 150 will be permitted to register again only on a space-available basis, as determined at the close of registration. Students must receive a grade of C or better in BIO 150 and in BIO 105 (when prescribed as a corequisite of BIO 150) to proceed to BIO 160. This is a required course for students planning to enter the programs in Nursing, Physical Therapy, Physician Assistant, or the Nuclear Medicine option in Medical Technology programs.

BIO 160  Human Anatomy and Physiology II
3 class hours, 3 laboratory hours; 4 credits
This course is a continuation of BIO 150. Lecture and laboratory sessions deal with the structure and function of the urinary, digestive, nervous, endocrine, and reproductive systems. May not be used to satisfy general education degree requirements, except for Nursing AAS students.
Prerequisite: BIO 105 or a satisfactory score on the Biology Placement Test, and BIO 150

Note: Students must receive a grade of C or better in BIO 150 and in BIO 105 (when prescribed by the Department as a corequisite of BIO 150) to proceed to BIO 160. This is a required course for students planning to enter the programs in Nursing, Physical Therapy, Physician Assistant, or the Nuclear Medicine option in Medical Technology programs.

BIO 170  General Biology I
3 hours; 3 credits
Fundamental biological principles of cell metabolism, energy transformations, and plant and animal functions including support, digestion, respiration, circulation, excretion, and integration, and selected current topics.
For science, medical technology, appropriate preprofessional majors, and other interested students in consultation with an adviser. (science)
Prerequisite: MTH 020 or an appropriate score on the CUNY Mathematics Assessment Test
Corequisite: BIO 171

BIO 171  General Biology I Laboratory
3 laboratory hours; 1 credit
Direct student involvement in the experimental demonstration of basic biological principles in plants and animals and the dissection of the fetal pig, with experiments oriented toward the understanding of the human body.
For science, medical technology, appropriate preprofessional majors, and other interested students in consultation with an adviser. (science)
Corequisite: BIO 170

BIO 180  General Biology II
3 hours; 3 credits
A continuation of BIO 170, including plant and animal diversity, microbes and disease, reproduction, development, patterns of inheritance, the origins of life, evolution, ecology, and selected topics. For science, medical technology, appropriate preprofessional majors, and other interested students in consultation with an adviser. (science)
Prerequisites: BIO 170 and BIO 171
Corequisite: BIO 181

BIO 181  General Biology II Laboratory
3 laboratory hours; 1 credit
A continuation of BIO 171. A laboratory examination of the material covered in BIO 180. For science, medical technology, appropriate preprofessional majors, and other interested students in consultation with an adviser. (science)
Prerequisites: BIO 170 and BIO 171
Corequisite: BIO 180

BIO 205  General Physiology
3 class hours, 3 laboratory hours; 4 credits
A study of systemic physiology with emphasis on cell physiology, homeostasis, and control mechanisms in vertebrates, particularly mammals. Laboratory exercises include physiographic studies of various systems. Required for Biology and Medical Laboratory Technology majors.
Prerequisites: BIO 160 or BIO 180 and 181; CHM 141 and CHM 121

BIO 213  Vertebrate Zoology
2 class hours, 4 laboratory hours; 4 credits
A comparative study of the chordates with emphasis on both extant and extinct taxa, ecology, behavior and morphological and physiological specializations. Projects conducted outdoors at local field sites and a museum trip.
Prerequisites: BIO 180 and 181

BIO 214  Biological Approach to Human Sexuality
3 hours; 3 credits
Developmental anatomy of female and male reproductive systems, basic endocrinology and reproductive cycles; physiology of sexual functions; pregnancy and birth; fertility, stimulation, and control; sexual disorders, venereal disease, and other diseases including cancer; biological origins and variations of behavior. May not be used to satisfy the major requirements for the BS in Biology.
Pre- or corequisite: BIO 180 and 181 or BIO 160

BIO 215  Invertebrate Zoology and Paleontology
2 class hours, 4 laboratory hours; 4 credits
Taxonomy, ecology, evolution, paleontology, and phylogeny of the invertebrates, emphasizing the medical, economic, and evolutionary importance of the various groups. Introduction to the use of zoological literature and preparation of a scientific paper.
Prerequisites: BIO 180 and 181
BIO 222  Field Biology
2 class hours, 4 laboratory or field hours; 4 credits
This course provides instruction in standard procedures of collecting, preserving, and analyzing specimens and data observed during off-campus field trips. Analysis will include introduction to descriptive statistics; comparisons and indices of species diversity; dispersion, and community similarity. One field study will be made of animal behavior. One weekend field trip is scheduled. Reports using scientific format, labeled specimen collections, and a field notebook are required.
Prerequisites: BIO 180 and 181

BIO 228  Botany
3 class hours, 3 laboratory hours; 4 credits
An introduction to the major structural and functional characteristics of the groups of plants that comprise the plant kingdom: bacteria, algae, fungi, mosses, ferns, gymnosperms, and angiosperms. Interrelationships of evolution, diversity, and ecology are stressed throughout the examination of all major disciplines of plant biology.
Prerequisites: BIO 180 and 181

BIO 232  Social Problems in Biology
3 hours; 3 credits
A course exploring the application of biology to crucial issues in the world today: drugs, pollution, overpopulation, birth control, abortion, the right to die, test-tube babies, genetic engineering, the rebuilding of man, and the conquest of diseases. May not be used to satisfy the major requirements for the BS in Biology.
Prerequisites: BIO 102, or BIO 170 and 171, or BIO 106 and 107

BIO 240  The Biology of Disease
3 hours; 3 credits
Biological aspects of the major diseases of humans, including heart disease, cancer, autoimmune diseases such as arthritis and multiple sclerosis; hereditary diseases such as sickle cell anemia and hemophilia; and bacterial and viral diseases such as tuberculosis, AIDS, and influenza. Principles of immunology, chemotherapy, and genetic engineering are among the major concepts that will be studied. Effects of disease on human history will also be discussed.
Prerequisites: BIO 108 and 109, or BIO 180 and 181, or BIO 160

BIO 242  History of Biology
3 hours; 3 credits
A survey of the historical development of some of the major biological concepts including an examination of the life and times of various biologists and the factors that influenced their work. Original scientific research papers will be read. May not be used to satisfy the major requirements for the BS in Biology.
Prerequisites: BIO 180 and 181

BIO 272  Biometrics
4 hours; 4 credits
A course for science majors emphasizing applications of statistics to problems in experimental biology, field biology, and environmental science. It covers descriptive statistics, probability and probability distributions, confidence intervals, hypothesis testing, and design of experiments. The following techniques are included: goodness of fit tests, t-tests, analysis of variance, correlation and regression, time series analysis, and nonparametric methods.
Prerequisites: BIO 160 or BIO 180 and 181; MTH 123 or MTH 130

BIO 312  Genetics
3 class hours, 3 laboratory hours; 4 credits
A study of the mechanics and molecular basis of inheritance. The lectures will cover patterns of inheritance, structure and function of nucleic acids, recombinant DNA, bacterial genetics, and population genetics. Laboratory exercises will include studying patterns of inheritance with Drosophila melanogaster and techniques related to recombinant DNA work. Required of Biology majors.
Prerequisites: BIO 205 and CHM 142 and CHM 127

BIO 314  General Microbiology
3 class hours, 3 laboratory hours; 4 credits
Topics will include immunology, biotechnology, and the metabolism, genetics, morphology, and growth of microorganisms. Required of Medical Technology majors.
Prerequisites: BIO 160 or BIO 180, BIO 181, and CHM 141

BIO 316  Clinical Microbiology
2 class hours, 4 laboratory hours; 4 credits
Medical and diagnostic microbiology: a study of host microbe interactions, the principles and applications of the immune response, the epidemiology of infectious disease, and the pathogenesis of the major microbial diseases. In the laboratory the procedures used in laboratory diagnosis are applied. Required of Medical Technology majors. A non-liberal arts and sciences course, not credited toward the Biology major.
Prerequisite: BIO 314

BIO 318  Histology
2 class hours, 4 laboratory hours; 4 credits
A study of the microscopic structure of mammalian cells, tissues, and organs with emphasis on functional correlations. Laboratory sessions include technical procedures for fixing, sectioning, staining, and mounting tissue specimens, and examination of prepared microscopic slides of human/mammalian tissues and organs.
Prerequisite: BIO 160 or BIO 205

BIO 322  Evolution
4 hours; 4 credits
The principles of the neo-Darwin theory of evolution; the origin and evolution of life; mechanisms of evolution and the roles of genetic variation, natural selection, isolation, and chance; species concepts and speciation; phylogeny; the tempo and mode of evolution; molecular evolution; the impact of genomics on evolutionary relationships; and an introduction to the use of pertinent scientific literature.
Prerequisite: BIO 312

BIO 324  Developmental Biology
3 class hours, 3 laboratory hours; 4 credits
Early development of representative organisms, including fertilization, cleavage, origin of germ layers, and organ systems; biochemical events during differentiation.
Prerequisites: BIO 180 and 181; CHM 142
Pre- or corequisite: BIO 205

BIO 325  Diagnostic Molecular Biology
(also MDT 325)
3 class hours, 3 laboratory hours; 4 credits
This course will address the theoretical and practical framework for the understanding and application of molecular biology techniques in the clinical laboratory. The course material will cover the principles and applications of recombinant DNA technology including DNA-DNA
hybridization, DNA amplification and nonradioactive in situ hybridization (HISH) for the detection and identification of microorganisms associated with infectious diseases.

Prerequisites: BIO 314, CHM 142

**BIO 326  Introduction to Bioinformatics and Genomics**
3 class hours, 3 laboratory hours; 4 credits
Introduction to the representation and analysis of biological sequence and structural information. Description and use of nucleic acid, protein, structure, sequence motif, genome, literature, and other relevant databases. Overview and discussion of basic sequence manipulations and analyses including sequence assembly and editing, restriction and protease analysis, coding region identification, gene prediction, database searching and similarity analysis, pairwise and multiple sequence alignment, PCR primer design, phylogenetic analyses, protein structure and property prediction, RNA structure prediction, microarray analyses, etc. Laboratory includes demonstrations and practical exercises illustrating the analyses and concepts presented and discussed in lecture.
Prerequisites: BIO 327 or permission of the instructor. Recommended: BIO 312, BIO 370, BIO 352 or the equivalent

**BIO 327  Molecular Biology**
4 hours; 4 credits
Principles and regulation of gene expression: nucleic acid and chromosome structure/function, transcription, RNA processing, and translation. Emphasis on eukaryotes and experimental analysis (recombinant DNA and other methods) of genomes, gene structure/function, and expression.
Prerequisites: BIO 205, CHM 142 and CHM 127 or permission of the instructor. Recommended: BIO 312, BIO 370, BIO 352, or the equivalent

**BIO 332  Advanced Physiology**
4 hours; 4 credits
An in-depth study of representative physiological mechanisms at the molecular and cellular levels of organization. Course topics include the function of biological macromolecules, bioenergetics and metabolism, cell surface dynamics, functional microanatomy of neurons, neural information transfer and integration, organization of reflexes, hormones and other bioactive chemical messengers, renal regulation of the internal environment.
Prerequisite: BIO 160 or BIO 205

**BIO 338  Behavioral Biology**
3 class hours, 3 laboratory hours; 4 credits
This course will cover the areas of animal behavior, neurophysiology, sensory physiology, and neuroendocrinology to provide an integrated point of view of the biological basis of behavior.
Prerequisites: BIO 205 and CHM 142

**BIO 342  Advanced Human Anatomy**
3 class hours, 3 laboratory hours; 4 credits
In-depth study of the human body with emphasis on the neuromuscular system. Examines structural interrelationships as a basis for normal functions. Directed laboratory experiences with cadaver dissection and skeletal materials and models.
Prerequisites: BIO 160 and acceptance into the Physical Therapy or Physician Assistant Programs or permission of the appropriate program coordinator.

**BIO 346  General Virology**
4 hours; 4 credits
Study of major groups of viruses and includes structural and biochemical characteristics, cell-virus interactions, and viral diseases.
Prerequisites: BIO 205 and CHM 142. Recommended: CHM 250 and BIO 312

**BIO 350  Microbiology and Cellular Pathology**
3 hours; 3 credits
A one-semester course that surveys the major groups of microorganisms with emphasis on those involved in human health problems. The principles of immunity and hypersensitivity, microbial control, and the principal microbial diseases are discussed. Not credited toward the Biology major.
Prerequisite: BIO 160
Corequisite: BIO 351

**BIO 351  Microbiology and Cellular Pathology Laboratory**
3 laboratory hours; 1 credit
Laboratory exercises correlated with topics covered in BIO 350.
Prerequisite: BIO 160
Corequisite: BIO 350

**BIO 352  Cell Biology**
3 class hours, 3 laboratory hours; 4 credits
The eukaryotic cell is treated as a highly compartmentalized functional unit. Emphasis on cell cycle, DNA and chromosomal organization and functions, replication, transcription and translation, also organization and functional interrelationship of surface and internal membrane systems, exo/endocytosis and cytoskeleton. The lab component deals with selected topics illustrating key cell biology concepts. Required for Biology majors.
Prerequisites: BIO 205 and CHM 142
Corequisite: CHM 250

**BIO 360  Ecology**
3 class hours, 3 laboratory hours; 4 credits
How interactions between organisms, and between organisms and the physical environment bring about adaptations in response to natural selection, and change in species diversity through evolutionary time. Population genetics, growth and demography; competition; predation; and community and ecosystem structure and function are other major areas covered. Principles of ecology will be emphasized in laboratory work and in field studies of various natural habitats. Required for Biology majors.
Prerequisites: BIO 312. Recommended: BIO 215 or BIO 228

**BIO 365  Principles of Neurobiology**
3 class hours, 3 laboratory hours; 4 credits
A study of basic mechanisms regulating activity of nerve cells including mechanisms of memory and brain disorders. Laboratory exercises include electrophysiological recordings of neuronal activity in vitro and biochemical characterization of components of the nervous tissue.
Prerequisites: BIO 180 and BIO 181, or BIO 160
Corequisite: CHM 250

**BIO 368  Neuroscience**
3 class hours, 3 laboratory hours; 4 credits
Examines the structure and function of the central nervous system and sensory receptors. Includes laboratory sessions on the dissection of the human brain, examination of sections of the spinal cord and brain stem and experiments with functions of the nervous system.
Prerequisites: BIO 332, BIO 342, PHT 200

**BIO 370  Biochemistry I**
(Also CHM 370)
4 hours; 4 credits
The major constituents of cells: physical and chemical properties of
carbohydrates, lipids, proteins, and nucleic acids. Properties of enzymes including specificity and kinetics.

Prerequisite: CHM 256
Pre- or corequisite: PHY 110 and 111, or PHY 116, or PHY 120 and 121

**BIO 372  Cell Biochemistry**

3 class hours, 3 laboratory hours; 4 credits

Chemical approaches to cell function: bioenergetics, cell replication, control of biosynthetic processes, and metabolism. Use of analytic methods to study the properties of cells and subcellular components.

Prerequisites: BIO 205, CHM 256

**BIO 376  Biochemistry II**

(Also CHM 376)

4 hours; 4 credits

Intermediary metabolism, metabolism of carbohydrates, lipids, amino acids, and nucleotides. Introduction to bioenergetics and biochemical genetics.

Prerequisite: BIO/CHM 370
Pre- or corequisite: PHY 150 and 151, or PHY 156, or PHY 160 and 161

**BIO 378  Radiation Biology**

4 hours; 4 credits

The biological effects of chronic and acute exposure to ionizing and non-ionizing radiation. The mechanisms underlying the events occurring during and after the interaction between macromolecules, isolated cells, organs, and entire organisms with irradiation. The effects of radiation at all levels of biological organization, and the biological basis for radiation safety practices are discussed.

Prerequisite: BIO 205
Pre- or corequisite: PHY 150 and 151, or PHY 156, or PHY 160 and 161

**BIO 382  Pharmacotherapeutics**

3 hours; 3 credits

Pharmacodynamics of medicinal substances with respect to advanced receptor mechanisms and the action-effect sequence of drug activity. Emphasis is on the correlation between drug structure, pharmacologic activity, and the effect of drugs. Not credited toward Biology major.

Prerequisites: BIO 350 and 351 or BIO 332; CHM 110 and 111 or CHM 141 and CHM 121

**BIO 415  Mathematical Biology**

(Also MTH 415)

4 hours; 4 credits

This course will address the growing interaction between mathematics and the biological sciences and will provide a practical context for the mathematical description and analysis of biological processes. The emphasis will be on the construction and analysis of models consistent with empirical data. Biological problems in ecology and conservation, epidemiology, cell biology, and neuroscience will be used to illustrate the equations, including especially nonlinear equations. The computer program MATLAB will be used extensively.

Prerequisites: MTH 230 and MTH 231 or equivalent; MTH 229, and one BIO 300-level course

**BIO 420  Comparative Endocrinology**

3 class hours, 3 laboratory hours; 4 credits

Role of major endocrine glands (including neuroendocrines) in cell function and metabolic pathways. Emphasis upon phylogeny and comparative physiology of the endocrine system. Pertinent methodology will be treated.

Prerequisites: BIO 205, CHM 256, and one additional physiology course

**BIO 424  Molecular Biology and Biotechnology Laboratory**

6 laboratory hours; 3 credits

Methods in the cloning, expression, isolation, and analysis of nucleic acids (RNA and DNA) and recombinant proteins; introduction to computer methods and analysis in biotechnology; DNA sequencing and sequence analysis; experimental approaches for the analysis of regulation of gene expression including transfection, report analysis, etc.

Prerequisites: BIO 205, CHM 142 and CHM 127
Pre- or corequisites: BIO 327. Recommended: BIO 312, BIO 370, or BIO 352

**BIO 425  Computational Molecular Biology**

3 hours; 3 credits

Overview of theoretical and computational methods in bioinformatics with an emphasis on the application of algorithms and use of statistical methods in nucleic acid and protein sequence analysis. Emphasis on the mathematical basis of sequence alignment including database searches using Smith-Waterman dynamic programming, pair-wise sequence alignment using dynamic programming and scoring matrices, and multiple sequence alignment using hidden Markov model and genetic algorithms.

Prerequisites: BIO 326, BIO 272 or MTH 214 and MTH 230 or MTH 231 or MTH 235

**BIO 428  Plant Physiology**

3 class hours, 3 laboratory hours; 4 credits

Examination of the basic physiological processes common to all vascular plants. Topics covered include cell structure and function, water transport, transpiration, photosynthesis, solute translocation, nutrient uptake, mineral nutrition, phytohormones, plant tropisms, growth, development, and reproduction. Laboratory exercises will include plant cells, water relations, tissue culture, photosynthesis, phytohormones, reproduction, competition, and symbiosis.

Prerequisite: BIO 205 or BIO 228
Pre- or corequisite: CHM 250

**BIO 432  Clinical Pathology**

3 hours; 3 credits

Study of the disease processes and their clinical manifestations beginning with the cellular and tissue levels leading to the organ level. Surveys medical conditions and their management as they relate to physical therapy practice. Areas include cardiology, orthopedics, autoimmune system, epidemiology.

Prerequisites: BIO 342, BIO 332
Corequisite: BIO 318

**BIO 434  Comparative Physiology**

4 hours; 4 credits

The study of the maintenance of internal homeostasis in different animal groups. Emphasis will be placed upon the phylogeny of the processes of regulation and integration.

Prerequisites: BIO 205 and BIO 213 or BIO 215
Corequisite: CHM 250

**BIO 442  Immunology**

2 lecture hours, 4 laboratory hours; 4 credits

An introduction to immunology, with attention to the formation and nature of antibodies, the nature of antigens, and problems of antigen-antibody interactions. Such subjects as antibody-mediated hypersensitivity and histocompatibility are also considered.

Prerequisite: BIO 314 or 350
BIO 450  Experimental Methods in Animal Physiology
6 laboratory hours; 3 credits
Procedures and instrumentation used in testing physiological phenomena. Some of the areas explored are muscle contraction, nerve responses, renal function, active transport, and basal metabolism.
Prerequisites: BIO 205, CHM 250
Pre- or corequisite: CHM 256

BIO 452  Experimental Methods in Behavioral Biology
6 laboratory hours; 3 credits
Emphasis will be placed on the laboratory analysis of factors that influence the behavior of animals in the laboratory and field. Field trips will be required.
Prerequisites: BIO 338 and BIO 272 or MTH 214.

BIO 454  Advanced Methods in Cell Biology
6 laboratory hours; 3 credits
Current procedures for the microscopic study of tissues and cells. Advanced histological procedures involving paraffin embedding, sectioning and staining with selected reactions will be used to study normal and experimentally modified tissues. Autoradiography and enzyme histochemistry will also be examined.
Prerequisites: BIO 352 and CHM 142

BIO 456  Experimental Methods in Ecology
6 laboratory hours; 3 credits
Introduction to natural communities. Emphasis on quantitative methods for community and ecosystem analysis. Field trips to be arranged.
Prerequisites: BIO 360 and either BIO 272 or MTH 214

BIO 458  Experimental Methods in Cell Biochemistry
6 laboratory hours; 3 credits
The course consists of the application of modern analytical methods to the study of the properties of cells and subcellular components. Emphasis will be placed on the mastering of laboratory techniques. Not credited toward biochemistry major.
Prerequisite: BIO 370 or 372

See Graduate Catalog for graduate courses.

General Education Requirements
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis: 13-15 credits
1. Scientific Analysis
   At least one science course with laboratory (4 credits)
   Mathematics: MTH 121, MTH 123, or higher (3-4 credits)
2. ECO 101 Introduction to Economics (3 credits)
3. One course from Social Scientific Analysis, The West and the World, or Textual, Aesthetic, and Linguistic Analysis (3-4 credits)
See section on general education requirements for approved course lists and complete details.

Core requirements: 23-24 credits
ACC 114 Introduction to Accounting I 4 credits
ACC 121 Introduction to Accounting II 4 credits
BUS 150 Essential Software Tools for Business 3 credits
   or
   CSC 102 Computing for Today 4 credits
BUS 160 Business Law I 3 credits
FNC/ECO 240 Managerial Finance I 3 credits
MGT 110 Organizational Theory and Management 3 credits
MKT 111 Marketing 3 credits

Specialization requirements: 7-8 credits selected from the following recommended courses:

Accounting:
Any two accounting courses above the level of ACC 121 Introduction to Accounting II.

Finance:
Any two finance courses at the 200 level or above.

Information Systems:
Two courses chosen from among the following: BUS 205 Data Communications and Networks for Business, BUS 352 Introduction to Systems Analysis, CSC 126 Introduction to Computer Science.

International Business:
BUS 200 and one additional course selected in consultation with the student’s adviser (ECO 250 International Economics, POL 260 International Politics: In Search of a New World Order).

Management:
Any two management courses at the 200 level or above.

Marketing:
Any two marketing courses at the 200 level or above.

Electives: 4-6 credits
Total Credits Required: 60
Liberal Arts and Sciences Requirement
All courses designated ACC and BUS, and most courses designated FNC, MKT, and MGT are non-liberal arts and sciences. Courses double-listed with economics (ECO) or political science (POL) are liberal arts and sciences.

Business (BS)
This program offers students a strong general business education together with the opportunity for a concentration in finance, international business, management, or marketing. The BS degree programs in Business and Accounting are appropriate for graduates of associate’s degree programs as well as for new and transfer students. A minimum GPA of 2.5 is required for admission to and continuation in majors leading to the BS in business and for graduation. A 2.5 GPA is not a requirement for students to enroll in the AAS program, for students pursuing a minor in the Business Department, or for students enrolling in individual courses.

General Education Requirements
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 21-27 credits
Whenever possible, these courses should be completed within the first 60 credits.

1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)
      Chosen from MTH 121, MTH 123, MTH 130, MTH 231*, MTH 235
      (*MTH 231 may be taken by those students who wish to combine
         MTH 150 Pre-Calculus Mathematics with MTH 231 Analytic
         Geometry and Calculus I.)
2. Social Scientific Analysis: (3-4 credits)
   Including ECO 101 Introduction to Economics
3. The West and the World: (4 credits)
4. Textual, Aesthetic, and Linguistic Analysis: (3-4 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
   c. Arts and Communications: 200-level
5. Pluralism and Diversity Requirement: (0-4 credits)
   See section on general education requirements for approved course lists
   and complete details.

   Note: International Business students must take two semesters of a
   foreign language. The language requirement can be met by exhibiting
   proficiency or by passing a proficiency exam equivalent to two semesters’
   work at the basic level or higher.

Pre-Major Requirements: 36-38 credits
Business Courses
- MGT 110 Organizational Theory and Management 3 credits
- MKT 111 Marketing 3 credits
- FNC/ECO 240 Managerial Finance I 3 credits
Economics Courses
- ECO 210 Price Theory 4 credits
- ECO 212 Income and Employment Theory 4 credits
- ACC 114 Introduction to Accounting I 4 credits
- ACC 121 Introduction to Accounting II 4 credits
- BUS 150 Essential Software Tools for Business
- CSC 102 Computing for Today
- CSC 126 Introduction to Computer Science 4 credits
- MGT/ECO 230 Introduction to Economic and Managerial Statistics 4 credits

One mathematics course chosen from:
- MTH 130 Pre-Calculus Mathematics
- MTH 221 Applied Finite Mathematics and Business Calculus
- MTH 223 Technical Calculus
- MTH 230 Calculus I with Pre-Calculus
- MTH 231 Analytic Geometry and Calculus I
- MTH 232 Analytic Geometry and Calculus II
- MTH 236 Accelerated Calculus II 3-5 credits

Major Requirements: 25-28 credits
Each student chooses one area of concentration beyond the pre-major requirements. Concentrations are available in finance, international business, management, and marketing.

Finance Concentration: 29-30 credits
- FNC/ECO 214 Money and Banking 4 credits
- FNC/ECO 345 Managerial Finance II 4 credits
- FNC/ECO 350 Advanced Corporate Finance 4 credits
- FNC/ECO 360 Investment Analysis 4 credits
- FNC/ECO 370 International Finance 4 credits
- ACC 241 Federal Income Taxation I 3 credits
- ACC 251 Federal Income Taxation II 3 credits
- ACC 241 Federal Income Taxation I or
- FNC/ECO 213 Money and Capital Markets 3-4 credits

Plus three additional credits in business and related courses with the written approval of the student’s adviser.

International Business Concentration: 28 credits
- BUS 200 International Business 4 credits
- FNC 370 International Finance 4 credits
- Foreign Language 8 credits

Note: Students who are exempt from the foreign language course
requirement must take additional credits from the courses listed below to
complete the 28 credits required in the concentration.
At least one course chosen from each of the following categories:
1. Business
   - MKT 415 International Marketing 4 credits
   - MGT 410 Business Policy 4 credits
   - MGT 416 Decision Making 4 credits
BUS 598 Business Internship 4 credits

2. Economics/Political Science
   ECO 250 International Economics 4 credits
   ECO 252 GEG 252 Economic Geography 4 credits
   ECO 256 Analysis of Underdeveloped Areas 4 credits
   ECO POL 251 International Political Economy 4 credits
   POL 260 International Politics 4 credits
   POL 261 International Organizations 4 credits

3. History
   HST 206 Modern China 4 credits
   HST 208 Modern Latin America 4 credits
   HST 210 Modern India 4 credits
   HST 272 Modern Germany 4 credits

**Management Concentration: 28 credits**

   MGT 310 Management Process 4 credits
   MGT 320 Management of Organizational Behavior 4 credits
   MGT 410 Business Policy 4 credits
   MGT 416 Decision Making in Business 4 credits

Plus 12 additional credits of courses in management or related subjects chosen with the written approval of the student's adviser.

**Marketing Concentration: 27-28 credits**

   MKT 211 Advertising 4 credits
   MKT 310 Consumer Behavior 4 credits
   MKT 410 Marketing Research 4 credits
   MKT 420 Marketing Management 4 credits
   MGT 416 Decision Making in Business 4 credits

An additional seven to eight credits selected from the following two lists including at least one course from list A:

A. Marketing courses:
   MKT 213 Retail Store Organization and Operation
   MKT 215 Principles of Selling
   MKT 216 Sales Management
   MKT 312 Advertising Copy and Production
   MKT 415 International Marketing
   MKT 490 Marketing Seminar

Any additional MKT courses at the 200 level or higher

B. Additional courses:
   BUS 160 Business Law I
   BUS 200 Introduction to International Business
   BUS 250 Computers in Information Processing
   BUS 598 Business Internships
   COM 250 Basic Design and Media Graphics
   ECO 323 MGT 324 Introduction to Econometrics
   ENL 112 Public Speaking
   ENL 212 Discussion and Debate
   PSY 214 Psychology of Advertising

**Electives: 16-18 credits**

**Total Credits Required: 120**

**Liberal Arts and Sciences Requirement**

Since most business courses are non-liberal arts and sciences, students in this program should pay special attention to this requirement.

**Honors**

To graduate with Honors in Business a student must have a 3.5 grade point average in business courses and must have a 3.25 grade point average overall. An honors thesis or project supervised by a member of the business faculty must be completed.

**Minors**

The Business minors are available to students in any of the College's bachelor's degree majors.

**Minor in Business**

At least 15 credits from any ACC, BUS, FNC, MGT, or MKT courses or ECO 101

**Minor in Finance**

At least 18 credits of courses including:

   ACC 114 Introduction to Accounting I 4 credits
   MGT 110 Organizational Theory and Management 3 credits
   FNC ECO 240 Managerial Finance I 3 credits
   FNC ECO 345 Managerial Finance II 4 credits
   One additional finance course 4 credits

**Minor in Management**

At least 18 credits of courses including:

   ACC 114 Introduction to Accounting I 4 credits
   MGT 110 Organizational Theory and Management 3 credits
   MGT 310 Management Process 4 credits
   MGT 320 Management of Organizational Behavior 4 credits
   One additional course in management at the 200 or 300 level 3-4 credits

**Minor in Marketing**

At least 18 credits of courses including:

   ACC 114 Introduction to Accounting I 4 credits
   MKT 111 Marketing 3 credits
   MKT 211 Advertising 4 credits
   MKT 310 Consumer Behavior 4 credits
   One additional course in marketing at the 200 or 300 level 3-4 credits

**Accounting courses are listed alphabetically under ACC.**

**Business Courses**

**BUS 100 Introduction to Business**

3 hours; 3 credits

The role of business is examined in relation to the environment, government, and society with the emphasis on decision making. An investigation is made of the major aspects of business practice including accounting, finance, management, marketing, data processing, and international business.

**BUS 135 Introduction to Information Systems**

(Also CSC 135)

2 lecture hours, 2 laboratory hours; 3 credits

A hands-on laboratory course in the effective use of technology tools for problem solving. Students will understand how copyright laws apply to
software and the need to acknowledge material from outside sources, including online material and the work of others.
Co-requisite: CSC 126

BUS 140 Business Communications
3 hours; 3 credits
Composition of effective business correspondence: credit and collection letters, request and response letters, job applications, résumés, and reports. Detailed attention is given to the principles of grammar, spelling, punctuation, and form as they apply to contemporary business writing.

BUS 150 Essential Software Tools for Business
4 hours; 3 credits
This course is a hands-on introduction to the use of microcomputers in business. The emphasis will be on the operating system and practical use of the most popular application software including spreadsheets, word processing, and database management. Data exchange among different applications and usage of external databases will also be introduced. Not open to students who have successfully completed CSC 102.
Prerequisite: MTH 020 or an appropriate score on the CUNY Mathematics Assessment Test

BUS 160 Business Law I
3 hours; 3 credits
The study of the law of contracts, agency, personal property, bailments, real property, mortgages, fire and casualty insurance, and accountant's legal liability. The lecture and case study methods will be employed.
Prerequisites: Successful completion of C/ACT Writing Skills Test, C/ACT Reading Sample Test, and the CUNY Math Assessment Test or the equivalent

BUS 200 Introduction to International Business
4 hours; 4 credits
International business is examined in relation to technological, competitive, economic, legal, social, and cultural factors. Introduction to the use of the Internet to develop the latest information for course assignments. Major areas of analysis include the evolution of international business, the ongoing development of opportunities in international business, the growth in global e-commerce, and the responses of multinational firms to these opportunities. Introduction to international aspects of the traditional business functions of marketing, finance, management, and accounting.
Pre- or corequisites: ECO 101 and MGT 110 or MKT 111

BUS 205 Data Communications and Networks for Business
4 hours; 4 credits
Fundamentals of data communications, including hardware, basic components of communications, configurations, networks and applications, protocols, and software. Detailed presentation of networks management and networks design fundamentals, including local networks.
Prerequisite: BUS 150 or CSC 102 or CSC 108/116/118 or CSC 126

BUS 210 Government Policy and Multinational Enterprises
4 hours; 4 credits
This course examines the major issues affecting relations between Multinational Enterprises (MNEs) and home and host governments. Students will be exposed to the processes by which conflicting interests are resolved. The impact of international controls on MNEs by the United Nations (UN), Organization for Economic Cooperation and Development (OECD), and the European Economic Community (EEC) will be examined in detail. (Offered only at the American University of Rome.)
Prerequisites: MGT 110 or BUS 100 and POL 100 or POL 240

BUS 211 Principles of Corporate Communication
(Also COM 211)
4 hours; 3 credits
A critical survey of artifacts of corporate and public communication, including films, video programs and other audio-visual presentations, annual reports, catalogues, brochures, house organs, and other print communications. Corporate publications: their meaning, purpose, audience, and significance. Writing and editing for such publications with special emphasis on audience and purpose and development of a variety of editorial skills: proofreading, reorganizing, rewriting, collaborating, coauthoring. Students who successfully complete COM/ENL 214 may not register for COM 211.
Prerequisites: COM 150 and ENG 151

BUS 230 Quantitative Analysis of Business and Economic Problems
(Also ECO 231)
3 hours; 3 credits
The application of mathematical techniques to business and economic problems. An introduction to operations research, linear programming, PERT, and related materials.
Prerequisites: MGT 110 and MGT 230

BUS 238 Ethical Issues in Business and Society
(Also PHL 238)
4 hours; 4 credits
Critical examination of economic and social responsibility of business in the U.S. and around the world; exploration of the appropriate scope of ethical involvement from the points of view of management and society; the limitations of responsibility and the establishment of ethical criteria for the evaluation of business performance; the role of public policy in shaping corporate responsibility; consideration of ethical issues arising from the changing nature and implementation of computer and information technology.
Prerequisites: ENG 111; PHL 101 or PHL 130 or MGT 110 or sophomore standing

BUS 250 Computers in Information Processing
2 class hours, 2 laboratory hours; 3 credits
A business-oriented approach to the use of computers in the management of information systems. Study of hardware and software concepts as they relate to solving problems and making decisions in business organizations. Use of advanced software options and applications. The laboratory component will involve projects utilizing widely-used office productivity software available on microcomputers including spreadsheets, databases, presentations, and other software.
Prerequisites: ACC 114 and BUS 150 or CSC 102 or passing score on a departmental placement test demonstrating basic proficiency in Windows, word processing, spreadsheets, databases, data presentations, and computer concepts

BUS 260 Business Law II
3 hours; 3 credits
The study of the Law of Sales, commercial paper (negotiable instruments), documents of title, and partnership. The lecture and case study methods will be employed.
Prerequisite: BUS 160
BUS 310  International Trade
4 hours; 4 credits
This course presents an integrated treatment of theory, policy, and enterprise in international trade and investment. The course is directed toward the acquisition of knowledge and understanding of these subjects. Among the topics to be investigated are: foreign exchange rates, balance of payments, tariff and non-tariff trade barriers. (Offered only at the American University of Rome.)

BUS 334  Decision Support Systems
4 hours; 4 credits
This course introduces modern approaches to management information systems methodologies and typical realizations. The use of computer systems and the data structures needed to implement small MIS environments and extensive network-based information systems will be covered. Current concepts from artificial intelligence and database management will be used in designing and building effective information systems, ranging in complexity from simple retrieval systems to sophisticated decision support systems.
Prerequisites: CSC 126, ECO/MGT 230, BUS 352

BUS 352  Introduction to Systems Analysis
4 hours; 4 credits
An analysis of business needs to be satisfied by systems solutions. The systems development cycle. Determining systems requirements. Design of input, output, database, and processes. Controls of data integrity and security. Managing a systems development project. Preliminary systems design.
Prerequisites: ACC 114 and one of the following computer courses: BUS 150 or CSC 126 or CSC 102, or permission of the instructor.

BUS 360  Business Law III
3 hours; 3 credits
The study of the law of corporations, estates, trusts and wills, regulation of employment, and securities regulations (Federal Securities Acts) will be covered in depth. Trade regulation, consumer protection, constitutional law, administrative law, criminal law, intentional torts, negligence, and strict liability will be discussed. The lecture and case study methods will be employed.
Prerequisite: BUS 260

BUS 405  Applied Concepts in Information Systems
(also CSC 405)
3 lecture hours, 3 laboratory hours; 4 credits
Examination of applied concepts in information systems. Theory and methodology for the design, development, and implementation of large-scale reliable business software projects; and tools and techniques for managing business software projects will be discussed. Presentations and GUI interfaces will be emphasized.
Prerequisites: CSC 326 and BUS 352

BUS 410  Media Administration
(also COM 410)
4 hours; 4 credits
A course dealing with the skills and concepts necessary for the competent management of a media production department. Topics include production planning and control, cost analysis procedures, contract and copyright law in relation to the media, and organization theory.
Prerequisite: COM 150, and COM 261 or COM 270 or CIN 111

Finance Courses
FNC 111  Personal Finance
3 hours; 3 credits
Discussion of the problems involved in handling personal finance: taxes, life insurance, investments and securities, borrowing, savings, annuities, wills, trusts, estate taxes, and budgeting.
Prerequisites: Successful completion of the CUNY Mathematics Assessment Test, the C/ACT Writing Skills test, and the C/ACT Reading Sample Test.

FNC 213  Money and Capital Markets
(Also ECO 213)
4 hours; 4 credits
The course examines financial markets from the standpoint of investors and users. Markets studied are those for money market instruments, T-bill futures, Ginnie Mae futures, T-bond futures, stocks, stock options, bonds, mortgages, and Eurocurrencies. Federal Reserve operations, U.S. Treasury operations, and international financing are considered with regard to their effects on financial markets.
Prerequisites: Successful completion of C/ACT Writing Skills Test and C/ACT Reading Sample Test or equivalent and ECO 101

FNC 214  Money and Banking
(Also ECO 214)
4 hours; 4 credits
An analytical, institutional, and historical examination of the monetary systems of the United States. Particular attention will be paid to the operation of commercial banks, and to the powers, purposes, and performance of the Federal Reserve System. The influence of the quantity of money on the level of economic activity will be considered.
Prerequisites: Successful completion of C/ACT Writing Skills Test and C/ACT Reading Sample Test or equivalent and ECO 101

FNC 240  Managerial Finance I
(Also ECO 240)
3 hours; 3 credits
Examination of securities markets, analysis of methods of long-term financing, financial ratio analysis, budgeting, current asset management, present value concepts, capital budgeting, cost of capital, and dividend policy.
Prerequisite: MTH 030 or MTH 121 or MTH 123 or equivalent and ACC 114 and ECO 101

FNC 245  Managerial Finance II
(Also ECO 345)
4 hours; 4 credits
Working capital management, current asset management, sources of short-term financing, financial structure and use of leverage, valuation and rates of return, dividend policy and internal financing, mergers and acquisitions, and liquidation; includes computer lab for solving financial management problems.
Prerequisite: FNC/ECO 240 and MGT/ECO 230
FNC 350  Advanced Corporate Finance  
4 hours; 4 credits  
A case problem approach to business policy including a theoretical and practical study of assets and liabilities, capital management, financial markets, and the legal concepts of corporate finance. Problems in industry structure, mergers, and acquisitions.  
Prerequisite: FNC/ECO 345  

FNC 360  Investment Analysis  
(Also ECO 360)  
4 hours; 4 credits  
Survey of principles governing the investment of individual and institutional capital funds: the theory and mechanics of investments; general analysis and valuation procedures including quantitative and qualitative tests for judging security values; valuation of fixed income securities and common stocks. Introduction to the analysis of industrial, public utility, and government securities. Management of an individual investor's portfolio.  
Prerequisite: FNC/ECO 345  

FNC 370  International Finance  
(Also ECO 370)  
4 hours; 4 credits  
The financial interrelationships between countries. Analysis of balance of payments, fixed and flexible exchange rates, the role of international reserves. Historical trends in payments and exchange; implications of the rise of the multinational corporation; current international policy problems facing the United States, other developed nations, and underdeveloped nations, and current institutional changes designed to meet them.  
Prerequisite: FNC/ECO 240  

Management Courses  

MGT 110  Organizational Theory and Management  
3 hours; 3 credits  
Theories of organization and management are developed, examined, and applied to business and nonprofit institutions. Evaluation of organizational structure and practice in light of these theories. Studies of leadership, small group behavior, creativity, communication, and the process of social change in the large business organization.  
Prerequisites: ENG 111, and MTH 025 or MTH 030 or permission of the Mathematics Department or an appropriate score on the CUNY Math Assessment Test.  

MGT 223  Public Administration  
(Also POL 223)  
4 hours; 4 credits  
A course examining concepts in the execution of public policy. Relationships of administrative process to the executive, legislative bodies, the public, special interest groups, the clientele, and the courts. Consider personnel administration and administrative law and regulation. (social science)  
Prerequisite: ENG 111, COR 100  

MGT 230  Introduction to Managerial and Economic Statistics  
(Also ECO 230)  
4 hours; 4 credits  
Development and application of modern statistical methods, including such elements of descriptive statistics and statistical inference as correlation and regression analysis, probability theory, sampling procedures, normal and binomial distributions, estimation, and testing of hypotheses.  
Prerequisites: Successful completion of C/ACT Writing Skills Test, C/ACT Reading Sample Test, ECO 101, Math 121 or 123, or equivalent  

MGT 261  Labor Relations  
(Also ECO 261)  
4 hours; 4 credits  
History, theories, structure, and objectives of trade unionism. Grievance procedures, collective bargaining, union power, strikes and other weapons, mediation and arbitration. Government regulation of the labor sector. Students will participate in the reenactment of actual arbitration cases.  

MGT 310  Management Process  
4 hours; 4 credits  
Advanced study of organizational structure and practice in light of management theory. Management functions: planning, organizing, and controlling, along with the secondary functions of staffing, personnel management, and external representation will be studied.  
Prerequisite: MGT 110, ECO 101, ACC 114  

MGT 311  Small Business Management  
4 hours; 4 credits  
An overview of the entrepreneur: definition, traits, and development; the role of the entrepreneur in our society and importance to the economy; the launching of a new venture; managing an ongoing venture; planning, financing, staffing, and control.  
Prerequisite: MGT 110, MKT 111  

MGT 320  Management of Organizational Behavior  
4 hours; 4 credits  
A systematic, analytical approach to understanding, predicting, and controlling human behavior in organizations. Consideration is given to the individual and the organization, groups and the organization, organizational development and leadership.  
Prerequisites: MGT 110, ECO 101  

MGT 322  Human Resource Administration  
4 hours; 4 credits  
The course provides an introduction to the functions of the personnel executive. A historical and theoretical background is provided. Stress is placed upon the technical, analytical, and legal skills necessary in performing the job itself. Specific topics include recruiting and selecting, employee development, reward and penalty systems, job descriptions, records, and industrial relations.  
Prerequisites: MGT 110  

MGT 323  Public Policy Analysis  
(Also POL 323)  
4 hours; 4 credits  
A study of how government deals with problems in such areas as health, energy, environment, education, crime, and economic stability. In addition to focusing on substantive policies in these fields, the course will examine how problems come to government’s attention and analyze various techniques for determining whether a governmental program is successful.  
Prerequisite: POL 100  

MGT 324  Introduction to Econometrics  
(Also ECO 325)  
4 hours; 4 credits  
This course will examine the relationship between economic theory and
statistical measurement. It will deal mainly with the general linear regression and correlation model. A selected number of other statistical tools will also be treated. Emphasis will be on the understanding of the concepts rather than on their mathematical derivation.
Prerequisites: ECO 101 and ECO/MGT 230 or permission of the instructor

MGT 339 Administrative Law
(Also POL 339)
4 hours; 4 credits
Emphasizes the judicial, legislative, and executive control of decisions made by bureaucrats. Topics such as the possibility and scope of judicial review of administrative decision making; ripeness for review and exhaustion of administrative remedies; and the legislative veto. The Administrative Procedure Act’s requirements for rule making and adjudication will also be analyzed.
Prerequisite: POL/MGT 223 or POL 336 or POL 338

MGT 410 Business Policy
4 hours; 4 credits
The course develops a conceptual framework for business planning through case analysis including the work of theorists, practitioners, and researchers in business policy and strategy planning.
Prerequisites: Completion of the business core requirements, and junior or senior standing, or permission of the instructor

MGT 416 Decision Making in Business
4 hours; 4 credits
Analysis of the problems that face business managers. The course involves participation in a simulated, computerized business game dealing with sales forecasting, marketing, production planning, personnel, pricing, and finance.
Prerequisites: Completion of the business core requirements

MGT 423 The Collective Bargaining Process
4 hours; 4 credits
Prerequisite: MGT 261

MGT 425 International Management
4 hours; 4 credits
After a review of the international business environment this course examines the strategic aspects of the multinational enterprise (MNE). This includes organization, policy making, and long-range planning. To achieve this end the functional aspects of international management are examined including human resource management and analysis of cross-cultural management and contrasts in the different managerial approaches and styles that are used throughout the world. Production, marketing, and financial aspects as they apply to the international scene are examined in relation to policy making. To achieve these goals the course is a combination of class lectures and discussions examining theory to formulate policy in analyzing current case studies.
Prerequisites: Senior status, ECO 250, BUS 200
Pre- or corequisite: ECO/FNC 370

Marketing Courses
MKT 111 Marketing
3 hours; 3 credits
Survey of the nature of the United States distributive system, covering the principles, policies, and practices used by manufacturers, wholesalers, and retailers. Emphasis is placed on the planning, development, and efficient use of marketing tools and institutions in the creation and expansion of markets. Current trends and developments in modern marketing practice are analyzed.
Prerequisites: ENG 111, and MTH 025 or MTH 030 or permission of the Mathematics Department or the equivalent score on the CUNY Math Assessment Test.

MKT 211 Advertising
4 hours; 4 credits
The course examines the principles and applications of advertising in modern business, details the procedures and techniques necessary for advertising campaigns and execution via preparation of a marketing/advertising plan, and stresses marketing/advertising strategy. Evaluation of social and ethical responsibilities of advertising.
Prerequisite: MKT 111

MKT 213 Retail Store Organization and Operation
3 hours; 3 credits
Survey of the functions, principles, procedures, organization, and activities involved in retail store operations. Current trends and developments in retailing practices are analyzed.
Prerequisite: MKT 111

MKT 215 Principles of Selling
3 hours; 3 credits
A study of the problems of sales management: sales policies; selection and training of salespersons; methods of compensation and sales stimulation; sales administration and budgeting; sales forecasting. Analysis and evaluation of current practices in sales management.
Prerequisite: MKT 111

MKT 310 Consumer Behavior
4 hours; 4 credits
The study of consumer behavior from a theoretical and practical standpoint. The course seeks to understand the role of the behavioral sciences (e.g. anthropology, sociology, psychology) in buying behavior and to integrate the theoretical world of the behavioral sciences with the practical world of marketing. Social, interpersonal, and mediating influences are examined and evaluated as a basis for marketing decisions.
Prerequisites: MKT 111, PSY 100 or SOC 100 or permission of the instructor

MKT 312 Advertising Copy and Production
4 hours; 4 credits
Creative and procedural techniques involved in planning, preparing, and producing advertisements for print and broadcast media. Problems and practice exercises are used to develop a working technical skill. Hands-on production experience in all media.
Prerequisite: MKT 211

MKT 410 Marketing Research
4 hours; 4 credits
Encompasses survey of research processes, problem formulation, the types
of problems for which market research is used, primary and secondary data collection methods, questionnaire design, and sampling plans. Analysis and interpretation of data and research report formats.

Prerequisites: MKT 111, MGT/ECO 230, and MKT 211 or MKT 310

MKT 415  International Marketing  
4 hours; 4 credits  
An analytical approach to solving international business problems considering the multiple environments of international business. This course requires the student to investigate the relationship of marketing strategy to cultural, economic, legal, political, and technological conditions in various national markets.

Prerequisites: ECO 250 or BUS 200 and MKT 111

MKT 420  Marketing Management  
4 hours; 4 credits  
The course focuses on the major decisions facing marketing management in its attempt to harmonize the objectives and resources of the company with the opportunities found in the marketplace. The course is analytical in nature and draws heavily on the basic disciplines of economics, behavioral science, and mathematics.

Prerequisites: Completion of business core requirements, MKT 310, senior standing, or permission of instructor

MKT 490  Marketing Seminar  
3 hours; 3 credits  
The use of a selected broad-gauge marketing topic as a focal point for the semester’s work to bring about an integration of concepts and knowledge from a number of related disciplines. New ways of thinking about problems faced by marketing management are sought. Individual study by each student of a specific topic and preparation of a report giving the results of research.

Prerequisite: Completion of business core requirements, senior standing, and permission of the instructor

Chemistry

(Bachelor of Science, Minor; see Graduate Catalog for information on graduate programs)

Department of Chemistry
Chair: Associate Professor John Olsen, Biological/Chemical Sciences Building (6S), Room 235

A degree in chemistry or biochemistry is essential to anyone interested in working in the chemical or pharmaceutical industries and in related fields such as teaching and chemical sales. The degree affords the opportunity to participate in pure chemical research, product development, marketing and sales. A student with a BS in Chemistry may branch out and become involved in government jobs in geochemistry, toxicology, and environmental chemistry. The Chemistry major also might elect to work in the more medically-oriented fields such as pharmacology, biochemistry, bioengineering, or medicinal chemistry or to enter the teaching profession. For students who wish to pursue graduate study in the sciences or enter professional schools (medicine, dentistry, optometry, pharmacy), a BS degree in Chemistry or Biochemistry is viewed quite favorably by admissions committees.

Chemistry (BS)

General Education Requirements for the BS  
ENG 111, ENG 151, COR 100, PED 190:  12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 21-27 credits
Whenever possible, these courses should be completed within the first 60 credits.

1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)

2. Social Scientific Analysis: (3-4 credits)

3. The West and the World: (4 credits)

4. Textual, Aesthetic, and Linguistic Analysis: (3-4 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
   c. Arts and Communications: 200-level

5. Pluralism and Diversity Requirement: (0-4 credits)
See section on general education requirements for approved course lists and complete details.

Pre-Major Requirements: 26 credits
Students planning to major in Chemistry must complete the following requirements. A detailed guide to course choices for Biochemistry and Chemistry majors is available from the Department of Chemistry.

CHM 141  General Chemistry I  3 credits
CHM 121  General Chemistry I Laboratory  1 credit
CHM 142  General Chemistry II  3 credits
CHM 127  General Chemistry II Laboratory  1 credit
PHY 120  General Physics I  3 credits
PHY 121  General Physics I Laboratory  1 credit
PHY 160  General Physics II  3 credits
PHY 161  General Physics II Laboratory  1 credit
MTH 229  Calculus Computer Laboratory
MTH 230  Calculus I and Pre-Calculus  
or
MTH 231  Analytic Geometry and Calculus I
   and
MTH 232  Analytic Geometry and Calculus II
MTH 233  Analytic Geometry and Calculus III
   or
MTH 235  Accelerated Calculus I  
MTH 236  Accelerated Calculus II  10-13 credits

Major Requirements: 36 credits

CHM 240  Quantitative Chemistry  4 credits
CHM 250  Organic Chemistry I  4 credits
CHM 256  Organic Chemistry II  4 credits
CHM 330  Physical Chemistry: Equilibria  4 credits
CHM 336  Physical Chemistry: Processes  4 credits
CHM 337  Experimental Methods in Physical Chemistry  4 credits

Three additional chemistry electives at the 300 level or higher  12 credits
Electives: 29 credits
All Chemistry majors are encouraged to take an Independent Study course (CHM 591-4) as an elective.

Total Credits Required: 120
Transfer students are expected to fulfill their advanced major requirements (300-level and higher) at the College of Staten Island.

Honors
A student may be eligible for admission to the honors program in Chemistry if he or she enters the senior year with a 3.5 grade point average. With the concurrence of a faculty supervisor, the student must submit (by September 1) a one-page summary of a proposed research project. The chairperson of the Department and the faculty supervisor will appoint a three-member committee to evaluate and/or modify the proposal (by September 15), then grant or deny admission to the honors program.

While pursuing honors research the student may receive eight credits for Independent Study (CHM 594), four each in the fall and spring semesters. Additionally, it is highly recommended that the student begin work on the project during the summer or spring semester that immediately precedes the senior year. Progress of the research will be monitored as follows: (1) the student will meet with his or her committee by November 1 of the first semester; (2) the student will submit a five-page progress report by January 15; (3) the committee will recommend for or against continuation in the program by February 1; (4) the student will submit a thesis, following the style of major journals, by May 1; (5) the student will present an oral defense of the thesis to the committee by the end of the final exam period.

The deadline dates noted above are based on a June graduation date, but corresponding guidelines may be designed for January graduation. In either case, it is expected that completion of the honors program will require at least one year of student research.

Minor
Prerequisite Courses:
CHM 141, 121, 124, 127 8 credits

Requirements:
CHM 240 Analytical Chemistry
or
CHM 340 Instrumental Analysis 4 credits
CHM 250 Organic Chemistry I 4 credits
CHM 256 Organic Chemistry II 4 credits
One 300-level chemistry course 4 credits

Courses
CHM 100 Introduction to Chemistry
3 lecture hours, 1 recitation hour; 3 credits
Course material includes matter and energy, atoms and molecules, the periodic table, nomenclature, equations, mole concept, stoichiometry, solutions.
Prerequisite: MTH 025 or MTH 030
Corequisite: CHM 101
Note: This course is intended for those students who have had no previous chemistry and for those returning to the subject after some years. The course is designed to prepare students for entry into CHM 141.

CHM 101 Introduction to Chemistry Laboratory
2 hours; 1 credit
A laboratory course emphasizing basic chemical laboratory techniques. The experiments provide illustrations of concepts discussed in CHM 100. Use of computer software for laboratory data analysis and computer-assisted instruction.
Corequisite: CHM 100

CHM 106 Chemistry for Today I
3 hours; 3 credits
Basic chemical concepts including atomic theory, the nature of molecules, chemical formulae and equations, bonding, gas laws, nuclear chemistry, oxidation-reduction, and acids and bases. (science)
Prerequisite: MTH 020 or an appropriate score on the CUNY Mathematics Assessment Test Corequisite: CHM 107

CHM 107 Chemistry for Today I Laboratory
2 laboratory hours; 1 credit
Laboratory experiences illustrating principles and topics discussed in CHM 106. (science)
Pre- or corequisite: CHM 106

CHM 108 Chemistry for Today II
3 hours; 3 credits
A continuation of Chemistry 106. Topics will be chosen from among the following: fossil fuels and pollution, man’s effect on the environment, food additives, household chemicals, the chemistry of drugs and the human mind, farm chemistry, and plastics. (science)
Prerequisite: CHM 106
Corequisite: CHM 109

CHM 109 Chemistry for Today II Laboratory
2 laboratory hours; 1 credit
Laboratory experiences illustrating principles and topics discussed in CHM 108. (science)
Pre- or corequisite: CHM 108

CHM 110 Principles of Chemistry I
3 hours; 3 credits
Modern concepts of the atom and chemical bonding, chemical calculations, states of matter, chemistry of water, purification of water, types of solutions, acids and bases, nuclear chemistry, and radioactivity. The concepts necessary for an understanding of our technological society are developed. (science)
Prerequisite: MTH 020 or an appropriate score on the CUNY Mathematics Assessment Examination Test Corequisite: CHM 111

CHM 111 Principles of Chemistry I Laboratory
2 laboratory hours; 1 credit
Experiments illustrating principles studied in CHM 110. (science)
Prerequisite: MTH 020 or an appropriate score on the CUNY Mathematics Assessment Test Corequisite: CHM 110

CHM 116 Principles of Chemistry II
3 hours; 3 credits
Chemistry and biochemistry of carbon compounds. A study of the nomenclature, structure, properties, and reactions of organic and biochemical compounds. A number of special topics are discussed, some of which are the petroleum industry, giant molecules (synthetic and biopolymers), environmental chemistry, drugs, and oral contraceptives. (science)
Prerequisite: CHM 110 and 111 or permission of the instructor Corequisite: CHM 117
CHM 117  Principles of Chemistry II Laboratory
2 laboratory hours; 1 credit
Laboratory experiments concerned with the synthesis, isolation, and purification and analysis of a variety of organic and biochemical compounds of the types considered in CHM 116. (science)
Prerequisites: CHM 110 and 111 or permission of the instructor
Corequisite: CHM 116

CHM 121  General Chemistry I Laboratory
3 laboratory hours; 1 credit
Experiments reinforce important chemical concepts discussed in lectures, teach modern lab techniques, and emphasize present day interpretations of lab measurements. (science)
Pre- or corequisite: CHM 141

CHM 127  General Chemistry II Laboratory
3 laboratory hours; 1 credit
A continuation of CHM 121. Inorganic qualitative analysis. (science)
Prerequisite: CHM 121
Pre- or corequisite: CHM 142

CHM 141  General Chemistry I
3 lecture hours, 1 recitation hour; 3 credits
A study of the fundamental principles and laws concerning the structure and behavior of matter. The first semester covers atomic and molecular structure, chemical bonding, reactions, stoichiometry and the gaseous, liquid, and solid states of matter. (science)
Pre- or corequisite: MTH 123
Corequisite: CHM 121
Note: Students are advised that satisfactory completion of one year of high school chemistry or a college-level introductory chemistry course is essential preparation for this course.

CHM 142  General Chemistry II
3 lecture hours, 1 recitation hour; 3 credits
A continuation of CHM 141. Solution properties, reaction rates, equilibrium processes, thermochemistry and thermodynamics, electrochemistry, nuclear and organic chemistry. (science)
Prerequisite: CHM 141
Corequisite: CHM 127

CHM 240  Analytical Chemistry
4 class hours, 4 laboratory hours; 4 credits
A study of the quantitative aspects of chemical changes, chemical equilibria, the stoichiometry and energetics of chemical reactions. Theory and laboratory in volumetric, optometric, electrostatic, and kinetic methods of chemical analysis. An introduction to instrumental methods of analysis.
Prerequisites: CHM 142 and 127

CHM 250  Organic Chemistry I
3 class hours, 4 laboratory hours; 4 credits
The structure and properties of organic compounds are examined. Emphasis is given to reactions and synthesis of aliphatic and aromatic molecules. Stereochemistry and organic reaction mechanisms are introduced and thoroughly discussed.
Prerequisites: CHM 142 and CHM 127

CHM 256  Organic Chemistry II
5 class hours, 4 laboratory hours; 4 credits
A continuation of CHM 250 with an emphasis on functional group chemistry and bioorganic chemistry. By the end of the two-semester sequence IR and NMR analysis are discussed in detail in conjunction with classical methods of structural determination.
Prerequisite: CHM 250

CHM 330  Physical Chemistry: Equilibria
4 hours; 4 credits
Chemical thermodynamics and its application to phase and chemical equilibria.
Prerequisite: MTH 233 or MTH 236, PHY 160, CHM 240

CHM 336  Physical Chemistry: Processes
4 hours; 4 credits
Kinetic theory and transport processes, introductory quantum and statistical chemistry, atomic and molecular spectroscopy, and chemical kinetics.
Prerequisite: MTH 233 or MTH 236, PHY 160, CHM 240

CHM 337  Experimental Methods in Physical Chemistry
8 hours; 4 credits
Introduction to techniques of physical measurement applied to chemical systems. Vacuum and gas handling techniques, optico-chemical methods, transport and electrochemical processes.
Corequisite: CHM 330 or CHM 336

CHM 340  Instrumental Methods of Chemical Analysis
2 class hours, 4 laboratory hours; 4 credits
Fundamental considerations underlying the theory and design of instrumental methods and procedures of analysis. General treatment of the operating characteristics of instruments. A consideration of ultraviolet-visible, infrared, nuclear magnetic and electron spin resonance spectroscopy, column and gas chromatography, flame photometry, atomic absorption, polarography, fluorimetry, radiochemical and thermal analysis, electrophoresis, and other analytical methods. Basic instrumentation electronics, including operational amplifiers, triodes, transistors, and transducers.
Prerequisites: CHM 142 and CHM 127, CHM 240 or permission of the instructor

CHM 350  Advanced Organic Chemistry
4 hours; 4 credits
An introduction to the theory of bonding and structure; acids and bases; an introduction to physical organic chemical concepts and the application of these, together with stereochemical concepts, to the study of reaction mechanisms.
Prerequisite: CHM 256
Corequisite: CHM 330 or CHM 336 or permission of the instructor

CHM 370  Biochemistry I
(Also BIO 370)
4 hours; 4 credits
Biochemistry and the living state. Regulation of energy-yielding and energy-requiring reactions in cells. Molecular components of cells, enzyme mechanisms, bioenergetics, and an introduction to biosynthetic principles.
Prerequisite: CHM 256
Corequisite: PHY 110 or 120 or permission of the instructor
CHM 376  Biochemistry II
(Also BIO 376)
4 hours; 4 credits
Respiration, photosynthesis, membrane structure and transport, biosynthesis of macromolecules, biochemical genetics, and the regulation of metabolic activity in mammals.
Prerequisite: CHM 370
Corequisite: PHY 150 or 160 or permission of the instructor

CHM 377  Experimental Biochemistry
8 laboratory hours; 4 credits
Through a study of a commonly occurring genetic defect, this course introduces students to biochemical concepts and techniques used in current research. Techniques used include protein purification, enzymology, Western blotting, RNA isolation, DNA isolation, PCR-amplification of mutated regions of genes, cloning of PCR products into vectors, culturing of mammalian brain cells, immunocytochemistry, and retrieving and processing of genetic information using various databases and software packages.
Prerequisite: CHM 240 or BIO 312 or BIO 352
Corequisite: CHM 370/BIO 370

CHM 434  Inorganic Chemistry
3 class hours, 3 laboratory hours; 4 credits
The course covers general bonding theories of inorganic compounds, symmetry elements and point groups, acid-base properties, coordination chemistry and reaction mechanisms, organometallic chemistry, and an introduction to bioinorganic chemistry.
Pre- or corequisite: CHM 256 or 330 or 336 or permission of instructor

CHM 442  Spectroscopy: Theory and Applications
4 hours; 4 credits
Theory and applications of molecular spectroscopy in gases and condensed phases, including rotation, vibration, electronic, and magnetic resonance techniques. Applications to structural problems in biochemistry and polymer chemistry.
Pre- or corequisite: CHM 330 or 336

CHM 452  Polymer Chemistry
4 hours; 4 credits
Prerequisites: CHM 256, 330, and 336; permission of the instructor

CHM 592  Independent Study for Research
2 credits

CHM 594  Independent Study for Honors Research
4 credits
See Graduate Catalog for graduate courses.

Cinema Studies (BA)

General Education Requirements for the BA
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 28-47 credits
Whenever possible, these courses should be completed within the first 60 credits.
1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)
2. Social Scientific Analysis: (7-8 credits)
3. The West and the World: (4 credits)
4. Textual, Aesthetic, and Linguistic Analysis: (6-8 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
   Arts and Communications: 200-level
5. Pluralism and Diversity Requirement: (0-4 credits)
6. Foreign Language: (0-12 credits)
See section on general education requirements for approved course lists and complete details.

Pre-Major Requirements: 6 credits
Students planning to major in Cinema Studies must complete the following pre-major requirements:
CIN 100  Introduction to Film
CIN 111  Basic Video Production

Major Requirements: 32 credits
Students majoring in Cinema Studies must complete 32 credits of cinema studies courses at the 200 or higher level. These 32 credits must include:
CIN 210  History and Theory of Film I 4 credits
CIN 220  History and Theory of Film II 4 credits
At least 12 additional credits in film history, theory, and aesthetics:
CIN 204, 230, 240, 301, 303, 304, 401, 402, 404, 405, 406, 407, 408
   At least six credits in film production:
CIN 211, 511, 512, 612
   6 credits

Electives: 41 credits
Total Credits Required: 120

Liberal Arts and Sciences Requirement
Film production courses are non-liberal arts and sciences.

Honors
To graduate with Honors in Cinema Studies a student must have a 3.5 grade point average in cinema studies courses and must complete an honors thesis or project, which may include the production of a film, approved by a faculty adviser.

Minor
Prerequisite Courses: 6 credits
CIN 100 Introduction to Film 3 credits
CIN 111 Basic Video Production 3 credits

Minor Requirements: 12 credits
CIN 210 History and Theory of Film I 4 credits
At least eight credits chosen from CIN 211, 220, 230, 240, 301, 302, 303, 310, 311, 312, 401, 402, 404, 405, 406, 407, 408 8 credits

Courses
CIN 100 Introduction to Film 4 hours; 3 credits
An introduction to the art of film and to the methods and terms of film analysis. Topics to be covered include the nature of cinematic time and space; the contribution of directorial style; the effects of cutting, editing, lighting, framing, camera movement, and sound; and the relationship between written script and visual imagery. (arts & com.)

CIN 111 Basic Video Production 4 hours; 3 credits
An introductory workshop in the basic techniques of video production. Visual awareness as applied to composition and continuity is developed in a series of practical class projects. This course is a prerequisite for 200- and 300-level work in film/video production and is intended for Cinema and Communications majors and minors. Others may register by permission of the instructor. (arts & com.)

CIN 204 Politics and Film (Also POL 219) 4 hours; 4 credits
An analysis of the political and social perspectives and directing styles of a variety of European and American directors. The course will examine how race, social class, gender, ethnicity, revolution, the city, and national character and culture are represented in these films. (social science) (arts & com.)
Pre requisite: ENG 111, COR 100

CIN 210 History and Theory of Film I 4 hours; 4 credits
Growth and development of film technique and theory from the beginning of cinema to 1939; viewing and discussion of films by various American, European, and other national filmmakers. Readings will include the major theoretical works of various critics and philosophers. Required for the Cinema Studies major.
Pre requisite: CIN 100 and ENG 111

CIN 211 Film/Video Cinematography 4 hours; 3 credits
A basic workshop in film/video cinematography: Practical exercises with video and 16mm equipment will focus on techniques of composition, lighting, and camera movement.
Pre requisite: CIN 111

CIN 220 History and Theory of Film II 4 hours; 4 credits
Advanced study of the growth and development of film technique, theory, and historiography from early studies to the present day; viewing and discussion of films by various American and international filmmakers. Readings in the major theoretical works of film critics and philosophers. Required for the Cinema Studies major.
Pre requisite: CIN 100, ENG 111, and CIN 210 or permission of the instructor.

CIN 230 American Film and American Myth (Also AMS 230) 4 hours; 4 credits
The American film and its relationship to American myth, society, and culture. Topics to be included are: the American West; the gangster; rural and urban life; the nature of war; race and class; comic views of America. (arts & com.)
Pre requisite: ENG 111

CIN 240 Third World Cinema 4 hours; 4 credits
A survey of cinema from and about the Third World that emphasizes the effort to construct a national identity within a post-colonial multinational context. Considered and analyzed will be films from Africa, Latin America, the Middle East, and Asia. Films directed by Glauber Rocha, Satyajit Ray, Tomas Alea, Tracy Moffatt, among others will be examined. (P&D)
Pre requisite: CIN 100

CIN 274 Introduction to Screen Writing (Also ENL 274) 4 hours; 4 credits
Writing for television and film. Class discussions of students’ work and the problems of creating in this field. Selected readings.
Pre requisite: ENG 151

CIN 290 Internship in Media Production (Also COM 290) 1-4 credits
An internship work and learning experience with a public or private agency whose activity is film, video, television, or radio production. Prerequisite: A 100-level course in cinema studies, or the equivalent and permission of the faculty sponsor

CIN 301 Literature into Film 4 hours; 4 credits
An examination of the aesthetic and practical problems in translating fiction into film. Students will read novels and plays and view the films made from them, with class discussions to focus on the potentialities and limitations of each art form.
Pre requisite: CIN 100 and ENG 111

CIN 303 Screen Comedy 4 hours; 4 credits
An examination of the screen comedians. The course will consider the comic techniques of the performers and the particular cinematic devices that are used to convey the performance. Showings of films by Chaplin, Lloyd, Keaton, Lubitsch, Laurel and Hardy, the Marx Brothers, W.C. Fields, and others.
Pre requisite: CIN 100 and ENG 111

CIN 304 Nonfiction Film 4 hours; 4 credits
A critical and historical survey of the development of nonfiction film, including the work of such filmmakers as Robert Flaherty, John Grierson, Pare Lorentz, Williard Van Dyke, Leni Riefenstahl, Richard Leacock, Albert and David Maysles, and Frederick Wiseman.
Pre requisite: CIN 100 and ENG 111

CIN 311 Film/Video Workshop 4 hours; 3 credits
Students will use advanced filmmaking and video equipment in the
production of sync-sound documentary or fiction videos. Projects shot on film will be edited on video. Emphasis is placed on the ability of students to work in production crews. This course may be repeated for credit.
Prerequisite: CIN 111, and either CIN 211 or COM 261

CIN 312 Non-Linear and Multimedia Production
4 hours; 3 credits
Individual projects in video and multimedia with an emphasis on digital post-production.
This course may be repeated for credit.
Prerequisite: CIN 111, and either CIN 211 or COM 261

CIN 401 Major American Directors I
4 hours; 4 credits
The place of individual directorial style in the American movie industry: Howard Hawks, Preston Sturges, Josef von Sternberg, John Ford, Alfred Hitchcock, and Orson Welles.
Prerequisites: CIN 100 and ENG 111

CIN 402 Major American Directors II
4 hours; 4 credits
The place of individual directorial style in the American movie industry: Martin Scorsese, Robert Altman, Spike Lee, and Francis Ford Coppola.
Prerequisites: CIN 100 and ENG 111

CIN 404 Major French Directors I
4 hours; 4 credits
A study of the personal vision and style of several French directors chosen from the leading figures of the 1930s, 1940s, and 1950s: Clair, Cocteau, Renoir, Vigo, Ophuls, Carne, Bresson, and Franju.
Prerequisites: CIN 100 and ENG 111

CIN 405 Major French Directors II
4 hours; 4 credits
A study of the work of the major New Wave directors (Truffaut, Godard, Resnais, Varda, Chabrol, Rohmer) and the French and American sources that influenced their aesthetic.
Prerequisites: CIN 100 and ENG 111

CIN 406 Postwar Italian Cinema
(Also LNG 406)
4 hours; 4 credits
A study of the political and cultural roots of Neorealism and of the personal style and vision of such postwar directors as Visconti, DeSica, Rossellini, Fellini, Antonioni, and Bertolucci.
Prerequisites: CIN 100 and ENG 111

CIN 407 International Films I
4 hours; 4 credits
An exploration of the work of important filmmakers from Western and Central Europe and Scandinavia. Those studied may include Olmi, Tanner, Herzog, Fassbinder, and Bergman.
Prerequisites: CIN 210 and ENG 111

CIN 408 International Films II
4 hours; 4 credits
An exploration of the work of important filmmakers from Eastern Europe, Asia, and the nations of the developing world. Those studied may include Wajda, Szabo, Forman, Kurosawa, Mizoguchi, and Ray.
Prerequisites: CIN 210 and ENG 111

CIN 436 Screen Writing
(Also ENL 436)
4 hours; 4 credits
Study of the craft of constructing the screenplay, treatment, synopsis, and shooting script. The student will work on the problems of creating the original filmscript as well as adapting a piece of existing material for the screen.
Prerequisite: CIN/ENL 274 or permission of the instructor
For graduate courses in Cinema Studies see the Graduate Catalog.

Civil Engineering Technology

Courses

CET 230 Statics
1 class hour, 2 laboratory hours; 2 credits
Prerequisite: ENT 100 or PHY 110
Pre- or corequisite: MTH 123

CET 360 Strength of Materials
2 class hours, 2 laboratory hours; 3 credits
Theoretical design analysis supplemented by practical testing and experimentation. Topics include: axial stress and strain, shear and moment diagrams, beam deflection, torsion, columns. Written reports are required in connection with the laboratory work.
Prerequisite: CET 230

Communications

(Bachelor of Science, Minor)
Department of Media Culture
Chair: Assistant Professor Edward Miller, Center for the Arts (1P), Room 203
This program is offered by the Department of Media Culture in collaboration with the Department of English, Speech, and World Literature and in association with the Department of Business, the Department of Psychology, and the Department of Sociology, Anthropology, and Social Work. The program is designed to provide undergraduate students with a broad, comprehensive and multi-disciplinary liberal arts education, while at the same time introducing them to the field of communications and equipping them with specialized skills and competencies. Students select one of the following areas of specialization: media studies, corporate communication, publication design, and journalism.

Communications (BS)

General Education Requirements
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis;
Pluralism and Diversity; Foreign Language requirements: 28-47 credits
Whenever possible, these courses should be completed within the first 60 credits.
1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)
2. Social Scientific Analysis: (7-8 credits)
3. The West and the World: (4 credits)
4. Textual, Aesthetic, and Linguistic Analysis: (6-8 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
      Arts and Communications: 200-level
5. Pluralism and Diversity Requirement: (0-4 credits)
6. Foreign Language: (0-12 credits)
See section on general education requirements for approved course lists and complete details.

Major Requirements: 51-57 credits
Common Core: required for all specializations: 33-34 credits
1. History and Theory of Communications (16 credits)
   - COM 150 Introduction to Communications 4 credits
   - COM 203 Theories of Communications 4 credits
   - Two of the following: 8 credits
     - COM/SOC 374 Mass Media in Modern Society
     - COM 220 History of Broadcasting
     - COM/ENL 230 History of Print Media
2. Practical and Applied (10-11 credits)
   - COM/ENL 277 Introduction to Journalism 4 credits
   - One of the following: 3-4 credits
     - CSC 102 Computing for Today
     - BUS 150 Essential Software Tools in Business
   - CIN 111 Film/Video Production I 3 credits
   - COM/SOC 374 Mass Media in Modern Society
   - COM 220 History of Broadcasting
   - COM/ENL 230 History of Print Media
3. Internship (3 credits)
   - COM/SOC 290 Internship in Media Production
4. Communications Seminar (4 credits)
   - COM 450 Senior Seminar in Communications

Areas of Specialization (18-23 credits)
Communications majors must elect one of the following specializations: media studies, corporate communications, publication design, or journalism.

Electives: 25-29 credits
Total Credits Required: 120
It is strongly recommended that students majoring in Communications also elect a minor. The choice of minor should be developed in accordance with the student’s career objectives in consultation with the student’s faculty adviser.

Specializations:
Media Studies
The specialization in media studies prepares students for entry-level positions in media production and media research. Students study the basic production skills of film, video, audio, and television as well as the institutional contexts in which mediated communication often occurs. Students are introduced to basic theories of communications and specialized theories of mass communications.

Requirements: 23 credits
- CIN 111 Film/Video Production I 3 credits
- CIN 211 Film/Video Production II 3 credits
- COM 240 Media Workshop: Acting, Directing, and Producing for the Media 3 credits
- One of the following: 4 credits
  - COM 200 Media and Culture
  - COM 201 History and Theory of Television
  - COM/ENL 312 Theories of Mass Media
- Two of the following: 6 credits
  - CIN 211 Film/Video Production II 3 credits
  - COM 240 Media Workshop: Acting, Directing, and Producing for the Media 3 credits

Corporate Communications
The specialization in corporate communications prepares students to enter business and not-for-profit settings. The curriculum provides a theoretical framework and practical skills in writing and design, with particular emphasis on their interrelationship, as well as knowledge of related production and business practices.

Requirements: 21 credits
- COM 211 Principles of Corporate Communications 3 credits
- COM/ENL 241 Communications Design Workshop: Writing and Design 3 credits
- COM 410 Media Administration 4 credits
- ACC 114 Introduction to Accounting I 4 credits
- BUS 100 Introduction to Business 3 credits
- MKT 111 Marketing 4 credits
- MGT 110 Organizational Theory and Management 4 credits
- FNC 240 Managerial Finance I 4 credits
- One of the following: 4 credits
  - MKT 211 Advertising
  - COM/ENL 412 Broadcast Journalism
Publication Design
The specialization in publication design prepares students for entry-level positions in publishing, small advertising and design organizations, and in public relations and publicity departments. The curriculum emphasizes writing and design skills and those skills specific to publicity, public relations, and publishing processes. The practical component provides students with the opportunity to develop skills and competence in at least one area of practical application: graphic design, non-broadcast video, radio, and tape production.

Requirements: 21 credits

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<tr>
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<th>Credits</th>
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<tbody>
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<td>3 credits</td>
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<td>Writing for Advertising and Public Relations Journalism</td>
<td>3 credits</td>
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Journalism
The specialization in journalism prepares students for entry-level positions in print and broadcast journalism. The curriculum provides students with a broad background in English language, linguistics, and literature, and with the development of writing and reportorial skills suited to contemporary journalism.

Requirements: 18-20 credits

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<td>3 credits</td>
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<tr>
<td>Minor in Corporate Communications:</td>
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<td>17 credits</td>
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<tr>
<td>COM 211</td>
<td>Principles of Corporate Communications</td>
<td>3 credits</td>
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<tr>
<td>COM/ENL 241</td>
<td>Communications Design Workshop</td>
<td>3 credits</td>
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<td>ENL 437</td>
<td>Writing in the Business World</td>
<td>4 credits</td>
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<td>4 credits</td>
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<td>COM 410</td>
<td>Media Administration</td>
<td>4 credits</td>
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<tr>
<td>ENL 360</td>
<td>Writing for the Media</td>
<td>4 credits</td>
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<td>ENL 412</td>
<td>Broadcast Journalism</td>
<td>4 credits</td>
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<tr>
<td>ENL 438</td>
<td>Newspaper Reporting</td>
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Internships
The program requires an internship of at least three credits.
One of the following: 3 credits
COM 250 Basic Design and Media Graphics
COM 261 TV Studio Production
COM 270 Radio Production

Minor in Publication Design: 17 credits
COM/
ENL 214 Principles of Editorial Style 3 credits
COM/
ENL 241 Communications Design Workshop 3 credits
COM/
ENL 277 Introduction to Journalism 4 credits
One of the following: 3 credits
COM 250 Basic Design and Media Graphics
COM 260 Small Format TV Production
COM 270 Radio Production

Minor in Journalism: 10-12 credits
Two of the following: 7-8 credits
COM/
ENL 277 Introduction to Journalism
COM/
ENL 412 Broadcast Journalism
COM/
ENL 438 Newspaper Reporting
COM/
ENL 439 Copyediting and Proofreading
ENL 440 Magazine Writing
COM/
ENL 465 Writing for the Media
COM/
ENL 475 Writing for Advertising and Public Relations

Courses

COM 100 Introduction to Media
3 hours; 3 credits
An introduction to television, radio, and related media. (arts & com.)

COM 150 Introduction to Communications
4 hours; 4 credits
The course provides a general introduction to the field of communications. It is intended for potential majors, and is designed to introduce basic concepts in the study of communications modes, media, and messages; interpersonal, organizational, and mass communication contexts; and the process of communications research.

COM 200 Media and Culture
4 hours; 4 credits
Media and Culture examines the nature and structure of communication media, their interrelationships, and their social, economic, and cultural contexts. The course considers the role of the mass media in influencing its audiences, and the effects of these strategies and messages on individuals, groups, and institutions. (arts & com.)
Prerequisite: ENG 111, and COM 100 or COM 150

COM 201 History and Theory of Television
4 hours; 4 credits
History and Theory of Television examines the development of commercial television broadcasting, its genesis in radio, its creation of distinctive genres, and its change and diversification in the age of cable and satellite broadcasting. The course considers different theoretical approaches to the analysis of television, investigating theories of the effects of television, the impact of television on other media, and television's "mythic" content. (arts & com.)
Prerequisite: ENG 111

COM 203 Theories of Communications
4 hours; 4 credits
Theories of Communications examines the development of communications as an academic discipline, tracing its roots in rhetoric, social psychology, political science, sociology, anthropology, and other disciplines. General theories of human communication will be discussed, as well as specialized theories of mass communication. Different models of communication (e.g., Shannon and Weaver's "Information Theory") will be presented and critiqued.
Prerequisite: ENG 111 and COM 150

COM 211 Principles of Corporate Communications
(Also BUS 211)
4 hours; 3 credits
A critical survey of artifacts of corporate and public communications, including films, video programs and other audio-visual presentations, annual reports, catalogues, brochures, house organs, and other print communications. Analyses of corporate publications will focus on their meaning, purpose, audience, and significance. Writing and editing for such publications is taught, with special emphasis on audience and purpose and the development of a variety of editorial skills: proofreading, reorganizing, rewriting, collaborating, coauthoring.
Students who successfully complete COM/ENL 214 may not register for COM 211.
Prerequisites: COM 150 and ENG 151
COM 214  Principles of Editorial Style: Integration of Writing and Graphics
(Also ENL 214)
4 hours; 3 credits
Editorial style as total concept, including both visual design and written concept. An introduction to professional writing, editorial concepts, and the publication process. Focus on brochure, newsletter, magazine, advertisement, and book structure; their meaning and significance. Writing and editing for such publications and for the marketplace, with special emphasis on audience and purpose and the development of a variety of editorial skills, such as proofreading, reorganizing, rewriting, collaborating, and coauthoring.
Students who successfully complete COM 211 may not register for COM/ENL 214.
Prerequisite: ENG 151 or permission of instructor.

COM 220  History of Broadcasting
4 hours; 4 credits
This course examines the structure and development of the American broadcasting system. The course considers political, economic, social, aesthetic, and technological factors contributing to the growth of radio and television as publicly owned but privately operated, profit-generating telecommunications media.
Prerequisite: ENG 111 and COM 150

COM 225  Multicultural Literacy
(Also ANT 225)
4 hours; 4 credits
This course will explore the nature of culture as it is defined by various disciplines and affected by class, race, gender, and ethnicity. Readings will include texts in anthropology, sociology, literary theory, media studies, and women's studies. (social science) (arts & com.) (P&D)
Prerequisites: ENG 151, COR 100; and either ANT 100, COM 100, HST 100, POL 100, SOC 100, or WMS 100

COM 230  A History of Print Media
(Also ENL 230)
4 hours; 4 credits
An introductory survey of the evolution of newspapers, periodicals, and the publishing industry, focusing on technological developments, major innovations, legal and ethical issues, and societal impact.
Prerequisite: ENG 151 and COM 150

COM 240  Media Workshop: Acting, Directing, and Producing for the Media
4 hours; 3 credits
An examination of the actor/director relationship as it applies in the various media: stage, film, and television. Students will have an opportunity to work both as actors and directors. New work from writing classes will be encouraged for student projects.
Pre- or corequisite: CIN 111

COM 241  Communications Design Workshop: Writing and Design
(Also ENL 241)
4 hours; 3 credits
Theoretical and practical approaches to the interrelationship of writing, print, and video graphics. Analysis of the role of subject, voice, and audience in determining appropriate visual and verbal forms. Practical problems of graphic and video reproduction and execution with applications through desktop publishing and small format TV. Each student works through a number of design problems and completes various problems and projects of his/her own choice.
Prerequisite: COM/ENL 214

COM 249  Workshop in Typesetting
2 hours; 1 credit
An intensive five-week course designed to introduce the student to the various capabilities and applications of desktop publishing.

COM 250  Basic Design and Media Graphics
4 hours; 3 credits
A hands-on course in the skills of layout and design. The course will focus on the organization of visual space, both moving and stationary, visual strategies, and the appropriateness of visual design to various audiences. Recommended for students with limited background in design.

COM 251  Advanced Design
4 hours; 3 credits
Case studies for projects from print and electronic media, focused on informational graphics, are assigned to students. Individual development of communications, problem solving, and presentation skills is stressed. Presentation to critiques by juries of professionals and peers represents a significant dimension of each class.
Prerequisite: COM 250

COM 261  Television Studio Production
4 hours; 3 credits
The emphasis is on studio production and the application of controlled studio techniques to the production of video programs. Increasingly complex projects will be planned, scripted, and carried through to a final edit.
Prerequisite: ENG 111 and CIN 111

COM 270  Radio Production
4 hours; 3 credits
This course is designed to give the student an understanding of radio production, theory, and practice. This includes audio principles and aesthetics; the purpose and operation of primary (microphones, tape machines, consoles, turntables) and secondary (compressors, equalizers, delays) studio equipment, and the techniques of the production process.

COM 271  Radio/TV Newscasting
4 hours; 3 credits
This course provides students with an understanding of newscasting through an evaluation of the impact of broadcast news, and investigation of journalistic tenets and applications that include organizing, writing, and producing news programs.
Prerequisite: COM 270 or COM 261

COM 277  Introduction to Journalism
(Also ENL 277)
4 hours; 4 credits
A general introduction to the principles of journalism. Work on reporting, editing, and layout, and an examination of distribution/feedback systems.
Prerequisite: ENG 151

COM 290  Internship in Media Production
(Also CIN 290)
1 to 4 credits
An internship work and learning experience with a public or private agency whose activity is film, video, television, or radio production.
Prerequisites: A 100-level course in communications, cinema studies, or the
COM 312 Theories of Mass Media  
(Also ENL 312)  
4 hours; 4 credits  
A survey of contemporary communications theory defining the language, structure, systems, effects, and rhetoric of the mass media. Practical examples in journalism, advertising, publishing, radio, television, and film will be analyzed.  
Prerequisite: ENG 151

COM 370 Introduction to Web Design, Graphics, and Theory  
4 hours; 4 credits  
This course explores Web design, new-media, digital culture, and cyberspace. These terms and practices, integrally linked, speak of current and emerging technologies. This course is concerned with the operation of technical equipment, equipment requirements of emerging technologies, and the theoretical implications of Web-based design. Students will create projects employing Web design software. Along with production, COM 370 focuses on the understanding of the psychological, cultural, social, economic, and political relationships that have brought about the development of “cyber-society.”  
Prerequisites: COM 203 and COM 250

COM 371 Minorities and the Media  
(also SOC 371)  
4 hours; 4 credits  
This course will examine the role of the mass media as cultural institutions in shaping the images and self-images of different minority groups. Definitions and images to be analyzed are drawn from religious, medical, and social scientific sources, as well as elite and popular culture. (P&D)  
Prerequisites: COM 150 or a 100-level and 200-level SOC or ANT course

COM 374 Mass Media in Modern Society  
(Also SOC 374)  
4 hours; 4 credits  
Sociological analysis of the mass media: their comparative histories and organizations, and their political and social effects. Attention will be given to their persuasive role in propaganda and public opinion, as well as to their function in providing information and entertainment for the common culture.  
Prerequisite: COM 150 and a 200-level SOC or ANT course

COM 410 Media Administration  
(also BUS 410)  
4 hours; 4 credits  
A course dealing with the skills and concepts necessary for the competent management of a media production department. Topics include production planning and control, cost analysis procedures, contract and copyright law in relation to the media, and organization theory.  
Prerequisite: COM 150, and COM 261 or COM 270 or CIN 111

COM 412 Broadcast Journalism  
(Also ENL 412)  
4 hours; 4 credits  
An introduction to the theory, history, and practice of modern newscasting. Special emphasis will be placed on preparing material for broadcast on radio and television. Readings will explore the economic realities of broadcasting, legal sanctions, and social impact. Students will monitor newscasts, analyze them, and write copy suitable for broadcast.  
Prerequisite: ENG 151; COM 100 is recommended

COM 438 Newspaper Reporting  
(Also ENL 438)  
4 hours; 4 credits  
Techniques of copyediting and proofreading for both the reporter-writer and the editor.  
Prerequisite: ENG 151

COM 445 Journalism and Society  
(Also ENL 445)  
4 hours; 4 credits  
Learning to “read” and write the news. Analysis of the ways in which news stories define our understanding of society. The course will consider both the effect of print and broadcast journalism on politics, values, and social standards and the pressures on the press that define its values. Topics vary from term to term.  
Prerequisite: ENG 151

COM 450 Senior Seminar in Communications Research  
4 hours; 4 credits  
This course provides an overview of communications research, and introduces students to basic research procedures, paradigms, and methods. First, we examine the historical development of the field of communications theory and research. Then we introduce some of the basic research goals, methodologies, and strategies used in communications research. Students then use these tools to formulate a research problem of their own. Not open to students who have previously taken COM 400.  
Prerequisites: COM 203, and COM 220 or COM 230 or COM 374

COM 465 Writing for the Media  
(Also ENL 465)  
4 hours; 4 credits  
Scripting for various media, including slide-tape presentations, audio, video, film, television, and print. The course emphasizes the translation of information, ideas, and experience into various presentational formats and applies that knowledge to specific projects such as marketing presentations, sales, promotional scripts, and motivational scripts within industry.  
Prerequisites: 200-level COM course and ENG 151 or permission of instructor

COM 475 Writing for Advertising and Public Relations  
(Also ENL 475)  
4 hours; 4 credits  
An introduction to the techniques of writing promotional copy, including advertising (print and broadcast), press releases, direct mail, and publicity materials. Students analyze advertising and public relations campaigns from a marketing point of view and evaluate and discuss their effectiveness. Assignments include product, audience, and media analysis, copywriting ads, press releases, and direct mail letters.  
Prerequisites: COM 211 or COM/ENL 214 and ENG 151 or permission of instructor

COM 480 Studies in Advanced Journalism  
(Also ENL 480)  
4 hours; 4 credits  
Analysis of the techniques required for good feature writing, magazine writing, personal journalism, investigative reporting, interviewing, etc. Emphasis varies from term to term.  
Prerequisite: COM 412 or COM 438

COM 490 Senior Project  
2 hours; 1 credit  
A laboratory/seminar in which students select a publication project to
complete during the semester, including a written analysis of the writing, design, and management problems and skills related to the completion of the project. Problems, possible solutions, and final results will be shared seminar-style.
Prerequisites: Senior standing and permission of the instructor.

Computer Science and Computer Technology
(Bachelor of Science, Associate in Applied Science, Minor; Master of Science - see Graduate Catalog)
Department of Computer Science
Chair: Associate Professor Emile Chi, Computer Science/Engineering Sciences and Physics Building (1N), Room 215

Computer User Responsibilities
The computer resources of The City University of New York and The College of Staten Island must be used in a manner that is consistent with the University’s educational purposes and environment. All users of computer resources are expected to act in a spirit of mutual respect and cooperation, and to adhere to the regulations for their use (see appendix ii). The University reserves the right to monitor, under appropriate conditions, all data contained in the system to protect the integrity of the system and to ensure compliance with regulations.

Computer Technology (AAS)
The College offers a Computer Technology program that focuses on general applications programming. Students seeking a Bachelor’s degree in Computer Science should consult the requirements for the BS in Computer Science or the BS in Computer Science/Mathematics.

General Education Requirements
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis: 15 credits
1. Scientific Analysis
   A one-year, eight-credit sequence of laboratory science (8 credits)
2. At least one course from two of the following groups:
   Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis (7 credits)
See section on general education requirements for approved course lists and complete details.

Pre-Core Requirement: 4 credits
CSC 126 Introduction to Computer Science 4 credits
A grade of C or above in CSC 126 is required for continuation in the program. Students will be allowed to repeat the course, if necessary.

Core Requirements: 29 credits
CSC 210 Applications Programming 4 credits
CSC 220 Computers and Programming 4 credits
CSC 326 Information Structures 4 credits
MTH 229 Calculus Computer Laboratory 1 credit
MTH 231 Analytic Geometry and Calculus I 4 credits

Total Credits Required: 60

Liberal Arts and Sciences Requirement
Courses designated CSC are non-liberal arts and sciences.

Computer Science (BS)
The Computer Science program offers a full four-year curriculum in computer science that prepares students for careers as computer professionals and/or for graduate study. The major provides a broad-based background in computer science and includes courses in computer software, systems, mathematics, and computer engineering. A student, under the guidance of a computer science adviser, may also select additional courses to pursue particular interests. Students interested in transferring into the program from the two-year Computer Technology program should consult the department chairperson.

The program in Computer Science is accredited by the Computer Science Accreditation Commission (CSAC) of the Computing Sciences Accreditation Board (CSAB), a specialized accrediting body recognized by the Council for Higher Education Accreditation (CHEA).

General Education Requirements for the BS
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 21-27 credits
Whenever possible, these courses should be completed within the first 60 credits.

1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
      A one-year science sequence chosen from the list of courses that provide the foundation for further study in the sciences
   b. Mathematics: (3 credits)*
      *Fulfilled in the pre-major requirements.
2. Social Scientific Analysis: (3-4 credits)
3. The West and the World: (4 credits)
4. Textual, Aesthetic, and Linguistic Analysis: (3-4 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
   c. Arts and Communications: 200-level
5. Pluralism and Diversity Requirement: (0-4 credits)
   Plus an additional 7-9 credits from categories that are not Scientific Analysis in the general education requirements.

See section on general education requirements for approved course lists and complete details.

Pre-Computer Science Sequence: 4 credits
CSC 126 Introduction to Computer Science 4 credits
A grade of C or above in CSC 126 is required for admission to the Computer Science Baccalaureate program. Students will be allowed to repeat the course, if necessary.
Pre-Major Requirements: 24-26 credits

<table>
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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>MTH 229</td>
<td>Calculus Computer Laboratory</td>
</tr>
<tr>
<td>MTH 230</td>
<td>Calculus I with Pre-Calculus</td>
</tr>
<tr>
<td>MTH 232</td>
<td>Analytic Geometry and Calculus II</td>
</tr>
<tr>
<td>MTH 233</td>
<td>Analytic Geometry and Calculus III</td>
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or

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<td>Analytic Geometry and Calculus I</td>
</tr>
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<tr>
<td>MTH 229</td>
<td>Calculus Computer Laboratory</td>
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<tr>
<td>MTH 235</td>
<td>Accelerated Calculus I</td>
</tr>
<tr>
<td>MTH 236</td>
<td>Accelerated Calculus II</td>
</tr>
<tr>
<td>CSC 220</td>
<td>Computers and Programming</td>
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<tr>
<td>MTH/</td>
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</tr>
<tr>
<td>CSC 228</td>
<td>Discrete Mathematical Structures</td>
</tr>
</tbody>
</table>

Six to eight additional credits of science courses chosen from the Scientific Analysis category list of courses that provide the foundation for further study in the sciences or chosen from courses with these Scientific Analysis courses as prerequisites. 8 credits

Major Requirements: 48 credits

Students majoring in Computer Science must complete:

<table>
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<tr>
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<td>Object-Oriented Software Design</td>
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<tr>
<td>CSC 332</td>
<td>Operating Systems I</td>
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<tr>
<td>CSC/</td>
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<tr>
<td>ENS 346</td>
<td>Switching and Automata Theory</td>
</tr>
<tr>
<td>CSC 347</td>
<td>Computer Circuits Laboratory</td>
</tr>
<tr>
<td>CSC 382</td>
<td>Analysis of Algorithms</td>
</tr>
<tr>
<td>CSC 430</td>
<td>Software Engineering</td>
</tr>
<tr>
<td>CSC 446</td>
<td>Computer Architecture</td>
</tr>
<tr>
<td>CSC 490</td>
<td>Seminar in Computer Science</td>
</tr>
<tr>
<td>MTH 311</td>
<td>Probability Theory and an Introduction</td>
</tr>
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<td>to Mathematical Statistics</td>
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<tr>
<td>MTH 338</td>
<td>Linear Algebra</td>
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Two courses chosen from the following, at least one of which must be a Computer Science course:

<table>
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<tbody>
<tr>
<td>CSC 420</td>
<td>Concepts of Programming Languages</td>
</tr>
<tr>
<td>CSC 424</td>
<td>Database Management Systems</td>
</tr>
<tr>
<td>CSC 432</td>
<td>Operating Systems II</td>
</tr>
<tr>
<td>CSC 434</td>
<td>Compiler Construction</td>
</tr>
<tr>
<td>CSC 435</td>
<td>Advanced Data Communications</td>
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<tr>
<td>CSC/</td>
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</tr>
<tr>
<td>ENS 462</td>
<td>Microprocessors</td>
</tr>
<tr>
<td>CSC 470</td>
<td>Introductory Computer Graphics</td>
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<tr>
<td>CSC 480</td>
<td>Artificial Intelligence</td>
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<tr>
<td>CSC 482</td>
<td>Discrete Simulation</td>
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<tr>
<td>CSC 484</td>
<td>Theory of Computation</td>
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<td>CSC/</td>
<td></td>
</tr>
<tr>
<td>MTH 335</td>
<td>Numerical Analysis</td>
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<tr>
<td>MTH 337</td>
<td>Applied Combinatorics and Graph Theory</td>
</tr>
<tr>
<td>MTH 339</td>
<td>Applied Algebra</td>
</tr>
<tr>
<td>MTH 350</td>
<td>Mathematical Logic</td>
</tr>
<tr>
<td>MTH 370</td>
<td>Operations Research</td>
</tr>
<tr>
<td>MTH 410</td>
<td>Statistics</td>
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</tbody>
</table>

Electives: 4-7 credits

Total Credits Required: 124

Minor

Prerequisites or corequisites: MTH 123 and

<table>
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<tr>
<td>CSC 126</td>
<td>Introduction to Computer Science</td>
</tr>
<tr>
<td>CSC 220</td>
<td>Computers and Programming</td>
</tr>
<tr>
<td>CSC/</td>
<td></td>
</tr>
<tr>
<td>MTH 228</td>
<td>Discrete Mathematical Structures</td>
</tr>
</tbody>
</table>

Requirements:

Students with a science major are strongly urged to take MTH 335 or ENS 336; students with a business major are strongly urged to take MTH 231 or MTH 221.

Computer Science minor requirements can be met by completion of any one of the following sequences:

1. Computer Science minor sequence for students with an interest in computer engineering:

<table>
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</thead>
<tbody>
<tr>
<td>CSC 326</td>
<td>Information Structures</td>
</tr>
<tr>
<td>CSC 332</td>
<td>Operating Systems I</td>
</tr>
<tr>
<td>CSC 435</td>
<td>Advanced Data Communications</td>
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<tr>
<td>CSC 446</td>
<td>Computer Architecture</td>
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2. Computer Science minor sequence for students with an interest in applications programming:

<table>
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<td>CSC 326</td>
<td>Information Structures</td>
</tr>
<tr>
<td>CSC 330</td>
<td>Object-Oriented Software Design</td>
</tr>
<tr>
<td>CSC 424</td>
<td>Database Management Systems</td>
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</tbody>
</table>

   and one course chosen from the following list: 4 credits

<table>
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<tbody>
<tr>
<td>CSC 332</td>
<td>Operating Systems I</td>
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<tr>
<td>CSC 420</td>
<td>Concepts of Programming Languages</td>
</tr>
<tr>
<td>CSC 430</td>
<td>Software Engineering</td>
</tr>
<tr>
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<td>Advanced Data Communications</td>
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<td>Introductory Computer Graphics</td>
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<td>CSC 480</td>
<td>Artificial Intelligence</td>
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</table>

Courses

The courses in computer science are listed below. Students should consult a computer science adviser before registering for courses. CSC 100 Computers and Society, and CSC 102 Computing for Today are general introductory courses in computers. They are not credited toward the major. CSC 126 Introduction to Computer Science is the introductory course in the Associate's degree Computer Technology program and in the Bachelor's degree program. It is designed for students who have completed MTH 025 or 030 or the equivalent. CSC 270 Introduction to Scientific Computing is a general introductory course in computer science for engineering students and others with similar needs.

CSC 102 Computing for Today

6 hours; 4 credits

The function and use of the microcomputer in our society. Introduction to a programming language and to the operating system of a microcomputer. Software packages such as spreadsheet, database manager, word processor and dictionary, business graphics, integrated software, educational software (expert system), and communications software. Not open to students who have successfully completed a 200-level computer course or BUS 150. Prerequisite: MTH 020 or an appropriate score on the CUNY Mathematics Assessment Test
CSC 112  Introduction to Word Processing
1 class hour, 2 laboratory hours - 7 weeks; 1 credit
The latest version of a popular word processing program will be taught. Topics will include creating and editing a file, using the speller and the thesaurus, formatting, printing, merging, footnotes, and macros. Not open to students who have successfully completed CSC 102.

CSC 114  Elements of Computer Programming for the Technologies
1 class hour, 3 laboratory hours; 2 credits
Elements of computer programming for the technologies; arithmetic and logical operations and functions, comparison operators, loops, subroutines, input and output. Programs will be written in a higher-level computer language. Specialized packages for technological applications will be used. Pre- or corequisite: MTH 123

CSC 116  Introduction to Database
1 class hour, 2 laboratory hours - 7 weeks; 1 credit
The latest version of a widely used database program will be taught. Topics will include creating and editing a file, sorting and indexing, printing reports and labels. Not open to students who have successfully completed CSC 102. Prerequisite: Passing the CUNY Mathematics Assessment Test

CSC 118  Introduction to Spreadsheets
1 class hour, 2 laboratory hours - 7 weeks; 1 credit
The latest version of a widely used spreadsheet program will be taught. Topics will include creating and problem solving using spreadsheets, entering data and formulas, correcting errors, the range, copy and formatting instructions, printing, tables, and graphs. Not open to students who have successfully completed CSC 102. Prerequisite: Passing the CUNY Mathematics Assessment Test

CSC 122  Computer and Windows
1 class hour, 2 laboratory hours; 2 credits
This course will introduce the novice to the essentials of Windows usage. Topics will include controlling the Windows graphical environment, customizing the desktop, screensavers, running programs, copying data between programs, and managing files with the File Manager. The supplied programs of Windows, the accessories, will be explored: Write, Terminal, Paintbrush, Notepad, Cardfile, Recorder, Calendar, and Calculator. Groups and the installation of programs will be taught. Not open to students who have completed CSC 326 or above. Prerequisite: Passing the CUNY Mathematics Assessment Test

CSC 126  Introduction to Computer Science
3 class hours, 3 laboratory hours; 4 credits
Computing and information processing. Basic computer structure. Programming methodology: analysis, design, documentation, implementation, and evaluation. Algorithmic approach to problem solving. Computer solutions of several numerical and non-numerical problems. For students who plan to pursue a degree program in computer science. Pre- or corequisite: MTH 123 or MTH 130 or MTH 230 or MTH 231 or MTH 235

CSC 135  Introduction to Information Systems
(Also BUS 135)
2 class hours, 2 laboratory hours; 3 credits
A hands-on laboratory course in the effective use of technology tools for problem solving. Students will understand how copyright laws apply to software and the need to acknowledge material from outside sources, including online material and the work of others. Corequisite: CSC 126

CSC 205  Basic Desktop Publishing
1 class hour, 2 laboratory hours; 2 credits
A hands-on course designed to provide a practical introduction to the basics of text formatting and design. Text and graphics will be combined to produce printer-ready pages for publication. Topics will stress the transformation of otherwise plain-looking documents into professional-looking, more readable copy. Typefaces, type styles, type sizes and page layouts will be explored. Prerequisite: CSC 102 or CSC 112.

CSC 210  Applications Programming
3 class hours, 3 laboratory hours; 4 credits
Application of programming techniques to problems in business and data processing. State of the art software packages to analyze and manipulate data for standard business applications will be taught. Prerequisite: A grade of C or above in either CSC 126 or CSC 270

CSC 220  Computers and Programming
3 class hours, 3 laboratory hours; 4 credits
Binary and hexadecimal number systems, computer structure, machine language, instruction formats and execution, addressing techniques, and digital representation of data. Computer systems organization, symbolic coding and assembly systems, programming techniques, program segmentation and linkage. Students will complete computer projects in machine language and assembly language. Prerequisite: A grade of C or above in either CSC 126 or 270

CSC 228  Discrete Mathematical Structures
(Also MTH 228)
3 class hours, 3 laboratory hours; 4 credits
Elementary set theory, functions, relations, and Boolean algebra. Elements of graph theory, matrix representation of finite functions and graphs, and matrix manipulation. Switching circuits, gating networks, and finite state machines. Applications of graph theory to computer science. Related algorithms. Introduction to combinatorial computing. Prerequisite: A grade of C or above in either CSC 126 or CSC 270; MTH 123 or MTH 130 or MTH 230 or MTH 231 or MTH 235

CSC 270  Introduction to Scientific Computing
6 hours; 4 credits
Programming elements: operators, flow control, repetition, selection, logical conditions, arrays, data import, vectors, matrices, functions. Introduction to numerical techniques using scientific software: graphing, integration, roots of equations, linear equations, eigenvectors, eigenvalues, interpolation, signal processing. Not open to students who have successfully completed CSC 120 or CSC 126. Prerequisite: MTH 231

CSC 310  Input/Output Operations and File Management
3 class hours, 3 laboratory hours; 4 credits
Files and file structures. Physical versus logical files. Secondary storage devices and system software. Input/output and access techniques. File organizations, indexing and processing. The capabilities of file handling in at least one higher-level programming language will be explored. Prerequisite: CSC 126
CSC 326 Information Structures
3 class hours, 3 laboratory hours; 4 credits
Organization and processing of various types of information. Storage allocation techniques. Linear list structures including stacks and queues, deques, rings, and linked arrays. Tree structures and multi-linked structures. Advanced sorting and searching techniques. Scatter storage techniques. Recursive programming.
Prerequisites: CSC 310 or CSC/MTH 228 or ENS 336; a knowledge of C programming language.

CSC 330 Object-Oriented Software Design
3 class hours, 3 laboratory hours; 4 credits
Large-scale software design issues; object-oriented design paradigms; encapsulation; polymorphism; inheritance; reusability; specifics of an object-oriented language and associated development tools. Students will be required to implement a substantial and well-engineered project using an object-oriented language.
Prerequisites: CSC 220 or ENS 362, and CSC 326.

CSC 332 Operating Systems I
3 class hours, 3 laboratory hours; 4 credits
Prerequisites: CSC 220 or ENS 362, and CSC 326.

CSC 334 Computer System Fundamentals
4 hours; 4 credits
The course covers concepts of hardware and software systems and programming concepts common to the corporate data processing environment. Topics include fundamentals of hardware and software, rudiments of operating systems, and communication between microcomputers and mainframes. Various software application and utility packages utilizing both mainframes and microcomputers will be studied.
Prerequisite: CSC 310

CSC 346 Switching and Automata Theory
4 hours; 4 credits
Prerequisites: CSC 220 and CSC 326 or CSC 270 and ENS 320 or CSC 220 and CSC/MTH 228 and ELT 240.

CSC 347 Computer Circuits Laboratory
4 hours; 2 credits
The design and implementation of circuitry found in modern computers. Physical realizations of minimized switching functions. Design and implementation of finite state machines including synchronous sequential circuits and asynchronous sequential circuits.
Prerequisite: CSC 346.

CSC 382 Analysis of Algorithms
4 hours; 4 credits
Complete development of an algorithm. Statement of problem, model development, design and correctness of algorithm, complexity analysis, program testing, and documentation. Design techniques include subgoals, branch and bound, heuristics, recursion, simulation, and parallelism.

Computer solution of several representative problems.
Prerequisite: CSC 326.

CSC 405 Applied Concepts in Information Systems
(Also BUS 405)
3 class hours, 3 laboratory hours; 4 credits
The course covers applied concepts in information systems. Theory and methodology for the design, development, and implementation of large-scale reliable business software projects; and tools and techniques for managing business software projects will be discussed. Presentations and GUI interfaces will be emphasized.
Prerequisites: CSC 326 and BUS 352.

CSC 420 Concepts of Programming Languages
4 hours; 4 credits
Definition of programming languages, data types and declaration, storage allocation, statement types, operations, control structures, binding time, procedure, subroutine, function declaration, parameters, string manipulation. Several programming languages will be discussed and problems using these languages will be assigned.
Prerequisites: CSC 220 and CSC 326.

CSC 424 Database Management Systems
4 hours; 4 credits
Prerequisite: CSC 326.

CSC 430 Software Engineering
3 class hours, 2 laboratory hours; 4 credits
Developing large-scale reliable software systems. Theory and methodology for the design and implementation of software systems from requirements analysis through design and implementation, testing, integration, and maintenance. Tools and techniques for all phases of a software system’s life cycle will be discussed. Documentation, testing, and management of large-scale systems. A significant project will be required.
Prerequisite: CSC 330.

CSC 432 Operating Systems II
4 hours; 4 credits
Concurrent processing. Linear and tree-structured address space. Resource allocation for multiprogramming. Queuing and network control policies. Protection mechanisms. Case studies of various state of the art systems and implementation of a small operating system.
Prerequisite: CSC 332.

CSC 434 Compiler Construction
4 hours; 4 credits
Review of assembly techniques of symbol table techniques and macros, and of compilation, loading, and execution. One-pass compilation techniques. Translation of arithmetic expressions from prefix form to machine language. Detailed organization of a simple complete compiler.
Prerequisites: CSC 330 and CSC 326.

CSC 435 Advanced Data Communications
4 hours; 4 credits
Concepts of circuit, packet, and message switched networks; local, campus, metropolitan, and wide area networks; concepts of data transmission; the emerging telecommunications industry, private networks, and integrated services digital networks.
Prerequisite: CSC 346.
CSC 446  Computer Architecture
(Also ENS 446)  
4 hours; 4 credits  
Instruction formats and addressing schemes. Arithmetic and logic unit design. Control unit design: hardwired and microprogrammed. Main memory technology. Virtual, high-speed, associative, and read-only memories. Programmable logic arrays. Computer organizations including stack, parallel, and pipeline. System structures: time sharing, multiprocessing, and networking. Digital communications. Input/Output systems; direct memory access. 
Prerequisite: CSC 346 or ENS 320

CSC 450  Honors Workshop  
4 hours; 4 credits  
Students, with the approval of the department, work in teams on large-scale projects. 
Prerequisites: Computer Science major with senior standing and departmental approval

CSC 462  Microprocessors  
(Also ENS 362)  
2 class hours, 4 laboratory hours; 4 credits  
Introduction to 8086 architecture using the SDK-86 single-board computer. Interfacing of programmable chips including the 8255 PIO, 8259 Interrupt controller, 8254 counter/timer, 8279 keyboard/display controller, and ADC 0804 analog to digital converter. Testing and debugging of assembler language programs to exercise the interface. Troubleshoot with oscilloscope and Debug. 
Prerequisites: ENS 220 and ENS 221, or CSC 346 and CSC 347

CSC 470  Introductory Computer Graphics  
4 hours; 4 credits  
Prerequisite: CSC 326

CSC 480  Artificial Intelligence  
4 hours; 4 credits  
Prerequisite: CSC 326

CSC 482  Discrete Simulation  
4 hours; 4 credits  
Prerequisite: MTH 311 and CSC 326

CSC 484  Theory of Computation  
4 hours; 4 credits  
Prerequisites: A grade of C or above in (CSC 126 or 270) and MTH 339 and (MTH 233 or 236)

CSC 490  Seminar in Computer Science  
2 hours; 2 credits  
Invited speakers will lead discussions on the ethical and societal impact of the computer. Students will write and present papers on current research topics in the computing field. 
Prerequisites: Computer Science major with senior standing

Computer Science-Mathematics (BS)  
The Departments of Computer Science and Mathematics offer a joint BS degree program in Computer Science and Mathematics that provides a balance between these two disciplines with an emphasis on their applied aspects and their relationship to each other.

General Education Requirements for the BS  
ENG 111, ENG 151, COR 100, PED 190:  12 credits  
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 21-27 credits  
General education requirements are the same as for other BS degrees.

Pre-Computer Science Sequence: 4 credits  
CSC 126  Introduction to Computer Science  
A grade of C or above in CSC 126 will be required for admission to the Computer Science-Mathematics Baccalaureate program. Students will be allowed to repeat the course, if necessary.

Pre-Major Requirements: 18-21 credits  
Students planning to major in Computer Science-Mathematics should complete the following requirements prior to their junior year.

Calculus sequence chosen from the following: 10-13 credits
- MTH 230  Calculus I with Pre-Calculus
- MTH 232  Analytic Geometry and Calculus II
- MTH 233  Analytic Geometry and Calculus III
- MTH 229  Calculus Computer Laboratory or
- MTH 231  Analytic Geometry and Calculus I
- MTH 232  Analytic Geometry and Calculus II
- MTH 233  Analytic Geometry and Calculus III
- MTH 229  Calculus Computer Laboratory or
- MTH 235  Accelerated Calculus I
- MTH 236  Accelerated Calculus II
- MTH 229  Calculus Computer Laboratory
- CSC 220  Computers and Programming  4 credits
- MTH/  
- CSC 228  Discrete Mathematical Structures  4 credits
Major Requirements: 48 credits

Computer Science: 24 credits
- CSC 326 Information Structures 4 credits
- CSC 330 Systems Programming: Concepts of Software Design 4 credits
- CSC ENS 346 Switching and Automata Theory 4 credits
- CSC 382 Analysis of Algorithms 4 credits
- CSC 420 Concepts of Programming Languages 4 credits

Any one from the following group of advanced computer courses:
- CSC 424 Database Management Systems
- CSC 480 Artificial Intelligence
- CSC 482 Discrete Simulation 4 credits

Mathematics: 24 credits
- MTH 311 Probability Theory and an Introduction to Mathematical Statistics 4 credits
- MTH 335 Numerical Analysis 4 credits
- MTH 338 Linear Algebra 4 credits
- MTH 339 Applied Algebra 4 credits

Any two of the following:
- MTH 330 Applied Mathematical Analysis I
- MTH 337 Applied Combinatorics and Graph Theory
- MTH 350 Mathematical Logic
- MTH 370 Operations Research
- MTH 410 Mathematical Statistics I 8 credits

Electives: 13 credits

Total Credits Required: 120

Liberal Arts and Sciences Requirement
All courses designated CSC are non-liberal arts and sciences.
(Courses are listed under Computer Science and Mathematics.)

COR 100

COR 100 United States: Issues, Ideas, and Institutions
4 hours; 4 credits
COR 100 is a required general education course that introduces CSI students to contemporary America’s constitutional democracy, multicultural society, and market economy, using the tools of the social sciences. The course seeks historical perspective by examining three formative periods in U.S. history: the American Revolution and debate over the Constitution, the African American freedom struggle from slavery through the civil rights movement, and the evolving relationship between government regulation and the market economy during the twentieth century. The course is writing intensive and is intended to develop logical, critical thought and expression.
Pre- or corequisite: ENG 111

CUNY Baccalaureate
Campus Coordinator: Dr. Marianne B. Carlin, South Administration Building (1A), Room 101
Established in 1971, the CUNY BA/BS Program is a small, university-wide alternate degree program intended for self-directed, academically strong students who have well-formulated academic and career goals. Students who are admitted to the program work on an individualized area of specialization with guidance from a CUNY faculty member who agrees to serve as a mentor. Students in this alternate degree program must also satisfy a core of general education requirements. Although students in the program are matriculated at one CUNY college, they are free to take courses at any of the other CUNY colleges. To be eligible to apply, students must have a clear academic goal and must have completed at least 15 college credits with a grade point average of 2.50 or higher. The CUNY BA and BS degrees are fully accredited and are awarded by The City University rather than by an individual college. The program operates under the auspices of the CUNY Graduate School and University Center. Additional information may also be obtained at www.cunyba.cuny.edu.

Dance

(Minor)
Department of Performing and Creative Arts
Coordinator: Associate Professor Charles Thomas, Center for the Arts (1P), Room 224
The minor in Dance is available to students in all baccalaureate programs. In conjunction with a major in Psychology, this minor prepares students for graduate work in dance therapy.

Requirements: 18 credits

Required courses:
- DAN 101 Contemporary Dance Technique I 2 credits
- DAN 111 Choreography I 3 credits
- DAN 184 Afro-Haitian Rhythms I 2 credits

Eleven credits to be selected from the following courses:
- DAN 112 Choreography II 3 credits
- DAN 150 Dance History: Twentieth Century 3 credits
- DAN 171 Improvisation I 2 credits
- DAN 172 Improvisation II 2 credits
- DAN 231 Ballet I 2 credits
- DAN 232 Ballet II 2 credits
- DAN 261 Modern Jazz Dance I 2 credits
- DAN 262 Modern Jazz Dance II 2 credits
- DAN 331 Private Study in Dance 2 credits

It is recommended that DAN 160 Modern Dance Technique I or DAN 180 International Folk Dancing be taken as electives; these courses cannot be taken for credit toward the minor. A medical examination form must be on file in the College Health Center (Campus Center) prior to registration for DAN 160 and DAN 180.

Courses

DAN 101 Contemporary Dance Technique I
DAN 102 Contemporary Dance Technique II
3 hours; 2 credits
The progressive stages in the development of a technical vocabulary and movement patterns into the art form and expression of modern dance. Each stage develops naturally from the preceding one, contributing to the total advancement of the dance. For beginning students.
Prerequisite for DAN 102: DAN 101 or permission of the instructor
DAN 111  
**Choreography I**  
3 hours; 3 credits  
I: Elements of Composition; II: Dance Composition. The art of the dance as a creative expression that offers students the opportunity to explore the traditional and experimental approach to choreography through interaction of time, space, and energy. It commands a critical judgment of one's own creative experience and expression. For beginning students. 
Prerequisite for DAN 112: DAN 111 or permission of the instructor

DAN 112  
**Choreography II**  
3 hours; 3 credits  

DAN 122  
**Black Dance Workshop**  
(Also AFA 122)  
4 hours; 3 credits  
Based on traditions of the peoples of Africa and the Caribbean, this course develops the technical language of black dance, emphasizing the cultural interaction of native tradition and western influence; the retelling of legends and tales through dance rhythms and symbolism.

DAN 150  
**Dance History: Twentieth-Century**  
(Also AMS 150)  
4 hours; 3 credits  
Concentrating on the "pioneers of modern dance" -- Duncan, Denishawn, Graham, Humphrey, Weidman, and others -- as well as on the experimental and avant-garde, using lectures, demonstrations, video, and film to illustrate examples of outstanding choreography. The course includes the dances of other countries, coordinated with professional concerts and student reports. Includes "Happenings in Today's World of Dance." No dance background required. (arts & com.)

DAN 160  
**Modern Dance Technique I**  
2 hours; 1 credit  
Technical movement skills used in dance to further the appreciation of dance as an art form and experiment with dance movement for the beginning student. Professional dance films will be shown. Open to all student.

DAN 171  
**Improvisation I**  
3 hours; 2 credits  
Experimenting with movement exploration to help develop sensitivity and creative response through free movement patterns. Simple props sometimes used in improvising. 
Prerequisite for DAN 172: DAN 171 or permission of the instructor

DAN 172  
**Improvisation II**  
3 hours; 2 credits  

DAN 180  
**International Folk Dance**  
2 hours; 1 credit  
Group dancing for both style and pleasure geared to the national characteristics and traditional folk dances from the British Isles, Russia, Germany, Greece, Israel, and the Scandinavian countries.

DAN 184  
**Afro-Haitian Rhythms I**  
3 hours; 2 credits  
The history, theory, and practice of dance as performed in Haiti and other parts of the Caribbean. This course will introduce the student to the historical and anthropological sources of Afro-Haitian dance, as well as to its choreometrics. 
Prerequisite for DAN 185: DAN 184

DAN 185  
**Afro-Haitian Rhythms II**  
3 hours; 2 credits  

DAN 201  
**Contemporary Dance Techniques III**  
3 hours; 2 credits  
The progressive stages in the development of a technical vocabulary and movement patterns translated into the art form and expression of modern dance, each stage developing naturally from the preceding one, contributing to the total advancement of the dance. For intermediate students. 
Prerequisite for DAN 201: DAN 102 or permission of the instructor; for DAN 202: DAN 201 or permission of the instructor

DAN 202  
**Contemporary Dance Techniques IV**  
3 hours; 2 credits  

DAN 211  
**Choreography III**  
3 hours; 3 credits  
Elements of composition. The art of the dance as a creative expression that offers students the opportunity to explore the traditional and experimental approach to choreography through interaction of time, space, and energy. It commands a critical judgment of one's own creative experience and expression. For intermediate students only. 
Prerequisite: DAN 112 or permission of the instructor

DAN 212  
**Choreography IV**  
3 hours; 3 credits  

DAN 231  
**Fundamentals of Ballet I**  
3 hours; 2 credits  
Using the five fundamental positions of feet and legs, and the associated positions of the arms, a vocabulary of classical ballet is developed and combined into longer dance phrases. Emphasis is placed on fluidity of movement for mastery of expression.

DAN 232  
**Fundamentals of Ballet II**  
3 hours; 2 credits  

DAN 261  
**Modern Jazz Dance I**  
3 hours; 2 credits  
The course includes basic technique and style of dance used with rhythmic improvisation in contemporary American jazz dance.

DAN 262  
**Modern Jazz Dance II**  
3 hours; 2 credits  

DAN 331, 332, 333, 334  
**Private Study in Dance I, II, III, IV**  
2 credits each  
Students interested in the development of style and technical skills necessary for performance may earn credit through study under an approved teacher in repertory class. Evaluation of the work will include performances in dance workshops and concerts. Registration is by permission of a full-time member of the dance faculty. 
Prerequisite: Permission of instructor

**Disability Studies**  
(Minor)  

Coordinator: Professor David Goode, Department of Sociology, Anthropology, and Social Work; Psychology/ Sociology, Anthropology, and Social Work Building (4S), Room 236  
The minor in Disability Studies is an interdisciplinary course of study in which students select from a variety of courses concerned with matters of interest to persons with disabilities. The student is required to take a core set of courses in the social and psychological sciences supplemented by a choice from a list of disability-related courses. The minor may be taken in combination with any baccalaureate degree.
Requirements:

- SWK 107 Introduction to Developmental Disabilities 3 credits
- PSY 211 Methods of Applied Behavioral Analysis 4 credits
- SOC 350 Psychosocial Aspects of Disabilities 4 credits
- One additional course chosen from the following:
  - ASL 113 American Sign Language I 5 credits
  - EDP 220 Special Education Needs of the Developmentally Disabled 4 credits
  - EDP 310 Survey of Exceptional Children I 4 credits
  - EDP 311 Survey of Exceptional Children II 4 credits
  - NRS 230 Health in Persons with Developmental Disabilities 4 credits
  - SWK 440 Internship in Developmental Disabilities 4 credits

Dramatic Arts
(Bachelor of Science, Minor)

Department of Performing and Creative Arts and Department of English, Speech, and World Literature

Coordinator: Assistant Professor Maurya Wickstrom, Department of Performing and Creative Arts, Center for the Arts (1P), Room 203F

The program in dramatic arts provides the opportunity to earn a Bachelor of Science degree in Dramatic Arts, with a focus on theatrical production and techniques including a study of dramatic literature. Students whose primary interest is in dramatic literature are referred to the program that leads to the Bachelor of Arts degree in English with a Concentration in Dramatic Literature. (See section on English.)

Dramatic Arts (BS)

General Education Requirements
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 28-47 credits
Whenever possible, these courses should be completed within the first 60 credits.

1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)
2. Social Scientific Analysis: (7-8 credits)
3. The West and the World: (4 credits)
4. Textual, Aesthetic, and Linguistic Analysis: (6-8 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
   Arts and Communications: 200-level
5. Pluralism and Diversity Requirement: (0-4 credits)
6. Foreign Language: (0-12 credits)

See section on general education requirements for approved course lists and complete details.

Major Requirements: 52 credits

- DRA 110 Acting I 3 credits
- DRA 131 Introduction to Technical Theater 3 credits
- DRA 210 Acting II 3 credits
- DRA 235 Introduction to Stage Management 3 credits
- DRA 260 History of Theater I 4 credits
- DRA 261 History of Theater II 4 credits
- DRA 320 Directing I 3 credits
- DRA 372 Theater Practicum 4 credits
- DRA 597 Internship 3 credits

Four courses in dramatic literature at the 300 level or above 16 credits
Electives in DRA or cross-listed courses 6 credits

Note: DRA 100 no longer qualifies as a course applicable toward the major requirements. It is, however, recommended as an introduction to the major.

Electives: 28 credits

Total Credits Required: 120

Honors
To graduate with Honors in Dramatic Arts a student must have a 3.5 grade point average in dramatic arts courses and must complete a creative project in acting, directing, design, or in the writing of plays or criticism.

Minor
Prerequisite Courses: 3-6 credits

- DRA 100 Introduction to Theater 3 credits
- DRA 110 Acting 3 credits
- DRA 131 Introduction to Technical Theater 3 credits

Minor Requirements: 14 credits

- At least six credits in courses in dramatic arts chosen from DRA 210, 213, 214, 220, 230, 231, 232, 233, 310, 320, 370, 371, 410, 420.
- At least eight credits in dramatic literature courses chosen from DRA 260, 261, 460, or DRA courses that are cross-listed with English (ENL), French (FRN), or Spanish (SPN) courses.

Courses

- DRA 100 Introduction to Theater 4 hours; 3 credits
  Students will read plays of different periods and study the collaboration between the text and those who produce it: actors, directors, and designers. Visits to the theater and field trips will be arranged. There may be modest expenses for tickets. (arts & com.)

- DRA 101 Exploring the New York Theater Scene 4 hours; 3 credits
  Students will see at least five productions, on and off Broadway, and will examine them in order to gain an understanding of what comprises the theater experience so that critical standards may be developed. Students are expected to purchase tickets. See the Schedule of Classes for estimated cost of theater tickets.

- DRA 110 Acting I 4 hours; 3 credits
  A basic approach to acting for stage, film, and television.
DRA 131  
**Introduction to Technical Theater**

4 hours; 3 credits  
Survey of different kinds of theaters, their physical plants, and production techniques. Construction and handling of scenery, properties, and lighting equipment.

DRA 202  
**African American Drama**

(Also AFA 202)  
4 hours; 4 credits  
A study of the emergence of the black theater in the United States and an examination of the theater as a manifestation of the black genius.

DRA 205  
**African American Musical Theater**

(Also AFA 205)  
4 hours; 4 credits  
A study of the musical theater of African Americans from its early beginnings in African culture to genius manifested in the nineteenth century, its influence on early vaudeville, its unique contribution to American musical theater, and the present day popularity of its style. Whenever possible, current productions will be attended and studied in detail.

DRA 210  
**Acting II**

4 hours; 3 credits  
Exercises and improvisations, with an emphasis on scene study.  
Prerequisite: DRA 110

DRA 213  
**Movement for the Theater**

4 hours; 3 credits  
Techniques to assist the actor in exploring the elements of movement and mime. This course may be repeated for credit.  
Prerequisite: ENG 111

DRA 214  
**Voice and Diction for the Theater**

4 hours; 3 credits  
The development and training of the actor’s voice as a flexible instrument. Work on individual problems in diction in order to develop an effective self-expression on the stage. This course may be repeated for credit.  
Prerequisite: DRA 100 or 110 or permission of the instructor

DRA 215  
**Modes of Drama**

(Also ENH 212)  
4 hours; 4 credits  
An introduction to the variety of forms and themes of dramatic literature. Major problems treated by dramatists will be examined, as well as genres: tragedy, comedy, farce, melodrama, tragicomedy, and the thesis play. (literature) (arts & com.)  
Prerequisite: ENG 111, ENG 151

DRA 220  
**Play Production**

4 hours; 3 credits  
The role of the producer in the management of non-profit and commercial theaters. A consideration of theater space, budget, organization of the production staff, front of the house and backstage management.

DRA 230  
**Set Design for the Theater**

4 hours; 3 credits  
Principles, materials, and practices of set design, with an emphasis on its contribution to various theatrical and periods.  
Prerequisites: ENG 111 and DRA 100 or DRA 131 or permission of the instructor

DRA 232  
**Costume Design for the Theater**

4 hours; 3 credits  
Principles, materials, and practices of the design of costumes and theatrical properties, with an emphasis on their contributions to various theatrical styles and periods.  
Prerequisite: ENG 111

DRA 233  
**Introduction to Design for the Theater**

4 hours; 3 credits  
Theory and practice of designing stage settings, lighting, and costumes. Visits to the theater and to professional scene shops.  
Prerequisite: ENG 111

DRA 235  
**Introduction to Stage Management**

4 hours; 3 credits  
Principles and practices of contemporary stage management. Interprets the function of the stage manager in the entire production process. Identifies the relationship of the stage manager to the director, designers, technical director, actors, stage hands, and costume and properties managers. Specifies responsibilities and practices.  
Prerequisite: ENG 111

DRA 240  
**Theater for Young People**

4 hours; 3 credits  
Theory and methods of producing theater for young people. An examination of appropriate dramatic literature, as well as the problems of play production for and with children and adolescents. Creative drama as an educational process will be viewed in relationship to theater for young people as an aesthetic product. Students will develop dramatic material in class for presentation.

DRA 260  
**History of Theater I**

4 hours; 4 credits  
A critical history of theater and theatrical style from prehistory through Shakespeare and his contemporaries. Aspects to be covered include the ritual origins of drama, the drama of ancient Greece and Rome, the Middle Ages, and the English and European theater of the sixteenth and seventeenth centuries. The primary emphasis will be the total theatrical context in which plays were written and produced (the social and cultural environment, the playhouse, the prevailing theatrical styles of the time). The secondary emphasis will be the reading of major dramatic texts that help to illustrate that development. (literature) (arts & com.)  
Prerequisite: ENG 111

DRA 261  
**History of Theater II**

4 hours; 4 credits  
A critical history of theater and theatrical style from the re-opening of the English theater in 1660 through American drama of the 1960s. Aspects to be covered include the English Restoration and eighteenth-century theater. European theater of the eighteenth and nineteenth centuries, the theater of Asia, and modern European and American theater. The primary emphasis will be on the total theatrical context in which plays were written and produced (the social and cultural environment, the playhouse, the prevailing theatrical styles of the time). The secondary emphasis will be the reading of major dramatic texts that help to illustrate that environment. (literature) (arts & com.)  
Prerequisite: ENG 111

DRA 270  
**Performance I**

DRA 271  
**Performance II**

4 hours; 3 credits
Performance of a play. Students will be involved in various aspects of
theatrical presentation.
Prerequisite: Permission of the instructor

**DRA 310 Acting III**  
4 hours; 3 credits  
Work on scenes, encouraging the actor to explore a variety of characters and to perform them before an audience.  
Prerequisite: DRA 210

**DRA 314 Media Workshop for Actors/Directors**  
(Also COM 314)  
An examination of the actor/director relationship as it applies in the various media: stage, film, and television. Students will have an opportunity to work both as actors and directors. New work from writing classes will be encouraged for student projects.  
Prerequisite: COM 210

**DRA 320 Directing I**  
4 hours; 3 credits  
Basic principles of directing. The function of the director in the production relating to actors, designers, the producer, stage manager, and house manager. Students direct scenes and produce a final workshop performance.  
Prerequisites: DRA 110, and DRA 131 or DRA 235, ENG 111

**DRA 345 Spanish Theater**  
(Also SPN 345)  
4 hours; 4 credits  
Discussion of ideas, background, and staging traditions of representative Spanish language plays from the Golden Age to the present. The course is taught in English. Readings and assignments in Spanish required for majors; readings and assignments may be done in English for non-majors.  
Prerequisite: SPN 313 or equivalent for those doing readings and assignments in Spanish; ENG 151 or a 200-level English course for those doing readings and assignments in English

**DRA 354 English Drama to 1800**  
(Also ENL 354)  
4 hours; 4 credits  
Selected works with emphasis on Elizabethan and Jacobean drama (exclusive of Shakespeare), and Restoration and eighteenth-century drama.  
Prerequisite: An ENH 200-level course

**DRA 355 Modern European Drama**  
(Also ENL 355)  
4 hours; 4 credits  
A study of the major dramatists of the modern European theater, with an emphasis placed upon the development of dramatic styles and themes, as well as the theatrical context in which the plays were produced.  
Prerequisite: An ENH 200-level course

**DRA 356 American Drama**  
(Also ENL 356)  
4 hours; 4 credits  
Readings of plays by O’Neill, Williams, Miller, and others who have dramatized the conflicts and predicaments of twentieth-century Americans.  
Prerequisite: An ENH 200-level course

**DRA 357 World Drama to 1800**  
(Also ENL 357)  
4 hours; 4 credits  
Selected plays from the Greeks to 1800.  
Prerequisite: An ENH 200-level course

**DRA 358 World Drama since 1800**  
(Also ENL 358)  
4 hours; 4 credits  
Selected plays from 1800 to the present.  
Prerequisite: An ENH 200-level course

**DRA 359 Contemporary Drama**  
(Also ENL 359)  
4 hours; 4 credits  
Major figures, works, and movements in dramatic literature since World War II, with special emphasis on the last two decades.  
Prerequisite: An ENH 200-level course

**DRA 361 The Early Shakespeare**  
(Also ENL 361)  
4 hours; 4 credits  
A selection of Shakespeare’s work written before 1600: early and middle comedies, the major histories, the earlier tragedies, and the poems.  
Prerequisite: An ENH 200-level course

**DRA 362 The Later Shakespeare**  
(Also ENL 362)  
4 hours; 4 credits  
A selection of Shakespeare’s work written after 1600: the major tragedies, the problem plays, the late comedies and romances.  
Prerequisite: An ENH 200-level course

**DRA 370 Theater Workshop I**  
4 hours; 3 credits  
Projects in acting and directing are developed by members of the workshop. An effort will be made to have a current playwright’s workshop contribute material for the course.  
Prerequisite: DRA 110 or permission of the instructor

**DRA 371 Theater Workshop II**  
4 hours; 3 credits  
Projects in acting, directing, and playwriting, representing various theatrical styles, will be developed by members of the workshop.  
Prerequisite: DRA 370 or permission of the instructor

**DRA 372 Theater Practicum**  
4 hours; 4 credits  
Participation in acting or production roles in a production sponsored by the program in Dramatic Arts. Students are to be evaluated by the faculty production coordinator. Students will keep a journal to be submitted at the conclusion of the production. This course may be repeated for credit.

**DRA 410 Acting IV**  
4 hours; 5 credits  
Work on more complex scenes leading to their performance before an audience.  
Prerequisite: DRA 310

**DRA 426 Classical French Drama**  
(Also FRN 426)  
4 hours; 4 credits  
Plays of Corneille, Racine, Molière, with special emphasis on the continuing
role of Molière in the world’s theater.
Prerequisite: FRN 313 or equivalent for those doing readings and assignments in French; ENG 151 for those doing readings and assignments in English

**DRA 460 Dramatic and Theatrical Criticism**
4 hours; 4 credits
A survey of theories of drama and theater and of the development of dramatic and theatrical criticism from their origins in such writers as Aristotle and Horace to the present.
Prerequisites: At least two 300-level courses in dramatic literature or English or permission of the instructor

**DRA 465 Spanish Theater in the Twentieth Century**
(Also SPN 465)
4 hours; 4 credits
Principal tendencies in Spanish theater in the twentieth century. Including an analysis of the major works of dramatists such as Benavente, Valle-Inclán, García Lorca, Mihura, Buero Vallejo, Alfonso Sastre, Carlos Muniz, Lauro Olmo, Arrabal, Antonio Gala, and others.
Prerequisite: SPN 313 or equivalent

Dramatic Arts students should also consider:
ENL 272 Playwriting I, ENL 373 Playwriting II, and ENL 435 Playwright’s Workshop.

**Economics**
(Bachelor of Arts, Bachelor of Science, Business Specialization, Finance Specialization, Minor)
Department of Political Science, Economics, and Philosophy
Chair: Associate Professor Vasilios Petratos, History/Political Science, Economics, and Philosophy Building (2N), Room 224
The Economics program serves several different student needs. It provides a major in economics for students interested in the study of the subject at the bachelor’s degree level or in preparation for graduate study of economics. A business specialization and a finance specialization are available for interested students.

**Economics (BA)**

**General Education Requirements for the BA**
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

**Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 28-47 credits**
Whenever possible, these courses should be completed within the first 60 credits.
1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)
2. Social Scientific Analysis: (7-8 credits)
3. The West and the World: (4 credits)
4. Textual, Aesthetic, and Linguistic Analysis: (6-8 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
      Arts and Communications: 200-level
5. Pluralism and Diversity Requirement: (0-4 credits)
6. Foreign Language: (0-12 credits)
See section on general education requirements for approved course lists and complete details.

**Pre-Major Requirement: 3 credits**
ECO 101 Introduction to Economics 3 credits

**Major Requirements: 28-32 credits**
(28-32 credits include Computer Proficiency Requirement)
28 credits in economics courses at the 200, 300, or 400 level or above including:
ECO 210 Price Theory 4 credits
ECO 212 Income and Employment Theory 4 credits
ECO/ MGT 230 Introduction to Economic and Managerial Statistics 4 credits
ECO 323 Introduction to Econometrics or
ECO 326 Introduction to Mathematical Economics 4 credits
And at least two additional 300- or 400-level economics courses 8 credits
The remaining four economics credits may be at the 200, 300, or 400 level.

**Computer Proficiency Requirement: 0-4 credits**
In addition, economics majors must demonstrate computer proficiency in one of the following ways:
1. Successful completion of any course in computer science.
3. Demonstration of proficiency with computers in a manner satisfactory to the economics faculty.
   (CSC 108, 112, 114, 116, 118, special focus, abbreviated courses, do not meet this requirement.)

**Electives: 44-48 credits**
Total Credits Required: 120

**Economics (BS)**

**General Education Requirements for the BS**
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

**Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 21-27 credits**
Whenever possible, these courses should be completed within the first 60 credits.
1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)
2. Social Scientific Analysis: (3-4 credits)
3. The West and the World: (4 credits)
4. Textual, Aesthetic, and Linguistic Analysis: (3-4 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
   c. Arts and Communications: 200-level

5. Pluralism and Diversity Requirement: (0-4 credits)
See section on general education requirements for approved course lists and complete details.

Pre-Major Requirements, 3 credits, and Major Requirements, 28-32 credits, including Computer Proficiency Requirement, are the same as those listed for the BA

Specializations
Within the major in Economics, the College offers two specializations, business and finance, combining the major in Economics with the study of selected courses in business. The program is administered jointly by the Department of Political Science, Economics, and Philosophy and the Department of Business. The specialization adds courses useful to students who plan to pursue careers in business or finance and/or continue their education.

Business Specialization: 17 credits

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<tr>
<th>Course</th>
<th>Credits</th>
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<tr>
<td>ACC 114</td>
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<td>ACC 121</td>
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<td>MGT 110</td>
<td>3</td>
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<td>MKT 111</td>
<td>3</td>
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<tr>
<td>ECO/FNC 240</td>
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Finance Specialization: 19 credits

The Finance Specialization has the following requirements within the 28-32 credits required for the major:

Four credits at the 200 level:

ECO/FNC 214 Money and Banking

Eight credits in 300-level economics courses chosen from the following:

ECO/FNC 315 Monetary Theory and Policy
ECO 336 Industrial Organization
ECO/FNC 360 Investment Analysis
ECO/FNC 370 International Finance
ECO 387 Managerial Economics

Specialization courses: 19 credits

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<th>Course</th>
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<tr>
<td>ECO/FNC 240</td>
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<td>ECO/FNC 345</td>
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<td>ACC 121</td>
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<td>FNC 350</td>
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<td>ECO/FNC 213</td>
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Honors
To graduate with Honors in Economics a student must have a 3.5 grade point average in economics courses and must complete a thesis or project determined by the student and his or her faculty sponsor and the course POL/ECO/PHL 490 Senior Seminar in Political Science, Economics, and Philosophy.

Minor
Prerequisite Course:
ECO 101 Introduction to Economics 3 credits

Minor Requirements:
ECO 210 Price Theory 4 credits
ECO 212 Income and Employment Theory 4 credits
ECO 230 Introduction to Economic and Managerial Statistics 4 credits
One 300 or 400 level course in economics 4 credits

Courses
ECO 101 Introduction to Economics
3 hours; 3 credits
This course examines the principles of economics in the context of the operation of the United States economy. Both microeconomic theory (behavior of firms and households) and macroeconomic theory (total output, inflation, employment and unemployment, economic growth) will be introduced as will economic approaches to social problems. (social science)
Prerequisite: MTH 020 or an appropriate score on the CUNY Mathematics Assessment Test

ECO 210 Price Theory
4 hours; 4 credits
Examination of the workings of the price mechanism by which a free enterprise system solves the basic economic problems of production, distribution, and optimum methods of production. The roles of household and firm in determining prices under varying market structures. Development of a theoretical approach as the foundation for more advanced work in economics. Application of analytical tools to contemporary problems.
Prerequisites: ECO 101; and MTH 025 or MTH 030 or an appropriate score on the CUNY Mathematics Assessment Test, or permission of the instructor.

ECO 212 Income and Employment Theory
4 hours; 4 credits
Aggregate economic analysis from the classical and the modern post-Keynesian point of view. The major objective is an understanding of the factors that determine the levels of national income, output, employment, overall prices, and rates of economic growth. The roles of consumption, investment, and alternative governmental policies are demonstrated. Measurement of national income and output is also studied.
Prerequisites: ECO 210; and MTH 025 or MTH 030 or appropriate score on the CUNY Mathematics Assessment Test, or permission of the instructor.

ECO 213 Money and Capital Markets
(Also FNC 213)
4 hours; 4 credits
The course examines financial markets from the standpoint of investors and users. Markets studied are those for money market instruments, T-bill futures, Ginnie Mae futures, T-bond futures, stocks, stock options, bonds, mortgages, and Eurocurrencies. Federal Reserve operations, U.S. Treasury
This course examines the relationships among nation states, corporations, and key international trade and financial organizations. It also examines how world politics affects distribution of economic wealth and, in turn, how economic growth/changes affect world politics.

Prerequisites: At least one political science or economics course, ENG 111, COR 100

ECO 252 Economic Geography
(Also GEG 252)
4 hours; 4 credits
Introduction to the principles of economic geography. Systematic analysis of the location and distribution of resources and economic activities; studies of the scope and methods of modern economic geography. (West & World)
Prerequisites: ENG 111, COR 100

ECO 253 United States Economic History
(Also HST 253)
4 hours; 4 credits
The growth of the American economy; analysis of the components of growth: capital, labor, and government.
Prerequisites: ECO 101, any college-level history course, and ENG 111

ECO 256 Analysis of Underdeveloped Areas
4 hours; 4 credits
An examination of economic problems confronting underdeveloped countries and the exploration of possible solutions. Historical perspectives of economic development and general theories of retardation followed by specific policy issues facing economic planners. Problem areas to be discussed include social capital, agriculture, industry, manpower utilization, fiscal policy, foreign aid, and the interaction of political, social and cultural factors as they affect economic development. (West & World) (P&D)
Prerequisites: ECO 101, ENG 111, COR 100

ECO 257 The Japanese Economy
4 hours; 4 credits
This course explores factors that influence the contemporary economy of Japan: historical components, including the Meiji Restoration and the expansion of the Japanese empire, World War II and the post-war Allied occupation, more recent components, principles of Japanese business, management style, government-business relations, education, labor relations, trade restrictions and agreements, and influence on the U.S. economy, and Japanese goals. (social science) (P&D)
Prerequisites: ENG 111, ECO 101, COR 100

ECO 260 Labor Economics
4 hours; 4 credits
A critical examination of theories of wage determination; factors responsible for wage differentials; the effect of unionism upon wages; empirical trends in wage differentials and average wage levels; wage push inflation, unemployment, minimum wage laws, and automation; human capital, educational expenditures, and manpower analysis.
Prerequisites: ECO 101 and ENG 111

ECO 261 Labor Relations
(Also MGT 261)
4 hours; 4 credits
History, theories, structure, and objectives of trade unionism. Grievance procedures, collective bargaining, union power, strikes and other weapons, mediation and arbitration. Government regulation of the labor sector. Students will participate in the re-enactment of actual arbitration cases.
ECO 276  The Nonprofit Institution
4 hours; 4 credits
The finances, management, and decision making of such nonprofit institutions as the university, school systems, governmental departments, hospitals, and foundations. The effects of the nonprofit institution upon society: Evaluation of the achievements of nonprofit institutions.
Prerequisite: ECO 101

ECO 285  Economics for Engineers
4 hours; 4 credits
An accelerated calculus-based course. Introduction to contemporary macroeconomic and microeconomic theory. Topics include output, unemployment, inflation, functioning of markets, government policy, and productivity. The course concludes with engineering applications. (social science)
Prerequisites: ENG 111, COR 100; MTH 230 or MTH 231 or MTH 235, CSC 126 or CSC 270 or other evidence of equivalent proficiency with computers

ECO 291  Political Economy of War and Peace
(Also POL 268)
4 hours; 4 credits
An interdisciplinary introduction to political and economic decision making as it concerns national defense spending, focusing on such issues as the “military-industrial complex,” the draft, a volunteer army, the question of national priorities, the impact of war and peace on such economic problems as inflation, recession, employment, growth, and the federal budget.
Prerequisite: ENG 111

ECO 292  Urban Economics
4 hours; 4 credits
Economic factors in the emergence of urban centers and historical changes in their economic functions. Determinants of the size and location of cities and the occupational characteristics of the urban labor force. Analysis of the proper economic scope of local government and the financing of its expenditures. Allocating and pricing public services. Aspects of urban renewal and study of the urban ghetto.
Prerequisites: ENG 111, ECO 101 or permission of the instructor

ECO 296  History of American Business
4 hours; 4 credits
The history of business in American life; theories of business evolution; the role of business in shaping American social institutions and values; the effect of the American social, political, and economic environment upon business thought and practice.
Prerequisite: ENG 111

ECO 315  Monetary Theory and Policy
(Also FNC 315)
4 hours; 4 credits
Theoretical and applied problems of monetary policy. Emphasis is placed on contemporary developments. Current controversies concerning the use of monetary policy, relationship to fiscal policy, and impact on economic activity.
Prerequisites: ECO 212 and either ECO/FNC 213 or ECO/FNC 214

ECO 318  Economic and Business Forecasting
4 hours; 4 credits
Forecasting the nation’s economy and economic trends over the short term and the longer term. Also forecasts of business trends and sales of individual businesses will be considered within the economic framework.
Prerequisites: ECO 210, ECO 212, ECO/MGT 230

ECO 323  Introduction to Econometrics
(Also MGT 324)
4 hours; 4 credits
This course will examine the relationship between economic theory and statistical measurement. It will deal mainly with the general linear regression and correlation model. A selected number of other statistical tools will also be treated. Emphasis will be on the understanding of the concepts rather than on their mathematical derivation.
Prerequisites: ECO 101 and ECO/MGT 230 or permission of the instructor

ECO 326  Introduction to Mathematical Economics
4 hours; 4 credits
The use of mathematical analysis in solving economic problems. Methods of calculus, matrix algebra, deductive logic, and elementary set theory will be developed and employed to understand the equilibrium of the market, firm, and consumer. The uses and misuses of the mathematical method in economics will also be discussed.
Prerequisites: ECO 101, MTH 121 or MTH 123 or the equivalent, or permission of the instructor

ECO 327  Intermediate Mathematical Economics
4 hours; 4 credits
A continuation of ECO 326. Differential and difference equations, elementary dynamic models and stability of equilibrium, rigorous development of modern microeconomic and macroeconomic theory using the mathematical approach.
Prerequisite: ECO 326 or permission of the instructor

ECO 330  Public Finance
4 hours; 4 credits
Analysis of causes and effects of government expenditure and taxation in the United States economy. Some treatment of determination of optimal types and amounts of government expenditure on goods and services, but greater emphasis on various types of taxation examined for equity, efficiency, role in fiscal policy, and effect on productive effort. Some attention to standards of income distribution and to inter-governmental fiscal relationships in the United States.
Prerequisite: ECO 210

ECO 331  Law and Economics
(Also POL 331)
4 hours; 4 credits
Fundamental concepts of economics, especially efficiency, will be utilized to explain and evaluate legal rulings. The tools of economics will be employed to analyze not only tort, contract, and property principles, but also marriage and divorce law, criminal law, and constitutional issues such as abortion, the death penalty, and racial and gender-based discrimination.
Prerequisites: ECO 101; BUS 160 or any two POL courses

ECO 333  Economics and Philosophy
(Also PHL 333)
4 hours; 4 credits
This course will cover topics that overlap in the fields of economics and philosophy. It will enlighten economics majors about the philosophical underpinnings of economics and introduce philosophy majors to the more “thoughtful” aspects of economics. Topics discussed will include: rational choice and ethics; social welfare; justice, efficiency, and equity; social choice; and game theory.
Prerequisites: ENG 111 and any introductory-level economics or philosophy course
ECO 336  Industrial Organization
4 hours; 4 credits
The rise and development of industrial combinations and their effect on the structure and performance of the United States economy; models of monopoly and oligopoly pricing; analysis of the power of monopoly and oligopoly in relation to efficient allocation of resources, technological growth, inflation, and political influence; causes and effects of mergers; government policies aimed at the preservation of competition in industrial markets, and regulation of trade practices.
Prerequisite: ECO 210

ECO 338  Government and Business
4 hours; 4 credits
The relationship between government and business in the United States will be investigated under three general headings: antitrust policy, regulation, and the promotion of specific business interests. Theoretical issues, historical developments, political and economic interrelationships, legislation and its judicial and quasijudicial interpretation relevant to each area will be explored.
Prerequisite: ECO 210

ECO 345  Managerial Finance II
(Also FNC 345)
4 hours; 4 credits
Working capital management, current asset management, sources of short-term financing, financial structure and use of leverage, valuation and rates of return, dividend policy and internal financing, mergers and acquisitions, and liquidation; includes computer lab for solving financial management problems.
Prerequisites: ECO/FNC 240 and MGT/ECO 290

ECO 352  Comparative Economic Systems
4 hours; 4 credits
An analysis of economic systems through formulation of abstract economic models and an analysis of actual economic societies, including comparison of capitalism and socialism.
Prerequisites: ECO 101 and at least two other courses in the social sciences

ECO 360  Investment Analysis
(Also FNC 360)
4 hours; 4 credits
Survey of the principles governing the investment of individual and institutional capital funds: the theory and mechanics of investments, general analysis and valuation procedures including quantitative and qualitative tests for judging security values, valuation to fixed income securities and common stocks. Introduction to the analysis of industrial, public utility, and governmental securities. Management of an individual investor's portfolio.
Prerequisite: ECO/FNC 345

ECO 370  International Finance
(Also FNC 370)
4 hours; 4 credits
The financial interrelationships between countries. Analysis of balance of payments, fixed and flexible exchange rates, the role of international reserves. Historical trends in payments and exchange; implications of the rise of the multinational corporation; current international policy problems facing the United States, other developed and underdeveloped nations, and current institutional changes designed to meet them.
Prerequisite: FNC/ECO 240

ECO 385  Engineering Economics
4 hours; 4 credits
Applications of economic theory and operations analysis in the formulation of business policies and decisions. Marginal and incremental analysis of business opportunities, demand analysis and forecasting, production and price setting, capital budgeting and investment analysis, and regulation of business. Introduction to the techniques and applications of econometrics and linear programming. Not open to students who have successfully completed ECO 387.
Prerequisite: MTH 121 or MTH 123 or equivalent

ECO 387  Managerial Economics
4 hours; 4 credits
Applications of economic theory and operations analysis in the formulation of business policies and decisions. The course will include marginal and incremental analysis of business opportunities, demand analysis and forecasting, production and price setting, and regulation of business. Introduction to the techniques and applications of econometrics and linear programming will also be included. Topics will be studied through consideration of actual business cases and problems. Not open to students who have successfully completed ECO 385.
Prerequisites: MTH 121 or 123 or equivalent; ECO 210

ECO 388  Economics of Natural Resources and the Environment
4 hours; 4 credits
An economic approach to the problems of depleting natural resources and environmental pollution. Intertemporal allocation of resources, recycling, renewable resources, energy, pollution, acid rain, global warming, ozone depletion. The role of markets and the role of government.
Prerequisite: ECO 210

ECO 389  Economics and Technology
4 hours; 4 credits
The economics of research and development in the single firm and the economy as a whole. Implications for society will be explored. Topics will include: determinants of research and development expenditures by the firm, selection and management of research and development projects, technological forecasting, the role of government and nonprofit organizations in research and development, the economics of the patent system, antitrust legislation, and technological innovation.
Prerequisite: ECO 210

ECO 390  History of Economic Thought
4 hours; 4 credits
The development of economic thought from antiquity to modern times. Emphasis on the contrast and similarities between such divergent schools of thought as mercantilism, the physiocratic school, the classical school, the socialist school, the historical school, and the neoclassical school. Prominent thinkers such as Aristotle, Aquinas, Mun, Hume, Quesnay, Adam Smith, Ricardo, Malthus, Mill, Cournot, von Thunen, Marx, Menger, Jevons, Walras, Marshall, Keynes, Samuelson, Schumpeter, and von Hayek will be discussed, as will the periodic resurgence of various themes and the links between economic thought and economic history.
Prerequisites: ECO 210 and ECO 212, or permission of the instructor

ECO 395  Foundations of Modern Capitalism
4 hours; 4 credits
An examination of the historical and intellectual origins of capitalist society, the role of capitalism in the growth and development of modern
industrial society; an evaluation of the future of capitalism.  
Prerequisites: ECO 101 and at least two other courses in the social sciences

**ECO 410  Seminar in Economic Analysis**  
4 hours; 4 credits  
Selected topics in economic theory including production theory, capital theory, welfare economics, growth theory, and investment in human capital. Students prepare detailed presentations and analyses of classic works for discussion and evaluation.  
Prerequisites: ECO 210 and 212, or permission of the instructor

**ECO 490  Senior Seminar in Political Science, Economics, and Philosophy**  
(Also POL 490 and PHL 490)  
4 hours; 4 credits  
Selected topics in which ideas and approaches from economics, political science, and philosophy either mesh or collide will be explored. Required of all students expecting to graduate with honors in political science, economics, or philosophy, but not limited to these students.  
Prerequisites: Senior standing and completion of at least 16 credits in intermediate and advanced social science courses and permission of the instructor.

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**Education**

Department of Education  
Chair, Associate Professor Susan Sullivan, Education Building (3S), Room 208.  
(See the Graduate Catalog for information on master’s degree programs.)  
The College of Staten Island offers a full selection of programs to prepare students for certification as teachers at all levels. Students at the College do not major in Education; they major in academic subjects and complete a sequence of courses in teacher education that provides the academic work necessary for a recommendation for initial certification by the State of New York. Students seeking initial certification from the State Education Department of New York must pass the appropriate teacher certification examinations.  
In 2001-2002, 98% of the College of Staten Island students taking the Liberal Arts and Sciences Test (LAST) of the New York State Teacher Certification Examination received a passing score. On the Assessment of Teaching Skills-Written Test (ATS-WT), 98% passed.  
Education courses are identified and the descriptions arranged alphabetically according to the following designations:  
EDA - Supervision and Administration  
EDC - Early Childhood  
EDO - General Education  
EDE - Elementary Education (Childhood Education)  
EDP - Special Education  
EDA - Secondary Education (Adolescence Education)  
(Graduate courses are described in the Graduate Catalog.)

**Fieldwork**  
A fieldwork component is required of every undergraduate education course. Fieldwork hours are determined based upon the needs of each course.

**Academic Major**  
Students in the Early Childhood Education program and in the Childhood Education program must complete the requirements for the major in Science, Letters, and Society (SLS) leading to the BA degree. Completion of all degree requirements for the Science, Letters, and Society major with the Early Childhood Education sequence may require at least 121 credits.

**Criteria for entry into the Education Sequences:**  
Students must have a GPA of 2.75 or above to enroll in introductory (foundations) education courses (EDC 215, EDC 216, EDE 200, EDE 260, EDS 201, EDS 202). Students whose GPAs are below 2.75 but above 2.6 may appeal for special permission to enroll in a foundations course. All students apply for admission to an educational sequence while enrolled in one of the foundations courses listed above. Students who are denied admission to an educational sequence may appeal the decision. Instructions for all appeal processes, including deadlines, are available in the department office, Room 208 of the Education Building (3S).

**Criteria for continuing in the Educational Sequences:**  
Students must develop and maintain a program portfolio as outlined in the program handbook. Students must earn a C+ or above in each education class. Students must maintain a 2.75 GPA throughout the program. Students whose portfolio, course grades, and/or GPA do not meet program standards may appeal for special permission to continue in the program. Instructions for the appeal process, including deadlines, are available in the department office, Room 208 of the Education Building (3S).

**Language Requirement**  
Beginning September 1993, all applicants for initial teacher education certification in early childhood, childhood, and adolescence education must demonstrate proficiency in a language other than English in one of two ways: by passing a CSI modern language course at the 114 level or by passing the Department of Modern Languages proficiency examination at that same level. For information on the department proficiency examination, please contact the coordinator of the Modern Languages Media Center.

**Liberal Arts and Sciences Requirement**  
Because most required education courses are non-liberal arts and sciences, students in education usually do not have room for non-liberal arts and sciences courses beyond those required for the education sequence. Students who take other non-liberal arts and sciences courses may find that they need to take more than 120 credits to complete their degree. Education courses that fulfill the Liberal Arts and Sciences requirement are marked (LAS&S).

Teacher certification is governed by the New York State Board of Regents and the New York State Education Departments. These requirements are subject to change. Students are advised to contact the Department of Education for the latest degree requirements.

**Early Childhood Education**  
This program is designed for students wishing to specialize in the education of children from birth to second grade. It provides the academic course content necessary for New York State certification at the early childhood level.
**Academic Major: 34-36 credits**

**Education Sequence: 30 credits**
Students wishing to be recommended by the College for initial certification must successfully complete the following sequence of education courses, as well as the Science, Letters, and Society major. Students are encouraged to begin the early childhood sequence in the sophomore year. To complete the sequence in two years, it must be started by the beginning of the junior year. Students must have a minimum cumulative average of 2.75 to be admitted to all early childhood courses.

- EDC 215 Psychological Foundations of Early Childhood Education 3 credits
- EDC 216 Social Foundations of Early Childhood Education 3 credits
- EDC 217 Affective Development of the Child 3 credits
- EDC 218 Language Development in Young Children and the Educative Process 3 credits
- EDC 310 The Teaching of Reading and Writing 3 credits
- EDC 332 Music in Early Childhood 3 credits
- EDC 340 Workshop in Mathematics and Science for Early Childhood 3 credits
- EDC 350 Fieldwork in Preschool Classrooms 2 credits
- EDC 360 Workshop in Social Studies 3 credits
- EDC 440 Student Teaching in Kindergarten and Early Primary Classrooms 4 credits

**Childhood Education**
This program provides the academic course content necessary for New York State certification as a childhood teacher at the first- through sixth-grade level (1-6).

**Academic Major: 34-36 credits**

**Education Sequence: 32 credits**
Students wishing to be recommended by the College for certification must successfully complete the following sequence of childhood education courses, as well as their academic major. The sequence in childhood education may be begun in the sophomore year. To complete the sequence in two years, it must be begun by the beginning of the junior year. Students must have a minimum cumulative average of 2.75 to be admitted to all childhood education courses.

- EDE 200 Social Foundations of Education 4 credits
- EDE 260 Psychological Foundations of Education 4 credits
- EDE 301 Literacy Development and Language Acquisition in Elementary Education 4 credits
- EDE 302 Social Studies, Art, Reading, and Language Arts in Elementary Education 6 credits
- EDE 303 Mathematics, Science, and Music in Elementary Education 6 credits
- EDE 400 Student Teaching in Elementary Education 6 credits
- EDE 402 Reflection and Analysis in Student Teaching in Elementary Education 2 credits

**Adolescence Education**
This program provides the academic course content necessary for certification as a teacher at the adolescence level in the fields of English, foreign languages, mathematics, science, and social studies.

**Academic Major**
Students must complete the requirements of a major in the field in which they plan to teach. These include English, Spanish, mathematics, biology, chemistry, and social studies disciplines.

Students planning to teach social studies major in history, and they complete at least 50 credits in the social sciences, including at least four credits in geography, at least four credits in U.S. history, and at least four credits in non-U.S. history.

**Adolescence Education Sequence: 24 credits**
Students wishing to be recommended by the College for certification must successfully complete the following sequence of education courses, as well as their academic major. The sequence may be begun in the sophomore year. To complete the sequence in two years it must be begun by the beginning of the junior year. Students must have a minimum cumulative average of 2.75 to be admitted to all adolescence education courses.

- EDS 201 Social Foundations of Secondary Education 4 credits
- EDS 202 Psychological Foundations of Secondary Education 4 credits

One of the following four credit courses:

- EDS 301 The Teaching of Secondary School Curriculum in Social Studies
- EDS 302 The Teaching of Secondary School Curriculum in English
- EDS 303 The Teaching of Secondary School Curriculum in Mathematics
- EDS 304 The Teaching of Secondary School Curriculum in Science
- EDS 305 The Teaching of Secondary School Curriculum in Foreign Language
- EDS 307 Discovery Learning and Interdisciplinary Instruction 4 credits
- EDS 400 Student Teaching in Secondary Education 6 credits
- EDS 401 Reflection and Analysis in Student Teaching in Secondary Education 2 credits

**Special Education**
The College of Staten Island does not offer an undergraduate program in Special Education. Students seeking certification in special education are advised to pursue the undergraduate sequence in childhood education and the Master's program in Special Education.

**Courses**
For graduate courses in education see the *Graduate Catalog*.

**Note:** Student teaching courses are graded P or F.

**EDC - Early Childhood**

**EDC 215 Psychological Foundations of Early Childhood Education**
3 hours; 3 credits
An examination of the developing child, focusing on the period from birth
through age eight, with an introduction to children with special needs. Major developmental theories are critically examined and are illuminated through students' field experiences with children in diverse and inclusive settings. Recent research on child abuse and abduction is examined within the context of the teacher's responsibilities. This course includes ten hours of fieldwork prior to student teaching. (L&S)
Prerequisites: EDC 215, EDC 216, and a GPA of 2.75

EDC 216 Social Foundations of Early Childhood Education
3 hours; 3 credits
A required multidisciplinary course for prospective early childhood teachers. Perspectives from such academic disciplines as philosophy, history, sociology, anthropology, political science, and economics are brought to bear on early childhood education in its relationships with contemporary society and with later education. The major purpose of this course is to bring the student to an initial understanding of how values, attitudes, and structures in society as a whole influence the education of young children. (L&S)
Prerequisites: ENG 111 and ENG 151, and a GPA of 2.75

EDC 217 Affective Development of the Child
3 hours; 3 credits
An examination of the emotional development of young children especially as it is connected to curriculum development. The symbolic imagery of myth, fairy tale, and poetry is studied for the rich possibilities it offers for children's emotional and moral development. Students learn to use a variety of observational approaches and recording techniques to increase their understanding of children who are developing normally and children with disturbances in development. Diverse infant programs are examined through 20 hours of fieldwork in order to see how they provide for children's emotional development.
Prerequisites: EDC 215, EDC 216, and a GPA of 2.75 or above.

EDC 218 Language Development in Young Children and the Educative Process
3 hours; 3 credits
Theory and research in language development and the processes of language acquisition to inform program planning and development inclusive educational settings. Students learn how to create, manage, and develop preschool curriculum areas such as dramatic play, block building, expressive arts, puzzles and manipulatives, nature study, and outdoor play to facilitate language acquisition and development. The course provides students with a range of alternative teaching strategies to meet the needs of linguistically diverse children.
Prerequisites: EDC 215 and EDC 216, or EDE 200 and EDE 260, and a GPA of 2.75 or above.

EDC 310 The Teaching of Reading and Writing
3 hours; 3 credits
An examination of the teaching of reading and writing within a developmental framework and introduction to programs, practices, and materials of reading/writing instruction in diverse and inclusive settings. The course provides students with a range of alternative teaching strategies for children with reading and writing delays. The course also examines software in reading and writing for its usefulness in assessment and instruction.
Prerequisites: EDC 215, EDC 216, and a GPA of 2.75 or above.

EDC 332 Music in Early Childhood
3 hours; 3 credits
Learn to develop basic musical understanding and skills and music appreciation in young children through participation in singing, ear training, rhythmic movement, and playing musical instruments. Students learn to select materials and develop activities that are developmentally appropriate for the needs of young children with an emphasis on creativity and helping students to develop a culturally diverse musical repertoire. A variety of media and computer technologies are explored to determine how they can enhance musical experience.
Prerequisite: EDC 215, EDC 216, and a GPA of 2.75 or above.

EDC 340 Workshop in Mathematics and Science for Early Childhood
3 hours; 3 credits
Techniques in building the child's knowledge of properties of objects in the environment, concepts of class inclusion, seriation, and numbering, and the structuring of space and time. Students learn a range of strategies used by children with special needs. Informal and formal assessment tools are presented as well as classroom management strategies for whole class and small group instruction. Examination of software in early childhood mathematics and science instruction for its usefulness and developmental flexibility.
Prerequisites: EDC 215, EDC 216, MTH/SLS 217, and a GPA of 2.75 or above.

EDC 350 Fieldwork in Preschool Classrooms
2 credits
This field-based course introduces students to preschool classrooms in diverse and inclusive settings. This course connects practice with prior education coursework and is especially related to the content of EDC 218 Language Development of Young Children and the Educative Process. In addition, students are given opportunities both to observe and to practice long- and short-term curriculum planning that reflects specific provision for children with special needs and linguistically diverse children. Students also practice a variety of observational approaches and recording techniques in order to assess the development of individual children. Alcohol, tobacco and drug abuse, and other dangers to children are discussed within the context of pre-natal and infant development with specific attention paid to the teachers' role and responsibilities. Students will be in attendance at the assigned school two mornings a week for a full semester, which accounts for 100 hours of fieldwork prior to student teaching. Graded Pass (P) or Fail (F).
Prerequisites: EDC 215, EDC 216, and pre- or corequisite EDC 218

EDC 360 Workshop in Social Studies
3 hours; 3 credits
An investigation of how multicultural imaginative historic narratives can be used as an ongoing structure within early primary grades to foster students' intellectual development in diverse and inclusive educational settings. To create these instructional materials, students will use the Internet and other media for educational applications. Formal and informal assessment tools are presented as well as classroom management strategies for whole class and small group interaction. The course will offer students opportunities to develop the skills of history storytelling and facilitating discussion. Opportunities will also be given to develop history storytelling units that offer young children multiple media to represent thought.
Prerequisites: EDC 215, EDC 216, and a GPA of 2.75 or above.

EDC 412 Reading in Primary and Upper Elementary Classroom II
3 hours; 3 credits
The objective of this course is to enable students to apply principles of
reading instruction to the actual field situation for individual children. Conferences and field supervision.

Prerequisites: EDC 215, EDC 216, EDC 310, and a GPA of 2.75 or above.

EDC 440 Student Teaching in Kindergarten and Early Primary Classrooms
4 credits
Practice and problem solving in primary and upper elementary classrooms. Designed for public schools. Students will be in attendance at the assigned school four mornings a week for a full semester. Application for a student teaching assignment must be completed and filed with the Student Teaching Office the semester preceding the semester in which the student plans to student teach. Students must also submit three letters of recommendation from full-time Education faculty. Graded Pass (P) or Fail (F).

Prerequisites: EDC 310, EDC 240, and EDC 340; SLS 218 and SLS 261. In addition, students must meet each of the following criteria:
1. An overall grade point average of 2.75.
2. A grade point average of 2.75 in all education courses.
3. A minimal grade of C in all education courses.

EDC 441 Student Teaching in Preschool and Kindergarten Classrooms
6 credits
Practice and problem solving in preschool and kindergarten classrooms. Designed for preschool and daycare. Students will be in attendance at the assigned school three days a week for a full semester. Application for a student teaching assignment must be completed and filed with the Student Teaching Office the semester preceding the semester in which the student plans to student teach. Students must also submit three letters of recommendation from full-time Education faculty. Graded Pass (P) or Fail (F).

Prerequisites: EDC 320, EDC 330, and EDC 440; SLS 218 and SLS 261. In addition, students must meet each of the following criteria:
1. An overall grade point average of 2.75.
2. A grade point average of 2.75 in all education courses.
3. A minimal grade of C in all education courses.

EDD - General Education

EDD 252 History of Education in the United States
(Also HST 252)
4 hours; 4 credits
The history and social foundation of American education. Topics include: the historical development of American public schools, the schools and race, the social function of compulsory schooling, the expansion of higher education in the post-World War II period, and the conceptual differentiation between schooling as socialization and education for personal growth. (social science) (P&D)

Prerequisites: ENG 111, COR 100, or college-level history course

EDE - Elementary Education

EDE 200 Social Foundations of Education
4 hours; 4 credits
The social, political, and economic forces that influence the work of educators and the lives of children and their families and a historic overview of the philosophies and goals of elementary education. Students analyze the legal and judicial landmarks, social policies, and technological advances that affect the schools and address the needs of our diverse population. Students spend ten (10) hours in varied education environments examining the relationship between theory and practice. (LA&S)

Prerequisites: Sophomore standing or six credits in the social sciences and/or philosophy, ENG 111, ENG 151, and a GPA of 2.75

EDE 260 Psychological Foundations of Education
4 hours; 4 credits
An examination of the developing child from preschool through early adolescence. Major theories of development and the interaction between cognitive, social, emotional, and physical development are emphasized. Children with different abilities and with special needs are discussed, as are cultural, gender, and socioeconomic factors. Ten (10) hours of fieldwork in varied educational settings will increase students' awareness of individual differences and their implications for classroom learning. (LA&S)

Prerequisites: Sophomore standing including three credits in psychology, ENG 111, ENG 151, and a GPA of 2.75

EDE 301 Literacy Development and Language Acquisition in Elementary Education
4 hours; 4 credits
An examination of major theories in literacy and language acquisition from early to later childhood and of various strategies for creating literature-based reading/writing programs to encourage literacy at all levels and to provide for differences in motivation, learning needs, cultural heritage, and background experience. Students evaluate published materials and technological aids designed to facilitate literacy and language acquisition. The course provides students with a variety of methods to assist children with diverse language, reading, and writing competencies. Ten (10) hours of field experience provide an opportunity to observe in varied and inclusive settings to evaluate diagnostic assessment techniques and interventions. Cannot be taken concurrently with EDE 302.

Pre- or corequisites: Junior standing and either EDE 200 and EDE 260, or EDC 215 and EDC 216, or EDS 200, and a GPA of 2.75 or above.

EDE 302 Social Studies, Art, and Reading and Language Arts in Elementary Education
3 lecture hours, 6 field hours; 6 credits
An examination of the structures and concepts of social studies, art, and reading and language arts for the elementary school. Appropriate connections among the disciplines are noted, relevant research on child development and learning is incorporated, and strategies to provide for students' special needs are explored. Issues addressed include curriculum development, resources and materials, management, standards, assessment, and the educational application of technology. A fieldwork component of thirty-six (36) hours provides opportunities to plan instruction, enhance communication skills in the disciplines, and connect theory to practice. Cannot be taken with EDE 303.

Prerequisite: EDE 301 and a GPA of 2.75 or above

EDE 303 Mathematics, Science, and Music in Elementary Education
3 lecture hours, 6 field hours; 6 credits
An examination of the structures and concepts of mathematics, science, and music for the elementary school. Appropriate connections among the disciplines are noted, relevant research on child development and learning is incorporated, and strategies to provide for differing student needs are explored. Issues addressed include curriculum development, resources and materials, management, standards, assessment, and the educational application of technology. A fieldwork component of thirty-six (36) hours provides opportunities to plan instruction, enhance communication skills in the disciplines, and connect theory to practice. Cannot be taken with EDE 302.

Pre- or corequisites: MTH 217/SLS 217, EDE 200, EDE 260, junior standing, and a GPA of 2.75 or above.
EDP - Special Education

EDP 220 Special Educational Needs of the Developmentally Disabled
4 hours; 4 credits
This course examines current trends in providing special education services to individuals (preschool, school-age, adult) with developmental disabilities. The approach of the course will be to follow the process of assessment, instructional planning, instruction, and evaluation of instruction in each of four areas of developmental disabilities: sensory disabilities, physical disabilities, communication disabilities, and behavioral disabilities. While the emphasis of the course will be on understanding instructional techniques, stress will be placed on thorough record keeping to evaluate and validate instructional approaches.

EDP 310 Survey of Exceptional Children I
4 hours; 4 credits
The first half of this course provides an orientation to the physical, social, and psychological aspects and educational needs of students with physical handicaps and emotional disturbances, while the second half considers these aspects as they apply to students with learning disabilities and mental retardation. Survey includes philosophy, history, classification, characteristics, etiology, and special educational provisions as well as psychological and educational assessment procedures in special education. Active fieldwork experiences are required.

EDP 311 Survey of Exceptional Children II
4 hours; 4 credits
The second half of this course provides an orientation to the physical, social, and psychological aspects and educational needs of students with physical handicaps and emotional disturbances, while the second half considers these aspects as they apply to students with learning disabilities and mental retardation. Survey includes philosophy, history, classification, characteristics, etiology, and special educational provisions as well as psychological and educational assessment procedures in special education. Active fieldwork experiences are required.

EDS - Secondary Education

EDS 201 Social Foundations of Secondary Education
4 hours; 4 credits
This course examines the historical, philosophical, and cultural roots of contemporary education. The issues of race, class, gender, ability, immigration, and language acquisition are examined for their impact on the learning of adolescents. The course deepens students' understanding of the power that social, political, and economic forces have on the work of teachers and on the lives of adolescents, families, and communities. Students spend fifteen (15) hours in diverse and inclusive educational environments examining the relationship between theory and practice. (LA&S)
Prerequisites: Sophomore standing and a GPA of 2.75 or above.

EDS 202 Psychological Foundations of Secondary Education
4 hours; 4 credits
This course examines major theories of preadolescent and adolescent development, with emphasis on implications for education. Major theories of development and the interaction between cognitive, emotional, and physical development are emphasized. Adolescents will be considered in the context of the larger community, with attention to language, culture, gender, and socioeconomic factors. Fifteen (15) hours of fieldwork in diverse and inclusive educational environments increase the student's awareness of children with special needs and the implications for classroom learning. (LA&S)
Prerequisites: Sophomore standing including three credits of psychology and a GPA of 2.75 or above.

EDS 301-305
Methods of teaching a content area. Students must complete one of the following methods courses. The methods course must coincide with the student's declared major.

EDS 301 The Teaching of Secondary School Curriculum in Social Studies
4 hours; 4 credits
The history, content, methods, and functions of social studies. Structures and concepts of the social studies disciplines are examined, particularly geography, economics, and political science. Issues of language and literacy acquisition related to the social studies are discussed. Students explore a range of alternative strategies and technologies used to address the linguistically diverse and adolescents with special needs. Students work on individual and group assignments to create specific curricula in social studies for children in grades 7-9 and 10-12. A fieldwork component of thirty-five (35) hours is included.
Prerequisites: EDS 201, EDS 202, and a GPA of 2.75 or above
Corequisite: EDS 307

EDS 302 The Teaching of Secondary School Curriculum in English
4 hours; 4 credits
Examination of language acquisition and development. Exploration in the teaching of reading and adolescent literature provides a basis for evaluating reading and learning activities appropriate for the linguistically diverse and for students' special needs. Students are exposed to a wide range of technologies and literature depicting multiple cultural settings. Students develop criteria useful for selecting books, programs, and Websites for the classroom. Students work on individual and group assignments to create specific curricula in English for children at the 7-9 and 10-12 levels. A
fieldwork component of thirty-five (35) hours is included. Prerequisites: EDS 201, EDS 202, and a GPA of 2.75 or above Corequisite: EDS 307

EDS 304 The Teaching of Secondary School Curriculum in Science 4 hours; 4 credits Issues of teaching and learning science are examined including curriculum, resources and materials, management, standards, assessment, and the educational application of technology. Scientific concepts, structures, and language are explored in relation to developing strategies for instruction and providing for students’ differing special needs. A fieldwork component of thirty-five (35) hours is included. Prerequisites: EDS 201, EDS 202, and a GPA of 2.75 or above Corequisite: EDS 307

EDS 305 The Teaching of Secondary School Curriculum in Foreign Language 4 hours; 4 credits Issues of teaching and learning a foreign language are examined including curriculum, resources and materials, management, standards, assessment, and the educational application of technology. Issues of language acquisition, written and oral communication, and grammar are explored in relation to developing strategies for instruction and providing for students’ differing special needs. A fieldwork component of thirty-five (35) hours is included. Prerequisites: EDS 201, EDS 202, and a GPA of 2.75 or above Corequisite: EDS 307

EDS 303 The Teaching of Secondary School Curriculum in Mathematics 4 hours; 4 credits Issues of teaching and learning mathematics are examined including curriculum, resources and materials, management, standards, assessment, and the educational application of technology. Mathematical concepts, structures, and language are explored in relation to developing strategies for instruction and providing for students’ differing special needs. A fieldwork component of thirty-five (35) hours is included. Prerequisites: EDS 201, EDS 202, and a GPA of 2.75 or above Corequisite: EDS 307

EDS 401 Reflection and Analysis in Student Teaching in Secondary Education 2 hours; 2 credits Student teachers reflect upon the educational philosophies they have studied and the methodologies they are implementing as they develop their own philosophical approaches to teaching and learning. The teacher’s role in developing environments that are safe and nurturing as well as intellectually stimulating and challenging for all students is examined. Hazards to children, including child abuse and substance abuse, will be discussed. To be taken concurrently with EDS 400. Prerequisite: A GPA of 2.75 or above

Electrical Engineering Technology

(Interdisciplinary Coordinating Committee Chair: Professor Elliot Rothkopf, Engineering Technologies West Building (4N), Room 207. This two-year career program, accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (TAC/ABET, 111 Market Street, Suite 1050, Baltimore, MD 21202; telephone 1.410.347.7700), is designed to provide a theoretical and practical course of study in the basic principles and applications of electrical and electronics technology with emphasis on the computer. The curriculum includes classes in communications, microcomputers, and computer programming. Graduates are prepared for employment as systems field and customer engineers, facilities managers, junior programmers, and sales representatives in the computer and electronics industries and in firms using modern computer systems in PC support, communications, networks, programming, research, development, and sales. Graduates of the program may continue in the BS degree programs in Computer Science, Engineering Science, or Economics at CSI.

Electrical Engineering Technology (AAS)

General Education Requirements

ENG 111, ENG 151, COR 100, PED 190: 12 credits Whenever possible, these four courses should be completed within the first 36 credits.

Core Requirements (52 credits)

CSC 126 Introduction to Computer Science 4 credits
ENT 110 Engineering Graphics 2 credits
ELT 224 Electrical Circuit Analysis 4 credits
ELT 225 Electrical Circuit Analysis Laboratory 1 credit
ELT 213 Introduction to Electronics 1 credit
ENS 220 Engineering Electronics 4 credits
or
CSC 346 Switching and Automata Theory 4 credits
ENS 221 Digital Electronics Laboratory 2 credits
or
CSC 347 Computer Circuits Laboratory 2 credits
ELT 331 Electronics Laboratory 1 credit
ELT 334 Electronics 3 credits
ELT 344 Microprocessors: Theory and Applications 3 credits
ELT 345 Microprocessor Laboratory 1 credit
or
ENS 362/ CSC 462 Microprocessors 4 credits
ELT 442 Computer Hardware Technology 4 credits
PHY 110 College Physics I 3 credits
PHY 111 College Physics I Laboratory 1 credit
or
PHY 116 Physics I 4 credits
PHY 153 Waves, Optics, and Modern Physics 4 credits
or
PHY 156 Physics II 4 credits
A sequence of at least eight credits of mathematics
(1) One of the following:
MTH 223 Technical Calculus 4 credits
or
MTH 230 Calculus I with Pre-Calculus 6 credits
MTH 229 Calculus Computer Laboratory 1 credit
or
MTH 231 Analytic Geometry and Calculus 3 credits
MTH 229 Calculus Computer Laboratory 1 credit
(2) One of the following:
MTH 123 College Algebra and Trigonometry 4 credits
MTH 228 Discrete Mathematical Structures 4 credits
Technical Elective: 200 or above CSC, ELT, or ENS courses to be chosen in consultation with an advisor 6 credits

Total Credits Required: 64

Liberal Arts and Sciences Requirement:
All courses designated ELT and ENT are non-liberal arts and sciences.

Electrical Engineering Technology Courses

ELT 102 Introduction to Electrical and Electronic Technology
3 class hours, 2 laboratory hours; 4 credits
Introduction to the nature, measurement, generation, and utilization of electricity in our modern world including industrial and consumer electronics, computers, robots, communications.
Prerequisite: MTH 020 an appropriate score the CUNY Mathematics Assessment Test

ELT 213 Introduction to Electronics
3 laboratory hours; 1 credit
Introduction to the study of electronics. Diode and transistor characteristics are discussed and used in the construction of an electronic device. Students design, photo-etch, and assemble a printed circuit. Characteristics of the device and component voltages are measured.
Pre- or corequisite: MTH 030 or equivalent or higher

ELT 224 Electrical Circuit Analysis
4 hours; 4 credits
This course begins with physical electrical concepts and continues through the analysis of various specific circuit configurations with dc and ac sources. Topics include resistance capacitance, and inductance in series, parallel, and series-parallel connection, transient circuit analysis, ac analysis using phasors, single and polyphase power concepts, resonance and filters, network theorems, and transformer theory. Applications for the various circuits will also be discussed.
Pre- or corequisites: MTH 030 and ENT 101 or ELT 102

ELT 225 Electrical Circuit Analysis Laboratory
3 hours; 1 credit
Laboratory experiments will be performed using various instruments from analog meters to the digitizing oscilloscope. Experiments will be based upon validating the theory of ELT 224 Electrical Circuit Analysis as well as demonstrating the applications of the various circuit configurations. A detailed laboratory report will be written and/or oral presentation will be required for the experiments.
Pre- or corequisite: ELT 224

ELT 331 Electronics Laboratory
3 laboratory hours; 1 credit
Semiconductor circuitry and electronics laboratory instrumentation. Transistor amplification, biasing, and frequency response. Transistor power amplifiers. Power supplies. Negative feedback and linear integrated circuit amplifiers. Introduction to computer-aided circuit analysis using the personal computer.
Pre- or corequisites: MTH 123, ELT 224, ELT 213, ELT 334

ELT 334 Electronics
3 hours; 3 credits
Physics and characteristics of semiconductor solid state devices. Analysis and application of transistor circuits. Time varying signal behavior of solid device circuits and systems including power applications and frequency response. Introduction to modulation and communications.
Pre- or corequisites: MTH 123, ELT 224, ELT 213

ELT 344 Microprocessors: Theory and Applications
3 hours; 3 credits
Microprocessor architecture and memory. The instruction set. Programming in machine and assembly language. Input/output techniques, the stack and stack pointer, interrupts, timing, microprocessor design criteria. Logic circuit analysis and fault diagnosis; applications and development systems; waveform creation.
Prerequisites: ELT 240 and ELT 241

ELT 345 Microprocessor Laboratory
3 laboratory hours; 1 credit
Experiments including register, memory, and stack operation. Data and address bus structure, signature analysis and other fault location techniques. Commercial microprocessor trainers based on 8085 and 2920 and logic analyzers will be used.
Pre- or corequisite: ELT 344
In these courses, the designs are tested and evaluated using computer simulation or calculation. The actual construction, testing, and evaluation of student designs occurs in the laboratory courses. The most important design experience for all students is the capstone course ENS 480 Advance Engineering Design. This is a project-oriented course in which students are asked to participate in the design of a major real-world system.

The BS degree program offers three specializations: Computer Engineering, Electrical Engineering, and Mechanical Engineering. The specialization in Computer Engineering has been developed in collaboration with the Department of Computer Science.

The Engineering Science bachelor's degree program is accredited by the Engineering Accreditation Commission (EAC) of the Accreditation Board for Engineering and Technology, Inc. (ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012).

Engineering Science (AS)
The Associate in Science in Engineering Science program prepares students for continuation in the BS program in Engineering Science at the College of Staten Island or in engineering programs at other institutions.

General Education Requirements for the AS
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.
ECO 285 Economics for Engineers 4 credits

Core Requirements: 41 credits
ENS 100 Introduction to Engineering Science 2 credits
Calculus sequence chosen from the following: 10-13 credits
MTH 229 Calculus Computer Laboratory
MTH 230 Calculus I with Pre-Calculus
or
MTH 231 Analytic Geometry and Calculus I
MTH 232 Analytic Geometry and Calculus II
MTH 233 Analytic Geometry and Calculus III
or
MTH 235 Accelerated Calculus I
MTH 236 Accelerated Calculus II
PHY 120 General Physics I 3 credits
PHY 121 General Physics I Laboratory 1 credit
PHY 160 General Physics II 3 credits
PHY 161 General Physics II Laboratory 1 credit
PHY 240 Waves and Modern Physics 3 credits
ENT 110 Engineering Graphics 2 credits
CHM 141 General Chemistry I 3 credits
CHM 121 General Chemistry I Laboratory 1 credit
ENS 220 Introduction to Computer Engineering 4 credits
CSC 270 Introduction to Scientific Computing 4 credits
MTH 330 Applied Mathematical Analysis I 4 credits
ENS 250 Engineering Mechanics 3 credits

Electives: 3 credits
Total Credits Required: 60
Engineering Science (BS)

General Education Requirements for the BS
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 21-27 credits
Whenever possible, these courses should be completed within the first 60 credits.
1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)
2. Social Scientific Analysis: (3-4 credits)
3. The West and the World: (4 credits)
4. Textual, Aesthetic, and Linguistic Analysis: (3-4 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
   c. Arts and Communications: 200-level
5. Pluralism and Diversity Requirement: (0-4 credits)
   See section on general education requirements for approved course lists and complete details.

Pre-Major Requirements: 40 credits
Students beginning the Engineering Science program as freshmen should complete the following requirements:
ENS 100 Introduction to Engineering Science 2 credits
Calculus sequence chosen from the following: 10-13 credits
MTH 229 Calculus Computer Laboratory
MTH 230 Calculus I with Pre-Calculus or
MTH 231 Analytic Geometry and Calculus I
MTH 232 Analytic Geometry and Calculus II or
MTH 233 Analytic Geometry and Calculus III or
MTH 235 Accelerated Calculus I
MTH 236 Accelerated Calculus II
PHY 120 General Physics I 3 credits
PHY 121 General Physics I Laboratory 1 credit
PHY 160 General Physics II 3 credits
PHY 161 General Physics II Laboratory 1 credit
PHY 240 Waves and Modern Physics 3 credits
CHM 141 General Chemistry I 3 credits
CHM 121 General Chemistry I Laboratory 1 credit
ENS 220 Introduction to Computer Engineering 4 credits
ENT 110 Engineering Graphics 2 credits
CSC 126 Introduction to Computer Science or
CSC 270 Introduction to Scientific Computing or
ENS 250 Engineering Mechanics 3 credits

Major Requirements: 63-64 credits
MTH 330 Applied Mathematical Analysis I 4 credits
MTH 331 Probability and an Introduction to Mathematical Statistics or
MTH 331 Applied Mathematical Analysis II 4 credits
ENS 221 Digital Electronics Laboratory 2 credits
ENS 310 Thermodynamics 4 credits
ENS 362 Microprocessors 4 credits
ENS 336 Computer-Aided Engineering 4 credits
ENS 340 Circuits and Systems 4 credits
ENS 370 Control Systems 4 credits
ENS 383 Electrical Properties of Materials or
ENS 384 Mechanical Properties of Materials 3 credits or
ENS 385 Properties of Materials 4 credits
ENS 430 Digital Signal Processing or
ENS 450 Fluid Mechanics 4 credits
CSC 326 Information Structures or
ENS 440 Network Theory or
ENS 380 Mechanics of Solids 4 credits
CSC 332 Operating Systems I or
ENS 356 Theory of Electromagnetic Radiation or
ENS 316 Dynamics 4 credits

At least two of the following laboratories:
ENS 309 Basic Measurements Laboratory or
ENS 359 Mechanical Materials Laboratory 2 credits
ENS 439 Systems Laboratory or
ENS 459 Applied Mechanics Laboratory 2 credits
ENS 480 Advanced Engineering Design 4 credits
Four credits of technical electives approved by an engineering science adviser 4 credits
At least six credits of advanced ENS electives 6 credits
The total number of ENS credits must be at least 58 as approved by an engineering science adviser.

Computer Engineering Specialization:
Courses fulfilling the pre-major and major requirements should include:
CSC 326, CSC 332, ENS 309, ENS 362, ENS 383 or ENS 385, ENS 430, ENS 439; and courses fulfilling the technical electives chosen from among:
ENS 330, ENS 430, ENS 435, ENS 480, ENS 482, ENS 490; ENS 420, ENS 422, ENS 432, ENS 446.

Electrical Engineering Specialization:
Courses fulfilling the pre-major and major requirements should include:
MTH 331, ENS 309, ENS 356, ENS 362, ENS 383 or ENS 385, ENS 430, ENS 439, ENS 440; and courses fulfilling the technical electives chosen from among:
ENS 359, ENS 420, ENS 422, ENS 432, ENS 434, ENS 436, ENS 438, ENS 446, ENS 459.
Mechanical Engineering Specialization:
Courses fulfilling the pre-major and major requirements should include:
MTH 331, ENS 316, ENS 359, ENS 362, ENS 380, ENS 384 or ENS 385, ENS 450, ENS 459; and courses fulfilling the technical electives chosen from among: ENS 309, ENS 350, ENS 410, ENS 416, ENS 422, ENS 434, ENS 436, ENS 438, ENS 439, ENS 470.

Electives: 0-7 credits
Total Credits Required: 133

The Engineering Science program offers a number of senior-level electives for students interested in further work in a particular area of engineering and for students interested in graduate work in engineering. Students should consult an adviser in the program for details. Concentrations are available in the following areas:
Computer Engineering - Communications and Networking
Computer Engineering - Operating Systems
Computer Engineering - Architecture and Organization
Computer Engineering - Artificial Intelligence
Electrical Engineering - Electronics
Electrical Engineering - Control Systems
Electrical Engineering - Communication Systems
Electrical Engineering - Energy Systems
Mechanical Engineering - Heat Transfer
Mechanical Engineering - Fluids and Aerodynamics
Mechanical Engineering - Biomedical Applications
Mechanical Engineering - Environmental Control

Liberal Arts and Sciences Requirement
Of the 133 credits required for the BS in Engineering Science, at least 66 must be in liberal arts and sciences courses. Most courses designated ENS are non-liberal arts and sciences; those ENS courses that are double listed in mathematics (MTH) or physics (PHY) are liberal arts and sciences.

Engineering Science
Transfer Program
Students who have graduated with a two-year Associate in Applied Science (AAS) degree in one of the engineering technologies can be admitted to the BS degree program. Their previous courses are evaluated, and they are usually required to take such bridging courses as PHY 230 Physics for Engineers and CSC 126 Introduction to Computer Science or CSC 270 Introduction to Scientific Computing, as well as additional mathematics courses.

The requirements for the transfer program are identical to those given above for the BS in Engineering Science.

Pre-Major Requirements:
Same as BS in Engineering Science

Major Requirements:
Same as BS in Engineering Science

Total Credits Required: 133

Minor in Electrical Engineering Technology
Minor Requirements: 16 credits
ELT 102 Introduction to Electrical and Electronic Technology 4 credits

Courses
ENS 100 Introduction to Engineering Science
4 hours; 2 credits
Introduction to the engineering science curriculum and engineering disciplines, organizations, and ethics; basic engineering parameters; engineering standards and codes, principles for engineering data acquisition and presentations, and effective experimentation; engineering statistics and data analysis; problem solving and case studies illustrating engineering solutions.
Prerequisites: Successful completion of the CUNY Basic Skills Tests

ENS 220 Introduction to Computer Engineering
4 hours; 4 credits
Number systems and codes. Logic functions, gates and assertion levels. Combinational circuit design and minimization. MSI and LSI circuits and their applications. Sequential machine fundamentals, analysis, and design.
Pre- or corequisites: CSC 126 or CSC 270

ENS 221 Digital Electronics Laboratory
4 laboratory hours; 2 credits
Design, construction, testing, and evaluation of digital systems. Counters, registers, and multiplexers are used to build combinational circuits and sequential machines, including programmable system controllers.
Prerequisite: ENS 220

ENS 250 Engineering Mechanics
3 hours; 3 credits
Prerequisites: PHY 120 and PHY 121 or PHY 230
Pre- or corequisite: MTH 233 or MTH 236

ENS 309 Basic Measurements Laboratory
(Also PHY 309)
4 laboratory hours; 2 credits
Basic instrumentation and precise measurements in engineering applications. Design, construction, testing, and analysis of simple analog systems using the circuit design tools and simulation software. Comparison of measured data to simulated data and reconciliation of discrepancies is emphasized.
Prerequisite: ENS 340

ENS 310 Thermodynamics
(Also PHY 310)
4 hours; 4 credits
Prerequisites: PHY 160 or PHY 230
Pre- or corequisite: MTH 233 or MTH 236
ENS 316  Dynamics  
(Also PHY 316)  
4 hours; 4 credits  
Prerequisites: ENS 250 and CSC 270 or CSC 126  
Pre- or corequisite: MTH 330

ENS 336  Computer-Aided Engineering  
4 hours; 4 credits  
Application of numerical analysis and computer simulation to the solution of engineering design problems. Topics include optimization and error analysis, solution of nonlinear equations, systems of algebraic equations, data analysis, regression and interpolation, numerical differentiation and integration, solution of ordinary and partial differential equations, finite difference and finite element methods. Theory will be implemented with several projects emphasizing design applications. 
Prerequisites: CSC 126 or CSC 270  
Pre- or corequisite: MTH 330

ENS 340  Circuits and Systems  
4 hours; 4 credits  
Prerequisites: CSC 126 or CSC 270, and PHY 160 or PHY 230  
Pre- or corequisite: MTH 330

ENS 350  Transport Processes  
(Also PHY 350)  
4 hours; 4 credits  
Introduction to momentum, heat, and mass transfer. Introduction to continuous media, control volume formulation of conservation laws, momentum and energy consideration of fluid flow, heat transfer by conduction and radiation, mass diffusion, analogies and breakdown of analogies among momentum, heat, and mass transfer. 
Prerequisites: ENS 310 and CSC 270 or CSC 126  
Pre- or corequisite: MTH 330

ENS 356  Theory of Electromagnetic Radiation  
(Also PHY 356)  
4 hours; 4 credits  
Production, propagation, scattering, and absorption of electromagnetic waves. Maxwell’s equations in differential form, wave equation, energy transfer, and the behavior of waves at metallic and dielectric surfaces. Production of radiation by dipoles and its absorption. Design of antennas, wave guides, and other applications. 
Prerequisite: PHY 160 and CSC 270 or CSC 126  
Pre- or corequisite: MTH 331

ENS 359  Mechanical Materials Laboratory  
4 hours; 2 credits  
Pre- or corequisite: ENS 380

ENS 362  Microprocessors  
(Also CSC 462)  
2 class hours, 4 laboratory hours; 4 credits  
Introduction to 8086 architecture using the SDK-86 single-board computer. Interfacing of programmable chips including the 8255 P10, 8259 Interrupt controller, 8254 counter/timer, 8279 keyboard/display controller, and ADC 0804 analog to digital converter. Testing and debugging of assembly language programs to exercise the interface. Troubleshoot with oscilloscope and Debug. 
Prerequisites: ENS 220 and ENS 221, or CSC 346 and CSC 347

ENS 370  Control Systems  
4 hours; 4 credits  
Prerequisites: ENS 310, ENS 336, and ENS 340

ENS 380  Mechanics of Solids  
4 hours; 4 credits  
Prerequisites: CSC 126 or CSC 270 and ENS 250  
Pre- or corequisite: MTH 330

ENS 383  Electrical Properties of Materials  
(Also PHY 383)  
3 hours; 3 credits  
Electrons in atoms, electrons in crystals, contacts between materials and p-n junctions, bipolar transistors, optoelectronic devices, field-effect transistors, charge transfer devices, integrated circuits, solid state lasers. Photo cells and LEDs. 
Prerequisites: PHY 240, and CSC 126 or CSC 270

ENS 384  Mechanical Properties of Materials  
(Also PHY 384)  
3 hours; 3 credits  
Prerequisites: ENS 310 and CSC 270

ENS 385  Properties of Materials  
(Also PHY 385)  
4 hours; 4 credits  
Prerequisite: Physics 240 or permission of the instructor
ENS 410  Heat Transfer
4 hours; 4 credits
Prerequisite: ENS 450

ENS 416  Applied Elasticity
4 hours; 4 credits
Introduction to the theory of elasticity and application of advanced strength of materials concepts to the design of elements of machines and structures.
Prerequisite: ENS 380
Pre- or corequisite: MTH 331 and ENS 336

ENS 420  Electronic Circuits
4 hours; 4 credits
Prerequisite: ENS 220 or equivalent

ENS 422  Signals and Noise
4 hours; 4 credits
Application of probability theory to engineering problems. Topics include random signal models and their uses, linear prediction and signal modeling, filtering of stationary random signals, parameter identification by the maximum likelihood methods, noise reduction and signal enhancement filters, quantization noise, linear estimation and detection of signals.
Prerequisite: ENS 340

ENS 430  Digital Signal Processing
4 hours; 4 credits
Prerequisites: CSC 346 or ENS 220

ENS 432  Digital and Analog Communication Systems
4 hours; 4 credits
Prerequisite: ENS 340

ENS 434  Energy Conversion
4 hours; 4 credits
Fundamental principles of conversion of such prime energy sources as chemical, nuclear, and solar into thermal, electrical, mechanical, and other forms of energy. Applications of thermochemical, electrochemical, and electromagnetic devices. Power plants and energy transmission. Direct energy conversion.
Prerequisite: ENS 310

ENS 436  Electric Energy Systems
4 hours; 4 credits
Prerequisite: ENS 340

ENS 438  Power Plant Design and Analysis
4 hours; 4 credits
Prerequisite: ENS 310

ENS 439  Systems Laboratory
4 laboratory hours; 2 credits
Students will undertake projects illustrating the principles, operation, and characteristics of electrical and electromechanical systems, operational amplifiers, digital filters, and transducers. Additional projects will involve modulation, transmission, and detection in analog and digital communication systems, and signal and image processing techniques. Projects will be designed and simulated, using the appropriate hardware and software tools. Measured data will be compared to simulated results. These projects fulfill the course objective of translation of systems theory into operating circuitry and systems.
Prerequisite: ENS 309

ENS 440  Network Theory
4 hours; 4 credits
Prerequisite: ENS 340

ENS 446  Computer Architecture
(Also CSC 446)
4 hours; 4 credits
Prerequisite: CSC 346 or ENS 220

ENS 450  Fluid Mechanics
(Also PHY 450)
4 hours; 4 credits
Prerequisite: ENS 310
Pre- or corequisite: MTH 330
ENS 459 Applied Mechanics Laboratory
4 hours; 4 credits
Prerequisite: ENS 309 or ENS 359
Pre- or corequisite: ENS 450

ENS 470 Introduction to Environmental Engineering
4 hours; 4 credits
Principles of systems analysis as applied to environmental problems. Topics to be chosen from air and water pollution, energy utilization, thermal pollution, transportation systems, solid and liquid waste disposal, etc.
Prerequisite: ENS 310 or permission of the instructor

ENS 480 Advanced Engineering Design
2 lecture hours, 4 laboratory hours; 4 credits
An integration of the analytical techniques of engineering science and mathematics, and their application to engineering design. Overall design process: figures of merit, empiricism, and mathematical modeling; quantitative techniques for optimization; computer-aided design. Students are required to complete a major design project.
Prerequisites: ENS 362, ENS 370, ENS 439 or ENS 459, ECO 285

English
(Bachelor of Arts, Minor, Concentration in Dramatic Literature; Master of Arts, see Graduate Catalog)
Department of English, Speech, and World Literature
Chair: Professor Arnold Kantrowitz, English, Speech, and World Literature/Modern Languages Building (2S), Room 218.
The Department of English, Speech, and World Literature offers a major and a minor in English with options in literature, writing, and linguistics, and a minor in Speech. A concentration in Dramatic Literature is offered in cooperation with the Department of Performing and Creative Arts. (See also section on Dramatic Arts.)

English (BA)

General Education Requirements for the BA
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 28–47 credits
Whenever possible, these courses should be completed within the first 60 credits.
1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)
2. Social Scientific Analysis: (7-8 credits)
3. The West and the World: (4 credits)
4. Textual, Aesthetic, and Linguistic Analysis: (6-8 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level

Arts and Communications: 200-level
5. Pluralism and Diversity Requirement: (0-4 credits)
6. Foreign Language: (0-12 credits)

See section on general education requirements for approved course lists and complete details.

Major Requirements: 36-37 credits

Literature Option
Students majoring in English with an option in literature must complete 36 credits of courses in English beyond the general education requirements. Up to eight credits (of nine courses) may be in ENL writing courses and/or linguistics courses. With the permission of the chairperson, four credits may be an ENH 200-level course. The remaining courses must be ENL courses. Students must satisfy the following requirements within the 36 credits:
A. Literary Approaches
   One course from each of the following:
   1. A literary period or movement prior to 1800 or Shakespeare
   2. A literary period or movement after 1800
   3. A specific literary genre
   4. A major figure

B. Coverage Areas
   One course from each of the following:
   1. English literature
   2. American literature
   3. Literature translated into English
   4. Literature written by women, American minorities, or Third World authors

C. At least two (of the nine) courses (eight credits) must deal primarily with material written before 1800.
The same course may be used to satisfy more than one of these requirements.

Writing Option
Students majoring in English with an option in writing must complete 36 credits of courses in English beyond the general education requirements.
These courses must be at the 300 or 400 level except up to eight credits may be in 200-level ENL writing courses. The 36 credits must include 20 credits in such writing courses and 16 credits in literature, of which at least 12 must be ENL courses. Literature courses must be from at least two of the Coverage Areas listed above under Literature Option.

Linguistics Option
Students majoring in English with an option in linguistics must complete 36 credits of courses in English beyond the general education requirements.
The 36 credits must include at least 16 credits in linguistics and at least 12 credits in ENL literature courses drawn from at least two of the Coverage Areas listed above. Up to eight credits in ENL writing courses or in speech courses may be taken.
Students who take more than 12 credits in literature may count one ENH or ENG 300 course toward the degree.

Linguistics courses may be selected from the following:
ENL 222 English Pronunciation 3 credits
ENL 422 Introduction to Linguistics 4 credits
ENL 423  Modern English Grammar  4 credits
ENL 424  Historical Linguistics  4 credits
ENL 425  History of the English Language  4 credits
ENL 426  Language Acquisition and Psycholinguistics  4 credits
ENL 427  Sociology of Language  4 credits

Dramatic Literature Concentration
At least 24 credits of courses in dramatic literature (DRA 260, 261, 460; and DRA/ENG, DRA/ENL, DRA/FRN, or DRA/SPN courses) including at least eight credits of courses at the 300 or 400 level. The 24 credits must include at least one course in dramatic literature before 1800 and at least one course in dramatic literature after 1800. At least 12 credits in dramatic arts courses including at least three credits at the 300 or 400 level. The 12 credits must include courses in at least two areas of dramatic arts (production, acting, directing, set design, lighting and costume design, or technical theater).

Electives: 42-43 credits
Total Credits Required: 120

Honors
Graduating English majors may apply for graduation with Honors in English. Candidates must have a grade point average of 3.5 or better and be recommended for Honors by the English Department Honors Committee after submitting a paper for its consideration.

The paper submitted need not be new work; it may be a revision or extension of a paper previously submitted in a course. Research papers, critical papers, and original works of prose or poetry are acceptable. Candidates should ask an English Department faculty member of their choosing to supervise the preparation of the paper; papers submitted to the Honors Committee must have the signature of this faculty member on the title page.

Honors projects should demonstrate superior originality, depth, and research, and critical or creative intelligence. Papers must be technically correct and research papers must have accurate MLA citations.

Students planning to apply for graduation with Honors in English are strongly urged to begin preparation of their honors projects before the semester of their graduation. Papers for majors graduating in January must be submitted to the English Department Office (Building 2S, Room 218) by November 20; papers for majors graduating in June or August by April 1.

Minors
Minor in Linguistics
At least 12 credits of courses in linguistics.

Minor in Literature
At least 12 credits in ENL literature courses, one course in literature before 1800, courses from two of the Literary Approaches groupings, and courses from two Coverage Areas.

Minor in Speech
At least 10 credits of courses in speech.

Minor in Writing
At least 12 credits in writing (ENL), at least one at or above the 300 level.

Courses
CUNY/ACT Reading Skills and Writing Sample Tests
Students who fail the CUNY/ACT Reading Skills Test (C/ARST) on entrance are required to take the appropriate 0-level reading course in their first semester.

Students who score 6 on the CUNY/ACT Writing Sample Test (C/AWST) on entrance are required to take the appropriate 0-level writing course within their first 12 equated credits.

Students who score 5 or below on the C/AWST on entrance are required to take the appropriate 0-level writing course within their first eight equated credits.

Students needing remediation are expected to complete the remedial courses that qualify them to enter college-level writing courses in one year, which may include, in addition to two semesters, a pre-freshman and a post-freshman Summer Immersion course and a Winter Intersession. Students for whom English is a second language (ESL students) have two academic years to pass the basic skills tests in reading and writing. The tests are administered at the end of every academic intervention that students complete (remedial or ESL courses, Summer Immersion, January Intersession, or Tutorial Workshops).

0-Level Courses in Reading and Writing
The following courses are designed for native speakers of English who fail the CUNY/ACT Reading Skills Test (C/ARST) and/or the CUNY/ACT Writing Sample Test (C/AWST).

ENG 001  Developmental Writing I
4 hours; 0 credit, 4 equated credits
Intensive work in writing with fluency and correctness in a variety of modes, both informal and formal.
Prerequisite: Score of 2-6 on CUNY/ACT Writing Sample Test

ENG 002  Basic Reading
4 hours; 0 credit, 4 equated credits
Intensive work on reading, both fiction and nonfiction. Emphasis on decoding, fluency, and accuracy. Frequent writing.
Prerequisite: Failing CUNY/ACT Reading Skills Test, interview and placement by English Department Reading Coordinator or designer

ENG 003  Developmental Writing II
4 hours; 0 credit, 4 equated credits
Intensive work in revising, proofreading, and editing.
Prerequisite: Score of 2-6 on CUNY/ACT Writing Sample Test and passing grade in ENG 001

ENG 004  Developmental Reading
4 hours; 0 credit, 4 equated credits
Introduction to college-level reading and techniques for improving comprehension. Frequent writing.
Prerequisite: Failing CUNY/ACT Reading Skills Test and either interview and placement by English Department Reading Coordinator or designer or passing grade in ENG 002

ENG 014  Reading for College
4 hours; 0 credit, 4 equated credits
Intensive work in college-level reading and techniques for improving comprehension. Frequent writing. An additional hour each week will be scheduled in the English Department Skills Center for instruction and practice in test taking.
The following courses are designed for those students who are not native speakers of English who fail the CUNY/ACT Reading Skills Test (C/ARST) and/or the CUNY/ACT Writing Sample Test (C/AWST).

**ENG 007 Developmental English for Non-Native Speakers**
4 hours; 0 credit, 4 equated credits
Intensive work in oral and written expression.
Prerequisites: Failing CUNY/ACT Writing Sample Test, interview and placement by English Department ESL Coordinator or designer

**ENG 008 Developmental Writing for Non-Native Speakers of English**
4 hours; 0 credit, 4 equated credits
Intensive work in writing.
Prerequisites: Failing CUNY/ACT Writing Sample Test, interview and placement by English Department ESL Coordinator or designer

**ENG 009 Basic Reading for Non-Native Speakers of English**
4 hours; 0 credit, 4 equated credits
Intensive study of the sounds and spellings of English.
Prerequisites: Failing CUNY/ACT Reading Skills Test, interview and placement by English Department Reading Coordinator or designer

**ENG 010 Developmental Reading for Non-Native Speakers of English**
4 hours; 0 credit, 4 equated credits
Introduction to college-level reading. Techniques for vocabulary expansion will be stressed.
Prerequisites: Failing CUNY/ACT Reading Skills Test, interview and placement by English Department Reading Coordinator or designer

**ENG 037 Writing for Non-Native Speakers of English**
4 hours; 0 credit, 4 equated credits
Practice in writing the complete essay with review of necessary basic skills.
Prerequisites: Failing CUNY/ACT Writing Sample Test, interview and placement by English Department ESL Coordinator or designer

**ENG 039 Reading for Non-Native Speakers of English**
4 hours; 0 credit, 4 equated credits
Emphasis on comprehension of longer fictional and textbook material.
Prerequisites: Failing CUNY/ACT Reading Skills Test, interview and placement by English Department ESL Coordinator or designer

**Writing Courses**
All students in the College are required to complete ENG 111 Communications Workshop and ENG 151 College Writing.

**ENG 111 Introduction to College Writing**
4 hours; 3 credits
Introduction to and development of critical and analytic writing/reading/thinking skills through class discussion of student work and selected texts. Intensive instruction in techniques for the planning, drafting, revising, and editing of college-level expository essays. Introduction to using the various research options available at the CSI Library.
Prerequisite: Successful completion of the CUNY/ACT Writing Sample and Reading Skills Tests.
Students entering the Baccalaureate Division as freshmen are required to enroll in a Baccalaureate Section of ENG 111.

**ENG 151 College Writing**
4 hours; 4 credits
English 151 builds on the work of English 111. It emphasizes expository and analytic writing and longer papers. Attention to reading, library skills, and research methods. Sections may be focused on particular themes, to be announced in the Schedule of Classes.
Prerequisites: ENG 111 and passing the CUNY/ACT Reading Skills Test

**Literature Courses**

**ENH 201 British Literature to 1800**
4 hours; 4 credits
A study of British literature in its cultural context from the early periods through the eighteenth century. (literature)
Prerequisites: ENG 111, ENG 151

**ENH 202 British Literature since 1800**
4 hours; 4 credits
A study of British literature in its cultural context since the early nineteenth century. Readings may include literature from Ireland, Scotland, and parts of the British Commonwealth in addition to literature from England. (literature)
Prerequisites: ENG 111, ENG 151

**ENH 203 Literary History of the United States to 1855**
4 hours; 4 credits
American literary expression, ranging from the histories of the Puritans to the poetry of Walt Whitman, studied in the context of the developing American culture. (literature)
Prerequisites: ENG 111, ENG 151

**ENH 204 Literary History of the United States since 1855**
4 hours; 4 credits
A history of American literary expression, ranging from the poetry of Dickinson to the novels of Hemingway and Faulkner. Special attention will be given to placing the works in the context of the developing American culture. (literature)
Prerequisites: ENG 111, ENG 151

**ENH 205 Classics of European Literature**
4 hours; 4 credits
A study of the principal forms, themes, and values of older European literature from Greek times to the Renaissance. (literature)
Prerequisites: ENG 111, ENG 151

**ENH 206 Classics of Modern World Literature**
4 hours; 4 credits
A study of major works and movements in modern and contemporary world literature. (literature)
Prerequisites: ENG 111, ENG 151

**ENH 207 Classics of Asian Literature**
4 hours; 4 credits
A study of classical and modern works from China, India, Japan, Indo-China, and the Near East. (literature) (P&D)
Prerequisites: ENG 111, ENG 151
ENH 208 Contemporary Literature
4 hours; 4 credits
An examination of important figures and trends in literature since World War II. (literature)
Prerequisites: ENG 111, ENG 151
ENH 210  Modes of Fiction
4 hours; 4 credits
An examination of various types of fiction. Special attention to such elements as plot, character development, setting, theme, point of view, style. (literature)
Prerequisites: ENG 111, ENG 151

ENH 211  Modes of Poetry
4 hours; 4 credits
A critical study of the variety of poetry, focusing on such recurring themes as the artist, the hero, belief and alienation, self and society, fantasy and reality, and love. (literature)
Prerequisites: ENG 111, ENG 151

ENH 212  Modes of Drama
(Also DRA 215)
4 hours; 4 credits
An introduction to the variety of forms and themes of dramatic literature. Major problems treated by dramatists will be examined, as well as genres: tragedy, comedy, farce, melodrama, tragicomedy, and the thesis play. (literature) (arts & com.)
Prerequisites: ENG 111, ENG 151

ENH 213  Nonfiction
4 hours; 4 credits
An examination of great works of prose focusing on the ways they have been used to illuminate the self and society. Readings will be drawn from a variety of nonfiction genres such as autobiography, biography, letters and journals, journalism, essays, criticism, historical accounts and analysis, manifestos, theoretical treatises. (literature)
Prerequisites: ENG 111, ENG 151

ENH 214  Trends in Literature and Film
4 hours; 4 credits
An investigation into the ways in which film has become a literary genre and what seem to be the future relationships between literature and film. (literature)
Prerequisites: ENG 111, ENG 151

ENH 215  Literature and Humanities
4 hours; 4 credits
The treatment of major humanistic concerns in literature. The specific focus of each section will be announced in the Schedule of Classes. (literature)
Prerequisites: ENG 111, ENG 151

ENH 216  The Bible and Later Literature
4 hours; 4 credits
A study of the Bible as a literary work and its importance as an influence on later literature. (literature)
Prerequisites: ENG 111, ENG 151

ENH 217  Introduction to Shakespeare
4 hours; 4 credits
Representative works from across the spectrum of Shakespeare’s career. The course is designed to introduce students to Shakespeare’s language, interests, visions, and styles and to give them a sense of his historical context. (literature)
Prerequisite: ENG 111, ENG 151

ENH 221  African American Literature
(Also AFA 221)
4 hours; 4 credits
A sociological examination of African American literature as it has developed from the dynamic interaction between black and white communities and movements within the black community. Works by African American authors will be analyzed with respect to the dominant social forces of their times and the ideas about the historically persistent polemics of assimilation, separation, or cultural pluralism, and their relevance for Americans of African descent in their struggle for equality. (literature) (P&D)
Prerequisites: ENG 111, ENG 151

ENH 222  Women and Literature
(Also WMS 222)
4 hours; 4 credits
A study of works by and about women drawn from a variety of periods and genres. (literature) (P&D)
Prerequisites: ENG 111, ENG 151

ENH 223  Mythology of Women
(Also WMS 263)
4 hours; 4 credits
An analysis of myths that continue to influence the way men look at women and women look at themselves. (literature) (P&D)
Prerequisites: ENG 111, ENG 151

ENH 224  U.S. Literature: Multicultural Perspectives
4 hours; 4 credits
Literature by and about members of ethnic, racial, religious, sexual, and other minorities in the U.S. (arts & com.) (P&D)
Prerequisite: ENG 111, ENG 151

Literature and Writing Courses
These courses, with few exceptions, are at the advanced level and are intended for students who have completed their requirements in English and wish additional electives and for students who are majoring in English. These courses are identified by the ALPHA prefix ENL.

ENL 214  Principles of Editorial Style: Integration of Writing and Graphics
(Also COM 214)
4 hours; 3 credits
Editorial style as total concept, including both visual design and written concept. An introduction to professional writing, editorial concepts, and the publication process. Focus on brochure, newsletter, magazine, advertisement, and book structure; their meaning and significance. Writing and editing for such publications and for the marketplace, with special emphasis on audience and purpose and the development of a variety of editorial skills, such as proofreading, reorganizing, rewriting, collaborating, and coauthoring.
Prerequisite: ENG 151 or permission of instructor. (Students who successfully complete COM 211 may not register for COM/ENL 214.)

ENL 230  History of Print Media
(Also COM 230)
4 hours; 4 credits
An introductory survey of the evolution of newspapers, periodicals, and the publishing industry, focusing on technological developments, major innovations, legal and ethical issues, and societal impact.
Prerequisites: ENG 151 and COM 150
ENL 241  Communications Design Workshop: Writing and Design  
(Also COM 241)  
4 hours; 3 credits  
Theoretical and practical approaches to the interrelationship of writing, print, and video graphics. Analysis of the role of subject, voice, and audience in determining appropriate visual and verbal forms. Practical problems of graphic and video reproduction and execution with applications through desktop publishing and small format TV. Each student works through a number of design problems and completes various problems and various projects of his/her choice.  
Prerequisite: ENG 151

ENL 265  Journal I  
4 hours; 4 credits  
During the semester, each student keeps a journal, including fragments of responses to whatever moments and situations (personal, domestic, social, cultural) he/she wishes to write about. Students will be encouraged to develop these fragments and their connections as an understanding of them deepens.  
Prerequisite: ENG 151

ENL 267  Workshop in Creative Writing  
4 hours; 4 credits  
A general introduction to the field in which students work on projects of their own choosing drawn from a variety of genres. Class discussions of students’ work and the problems of creative writing. Selected readings.  
Prerequisite: ENG 151

ENL 268  Writing Fiction I  
4 hours; 4 credits  
A study of the techniques of writing fiction. Students will work on short stories and longer works, with a concentration on individual projects.  
Prerequisite: ENG 151

ENL 270  Writing Poetry I  
4 hours; 4 credits  
An introduction to writing poetry. Class discussions of students’ work and the problems of creating poetry. Selected readings.  
Prerequisite: ENG 151

ENL 272  Playwriting I  
4 hours; 4 credits  
A course that will start with the writing of short dramatic scenes and will culminate in the writing of a one-act play or a single act of a larger play. Attendance at productions and reading from dramatic literature will be encouraged.  
Prerequisite: ENG 151

ENL 274  Introduction to Screen Writing  
(Also CIN 274)  
4 hours; 4 credits  
Writing for television and film. Class discussions of students’ work and the problems of creating in this field. Selected readings.  
Prerequisite: ENG 151

ENL 277  Introduction to Journalism  
(Also COM 277)  
4 hours; 4 credits  
A general introduction to the principles of journalism. Work on reporting, editing, and layout, and an examination of distribution/feedback systems.  
Prerequisite: ENG 151

ENL 280  Introduction to Women’s Written Expression  
(Also WMS 280)  
4 hours; 4 credits  
A course to develop skill in both imaginative and critical writing based primarily on the students’ personal experiences, with some analysis of poetry and short stories written by selected women authors.  
Prerequisite: ENG 151

ENL 281  Writing and Peer Tutoring  
4 class hours, 2 laboratory hours; 4 credits  
Provides an in-depth knowledge of the skills of exposition and advanced prose style through the writing and criticism of expository essays. The student will work with students in need of help in the College’s English Learning Center for two hours per week in addition to the four hours of classroom work.  
Prerequisite: ENG 151, letter of recommendation from the student’s ENG 151 instructor, and permission of the instructor.

ENL 300  The Western Literary Tradition I  
4 hours; 4 credits  
An examination of texts by Chaucer, Shakespeare, Milton, and Pope or Swift. Readings in other English and continental authors, designed to help place these major figures in a broad cultural context.  
Prerequisite: An ENH 200-level course

ENL 301  The Western Literary Tradition II  
4 hours; 4 credits  
An examination of representative texts from the three major modern literary movements: Romanticism, Realism, Modernism. English and American works originally not written in English will be considered, as well as works by women and American minority authors.  
Prerequisite: An ENH 200-level course

ENL 302  Oral Interpretation of Literature  
4 hours; 4 credits  
The oral interpretation of poetry, drama, fiction, and historical speeches. Students will prepare for oral performance by reading aloud, raising questions of meaning, doing library research, writing paraphrases, comparing other interpretations, and consulting an author’s other works.  
Pre- or Corequisite: An ENH 200-level course

ENL 312  Theories of Mass Media  
(Also COM 312)  
4 hours; 4 credits  
A survey of contemporary communications theory defining the language, structure, systems, effects, and rhetoric of the mass media. Practical examples in journalism, advertising, publishing, radio, television, and film will be analyzed.  
Prerequisite: ENG 151

ENL 314  Classical Greek and Roman Literature  
4 hours; 4 credits  
Readings in translation and discussion of works from Homer to Tacitus. Special attention will be given to the characteristics of specific genres.  
Prerequisite: An ENH 200-level course

ENL 315  Early Celtic Literature  
4 hours; 4 credits  
Examines older literature of the Celtic languages of the British Isles and northwest Europe. Mythological, heroic, Romance, and historical works may be considered. All works will be read in translation.  
Prerequisite: An ENH 200-level course
ENL 316 Medieval Literature
4 hours; 4 credits
A study of the European contemporaries of Chaucer, including works dealing with Arthurian legends.
Prerequisite: An ENH 200-level course

ENL 317 English Literature prior to the Renaissance
4 hours; 4 credits
An intensive study of Old English and English Medieval literature through the fifteenth century.
Prerequisite: An ENH 200-level course

ENL 318 English Literature of the Renaissance
4 hours; 4 credits
A generic and thematic study of the nondramatic literature of sixteenth- and seventeenth-century England, with emphasis on Spenser and the Sidney circle.
Prerequisite: An ENH 200-level course

ENL 319 European Literature of the Renaissance and Seventeenth Century
4 hours; 4 credits
Readings in translation of the major works of European literature from the late fourteenth century through the seventeenth century.
Prerequisite: An ENH 200-level course

ENL 320 English Literature of the Seventeenth Century
4 hours; 4 credits
An intensive study of poets and prose writers of the period, from John Donne through John Dryden.
Prerequisite: An ENH 200-level course

ENL 322 English Literature in the Age of Reason
4 hours; 4 credits
A study of eighteenth-century England with emphasis on such authors as Addison, Steele, Swift, and Pope, and on the change in society during the period of the Enlightenment.
Prerequisite: An ENH 200-level course

ENL 324 Readings in English Romanticism
4 hours; 4 credits
A study of selected texts by Blake, Wordsworth, Coleridge, Shelley, Byron, Keats, and others.
Prerequisite: An ENH 200-level course

ENL 325 Readings in Victorian Literature
4 hours; 4 credits
A study of important works of poetry, fiction, and nonfiction of the period by such authors as Tennyson, Hopkins, Dickens, G. Eliot, Arnold, Mill, Hardy.
Prerequisite: An ENH 200-level course

ENL 326 European Literature: 1780-1850
4 hours; 4 credits
Readings in European literature and related intellectual texts of the Romantic period with a view toward tracing the emergence of a distinctively modern consciousness.
Prerequisite: A 200-level English course

ENL 330 The American Renaissance
4 hours; 4 credits
A detailed study of selected texts by Emerson, Thoreau, Hawthorne, Melville, and Whitman. The authors and their works are considered in relation to the social and philosophical backgrounds of their time.
Prerequisite: An ENH 200-level course

ENL 331 The Modernists I
4 hours; 4 credits
A study of the development of the modernist sensibility from the symbolists through World War I.
Prerequisite: An ENH 200-level course

ENL 332 The Modernists II
4 hours; 4 credits
A study of the modernist sensibility from the 1920s through the Existentialists.
Prerequisite: A 200-level English course

ENL 333 Modern Irish Writers
4 hours; 4 credits
A study of Anglo-Irish literature since the Renaissance, with emphasis on Yeats and Joyce. Includes readings from Synge, O’Casey, Kinsella, Behan, O’Flaherty, and John Montague.
Prerequisite: An ENH 200-level course

ENL 334 Modern Russian Literature
4 hours; 4 credits
A study of Russian literature of the nineteenth and twentieth centuries.
Prerequisite: A 200-level English course

ENL 335 Modern Asian Literature
4 hours; 4 credits
An exploration of the world of Asia through literature. Works of major modern writers of India, China, Japan, and Vietnam will be studied with a view to understanding changing beliefs and values. (P&D)
Prerequisite: An ENH 200-level course

ENL 337 The Comic Vision
4 hours; 4 credits
An examination of comedy as a literary genre. Works will range from classical to modern and will cover the forms of comedy from farce to tragicomedy.
Prerequisite: An ENH 200-level course.

ENL 338 Epic and Romance
4 hours; 4 credits
Study of these genres, their similarities and dissimilarities, from classical and medieval times to the present.
Prerequisite: An ENH 200-level course

ENL 339 The Tragic Vision
4 hours; 4 credits
Themes and images evident in the Western tragic tradition, in all literary genres, will be examined. Relevant criticism will be studied to develop a framework for evaluation.
Prerequisite: An ENH 200-level course

ENL 340 Autobiography and Biography
4 hours; 4 credits
An analysis of the autobiographical genre with attention to its evolution from the Middle Ages to the present. Biography will be discussed in contrast: the form of each; the structure of truth and illusion; the role of memory and imagination; the interaction of past and present; and the relation of the individual to society.
Prerequisite: An ENH 200-level course
ENL 341 Studies in Eighteenth-Century Fiction
4 hours; 4 credits
A study of selected novels by Defoe, Richardson, Fielding, Smollett, Swift, Sterne, Prevost, Voltaire, Diderot, Laclos, Wieland, Goethe, and others who contributed to the development of prose fiction.
Prerequisite: An ENH 200-level course

ENL 342 Studies in Nineteenth-Century English Fiction
4 hours; 4 credits
A study of major English novelists from Jane Austen through George Gissing.
Prerequisite: An ENH 200-level course

ENL 343 Studies in Nineteenth-Century European Fiction
4 hours; 4 credits
Readings in European fiction, including Hugo, Balzac, Stendhal, Zola, Turgenev, Dostoyevsky, and Tolstoy.
Prerequisite: An ENH 200-level course

ENL 344 American Fiction from 1885 until World War II
4 hours; 4 credits
An examination of major figures and movements in American fiction from the Civil War until World War II.
Prerequisite: An ENH 200-level course

ENL 345 American Fiction since World War II
4 hours; 4 credits
An examination of significant short fiction and novels since World War II together with a consideration of major movements and trends.
Prerequisite: An ENH 200-level course

ENL 346 Modern English Fiction through World War II
4 hours; 4 credits
A study of the development of the English novel since 1900 with special attention to such figures as Conrad, Lawrence, Joyce, Woolf, and Graham Greene.
Prerequisite: An ENH 200-level course

ENL 347 Major Twentieth-Century Novelists
4 hours; 4 credits
A study of major modern works of fiction from Europe, Latin America, Asia, and Africa.
Prerequisite: An ENH 200-level course

ENL 348 Women Novelists
(Also WMS 348)
4 hours; 4 credits
Significant novels by such women authors as Jane Austen, George Eliot, Elizabeth Gaskell, Willa Cather, Virginia Woolf, Doris Lessing, Jean Rhys. (P&D)
Prerequisite: An ENH 200-level course

ENL 349 English and Commonwealth Fiction since World War II
4 hours; 4 credits
An examination of major figures and trends in English fiction since World War II. Readings will be drawn from such authors as Kingsley Amis, Margaret Atwood, Margaret Drabble, Graham Greene, Doris Lessing, V.S. Naipaul, and Salman Rushdie.
Prerequisite: An ENH 200-level course

ENL 350 American Poetry
4 hours; 4 credits
The course establishes the relationship between the poets’ personal histories and the American literary tradition, between their different temperaments and individualistic poetic styles.
Prerequisite: An ENH 200-level course

ENL 351 Modern English Poetry
4 hours; 4 credits
A study of British, Irish, and Commonwealth poetry in the twentieth century.
Prerequisite: An ENH 200-level course

ENL 352 Major Twentieth-Century Poets
4 hours; 4 credits
Important twentieth-century poets (some in translation) such as Rilke, Lorca, Mistral, Neruda, Ungaretti, Williams, Thomas, and Pasternak.
Prerequisite: An ENH 200-level course

ENL 353 Contemporary Poetry
4 hours; 4 credits
An intensive study of several of the most prominent poets living and writing in America and England today.
Prerequisite: An ENH 200-level course

ENL 354 English Drama to 1800
(Also DRA 354)
4 hours; 4 credits
Selected works with emphasis on Elizabethan and Jacobean drama (exclusive of Shakespeare), and Restoration and eighteenth-century drama.
Prerequisite: An ENH 200-level course

ENL 355 Modern European Drama
(Also DRA 355)
4 hours; 4 credits
A study of the major dramatists of the modern European theater, with an emphasis placed upon the development of dramatic styles and themes, as well as the theatrical context in which the plays were produced.
Prerequisite: An ENH 200-level course

ENL 356 American Drama
(Also DRA 356)
4 hours; 4 credits
Readings of plays by O’Neill, Williams, Miller, and others who have dramatized the conflicts and predicaments of twentieth-century Americans.
Prerequisite: An ENH 200-level course

ENL 357 World Drama to 1800
(Also DRA 357)
4 hours; 4 credits
Selected plays from the Greeks to 1800.
Prerequisite: An ENH 200-level course

ENL 358 World Drama since 1800
(Also DRA 358)
4 hours; 4 credits
Selected plays from 1800 to the present.
Prerequisite: An ENH 200-level course

ENL 359 Contemporary Drama
(Also DRA 359)
4 hours; 4 credits
Major figures, works, and movements in dramatic literature since World War II, with special emphasis on the last two decades.
Prerequisite: An ENH 200-level course
ENL 360  Chaucer
4 hours; 4 credits
An intensive study of Chaucer's dream visions, Troilus and Cressida, and
Canterbury Tales. Works to be read in Middle English.
Prerequisite: An ENH 200-level course

ENL 361  The Early Shakespeare
(Also DRA 361)
4 hours; 4 credits
A selection of Shakespeare's work written before 1600: early and middle
comedies, the major histories, the earlier tragedies, and the poems.
Prerequisite: An ENH 200-level course

ENL 362  The Later Shakespeare
(Also DRA 362)
4 hours; 4 credits
A selection of Shakespeare's work written after 1600: the major tragedies, the
problem plays, the late comedies and romances.
Prerequisite: An ENH 200-level course

ENL 363  John Milton
4 hours; 4 credits
An intensive study of the major works.
Prerequisite: An ENH 200-level course

ENL 366  Walt Whitman
4 hours; 4 credits
An intensive study of the man and his poetry. (P&D)
Prerequisite: An ENH 200-level course

ENL 370  Journal II
4 hours; 4 credits
Students will continue to keep the journals begun in Journal I. The
emphasis in the second semester course will be on the exploration of the
area where ideas of literature, psychology, and biography overlap with the
introspective sort of writing involved in the personal journal. The class
meetings will be concerned essentially with extending the ideas that emerge
from the individual journals.
Prerequisite: ENL 265

ENL 371  Writing Fiction II
4 hours; 4 credits
A second-level course in writing fiction. Stories written by students and
elements from the literature of the short story will be analyzed with a view
to developing the skills involved in writing short fiction.
Prerequisite: ENL 268 or permission of the instructor

ENL 372  Writing Poetry II
4 hours; 4 credits
A second-level course in writing poetry. Poems written by students and
elements from the literature of poetry will be analyzed with a view to
developing the basic skills involved in poetic composition.
Prerequisite: ENL 270 or permission of the instructor

ENL 373  Playwriting II
4 hours; 4 credits
A second-level course in playwriting. Plays (or scenes from plays) written by
students and examples from dramatic literature are analyzed with a view to
developing the basic skills involved in dramatic composition.
Prerequisite: ENL 272 or permission of the instructor

ENL 374  Charles Dickens
4 hours; 4 credits
Reading and discussion of selected novels in which Dickens explores such
questions as economic and social injustice and psychological aberration in
human character.
Prerequisite: An ENH 200-level course

ENL 375  James Joyce
4 hours; 4 credits
An in-depth study; includes a comprehensive reading of Dubliners, A
Portrait of the Artist as a Young Man, Ulysses, as well as selections from
Finnegans Wake.
Prerequisite: An ENH 200-level course

ENL 378  Major English Author I
4 hours; 4 credits
Intensive study of the works of a major English author.
Prerequisite: An ENH 200-level course

ENL 379  Major English Author II
4 hours; 4 credits
Intensive study of the works of a major English author.
Prerequisite: An ENH 200-level course

ENL 380  Major English Author III
4 hours; 4 credits
Intensive study of the works of a major English author.
Prerequisite: An ENH 200-level course

ENL 381  Major American Author I
4 hours; 4 credits
Intensive study of the works of a major American author.
Prerequisite: An ENH 200-level course

ENL 382  Major American Author II
4 hours; 4 credits
Intensive study of the works of a major American author.
Prerequisite: An ENH 200-level course

ENL 383  Major American Author III
4 hours; 4 credits
Intensive study of the works of a major American author.
Prerequisite: An ENH 200-level course

ENL 384  Major Woman Author I
(Also WMS 384)
4 hours; 4 credits
Intensive study of the works of a major woman author. (P&D)
Prerequisite: An ENH 200-level course

ENL 385  Major Woman Author II
(Also WMS 385)
4 hours; 4 credits
Intensive study of the works of a major woman author. (P&D)
Prerequisite: An ENH 200-level course

ENL 386  Major Woman Author III
(Also WMS 387)
4 hours; 4 credits
Intensive study of the works of a major woman author. (P&D)
Prerequisite: An ENH 200-level course
ENL 387  Major World Author I  
(Also LNG 387)  
4 hours; 4 credits  
Intensive study of the works of a major world author.  
Prerequisite: An ENH 200-level course

ENL 388  Major World Author II  
(Also LNG 388)  
4 hours; 4 credits  
Intensive study of the works of a major world author in English translation.  
Prerequisite: An ENH 200-level course

ENL 389  Major World Author III  
(Also LNG 389)  
4 hours; 4 credits  
Intensive study of the works of a major world author in English translation.  
Prerequisite: An ENH 200-level course

ENL 390  Studies in Women in Literature and the Arts  
(Also WMS 390)  
4 hours; 4 credits  
This course examines women's literature, art, and film as shaped by national culture, historical circumstances, class, and age. (P&D)  
Prerequisite: An ENH 200-level course

ENL 391  Woman as Hero  
(Also WMS 391)  
4 hours; 4 credits  
Selected readings from Greek drama through current literature, revealing the position and experience of women as heroes. (P&D)  
Prerequisite: An ENH 200-level course

ENL 392  The Black Writer in the Modern World  
(Also AFA 323)  
4 hours; 4 credits  
An intensive study of various recent and contemporary Black authors, writing in all the literary genres, and their grappling with traditional and changing environments. (P&D)  
Prerequisite: An ENH 200-level course

ENL 394  Studies in Science Fiction  
4 hours; 4 credits  
An intensive study of literature that both employs the latest discoveries of technology and medicine and introduces new concepts to the worlds of technology and medicine.  
Prerequisite: An ENH 200-level course

ENL 395  Mythic Concepts and Archetypes in Literature  
4 hours; 4 credits  
The presence and influence of Jungian and folkloric concepts in past and current literature. (P&D)  
Prerequisite: An ENH 200-level course

ENL 396  Studies in Global Literature I  
(Also LNG 396)  
4 hours; 4 credits  
Focus on literature from outside the U.S. and Europe. The specific emphasis will vary from semester to semester and will be announced in the Schedule of Classes. (P&D)  
Prerequisite: An ENH 200-level course

ENL 397  Studies in Global Literature II  
(Also LNG 397)  
4 hours; 4 credits  
Focus on literature from outside the U.S. and Europe. The specific emphasis will vary from semester to semester and will be announced in the Schedule of Classes. (P&D)  
Prerequisite: An ENH 200-level course

ENL 398  Cultural Variety in the Literature of the United States  
4 hours; 4 credits  
An examination of literature offering perspectives on the diversity that comprises our American experience: ethnic backgrounds, races, religions, genders, sexual orientations, age groups, etc. Focus of the course varies from semester to semester. (P&D)  
Prerequisite: An ENH 200-level course

ENL 399  Themes in Literature  
4 hours; 4 credits  
A study of selected themes in literary works. The particular theme for the semester will be announced in the Schedule of Classes.  
This course may be taken more than once for credit.  
Prerequisite: An ENH 200-level course

ENL 429  Autobiographical Writing  
4 hours; 4 credits  
A writing and discussion course for students who, working in various literary genres, will be exploring autobiography as the basis for content.  
Conferences and group sessions on the student-author's work.  
Prerequisite: ENG 151

ENL 430  Creative Writing  
4 hours; 4 credits  
A series of experiments in the writing of poetry and prose fiction, designed to develop writing skills through extensive practice. Production and publication of selected projects. Class meetings and individual conferences.  
Prerequisite: ENL 267 or permission of the instructor

ENL 431  Craft of Fiction Workshop  
4 hours; 4 credits  
An advanced course in the craft of fiction. In a workshop situation, the student's work will be discussed and analyzed. Particular techniques of short story and novel writing will be closely explored.  
Prerequisite: ENL 371 or permission of the instructor

ENL 432  Craft of Poetry Workshop  
4 hours; 4 credits  
An advanced course in the craft of poetry. In a workshop setting, the student's work will be discussed and analyzed. Particular techniques of the art of poetry will be closely explored. A degree of poetic sophistication will be expected of the workshop participants.  
Prerequisite: ENL 372 or permission of the instructor

ENL 433  Nonfiction Writing  
4 hours; 4 credits  
A course intended to develop the student's skill in expository and critical writing. Attention will be given to the problems of structure and style with a view to writing with more persuasiveness.  
Prerequisite: ENG 151
ENL 435 Playwright's Workshop
4 hours; 4 credits
An advanced course in playwriting. In a workshop situation, the student's work will be discussed and analyzed. Particular techniques of playwriting will be closely explored. An effort will be made to have a current theater workshop class perform some of the contributed material.
Prerequisite: ENL 272 or permission of the instructor

ENL 436 Screen Writing
(Also CIN 436)
4 hours; 4 credits
Study of the craft of constructing the screenplay, treatment, synopsis, and shooting script. The student will work on the problems of creating the original filmscript as well as adapting a piece of existing material for the screen.
Prerequisite: CIN/ENL 274 or permission of the instructor

ENL 437 Writing in the Business World
4 hours; 4 credits
Communications, reports, descriptive statements, promotional writing, etc., which form the basis for written work in business, advertising, and industry.
Prerequisite: ENG 151

ENL 438 Newspaper Reporting
(Also COM 438)
4 hours; 4 credits
Techniques of copyediting and proofreading for both the reporter-writer and the editor.
Prerequisite: ENG 151

ENL 440 Magazine Writing
4 hours; 4 credits
A writing and discussion course for students who want to break into the magazine publishing world. Writing for popular, specialized, little, and broad-circulation magazines will be covered, as well as the broader aspects of the publishing market. Conferences and group sessions on the student-author's work.
Prerequisite: ENG 151

ENL 441 Writing about Media
4 hours; 4 credits
A writing and discussion course for students who are interested in producing articles and books concerning films, records, and television. Conferences and group sessions on the student-author's work.
Prerequisite: ENG 151

ENL 442 Women's Written Expression
(Also WMS 442)
4 hours; 4 credits
A seminar to develop skills in both imaginative and critical writing, incorporating an analysis and comparison of the stylistic developments of women authors.
Prerequisite: ENG 151

ENL 445 Journalism and Society
(Also COM 445)
4 hours; 4 credits
Learning to "read" and write the news. Analysis of the ways in which news stories define our understanding of society. The course will consider both the effect of print and broadcast journalism on politics, values, and social standards and the pressures on the press, which define its values. Topics vary from term to term.
Prerequisite: ENG 151

ENL 465 Writing for the Media
(Also COM 465)
4 hours; 4 credits
Scripting for various media, including slide-tape presentations, audio, video, film, television, and print. The course emphasizes the translation of information, ideas, and experience into various presentational formats and applies that knowledge to specific projects such as marketing presentations, sales, promotion scripts, and motivational scripts within industry.
Prerequisites: A COM 200-level course and ENG 151 or permission of instructor

ENL 470 Senior Seminar in Literature
4 hours; 4 credits
Various topics in literature, differing from semester to semester.
Prerequisites: Senior standing and permission of the instructor

ENL 475 Writing for Advertising and Public Relations
(Also COM 475)
4 hours; 4 credits
An introduction to the techniques of writing promotional copy, including advertising (print and broadcast), press releases, direct mail, and publicity materials. Students analyze advertising and public relations campaigns from a marketing point of view and evaluate and discuss their effectiveness. Assignments include product, audience, and media analysis; copywriting ads, press releases, and direct mail letters.
Prerequisites: COM 211 or COM/ENL 214 and ENG 151 or permission of instructor

Linguistics Courses
These courses are intended for students who have completed their requirements in English and wish additional electives, as well as for students majoring in English.

ENL 222 English Pronunciation
3 hours; 3 credits
The sounds of standard American English and the articulatory mechanism; the International Phonetic Alphabet; normative pronunciation.
Pre- or corequisite: ENG 111

ENL 422 Introduction to Linguistics
4 hours; 4 credits
The scientific study of language: sounds, grammar, words, animal communication, language families, etc. Special consideration is given to the dialect of New York City.
Prerequisite: ENG 151

ENL 423 Modern English Grammar
4 hours; 4 credits
The structure of English sentences, examined from both the transformational and traditional points of view.
Prerequisite: ENG 151
ENL 424 Language Change
4 hours; 4 credits
How languages change and why, using the English language and the Indo-European family as examples.
Prerequisite: ENG 151

ENL 425 History of the English Language
4 hours; 4 credits
How the sounds, grammar, spelling, and words of English came to be the way they are.
Prerequisite: ENG 151

ENL 426 Language Acquisition and Psycholinguistics
(Also LNG 426)
4 hours; 4 credits
The course examines issues in psycholinguistics, especially those related to native, foreign, and second language acquisition: How is language learned? How do we acquire a second language? What are the characteristics of successful language learning?
Prerequisites: ENG 151

ENL 427 Sociology of Language
(Also SOC 427)
4 hours; 4 credits
Areas of discussion include language and class, language and sex, language and race, and language and ethnicity.
Prerequisite: ENG 151

Speech Courses
These courses are intended for students who have completed their requirements in English and wish additional electives, for students majoring in English, and for students wishing a minor in Speech.

ENL 112 Public Speaking
3 hours; 3 credits
A basic course in public speaking, with emphasis on student performance.

ENL 212 Discussion and Debate
3 hours; 3 credits
Techniques of leading and participating in group discussions, and the principles and practice of debating. Parliamentary rules of order are covered.
Pre- or corequisite: ENG 111

ENL 302 Oral Interpretation of Literature
4 hours; 4 credits
The oral interpretation of poetry, drama, fiction, and historical speeches. Students will prepare for oral performance by reading aloud, raising questions of meaning, doing library research, writing paraphrases, comparing other interpretations, and consulting an author's other works.
Prerequisite: An ENH 200-level course

ENL 312 Theories of Mass Media
(Also COM 312)
4 hours; 4 credits
A survey of contemporary communications theory defining the language, structure, systems, effects, and rhetoric of the mass media. Practical examples in journalism, advertising, publishing, radio, television, and film will be analyzed.
Prerequisite: ENG 151

ENL 412 Broadcast Journalism
(Also COM 412)
4 hours; 4 credits
An introduction to the theory, history, and practice of modern newscasting. Special emphasis will be placed on preparing material for broadcast on radio and television. Readings will explore the economic realities of broadcasting, legal sanctions, and social impact. Students will monitor newscasts, analyze them, and write copy suitable for broadcast.
Prerequisite: ENG 151; COM 100 is recommended

French
Department of Modern Languages
Chair, Professor Kathryn Talarico, English, Speech, and World Literature/Modern Languages Building (2S), Room 109
All students with prior training in French must take a proficiency examination to determine placement at an appropriate level.

Minor
At least 12 credits of courses at the 200 level or above.

Courses
FRN 101 French Conversation I
2 hours; 2 credits
Practical French for business, community relations, travel, and simple technical application. For beginners with no previous knowledge of the language. Regular attendance in the Modern Languages Media Center is required.

FRN 102 French Conversation II
2 hours; 2 credits
A continuation of FRN 101. Regular attendance in the Modern Languages Media Center is required.
Prerequisite: FRN 101 or equivalent

FRN 113 Basic French I
4 hours; 4 credits
A beginning course in fundamentals of expression and communication for those who have had no previous work in the language. Regular attendance in the Modern Languages Media Center is required. (foreign lang.)

FRN 114 Basic French II
4 hours; 4 credits
A continuation of FRN 113. Regular attendance in the Modern Languages Media Center is required. (foreign lang.)
Prerequisite: FRN 113 or equivalent

FRN 208 French for Native Speakers
4 hours; 4 credits
For students with fluency in spoken French but lacking experience in writing and reading the language.

FRN 213 Continuing French I
4 hours; 4 credits
Grammar review and more intensive training in the fundamentals of expression and communication. Regular attendance in the Modern Languages Media Center is required. (foreign lang.)
Prerequisite: FRN 114 or equivalent
FRN 215  Continuing French II
4 hours; 4 credits
A continuation of FRN 213 with stress on written and oral composition and on selected cultural and literary readings of intermediate difficulty. Regular attendance in the Modern Languages Media Center is required. (foreign lang.)
Prerequisite: FRN 213 or equivalent

FRN 313  Advanced Communication Skills
4 hours; 4 credits
Refinement of written and oral expression through composition, translation, oral reports, and critical study of the French grammar based on the analysis of selected literary readings of advanced difficulty. Regular attendance in the Modern Languages Media Center is required.
Prerequisite: FRN 215 or equivalent

FRN 325  French Civilization
4 hours; 4 credits
The art, literature, history, and political and social systems of the French speaking world. A panoramic approach designed to provide a basic knowledge of French civilization.
Prerequisite: FRN 313 or equivalent

FRN 340  An Introduction to the Literature of France
4 hours; 4 credits
A chronological survey of the literature of France from the Middle Ages to the present. (literature)
Prerequisite: FRN 313 or equivalent

FRN 350  The Feminist Challenge in French Literature
(Also WMS 353)
4 hours; 4 credits
A study of the most important women writers in French literature, focusing primarily on selected works of Christine de Pisan, Marguerite de Navarre, Madame de Staël, George Sand, Colette, Simone de Beauvoir, Françoise Sagan, Nathalie Sarraute. Taught in French. (literature)
Prerequisite: FRN 313 or equivalent

FRN 426  Classical French Drama
(Also DRA 426)
4 hours; 4 credits
Plays of Corneille, Racine, Molière, with special emphasis on the continuing role of Molière in the world’s theater. (literature)
Prerequisite: FRN 313 or equivalent for those doing readings and assignments in French; ENG 151 or a former ENG 200 course for those doing readings and assignments in English

FRN 450  Contemporary French Literature
4 hours; 4 credits
An analysis of representative masterpieces of twentieth-century French literature from Proust, Gide, and Malraux to Sartre, Camus and Robbe-Grillet. (literature)
Prerequisite: FRN 313 or equivalent

FRN 465  French Existentialist Literature
4 hours; 4 credits
A study of French existentialist literature through the works of Sartre, Simone de Beauvoir, Proust, and Camus. (literature)
Prerequisite: FRN 313 or equivalent

Geography
(Minor)
Department of Political Science, Economics, and Philosophy
Coordinator: Associate Professor Deborah Popper, History/Political Science, Economics, and Philosophy Building (2N), Room 238

Minor Requirements: 15 credits

GEG 100  Introduction to Geography 3 credits

and

At least 12 credits at or above the 200 level.

Courses

GEG 100  Introduction to Geography
3 hours; 3 credits
Fundamental relationships between people and Earth are explored through examination of different world regions. The course covers variations in climate, agriculture, resources, economic, cultural, and political phenomena. (social science)

GEG 220  Geography of Western Europe
4 hours; 4 credits
Demographic, economic, and political effects on the nations of Western Europe of the intraregional variations in such fundamental geographic factors as geomorphic position, climate, soils, minerals, and elevation. Emphasis on selected nations in the context of twentieth-century industrial development.

GEG 222  Geography of the United States
4 hours; 4 credits
This course explores the geographic variety of the United States. The country’s physical characteristics are regionally diverse and provide an array of resources. Different populations have put them to use in various ways. The course traces who lives where, why, what they have found there, what have they done with it. Emphasis is placed on the contrasting threads of regional variation and national homogenization. (social science)
Prerequisite: ENG 111

GEG 223  American Landscapes
(Also HST 223)
4 hours; 4 credits
A study of American landscapes through historical geography and history. This course examines the making of American landscapes, including not only the “natural” processes but also the social, cultural, and ideological forces that have shaped them. (social science)
Prerequisites: ENG 111, COR 100, and any college-level history course.

GEG 250  Conservation and Humanity
4 hours; 4 credits
Analysis of the nature and extent of pollution and depletion of essential resources of humankind, with emphasis on food, water, and oxygen. Study will include inquiry into economic, legal, and political problems of control, detection, and prevention of pollution and depletion of resources. (social science)
Prerequisites: ENG 111, COR 100

GEG 252  Economic Geography
(Also ECO 252)
4 hours; 4 credits
Introduction to the principles of economic geography. Systematic analysis of the location and distribution of resources and economic activities; studies
GEO 100     Physical Geology
3 hours; 3 credits
Materials, structure, and behavior of the Earth's crust. Description of streams, atmosphere, ground water, glaciers, and oceans, with a discussion of the erosional and depositional work of each. Participation in scheduled field trips is required. (science)
Prerequisite: MTH 020 or an appropriate score on the CUNY Mathematics Assessment Test
Corequisite: GEO 101

GEO 101     Physical Geology Laboratory
2 laboratory hours; 1 credit
Physical properties and identification of minerals, igneous, sedimentary, and metamorphic rock identification. Maps and interpretation of geomorphological features. (science)
Corequisite: GEO 100

GEO 102     Historical Geology
3 hours; 3 credits
Geologic history of the Earth. Application of fundamental principles of stratigraphy to the reconstruction of paleogeographic, ancient sedimentary, and tectonic relationships. The evolution of life is traced from the fossil record. Participation in scheduled field trips is required. (science)
Prerequisite: MTH 020 or an appropriate score on the CUNY Mathematics Assessment Test
Corequisite: GEO 103

GEO 103     Historical Geology Laboratory
2 laboratory hours; 1 credit
Classification and identification of major fossil groups. Interpretation of rock record with emphasis on stratigraphic correlation. Major geological features of the United States. (science)
Corequisite: GEO 102

GEO 105     Environmental Geology
3 class hours, 2 laboratory hours; 4 credits
Application of the principles of the earth sciences to problems associated with urban and regional development. Water, minerals, and fuel resources, waste disposal, subsurface storage, hazards of nature (earthquakes, fire, flood, landslides, extreme climate, and weather variations). Physical properties of rocks and soil. Case histories. Participation in scheduled field trips is required. (science)
Prerequisite: MTH 020 or an appropriate score on the CUNY Mathematics Assessment Test

The following courses are available through independent study. Contact Assistant Professor A. Ohan, Department of Engineering Science and Physics.

GEO 220     General Geophysics
3 hours; 3 credits
Prerequisites: GEO 100, PHY 110 or 120, or permission of the instructor

GEO 320     Invertebrate Paleontology
3 class hours, 3 laboratory hours; 4 credits
Prerequisites: GEO 100 or 102

GEO 322     Structural Geology
3 class hours, 3 laboratory hours; 4 credits
Prerequisites: GEO 100 or 102
Health Education Course
Department of Nursing
Chair: Associate Professor Linda Reese, Marcus Hall (5S), Room 213
The following course in health education is offered as a non-liberal arts and sciences elective. It may not be used to satisfy the College Physical Education Requirement.

HED 111 First Aid and Safety
2 hours, 2 laboratory hours; 3 credits
Theory and practice of first aid to the injured. Safety procedures when emergency first aid is needed and medical assistance is delayed. Includes cardio-pulmonary resuscitation (CPR), care and prevention of accidental injuries, and sudden illness.

History
(Bachelor of Arts, Minor; Master of Arts, see Graduate Catalog)
Department of History
Chair: Associate Professor Howard Weiner, History/Political Science, Economics, and Philosophy Building (2N), Room 210

History (BA)

General Education Requirements for the BA
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 28-47 credits
Whenever possible, these courses should be completed within the first 60 credits.
1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)
2. Social Scientific Analysis: (7-8 credits)
3. The West and the World: (4 credits)
4. Textual, Aesthetic, and Linguistic Analysis: (6-8 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
   c. Arts and Communications: 200-level
5. Pluralism and Diversity Requirement: (0-4 credits)
6. Foreign Language: (0-12 credits)
See section on general education requirements for approved course lists and complete details.

Major Requirements: 36 credits
HST 200 Historical Method 4 credits
HST 300 Historiography 4 credits
HST 401 Seminar in Advanced Historical Study 4 credits
Twenty-four credits of history courses at the 200 level or higher, of which at least two courses must be at the 300 level including:
   At least one history course designated as pre-1700 history
   At least one history course designated as modern European history
   At least one history course designated as United States history
At least one history course from a geographical area other than Europe or the United States, designated as World history
A 200-level geography course may be used to meet this 24-credit requirement. At most, one independent study course may be used to satisfy this requirement. The cumulative grade point average in history courses must be 2.0 or higher for graduation.

Electives: 25-44 credits
Total Credits Required: 120

Minor
At least 12 credits of courses in history at or above the 200 level including courses from at least two of the following categories: pre-1700 history; modern European history; United States history; World history.

Note: Students interested in becoming secondary school teachers should refer to page 116 (Adolescence Education) for academic major and education requirements.

Honors
To graduate with honors a student must have a minimum of 3.5 grade point average in courses in the major and an honors thesis must be completed under the supervision of a history faculty member and the department chair.

Courses
HST 100 Past and Present
minors, this is designated as a pre-1700 history course. (social science)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 116 Freshman Seminar in History
3 hours; 3 credits
An interdisciplinary approach to historical experience since the Renaissance with selected emphasis on significant themes and events and on concepts such as freedom, power, social roles, bureaucracy, and historical cycles. The seminar is designed to give students special instruction in communications skills. It is offered in conjunction with a designated section of ENG 001. Students must register for both the seminar and the designated English course. Students can receive credit for only one freshman seminar. (social science)
Prerequisite: Successful completion of CUNY/ACT Reading Skills Test.
Students who successfully complete the Freshman Seminar in History may not register for any additional 100-level courses in history without permission of the department chairperson.

HST 160 African American History: 1619 to the Present
(Also AFA 160)
3 hours; 3 credits
From the forced migration of the first Africans in the seventeenth century to the contemporary struggles for equality; emphasis on such topics as slavery, abolition, Reconstruction, the origins of Jim Crow, urban migrations, the struggle for civil rights, nonviolence, and the new militancy. (social science)

HST 182 Women's History and Feminist Theory
(Also WMS 100)
3 hours; 3 credits
This course explores both the history of women's experience and feminist interpretations of their historical condition. Emphasis is on the development of analytic and writing skills. (social science)
HST 200  Historical Method
4 hours; 4 credits
An introduction to the basic skills of historical reasoning, research, and writing. Students receive training in the interpretation of primary sources and the evaluation of historical data, and are acquainted with the notion of historiography. Particular emphasis is placed on the preparation of research papers and book reviews, the use of library, electronic, and archival resources, and the critical evaluation of secondary monographic works. Required for History majors, open to all students.
Prerequisites: ENG 111, and any college-level history course

HST 201  History of Western Civilization:
Antiquity to 1500
4 hours; 4 credits
The historical development of Western civilization in ancient, medieval, and Renaissance times, with emphasis on the individuals, issues, ideas, institutions, and events that highlight its evolution. For history majors and minors, this is designated as a pre-1700 history course. (social science)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 202  History of Western Civilization since 1500
4 hours; 4 credits
The historical development of Western civilization from the sixteenth century to the present. The focus is on Europe, but developments in other areas of the world are considered in relation to Western ideas. (social science)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 203  The World since 1914
4 hours; 4 credits
Major political, economic, social, and cultural developments beginning with World War I. The course will focus on the processes of decolonization and modernization around the world. (West and World)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 204  Introduction to Asian Civilization
4 hours; 4 credits
An introductory course on the nature of Asian civilization and culture. The first part will deal with an analysis of the historical role of Buddhism, Confucianism, and Taoism; the second, with different paths to modernization emphasizing China, India, and Japan. For history majors and minors, this is designated as a World history course. (social science) (P&D) (West and World)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 205  Modern China
4 hours; 4 credits
A survey of China from the nineteenth century to the present. The course will analyze the character of early Western involvement and Chinese responses, the rise of Chinese communism, and China’s struggle to modernize. For history majors and minors, this is designated as a World history course. (West and the World) (P&D)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 206  History of Africa
4 hours; 4 credits
Nineteenth-century African history, the story of European imperialism, and the emergence of modern, independent Africa and its problems. For history majors and minors, this is designated as a World history course. (West and the World) (P&D)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 207  History of Latin America
4 hours; 4 credits
A survey of the social, economic, political, and cultural development of Latin America since independence. The course will focus on the prevailing colonial influences on modern institutions; Cuba, Venezuela, and Brazil as developmental models; and on United States-Latin American relations. For history majors and minors, this is designated as a World history course. (social science) (P&D) (West and the World)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 208  History of Modern Latin America
4 hours; 4 credits
A survey of the social, economic, political, and cultural development of Latin America since independence. The course will focus on the prevailing colonial influences on modern institutions; Cuba, Venezuela, and Brazil as developmental models; and on United States-Latin American relations. For history majors and minors, this is designated as a World history course. (social science) (P&D) (West and the World)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 209  Modern Latin America
4 hours; 4 credits
A survey of the history of Latin America from the end of the nineteenth century to the present. Emphasis will be placed on the nature of British imperialism, the Independence movement, and Latin American attempts to modernize. For history majors and minors, this is designated as a World history course. (social science) (P&D) (West and World)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 210  Modern China
4 hours; 4 credits
A survey of the history of China from the end of the Mogul period to the present. Emphasis will be placed on the nature of British imperialism, the Independence movement, and China’s attempts to modernize. For history majors and minors, this is designated as a World history course. (social science) (P&D) (West and World)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 211  Japanese Civilization
4 hours; 4 credits
A survey of Japanese history from the beginning of the historical period through the eighteenth century. The course will examine major themes such as the early Japanese traditions, China’s influence, the Japanese adaptation of Chinese ideas and institutions, the changing nature of elite status, relations with outsiders, and Japanese religious and philosophical traditions. For history majors and minors, this is designated as a World history course. (social science) (P&D)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 212  History of the Ancient Near East
4 hours; 4 credits
An interdisciplinary approach to ancient Near Eastern civilizations of the pre-Christian era. Attention will be given to the literature, history, mythology, philosophy, religions, art, and architecture of Egypt, Mesopotamia, Persia, and ancient Palestine. For history majors and minors, this is designated as a pre-1700 history course. (social science)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 213  Chinese Civilization
4 hours; 4 credits
A survey of Chinese history from the beginning of the historical period through the eighteenth century. The course will examine major themes such as the imperial state, philosophical and religious traditions, the changing nature of elite status, relations with Inner Asia, and the agrarian-based society and the emergence of the commercial economy. For history majors and minors, this is designated as a World history course. (social science) (P&D)
Prerequisites: ENG 111, and COR 100 or any college-level history course
HST 214  Greece and the Hellenistic World
4 hours; 4 credits
Introduction to the social, economic, political, and intellectual history of Greece from ca. 2000 BC to the Hellenistic world of ca. 250 BC. Integration of background with various aspects of Greek and Hellenistic culture, for example, philosophy, political thought, and religion. Emphasis on the interpretation of primary and secondary sources in historical study. For history majors and minors, this is designated as a pre-1700 history course. (social science) Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 215  The Origins of Western Europe: 400-1000 CE
4 hours; 4 credits
A survey of the history and culture of Western Europe from the dissolution of the Western Roman Empire to the year 1000. This period of change and transformation saw the settlement of migrating peoples in the former provinces of the Western Roman Empire and the emergence of new states and new societies. This course aims to introduce students to the political, social, cultural, and demographic changes that laid the foundations of modern Europe. For history majors and minors, this is designated a pre-1700 course. (social science) Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 216  Byzantine Thought and Civilization
4 hours; 4 credits
A survey of various aspects of the culture of the East Roman or Byzantine Empire (ca.600-1200 CE). Special emphasis is placed on the church, state, and social classes in the creation of a distinctive Byzantine civilization, identity, and world-view. This course also examines achievements in the arts, philosophy, literature, and spirituality. This course is interdisciplinary in approach and includes readings in historical documents and slide lectures. For history majors and minors, this is designated a pre-1700 course. (social science) Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 218  The Roman World
4 hours; 4 credits
Aspects of Roman history in relation to the historical background, for example, the growth of the Roman constitution in the age of the republic, Rome’s expansion in the Mediterranean world, the Roman revolution, the principate, the problems of primary and secondary sources in historical study. For history majors and minors, this is designated as a pre-1700 history course. (social science) Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 220  Medieval Thought and Civilization
4 hours; 4 credits
Various aspects of the culture of the Middle Ages from the creation of the Carolingian empire (ca. 800 to ca. 1300) in relation to the historical background; special emphasis on the interaction of the Church, state, and medieval social classes in the creation of a distinctive medieval civilization. The course is interdisciplinary in approach and includes readings in literature and slide lectures. For history majors and minors, this is designated as a pre-1700 history course. (social science) Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 221  The American Dream
(Also AMS 221)
4 hours; 4 credits
The hopes, the frustrations, and particularly, the dreams of American society as observed by foreign and native commentators in the past and present. This course will attempt to assess not only the idealization of the American dream but also disillusionment with it as expressed by such writers as Franklin, Tocqueville, Emerson, Whitman, Henry Adams, and Norman Mailer. For history majors and minors, this is designated as a United States history course. (social science) Prerequisites: ENG 111, and COR 100 or any American Studies or history course

HST 223  American Landscapes
(Also GEG 223)
4 hours; 4 credits
A study of American landscapes through historical geography and history. This course examines the making of American landscapes, including not only the “natural” processes but also the social, cultural, and ideological forces that have shaped them. For history majors and minors, this is designated as a United States history course. (social science) Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 224  Jewish History
4 hours; 4 credits
The history of the Jewish people including their culture, religion, education, and economic conditions from the Babylonian exile (586 BC) through the present day; domination by Persia, Greece, and Rome; Jewish life in Babylonia and neighboring Eastern lands; Jews in the Western world from medieval to modern times; the development of Jewish communities and the distinctive features of life in Italy, Spain, France, Germany, England, Russia, Poland, and the United States; the world wars and the Jews; the State of Israel. (social science) Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 225  History of Christianity
4 hours; 4 credits
A cultural approach to early Christianity, featuring an examination of the New Testament; a study of the history of the medieval Church and the emergence of Protestantism in the modern world. Examples of church art, architecture, and music in the Christian tradition. (social science) Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 228  Renaissance and Reformation Europe
4 hours; 4 credits
A study of the interaction of the socioeconomic, intellectual, cultural, and religious trends of Europe from the close of the Middle Ages to the end of the sixteenth century. For history majors and minors, this is designated as a pre-1700 history course. (social science) Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 230  Early Modern England
4 hours; 4 credits
English history from the Reformation to the end of the seventeenth century. The emphasis is on political history and the underlying social and economic forces. Topics generally include Protestantism and the rise of capitalism, origins of the English Revolution, and the background to American colonial and constitutional history. For history majors and minors, this is designated as a pre-1700 history course. (social science) Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 234  Asian Tigers since 1945
4 hours; 4 credits
Focus is on the “Asian Tigers” (Hong Kong, Singapore, South Korea, and Taiwan), and exploration of themes such as post-1945 development and its connection to the common cultural heritage shared by these places; the
British (Hong Kong and Singapore) and Japanese (South Korea and Taiwan) colonial heritages; and the post-1945 economy. The course will also examine the relationship of these places to their respective hinterlands and the sense of identity of the respective populations in relation to the mainland and the world at large. Overall, this class will examine the proposition that there is an East Asian developmental model. For history majors and minors, this is designated as a World history course. (West and the World) (P&D)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 235 The Modern Middle East
4 hours; 4 credits
A survey of the main political, social, economic, and intellectual currents of the nineteenth and twentieth centuries. Emphasis on historical background and development of current problems in the region. Topics of study include imperialism, religion, culture, women, class formation, oil, and the Arab-Israeli conflict. For history majors and minors, this is designated as a World history course. (social science) (P&D) (West and the World)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 236 Asian American History
4 hours; 4 credits
An introductory survey of the major Asian groups in the U.S. from their earliest migration to the present. The course will examine the immigration history, experiences, and major problems encountered by each group. For history majors and minors, this is designated as a United States history course. (social science) (P&D)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 238 World Civilization I
(Also SLS 240)
4 hours; 4 credits
A comparative study of the growth and development of the major global civilizations from earliest times to the onset of modernity. An overview of the development of civilizations, examining their structure and organization, characteristic ideas and institutions, and the processes of cultural diffusion and conflict within and between them. For history majors and minors, this is designated as a pre-1700 history course. (P&D)
Prerequisites: A minimum GPA of 2.75; ENG 111 and ENG 151

HST 239 World Civilization II
(Also SLS 241)
4 hours; 4 credits
The growth and development of the major civilizations around the globe from the onset of modernity to present times, with particular attention to the changing relationships among global communities. (P&D)
Prerequisites: A minimum GPA of 2.75; ENG 111 and ENG 151

HST 244 United States History: 1607-1865
4 hours; 4 credits
An examination of American society from the English colonization of Virginia to the Civil War. Attention will focus on the major political, economic, social, and intellectual developments of the period. For history majors and minors, this is designated as a United States history course. (social science)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 245 United States History: 1865-Present
4 hours; 4 credits
A historical survey of American society from the abolition of slavery to the present. Some of the topics to be examined are: Reconstruction, the development of industrial America, the Progressive movement, World War I, the Depression, World War II, the McCarthy Era, the Civil Rights Movement, Feminist Movement, and the Vietnam War. For history majors and minors, this is designated as a United States history course. (social science)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 246 Religion in America
(Also AMS 224)
4 hours; 4 credits
Addresses the development of religion—Protestant, Catholic, Jewish, and others—in the context of American social, cultural, and intellectual history. For history majors and minors, this is designated as a United States history course. (social science)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 248 New York City: History and Problems
4 hours; 4 credits
The history of neighborhoods and communities of New York City. Each student will study a community in detail by tracing its history, interviewing inhabitants, and creating plans for its future. Special emphasis on the culture, life, and governmental services of Staten Island and Brooklyn. For history majors and minors, this is designated as a United States history course. (social science) (P&D)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 249 Italian-American History
4 hours; 4 credits
A survey of the history of Italian-Americans from their earliest migration to the present. Attention will focus on the generational problems of acculturation and the present position of Italian-Americans in the community. For history majors and minors, this is designated as a United States history course. (social science) (P&D)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 251 History of the U.S. City
4 hours; 4 credits
An urban studies course with special emphasis on the impact of industrialization and immigration on the development of the U.S. city and urban culture. For history majors and minors, this is designated as a United States history course. (social science) (P&D)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 252 History of Education in the United States
(Also EDD 252)
4 hours; 4 credits
The history and social foundation of American education. Topics include: the historical development of American public schools, the schools and race, the social function of compulsory schooling, the expansion of higher education in the post-World War II period, and the conceptual differentiation between schooling as socialization and education for personal growth. (social science) (P&D)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 253 United States Economic History
(Also ECO 253)
4 hours; 4 credits
The growth of the American economy: analysis of the components of growth: capital, labor, and government. For history majors and minors, this is designated as a United States history course.
Prerequisites: ECO 101, ENG 111, and COR 100 or any college-level history course
HST 254  History of Staten Island
4 hours; 4 credits
A study of the architectural, industrial, environmental, political, and ethnic history of the borough from colonial times through today. For history majors and minors, this is designated as a United States history course. Prerequisite: ENG 111, and COR 100 or any college-level history course

HST 257  The History of American Immigration
4 hours; 4 credits
This course will examine the pushes and pulls leading to the immigration and (or) restriction of northwestern European, southeastern European, Caribbean, Asian, Mexican, and other groups. Such theories as the "White Anglo Saxon Protestant Ideal," the melting pot, and cultural pluralism are to be studied. Implications for neighborhood structures, educational policy, and politics will be discussed. For history majors and minors, this is designated as a United States history course. (social science) (P&D)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 258  Vietnam and America: 1945-1975
(Also AMS 258)
4 hours; 4 credits
An examination of the history of American involvement in Vietnam, the experience of Americans and Vietnamese who fought the Second Indochina war on American society. For history majors and minors, this is designated as a United States history course. (social science)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 262  African American History: 1619-1865
(Also AFA 262)
4 hours; 4 credits
A study of the African American experience in the Western hemisphere. Emphasis on the slave trade, slave life, slave revolts, and the struggle for freedom. For history majors and minors, this is designated as a United States history course. (social science)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 263  African American History: 1865 to the Present
(Also AFA 263)
4 hours; 4 credits
The continuing role of African Americans in the building of their own nation. Emphasis on freedom movements as shown in literature, in civil rights movements, in nationalist and other political organizations. For history majors and minors, this is designated as a United States history course. (social science)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 265  History of the Caribbean
(Also AFA 265)
4 hours; 4 credits
Pre-colonial and colonial history of the Caribbean; an examination of the policies of the metropolitan powers, and the emergence of anticolonialist movements. For history majors and minors, this is designated as a World history course. (social science) (P&D)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 266  Peoples and Cultures of Africa
(Also AFA 247)
4 hours; 4 credits
A descriptive survey of the peoples and cultures of the African continent. Emphasis is on those features and/or qualities of the African pattern of life that are common to the African people as a whole. For history majors and minors, this is designated as a World history course. (P&D)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 267  Pre-colonial and Colonial History of the Caribbean
4 hours; 4 credits
A study of the history of the Caribbean from the colonial period to modern times. Emphasis on the development of the Caribbean region as a cultural and political entity. For history majors and minors, this is designated as a United States history course. (social science) (P&D)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 268  History of Africa
4 hours; 4 credits
A study of the continent of Africa, including its pre-colonial history, the impact of European colonization, and the modern political, social, and economic developments. For history majors and minors, this is designated as a United States history course. (social science) (P&D)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 269  Blacks in Urban America: 1900-Present
(Also AFA 269)
4 hours; 4 credits
An examination of various aspects of black life in major American cities. Particular emphasis will be placed on the causes of the migration; ecological development of black communities; urban violence; blacks' participation in conventional and radical politics; blacks in the labor force; and the impact of urbanization on the black family. For history majors and minors, this is designated as a United States history course. (social science) (P&D)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 270  Modern British History: 1700-1900
4 hours; 4 credits
A study of selected problems of British social and political history in the eighteenth and nineteenth centuries. The origins and immediate impact of industrialization in Britain and the rise of the British Empire. For history majors and minors, this is designated as a modern European history course. (social science)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 271  Modern British History: 1900 to the Present
4 hours; 4 credits
A study of selected problems of British social and political history in the late nineteenth and twentieth centuries. Topics generally include the decline of empire, the creation of the welfare state, and the British role in the world wars. For history majors and minors, this is designated as a modern European history course.
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 272  Modern Germany
4 hours; 4 credits
The history of nineteenth- and twentieth-century Germany--cultural flowering, national unification, industrialization, world empire and war, fascism, and division into two states. Particular focus on the origins, nature, and consequences of Hitler and the Nazi state. For history majors and minors, this is designated as a modern European history course. (social science)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 274  History of Modern Russia
4 hours; 4 credits
A survey of Russian developments since the eighteenth century with special emphasis on the Russian Revolution and the history of the Soviet Union. For history majors and minors, this is designated as a modern European history course. (social science)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 276  History of Italy
4 hours; 4 credits
A study of Italy from the Renaissance to the present, examining Italian contributions to the formation of Western ideals and culture, the role of Italian cities in early capitalism and world expansion, the creation of Italy as a nation, and Italy's contribution to the development of fascism and Euro-communism. For history majors and minors, this is designated as a modern European history course. (social science)
Prerequisites: ENG 111, and COR 100 or any college-level history course

HST 277  Europe: 1815-1914
4 hours; 4 credits
A study of European civilization at the height of its vitality and world power; the evolution of mature capitalism; the transformation of society and
This course introduces students to broad themes in American Women's History from colonial times to the present and focuses on women as historical actors and on the historical forces shaping the construction of womanhood. The course will pay particular attention to differences among women with respect to race, class, ethnicity, and sexual orientation. For history majors and minors, this is designated as a United States history course. (social science) (P&D)

**Prerequisites:** ENG 111, and COR 100 or any college-level history course

### HST 278 Twentieth-Century Europe  
4 hours; 4 credits

A study of selected aspects of European civilization in the twentieth century. Major themes of the age, which run from the origins of World War I to the Cold War, will be selected for discussion. These will include such topics as the emergence of technocracy and the welfare state, the rise of fascism, the communist revolutions, the impact of modern warfare, European imperialism, irrationalism, and existentialism. For history majors and minors, this is designated as a modern European history course. (social science)

**Prerequisites:** ENG 111, and COR 100 or any college-level history course

### HST 279 Introduction to the Balkans: 1699 to Present  
4 hours; 4 credits

Overview of the main influences from both East and West in southeastern Europe with the goal of understanding conflicts and bases for unity in the area today. For history majors and minors, this is designated as a modern European history course. (West and the World)

**Prerequisites:** ENG 111, and COR 100 or any college-level history course

### HST 280 History of Science  
4 hours; 4 credits

An examination of several major scientific world-views, such as Aristotelian and Newtonian physics, Darwinism, Freudianism, and relativity. For history majors and minors, this is designated as a modern European history course.

**Prerequisites:** ENG 111, and COR 100 or any college-level history course

### HST 281 History of Work  
4 hours; 4 credits

Work as a central experience in medieval, early industrial, and modern history. A study of employment choice, work satisfaction, the impact of technology, training, worker organizations, social consequences, the role of government, leisure, and the job milieu.

**Prerequisites:** ENG 111, and COR 100 or any college-level history course

### HST 283 Psycho-History  
4 hours; 4 credits

A study of the uses, methods, and styles of psychology in history writing. How mass behavior, as well as the personalities of heroes and geniuses, shape history. Special emphasis on psychobiography and on a mass movement, such as fascism.

**Prerequisites:** ENG 111, and COR 100 or any college-level history course

### HST 285 The World of the Twenty-First Century  
4 hours; 4 credits

This course uses history to examine the possible makeup of future society. Topics include the prospect of world government, limits of growth, and changes in morality and behavior as well as questions about the validity of projecting the future from past experience.

**Prerequisites:** ENG 111, and COR 100 or any college-level history course

### HST 286 History of American Women  
(Also WMS 286)  
4 hours; 4 credits

This course introduces students to broad themes in American Women's...
HST 315  The European Discovery of America and the Encounter with the Native Peoples: 1492 to 1581
4 hours; 4 credits
A study of the European discovery of America and the conquest of the native peoples up to the establishment of an imperial system in 1581. Emphasis will be placed on the issue of the "discovery" by Columbus in 1492; the impact of America on European thought; the character of the Spanish conquests of the Caribbean, Mexico, and Peru; the role of the Catholic church in Hispanicizing the culture of those regions; and the creation of an imperial system. For history majors and minors this is designated as either a pre-1700 history course or a World history course.
Prerequisite: Any 200-level history course and ENG 151

HST 317  The Medieval Balkans and The Ottoman Turks: 1204-1481
4 hours; 4 credits
An examination of the history of the Balkans and Asia Minor (modern Turkey) between the years 1204-1481 CE. The decline of the Byzantine Empire, the ancient power in the region, set in motion a struggle for supremacy that ended with the emergence of the Ottoman Empire as a world power. This course discusses this historical process and the means by which competing states attempted to lay claim to concepts of world empire. For history majors and minors, this is designated a pre-1700 course.
Prerequisites: Any 200-level history course and ENG 151

HST 318  Themes in Byzantine History
4 hours; 4 credits
This course examines themes in the history and culture of the medieval Eastern Roman or Byzantine Empire (Byzantium). It discusses important political, social, and cultural developments; analyzes the catalysts for change, both internal and external; discusses the interaction of Roman political ideology, Christianity, and ancient Greek culture; and assesses the impact of Byzantium on other cultures as well as on its own peoples. For history majors and minors, this is designated a pre-1700 history course.
Prerequisites: Any 200-level history course and ENG 151

HST 319  Medieval Cities
4 hours; 4 credits
An examination of aspects of the history and culture of medieval cities between 300-1200 CE from a comparative perspective. Starting with the transformation of ancient urban life under the Christian Roman Empire, this course compares and contrasts urban life in three areas of the medieval world: Western Europe, Byzantium, and the Islamic Middle East. Particular emphasis is placed on: concepts of "the city"; the state and the city; the impact of established religion; the urban economy; civic government and institutions; change and continuity; patterns of daily life; and causes of urban decline and revival. For history majors and minors, this is designated a pre-1700 course.
Prerequisites: Any 200-level history course and ENG 151

HST 320  Topics in Ancient and Medieval History
4 hours; 4 credits
Europe after the fall of Rome to the rise of the nation-state. The emergence of feudal classes, the Catholic church and the state, the rise of medieval cities, East-West relations, Islam and the Byzantine Empire, political theory, and humanism. For history majors and minors, this is designated as a pre-1700 history course.
Prerequisites: Any 200-level history course and ENG 151

HST 322  The Late Antique World
4 hours; 4 credits
This course addresses aspects of the history and culture of Late Antiquity (285-641 CE). It examines the historical watershed known as the "End of the Ancient World" and the "Birth of the Middle Ages" by analyzing the transformation of the Later Roman Empire into the medieval worlds of Germanic Europe, Byzantium, and Islam. Particular emphasis is placed on concepts of monotheism and universalism in an age of diversity and innovation; the synthesis of Christianity and Classical culture; imperial autocracy and the Christian church; social and intellectual changes; the nature of the economy and problems of imperial defense; and the collapse and transformation of the Roman State and emergence of its successors. For history majors and minors, this is designated as a pre-1700 history course.
Prerequisites: Any 200-level history course and ENG 151

HST 327  The World of Late Imperial China
4 hours; 4 credits
A study of the social and ideological forces that have created modern Europe from the collapse of feudal Europe to the end of the eighteenth century, including the Renaissance and Reformation, the rise of capitalism, the scientific revolution, and the Enlightenment. For history majors and minors, this is designated as a modern European history course.
Prerequisites: Any 200-level history course and ENG 151

HST 330  Nationalist Movements and the Process of Independence in Africa
4 hours; 4 credits
The objective of this course is to provide a broad view of important historical developments in the African continent: nationalist movements and the process of independence. These movements occurred between 1945, at the end of World War II, and 1990, when the entire African continent was decolonized. The course will be divided in two parts: the first will discuss the causes of nationalist movements and the second will focus on the process of independence. For history majors and minors, this is designated as a World history course.
Prerequisites: Any 200-level history course and ENG 151

HST 332  The Age of Revolutions: 1765-1820
4 hours; 4 credits
This course will begin by examining the Enlightenment in Europe and the social and economic changes that resulted from European worldwide colonization. It will focus on the uprisings and revolutions from 1765 to 1820 that broke out in the Old and New Worlds, emphasizing the Great Revolution in France. For history majors and minors, this is designated as a modern European history course.
Prerequisites: Any 200-level history course and ENG 151

HST 335  Society and Culture in the United States
(Also AMS 335)
4 hours; 4 credits
Major artistic and intellectual developments in America from the
eighteenth century to the present, and their relationship to changing social and political realities. For history majors and minors, this is designated as a United States history course.

Prerequisites: Any 200-level history course or any 200-level American Studies course and ENG 151

HST 336 Themes in United States History: 1607-1788
4 hours; 4 credits
Selected topics in American history from the colonial period through the establishment of a national government under the Constitution. The course will examine significant political, social, economic, and intellectual developments. For history majors and minors, this is designated as a United States history course.

Prerequisites: Any 200-level history course and ENG 151

HST 337 Early American Republic: 1788-1850
An exploration of major developments in the new nation, from the ratification of the Constitution to the Compromise of 1850. Topics will include political culture, the market revolution, westward expansion, the wars with Britain and Mexico, slavery, and reform. For history majors and minors, this is designated as a United States history course.

Prerequisites: Any 200-level history course and ENG 151

HST 338 Themes in United States History: 1877-1914
4 hours; 4 credits
Selected topics in American history from the end of Reconstruction to the nation’s emergence as an international power. The course will examine significant political, social, economic, and intellectual developments. For history majors and minors, this is designated as a United States history course.

Prerequisites: Any 200-level history course and ENG 151

HST 339 Themes in United States History: 1914-1945
4 hours; 4 credits
Selected topics in American history from 1914-1945. The course will examine significant political, social, economic, and intellectual developments. For history majors and minors, this is designated as a United States history course.

Prerequisites: Any 200-level history course and ENG 151

HST 340 United States Foreign Policy in the Twentieth Century
4 hours; 4 credits
The development of America’s foreign policy from isolationism to empire. The focus will be on the expanding role of the United States in world affairs and the impact of World Wars I and II on contemporary society. For history majors and minors, this is designated as a United States history course.

Prerequisites: Any 200-level history course and ENG 151

HST 344 War and Society in Modern America
4 hours; 4 credits
An examination of the impact of the Cold War and its resulting international tensions upon American society. Among the topics are: the origins of the Cold War; the problem of defining loyalty in a democratic state; the role of the military in the nuclear age; secret intelligence operations and their influence upon a democratic society; and the quest for security in a divided world. All questions will be considered within the framework of an attempt to assess America’s traditional values and define its national goals. For history majors and minors, this is designated as a United States history course.

Prerequisites: Any 200-level history course and ENG 151

HST 347 Your Parents’ America
4 hours; 4 credits
The United States from World War II to the Vietnam War, using parents’ reminiscences. A study of the effects of World War II and the Cold War, the growth of mass media, the youth gangs of the fifties, the Civil Rights movement and rising expectations, the suburban dream, the cult of the automobile, the fear of atomic disaster, the sexual revolution, and changing patterns of child rearing. For history majors and minors, this is designated as a United States history course.

Prerequisites: Any 200-level history course and ENG 151

HST 349 United States History since 1945
4 hours; 4 credits
A survey of U.S. cultural, social, political, and diplomatic history from the conclusion of World War II to the present. For history majors and minors, this is designated as a United States history course.

Prerequisites: Any 200-level history course and ENG 151

HST 350 Comparative Urban History
4 hours; 4 credits
A study of urban life in various periods and societies with a view toward spelling out similarities and differences.

Prerequisites: Any 200-level history course and ENG 151

HST 361 The Heritage of Marcus Garvey and W.E.B. DuBois
(Also AFA 361)
4 hours; 4 credits
Marcus Garvey, the man and the idealist, his influence on African American consciousness; W.E.B. DuBois, the man and the thinker, his influence on African American consciousness and Pan-Americanism. For history majors and minors, this is designated as a United States history course. (P&D)

Prerequisites: Any 200-level history course and ENG 151

HST 370 The Middle East and Europe
4 hours; 4 credits
An introduction to the relations between Western Europe and the non-Western Middle East as they evolved historically. In order to examine the Middle Eastern historical experience, the course begins with Christian conceptions of Islam in the medieval and early modern periods and explores whether and how the Christian representatives of Islam influenced Western discourses on the Middle East in modern times. For history majors and minors, this is designated as a World history course.

Prerequisites: Any 200-level history course and ENG 151

HST 375 Economic History of Soviet Russia
4 hours; 4 credits
An examination of the creation and development of the Stalinist economic system in the USSR after 1928 and in the European part of the Soviet bloc after 1945. The economic structure and policy will be investigated as both cause and effect of internal policy and Soviet foreign policy, as well as its applicability as a model for development in the Third World. For history majors and minors, this is designated as a modern European history course.

Prerequisites: Any 200-level history course and ENG 151

HST 382 War and Society
4 hours; 4 credits
An introduction to the study of war. The central focus of the course will be to see why wars begin, how they are won and lost, and what kind of impact war has had on recent Western history.

Prerequisites: Any 200-level history course and ENG 151
HST 384 Social and Political Ideologies in the Modern World
4 hours; 4 credits
A survey of the major social and political "isms" that developed from the French Revolution to the mid-twentieth century, analyzing their historical context and content. Such topics as liberalism, conservatism, socialism, nationalism, imperialism, communism, and fascism will be considered. For history majors and minors, this is designated as a modern European history course.
Prerequisites: Any 200-level history course and ENG 151

HST 386 The Recovery of Women's Past
(Also WMS 386)
4 hours; 4 credits
An examination of the history of women, beginning with ancient and classical notions of patriarchy in Mediterranean and Near Eastern cultures. Review of Jewish, Christian, and Islamic prescriptions about women as a basis for understanding the changes in modern Western history. Approximately half the course will examine the past two centuries when women's movements, feminisms, gender analysis, and sexual liberation evolved. For history majors and minors, this is designated as a modern European history course. (P&D)
Prerequisites: Any 200-level history course and ENG 151

HST 388 Imperialism
4 hours; 4 credits
The history and analysis of modern imperialism. Students will survey major theorists of imperialism from Hobson, Lenin, and their critics to the present. The range of theories of imperialism will be tested by applying them to the history of Western expansion, principally in the past century. For history majors and minors, this is designated as a modern European history course.
Prerequisites: Any 200-level history course and ENG 151

HST 389 Themes in American Women's History
(Also WMS 389)
4 hours; 4 credits
An exploration of selected themes in American women's history from the Colonial era to the present. This course, which is organized either around a chronological period, a thematic topic, or a geographical region, also examines women's historical methodology and literature. For history majors and minors, this is designated as a United States history course. (P&D)
Prerequisites: Any 200-level history course and ENG 151

HST 395 Foundations of Modern Society
4 hours; 4 credits
The rise of the modern state system; the origins of capitalism; the religious wars; the emergence of a secular society.
Prerequisites: Any 200-level history course and ENG 151

HST 401 Seminar in Advanced Historical Study
4 hours; 4 credits
An advanced course in the reading of classic works of history, combined with research on an individual student project. Required of all majors in their senior year. Open, by permission of the instructor, to seniors in other majors with the appropriate background. In alternate semesters the course material will be drawn from American and World history.
Prerequisites: HST 200, HST 300, and any additional 300-level history course

Honors College
Acting Director: Associate Professor Jonathan Sassi, South Administration Building (1A), Room 206.
The Honors College is a college within the College. It is designed for capable and highly motivated students ready to take advantage of the special opportunities it offers. The Honors College provides students with a common core of innovative and challenging courses during their first and second years of study, courses that provide a coherent foundation for the baccalaureate degree. Third- and fourth-year students pursue their fields of study in a wide range of majors and specializations, and may elect to meet their programs' criteria for graduation with honors. See section under Admissions for requirements.

The curriculum for the Honors College follows three plans: one plan is designed for students who intend to pursue a course of study leading to the Bachelor of Arts degree; one is designed for students who intend to pursue the Bachelor of Science degree; and one is designed for students intending to pursue a degree in the health sciences. Those who plan to major in the humanities and social sciences also take challenging courses in mathematics and the biological, physical, and computer sciences. Those who plan to major in mathematics, the sciences, and the health sciences take equally challenging courses in the humanities and social sciences. Those who plan to major in professional studies take challenging courses in all of the above.

The College participates in the CUNY Honors College: University Scholars Program. Students who have been accepted into the CUNY Honors Program will participate simultaneously in the Honors Colleges of CSI and the University.

Admission to the Honors College Directly from High School
First-time students may apply for admission to the CUNY Honors College at CSI and/or to the CSI Honors College. Applicants are expected to have an academic diploma with an average of at least 90. The admissions committee for the Honors College considers the following documents submitted by applicants: high school transcript; scores on Regents Examinations; scores on the SAT, ACT, and achievement tests; Advanced Placement courses; extracurricular activities; evidence of talents and interests; letters of recommendation; and personal essay. Personal interviews are also required. Admission is limited and competitive.

Admission to the CSI Honors College from Another College
Students transferring from other colleges who have completed fewer than 24 credits may apply to the CSI Honors College. They must meet the same requirements and submit the same documents as students applying from high school, with the addition of official college transcripts.

Admission to the CSI Honors College from CSI
CSI students who have completed 12 to 24 credits with a 3.5 GPA and who have taken or are ready to take MTH 130 Pre-Calculus Mathematics or the equivalent are also eligible to apply for transfer into the CSI Honors College.

Requirements:

BA students and BS students in Art, Business, Communications, Dramatic Arts, Information Systems, and Music
1. Humanities and Social Sciences
Six courses in humanities and social sciences from the Honors College courses, with two possible exemptions made for advanced placement credit, transfer credit, or completed CSI coursework.
Honors Writing Seminar
2. Science
   One year of laboratory science chosen from Honors College sections of:
   General Biology I and Laboratory
   General Biology II and Laboratory
   or
   General Chemistry I and Laboratory
   General Chemistry II and Laboratory
   or
   General Physics I and Laboratory
   General Physics II and Laboratory

3. Mathematics
   Honors College sections of at least one of the following courses:
   Applied Statistics Using Computers
   Analytic Geometry and Calculus I and Laboratory
   Analytic Geometry and Calculus II

4. Computer Science
   Honors College sections of one of the following two courses:
   Introduction to Computer Science
   Applications Programming

5. Arts
   One course chosen from art, art history, cinema, dance, dramatic arts, or music

   Students pursuing the BA degree and, in some cases, the BS degree, must meet a foreign language requirement. All students must complete PED 190 Fitness for Life.

**BS students, except BS students in Art, Business, Communications, Dramatic Arts, Information Systems, and Music**

1. Humanities and Social Sciences
   Four courses in humanities and social sciences chosen from the Honors College courses, with up to one exemption made for advanced placement credit, transfer credit, or completed CSI coursework.
   Science Writing Seminar

2. Science
   One year of laboratory science chosen from Honors College sections of:
   General Biology I and Laboratory
   General Biology II and Laboratory
   or
   General Chemistry I and Laboratory
   General Chemistry II and Laboratory
   or
   General Physics I and Laboratory
   General Physics II and Laboratory

   Two additional science courses chosen from the above list or from among courses having BIO 180, CHM 142, or PHY 160 as a prerequisite.

3. Mathematics
   Honors College sections of at least two of the following courses:
   Applied Statistics Using Computers
   Analytic Geometry and Calculus I and Laboratory
   Analytic Geometry and Calculus II

4. Computer Science
   One of the following two courses:
   Introduction to Computer Science
   Applications Programming

5. Arts
   One course chosen from art, art history, cinema, dance, dramatic arts, or music

   All students must complete PED 190 Fitness for Life.

**Students Intending to Major in Health Sciences including Physician Assistant, Physical Therapy, and Nursing**

1. Humanities and Social Sciences
   Four courses in humanities and social sciences chosen from the Honors College courses, with up to one exemption made for advanced placement credit, transfer credit, or completed CSI coursework. Nursing students may substitute PHL 130 Introduction to Ethics for one of the courses.
   Science Writing Seminar

2. Science
   One year of laboratory science chosen from Honors College sections of:
   General Biology I and Laboratory
   General Biology II and Laboratory
   or
   General Chemistry I and Laboratory
   General Chemistry II and Laboratory
   or
   General Physics I and Laboratory
   General Physics II and Laboratory

3. Mathematics
   Honors College sections of at least one of the following courses:
   Applied Statistics Using Computers*
   Analytic Geometry and Calculus I and Laboratory
   Analytic Geometry and Calculus II

   *Health Science students may substitute BIO 272 Biometrics

4. Computer Science
   One of the following two courses:
   Introduction to Computer Science
   Applications Programming

5. Arts
   One course chosen from art, art history, cinema, dance, dramatic arts, or music

   All students must complete PED 190 Fitness for Life.

Honors College students majoring in the Health Sciences may need more than 120 credits to complete a BS degree. Full-time Honors College students pursuing Nursing degrees should expect to spend more than two years studying for the AAS in Nursing and more than four years studying for the BS in Nursing. Nursing students should see an adviser in the Nursing Department.

**Honors College Courses**

**HSSH 101 The American Experience: Humanities**

4 hours; 4 credits

A writing-intensive introduction to selected areas and topics of the American experience through the humanities; the specific focus will be determined by the instructor.

Prerequisite: Admission to the Honors College
The Honors Seminar in the Humanities and Social Sciences will focus on a particular methodological problem or central issue in one or more disciplines of the humanities and social sciences. In the course of the semester, students will be required to (1) familiarize themselves with the current literature in a particular problem area and (2) pursue original research in that area. Students will also be required to read extensively, engage in seminar discussions, participate in individual conferences with the instructor, and pursue original research leading to an article-length paper.

Prerequisites: Matriculation in one of the disciplines under the aegis of the Division of Humanities and Social Sciences; completion of 64 credits; selection by a faculty committee.

### Information Systems

(Bachelor of Science)

Department of Business

Co-Coordinators:

Professor Max Gottlieb, Business Building (3N), Room 208

Department of Computer Science

Ms. Roberta Klibaner, Computer Science/Engineering Science and Physics Building (1N), Room 208.

The program in Information Systems, offered as an interdisciplinary collaboration between the Departments of Business and Computer Science, prepares undergraduate students to enter business with advanced quantitative skills and a sophisticated understanding of technology. In addition, it offers an opportunity for professional development for students who have already started a career. Graduates of the program will be able to traverse the boundary between management and computer information technology; to plan organizational change, advise in the development of information systems, participate in their implementation, and interpret analytical and statistical models and data.

Responding to changes in business and technology, the program in Information Systems is designed to prepare students for careers as systems analysts, programmer analysts, and designers; data administrators; information systems consultants; and managers in information technology.

In designing the curriculum, faculty in the departments have followed guidelines from the following professional organizations: the Association for Computing Machinery, the Data Processing Management Association, the International Conference on Information Systems, and the Association for Information Systems.

A minimum GPA of 2.5 is required for admission to and continuation in the Information Systems major and for graduation. There is no minimum GPA requirement for students enrolling in individual courses.

### Information Systems (BS)

#### General Education Requirements for the BS

**ENG 111, ENG 151, COR 100, PED 190: 12 credits**

Whenever possible, these four courses should be completed within the first 36 credits.

**Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 28-35 credits**

Whenever possible, these courses should be completed within the first 60 credits.

1. **Scientific Analysis: (11 credits)**
I NTEGRATED SCIENCE

1. Science and Technology: (8 credits)
   a. Mathematics: (3 credits)

2. Social Scientific Analysis: (7-8 credits)

3. The West and the World: (4 credits)

4. Textual, Aesthetic, and Linguistic Analysis: (6-8 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
   c. Arts and Communications: 200-level

5. Pluralism and Diversity: (0-4 credits)

Pre-Major Requirements: 18 credits
Pre-major requirements that count toward general education requirements are marked with an asterisk (*).

ACC 114 Introduction to Accounting I 4 credits
ACC 121 Introduction to Accounting II 4 credits
BUS/CSC 135 Introduction to Information Systems 3 credits
CSC 126 Introduction to Computer Science 4 credits
ECO 101* Economics 3 credits
MGT 110 Organizational Theory and Management 3 credits
MTH 229* Calculus Computer Laboratory 1 credit
MTH 231* Analytic Geometry and Calculus 3 credits

Major Requirements: 61 credits

ACC 250 Accounting Information Systems 4 credits
BUS 205 Data Communications and Networks for Business or
CSC 435 Advanced Data Communications 4 credits
BUS 211 Principles of Corporate Communication 3 credits
BUS 230/ECO 231 Quantitative Analysis of Business and Economic Problems 3 credits
BUS/CSC 435 Advanced Data Communications 4 credits
PHL 238 Ethical Issues in Business and Society 4 credits
BUS 334 Decision Support Systems 4 credits
BUS 352 Introduction to Systems Analysis 4 credits
BUS/CSC 405 Applied Concepts in Information Systems 4 credits
CSC 410 Applications Programming 4 credits
CSC 410 Input/Output Operations and File Management 4 credits
CSC 426 Information Structures 4 credits
CSC 434 Computer System Fundamentals 4 credits
ECO 210 Price Theory 4 credits
ECO/CSC 230 Introduction to Managerial and Economic Statistics 4 credits
FNC 240 Managerial Finance I 3 credits

One additional course chosen from the following:
CSC 330 Object-Oriented Software Engineering
CSC 332 Operating Systems
CSC 424 Database Management Systems
CSC 435 Advanced Data Communications
CSC 470 Introductory Computer Graphics
CSC 482 Discrete Simulation
MGT 320 Management of Organizational Behavior
MGT 410 Business Policy
MGT 416 Decision Making in Business

Electives: 0
Total credits: 120

Liberal Arts and Sciences Requirement
Since most business courses and computer science courses are non-liberal arts and sciences courses, students in this program should pay special attention to this requirement. At least 60 credits of the 120 credit total must be in this area.

See chapters on Business and Computer Science for course descriptions.

Integrated Science Courses

Department of Engineering Science and Physics
Chair: Associate Professor Syed A. Rizvi, Computer Science/Engineering Science and Physics Building (IN), Room 226
Department of Chemistry
Chair: Associate Professor John Olsen, Biological Sciences/Chemical Sciences Building (6S), Room 235

INS 100 Integrated Physical Science I
3 hours; 3 credits
For students whose major interests are not in science. Elements of astronomy, early and present day theories of the solar system. Development of the laws and theories basic to the study of man’s physical world: force and motion, gravitation, energy, properties of matter, heat, electricity, and magnetism. Students may not receive credit for both INS 100 and AST 100 Contemporary Theories of the Solar System. (science)
Prerequisite: MTH 020 or an appropriate score on the CUNY Mathematics Assessment Test
Corequisite: INS 101

INS 101 Integrated Physical Science I Laboratory
2 laboratory hours; 1 credit
Laboratory experiments and demonstrations illustrative of subject matter of INS 100 and the scientific method. Experiments on motion of the Earth and moon, free fall, Newton’s laws, properties of matter, heat, electricity, and magnetism. (science)
Pre- or corequisite: INS 100

INS 110 Integrated Physical Science II
3 hours; 3 credits
Structure of the atom; the periodic table; the chemistry of carbon, plastics, food, water, air, drugs, nuclear power; the study of the earth, rocks, and minerals; volcanism, weathering, erosion, fossils, and Earth history. (science)
Prerequisite: MTH 020 or an appropriate score on the CUNY Mathematics Assessment Test

INS 111 Integrated Physical Science II Laboratory
2 laboratory hours; 1 credit
Preparation and study of simple chemicals, identification of rocks and minerals, elementary laboratory techniques. (science)
Pre- or corequisite: INS 110
International Studies
(Bachelor of Arts and minor)
Interdisciplinary Program
Acting Coordinator: Assistant professor Jane Marcus-Delgado, Department of Modern Languages; English, Speech, and World Literature/Modern Languages Building (25), Room 101

This International Studies major is an interdisciplinary major with a predominantly social science emphasis—history, political science, economics—that allows for a measure of geopolitical specialization. Students choose courses from the categories of economics/geography, culture and society, and political science. They also select classes that focus on a geographical area: Africa/Middle East, Asia, Caribbean/Latin America, or Europe.

Study Abroad: International Studies majors are strongly urged to plan and schedule a semester of study abroad in their junior or senior year through the Center for International Service.

Internship: International Studies majors are urged to plan and schedule an internship with an international organization through the Division of Humanities and Social Sciences.

International Studies (BA)

General Education Requirements for the BA
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 28–47 credits
Whenever possible, these courses should be completed within the first 60 credits.

1. Scientific Analysis (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)
2. Social Scientific Analysis: (7-8 credits)
3. The West and the World: (4 credits)
4. Textual, Aesthetic, and Linguistic Analysis: (6-8 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
   Arts and Communications: 200-level
5. Pluralism and Diversity Requirement: (0-4 credits)
6. Foreign Language: (0-12 credits)*
   See section on general education requirements for approved course lists and complete details.

*Language Requirement:
For the major in International Studies, two and one-half years of college-level study of the same language (one semester beyond the 215-level course) or evidence of proficiency at that level is required. All languages qualify.

Pre-Major Requirements: 12 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>INT 100</td>
<td>Introduction to International Studies</td>
<td>3</td>
</tr>
<tr>
<td>ECO 101</td>
<td>Introduction to Economics</td>
<td>3</td>
</tr>
<tr>
<td>GEG 100</td>
<td>Introduction to Geography</td>
<td>3</td>
</tr>
<tr>
<td>HST 100</td>
<td>Past and Present</td>
<td></td>
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<tr>
<td>or POL 103</td>
<td>Understanding the Political World</td>
<td>3</td>
</tr>
</tbody>
</table>

Major Requirements: 36 credits
Within the major requirements at least 12 credits must be at the 300 level or above.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HST 239/</td>
<td>World Civilization II</td>
<td>4</td>
</tr>
<tr>
<td>SLS 241</td>
<td>World Civilization II</td>
<td>4</td>
</tr>
<tr>
<td>(Prerequisites for this course: a minimum GPA of 2.75; ENG 111 and ENG 151)</td>
<td></td>
<td></td>
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<tr>
<td>POL 260</td>
<td>International Politics:</td>
<td>4</td>
</tr>
<tr>
<td>or POL 261</td>
<td>In Search of a New World Order</td>
<td>4</td>
</tr>
<tr>
<td>ANT 225/</td>
<td>Multicultural Literacy</td>
<td>4</td>
</tr>
</tbody>
</table>

Three courses chosen from one of the following categories: (12 credits)

1. Economics/Geography
   ECO 250 | International Economics
   GEG 250 | Conservation and Humanity
   ECO/   |
   GEG 252 | Economic Geography
   ECO 256 | Analysis of Underdeveloped Areas
   GEG 260 | Urban Geography
   ECO 370 | International Finance

2. Culture and Society
   ANT 370 | Urban Anthropology
   ANT 460 | Personality and Culture
   CIN 240 | Third World Cinema
   ENH 206 | Classics of Modern World Literature
   ENL 396 | Studies in Global Literature I
   ENL 397 | Studies in Global Literature II
   HST 382 | War and Society
   HST 388 | Imperialism
   INT 200 | The World and the West: Contemporary Issues
   PHL 243 | Comparative Religion

3. Political Science
   POL 240 | Comparative Government
   POL 261 | International Organizations
   POL/   |
   GEG 264 | Political Geography
   POL 342 | Comparative Politics of Developing Countries
   POL 349 | Comparative Human Rights
   POL 365 | Current American Foreign Policy
   POL 375 | International Law

Three courses chosen from one of the following geographical areas: (12 credits)

A. Three African/Middle East area courses that emphasize comparative or general issues chosen from the following:
   AFA 247/ | Peoples and Cultures of Africa
   HST 266 | History of Africa
   AFA 260/ | Modern Middle East
   HST 290 | Africa Encounters Europe
   HST 330 | Nationalist Movements and the Process of Independence in Africa
ITALIAN

B. Three Asian area courses that emphasize comparative or general issues chosen from the following:

- ECO 257 The Japanese Economy
- ENH 207 Classics of Asian Literature
- ENL 335 Modern Asian Literature
- HST 204 Introduction to Asian Civilization
- HST 206 Modern China
- HST 210 History of Modern India
- PHL 344 Eastern Philosophy
- POL 256 Contemporary Far Eastern Political Scene
- POL 353 China: Politics and Foreign Relations

C. Three Caribbean/Latin American area courses that emphasize comparative or general issues chosen from the following:

- HST 208 History of Modern Latin America
- HST/  
- APA 265 History of the Caribbean
- HST 291 The Americas Encounter Europe
- HST 315 The European Discovery of America and the Encounter with Native Peoples
- INT 201 Latin American Perspectives
- SPN 325 Civilization of Pre-Columbian Spanish America
- SPN 330 Civilization of Spanish America
- SPN 350 Introduction to Spanish American Literature
- SPN 455 Modern Spanish American Novel
- SPN 480 Literature of the Hispanic Caribbean

D. Three European area courses that emphasize comparative or general issues chosen from the following:

- ART 208 Twentieth-Century Art
- CIN 407 International Films I
- ENH 205 Classics of European Literature
- GEG 220 Geography of Western Europe
- HST 271 Modern British History: 1900 to the Present
- HST 272 Modern Germany
- HST 274 History of Modern Russia
- HST 276 History of Italy
- HST 375 Economic History of Soviet Russia
- HST 277 Europe: 1815-1914
- HST 278 Twentieth-Century Europe
- PHL 213 Existentialism
- POL 241 Western European Politics
- POL 244 Soviet People and their World
- POL 303 Recent Political Theory
- POL 340 European Economic Community
- WMS/  
- LNG 256 Women and European Literature

Electives: 34-41 credits

Total Credits Required: 120 credits

Minor Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INT 100</td>
<td>Introduction to International Studies</td>
<td>3 credits</td>
</tr>
<tr>
<td>ECO 250</td>
<td>International Economics</td>
<td>4 credits</td>
</tr>
<tr>
<td>POL 260</td>
<td>International Politics: In Search of a New World Order</td>
<td>4 credits</td>
</tr>
</tbody>
</table>

HST 239/

SLS 241 World Civilization II 4 credits

Students who minor in International Studies must take INT 200 The World and the West: Contemporary Issues, which qualifies in fulfillment of the West and the World requirement for general education.

Two years of college-level study of the same language (one semester beyond the 213-level course) or evidence of proficiency at that level. All languages satisfy the requirement.

Courses

INT 100 International Studies
3 hours; 3 credits
This course examines the impact and implications of today's dynamic international context for nations and their citizens. To operate in this global context, citizens, corporations, and governments must know other cultures and political-economic systems and how global forces influence domestic activities, both public and private. Analyzing the social, cultural, economic, and current political characteristics of the international environment, students will learn how these characteristics may affect their lives and choices. (social science)

INT 200 The World and the West: Contemporary Issues
4 hours; 4 credits
This interdisciplinary course will analyze contemporary issues in the dynamic relationship between countries and cultures described as "the West" and the "non-West." Social, cultural, historical, political, and economic factors affecting this relationship will be considered. This course provides students the opportunity, skill, and knowledge to acquire and interpret information necessary for comparing and analyzing alternative models of "the West" and the rest of the world and the dynamic relationship between them. Students will examine news reports of current international issues involving such regions as Latin America, Africa, Eastern Europe, and Asia. (West and the World) (P&D)
Prerequisites: ENG 111 and COR 100

INT 201 Latin American Perspectives
4 hours; 4 credits
This course will analyze how Latin America has historically interacted with the West, and the West with Latin America. Emphasis will be placed on the historical legacies of the encounters between the West and Latin America, the geographical/social diversity of this area, an appreciation of the region's artistic and literary contributions, as well as the technological challenges facing this part of the world today. (West and World)
Prerequisites: ENG 111 and COR 100

Italian

Department of Modern Languages
Chair, Professor Kathryn Talarico, English, Speech, and World Literature/Modern Languages Building (2S), Room 109
See also listings under Languages and Romance Languages.
All students with prior training in Italian must take a proficiency examination to determine placement at an appropriate level.

Minor
At least 12 credits of courses at the 200 level or above.
Courses

**ITL 101  Italian Conversation I**  
2 hours; 2 credits  
Practical Italian for business, community relations, travel, and simple technical application. For beginners with no previous knowledge of the language. Regular attendance in the Modern Languages Media Center is required.

**ITL 102  Italian Conversation II**  
2 hours; 2 credits  
A continuation of ITL 101. Regular attendance in the Modern Languages Media Center is required.  
Prerequisite: ITL 101 or equivalent

**ITL 113  Basic Italian I**  
4 hours; 4 credits  
A beginning course in fundamentals of expression and communication for those who have had no previous work in the language. Regular attendance in the Modern Languages Media Center is required. (foreign lang.)

**ITL 114  Basic Italian II**  
4 hours; 4 credits  
A continuation of ITL 113. Regular attendance in the Modern Languages Media Center is required. (foreign lang.)  
Prerequisite: ITL 113 or one year of high school Italian or equivalent

**ITL 208  Italian for Native Speakers**  
4 hours; 4 credits  
For students fluent in spoken Italian but lacking experience in writing and reading the language.

**ITL 213  Continuing Italian I**  
4 hours; 4 credits  
Grammar review and more intensive training in the fundamentals of expression and communication, both written and oral, based on selected cultural readings. Regular attendance in the Modern Languages Media Center is required. (foreign lang.)  
Prerequisite: ITL 114 or equivalent

**ITL 215  Continuing Italian II**  
4 hours; 4 credits  
A continuation of ITL 213 with stress on written and oral composition and on selected cultural and literary readings of intermediate difficulty. Regular attendance in the Modern Languages Media Center is required. (foreign lang.)  
Prerequisite: ITL 213 or equivalent

**ITL 313  Advanced Communication Skills**  
4 hours; 4 credits  
Refinement of written and oral expression through composition, translation, oral reports, and critical study of the Italian grammar based on the analysis of selected literary readings of advanced difficulty. Regular attendance in the Modern Languages Media Center is required.  
Prerequisites: ITL 215 or equivalent

**ITL 320  Italian Civilization and Culture**  
4 hours; 4 credits  
A survey of the major contributions of Italian civilization in the fields of art, literature, and science, from its origins to the present day.  
Prerequisite: ITL 313 or equivalent

**ITL 325  The Italian American Experience**  
4 hours; 4 credits  
A survey of the major contributions of Italian Americans in the fields of art, literature, and science in the United States. Readings and assignments in Italian required for majors; readings and assignments may be done in English for non-majors.  
Prerequisite: ITL 313 or equivalent for those doing readings and assignments in Italian; no prerequisite for those doing readings and assignments in English

**ITL 340  Introduction to Italian Literature**  
4 hours; 4 credits  
An introduction to major works of Italian literature from the Sicilian school to the contemporaries. (literature)  
Prerequisite: ITL 313 or equivalent

**ITL 440  Italian Nineteenth-Century Literature**  
4 hours; 4 credits  
An examination of major figures and their works in Italian nineteenth-century literature, from Foscolo and Leopardi to Manzoni and De Sanctis. (literature)  
Prerequisite: ITL 313 or equivalent

**ITL 450  Modern Italian Literature**  
4 hours; 4 credits  
Representative masterpieces of nineteenth- and twentieth-century Italian literature from Manzoni to such other major contemporary authors as Leopardi, D’Annunzio, Carducci, Pirandello, Lampedusa, Silone, Moravia, Pavese, Quasimodo, and Montale. (literature)  
Prerequisite: ITL 313 or equivalent

Language Courses

(See listings under French, Italian, Spanish)  
Department of Modern Languages  
Chair: Professor Kathryn Talarico, English, Speech, and World Literature/Modern Languages Building (2S), Room 109.  
General courses in the culture and literature of non-English speaking peoples.

**LNG 156  Contemporary European Drama**  
3 hours; 3 credits  
The works of Pirandello, Brecht, Pinter, Beckett, and Genet as well as such antirealistic movements as theatricalism, epic theater, alienation, the absurd, and cruelty.

**LNG 162  Western European Culture - France**  
3 hours; 3 credits  
An overview of the unique cultural aspects of France, emphasizing language, literature, music, and art. Taught in English. Not to be credited to a major in a foreign language.

**LNG 163  Western European Culture - Germany**  
3 hours; 3 credits  
An overview of the unique cultural aspects of Germany, emphasizing language, literature, music, and art. Taught in English. Not to be credited to a major in a foreign language.

**LNG 164  Western European Culture - Italy**  
3 hours; 3 credits  
An overview of the unique cultural aspects of Italy, emphasizing language,
literature, music, and art. Taught in English. Not to be credited to a major in a foreign language.

**LNG 165 Western European Culture - Spain**
3 hours; 3 credits
An overview of the unique cultural aspects of Spain, emphasizing language, literature, music and art. Taught in English. Not to be credited to a major in a foreign language.

**LNG 168 Latin American Culture**
3 hours; 3 credits
An overview of the varied cultural aspects of the Latin American countries, emphasizing language, literature, music, and art. Both European and Pre-Columbian influences will be considered. Taught in English. Not to be credited to a major in a foreign language.

**LNG 266 Women in European Literature to the Renaissance**
(Also WMN 266)
4 hours; 4 credits
Women as writers and characters in European literature from classical antiquity to the Renaissance. (arts & com.) (P&D)
Prerequisites: ENG 111, ENG 151

**LNG 267 Women in European Literature after the Renaissance**
(Also WMS 267)
4 hours; 4 credits
Women as writers and characters in European literature from the Renaissance to modern times. (arts & com.) (P&D)
Prerequisites: ENG 111, ENG 151

**LNG 387 Major World Author I**
(Also ENL 387)
4 hours; 4 credits
Intensive study of the works of a major world author. Prerequisite: An ENH 200-level course

**LNG 388 Major World Author II**
(Also ENL 388)
4 hours; 4 credits
Intensive study of the works of a major world author in English translation. Prerequisite: An ENH 200-level course

**LNG 389 Major World Author III**
(Also ENL 389)
4 hours; 4 credits
Intensive study of the works of a major world author in English translation. Prerequisite: An ENH 200-level course

**LNG 396 Studies in Global Literature I**
(Also ENL 396)
4 hours; 4 credits
Focus on literature from outside the U.S. and Europe. The specific emphasis will vary from semester to semester and will be announced in the Schedule of Classes. (P&D)
Prerequisite: An ENH 200-level course

**LNG 397 Studies in Global Literature II**
(Also ENL 397)
4 hours; 4 credits
Focus on literature from outside the U.S. and Europe. The specific emphasis will vary from semester to semester and will be announced in the Schedule of Classes. (P&D)
Prerequisite: An ENH 200-level course

**LNG 406 Postwar Italian Cinema**
(Also CIN 406)
4 hours; 4 credits
A study of the political and cultural roots of Neorealism and of the personal style and vision of such postwar directors as Visconti, DeSica, Rossellini, Fellini, Antonioni, and Bertolucci.
Prerequisites: CIN 210 and ENG 111

**LNG 426 Language Acquisition and Psycholinguistics**
(Also ENL 426)
4 hours; 4 credits
The course examines issues in psycholinguistics, especially those related to native, foreign, and second language acquisition: How is language learned? How do we acquire a second language? What are the characteristics of successful language learning?
Prerequisites: ENG 111, ENG 151

### Liberal Arts and Sciences

**Liberal Arts and Sciences (AA)**

The Liberal Arts and Sciences Associate in Arts degree is the transfer degree for all students, other than those in the sciences, mathematics, or computer science, who plan to matriculate in a four-year bachelor's degree program. The AA degree allows considerable flexibility: it enables students to survey areas of academic interest, to concentrate in a particular area, to begin work on a major in the sophomore year, and to combine career courses with the study of the liberal arts and sciences. Graduates may continue study toward a bachelor's degree at the College in one of many major fields of study.

**General Education Requirements for the AA**

**ENG 111, ENG 151, COR 100, PED 190: 12 credits**
Whenever possible, these four courses should be completed within the first 36 credits.

**Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 28–47 credits**
Whenever possible, these courses should be completed within the first 60 credits.

1. **Scientific Analysis:** (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)
2. **Social Scientific Analysis:** (7-8 credits)
3. **The West and the World:** (4 credits)
4. **Textual, Aesthetic, and Linguistic Analysis:** (6-8 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
      Arts and Communications: 200-level
5. **Pluralism and Diversity Requirement:** (0-4 credits)
6. **Foreign Language:** (0-12 credits)

See section on general education requirements for approved course lists and complete details.
Electives: 1-20 credits
The remaining courses should be chosen in consultation with an adviser. Students interested in pursuing a bachelor’s degree should consult with advisers in the discipline in which they plan to major and may begin working in their majors while completing the requirements for the associate’s degree.

Total Credits Required: 60

Liberal Arts and Sciences (AS)
This is the basic degree for students interested, in the future, in matriculating in a bachelor’s degree program in the sciences, mathematics, or computer science. Graduates may continue in the baccalaureate programs in biochemistry, biology, chemistry, computer science, computer science-mathematics, engineering science, medical technology, and physics offered by the College. Students are recommended to consult an academic adviser about appropriate pre-major courses to prepare for the baccalaureate programs.

General Education Requirements for the AS
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 21-31 credits
Whenever possible, these courses should be completed within the first 36 credits.
1. Scientific Analysis: 12-15 credits chosen from the following
   a. 8 credits chosen from one of the following sequences:
      AST 100, 101, 102, 103 Astronomy I and II with laboratories
      BIO 170, 171, 180, 181 General Biology I and II with laboratories
      CHM 141, 121, 142, 127 General Chemistry I and II with laboratories
      PHY 120, 121, 160, 161 General Physics I and II with laboratories
      GEO 100, 101, and GEO 102, 105 or 105 Geology with laboratories
   b. 4 - 7 credits chosen from the following:
      MTH 230, 229 Calculus I with Pre-Calculus with laboratory
      MTH 231, 229 Analytic Geometry and Calculus I with laboratory
2. Social Scientific Analysis (3-4 credits)
3. The West and the World (4 credits)
4. Textual, Aesthetic, and Linguistic Analysis (3-4 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
   c. Arts and Communications: 200-level
5. Pluralism and Diversity Requirement (0-4 credits)
See section on general education requirements for approved course lists and complete details.

Core Requirements: 11 credits:
8 credits chosen from the following:
   AST 100, 101, 102, 103 Astronomy I and II with laboratories
   BIO 170, 171, 180, 181 General Biology I and II with laboratories
   CHM 141, 121, 142, 127 General Chemistry I and II with laboratories
   PHY 120, 121, 160, 161 General Physics I and II with laboratories
   GEO 100, 101, and GEO 102 or 105 or 105 Geology with laboratories

Electives: 6 -16 credits
Minimum of two science or math courses at the 200 level or above chosen from astronomy, biology, chemistry, computer science, engineering science, geology, math, or physics. Students should consult with an academic adviser in the discipline of interest as early as possible.

Total Credits Required: 60

Mathematics
(Bachelor of Science, Adolescence Education Preparation, Minor; see also Computer Science-Mathematics)
Department of Mathematics
Chair: Professor Arundhati Raychaudhuri, Mathematics Building (1S), Room 215

Mathematics (BS)
General Education Requirements for the BS
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 21-27 credits
Whenever possible, these courses should be completed within the first 60 credits.
1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
      chosen from one of the following sequences:
      BIO 170, 171, 180, 181 General Biology I and II with laboratories
      CHM 141, 121, 142, 127 General Chemistry I and II with laboratories
      PHY 120, 121, 160, 161 General Physics I and II with laboratories
      GEO 100, 101, and GEO 102, 105 or 105 Geology with laboratories
   b. 3 credits chosen from the following:
      MTH 272 Biometrics
      MTH 130 Pre-Calculus Mathematics
      MTH 214 Applied Statistics Using Computers
      MTH 232 Analytic Geometry and Calculus II
      MTH 233 Analytic Geometry and Calculus III
2. Social Scientific Analysis: (3-4 credits)
3. The West and the World: (4 credits)
4. Textual, Aesthetic, and Linguistic Analysis: (3-4 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
   c. Arts and Communications: 200-level
5. Pluralism and Diversity Requirement: (0-4 credits)
See section on general education requirements for approved course lists and complete details.

**Pre-Major Requirements: 14-17 credits**

- MTH 229 Calculus Computer Laboratory 1 credit
- MTH 231 Analytic Geometry and Calculus I 3 credits
- MTH 232 Analytic Geometry and Calculus II 3 credits
- MTH 233 Analytic Geometry and Calculus III 3 credits  
  \[(10 \text{ credits})\]
  or
  
- MTH 229 Calculus Computer Laboratory 1 credit
- MTH 235 Accelerated Calculus I 5 credits
- MTH 236 Accelerated Calculus II 5 credits  
  \[(11 \text{ credits})\]
  or
  
- MTH 229 Calculus Computer Laboratory 1 credit
- MTH 230 Calculus I with Pre-Calculus 6 credits
- MTH 232 Analytic Geometry and Calculus II 3 credits
- MTH 233 Analytic Geometry and Calculus III 3 credits  
  \[(13 \text{ credits})\]
- CSC 126 Introduction to Computer Science
  or
- CSC 270 Introduction to Scientific Programming 4 credits

**Major Requirements: 36 credits**

- MTH 330 Applied Mathematical Analysis I 4 credits
  or
- MTH 334 Differential Equations 4 credits
- MTH 338 Linear Algebra 4 credits
- MTH 339 Applied Algebra 4 credits
- MTH 341 Advanced Calculus I 4 credits

Five additional mathematics courses (20 credits) at the 300 or 400 level chosen with the approval of an adviser.

Students interested in pure mathematics are advised to include courses chosen from the following:

- MTH 331 Applied Mathematical Analysis II
- MTH 342 Advanced Calculus II
- MTH 347 Number Theory
- MTH 350 Mathematical Logic
- MTH 431 Complex Analysis
- MTH 441 Topology
- MTH 442 Abstract Algebra

Students interested in applied mathematics are advised to include courses chosen from the following:

- MTH 311 Probability Theory and an Introduction to Mathematical Statistics
- MTH 331 Applied Mathematical Analysis II
- MTH 335 Numerical Analysis
- MTH 337 Applied Combinatorics and Graph Theory
- MTH 370 Operations Research
- MTH 410 Mathematical Statistics I
- MTH 415 Mathematical Biology
- MTH 435 Nonlinear Dynamics and Chaos

Students interested in Adolescence Education (see below) are advised to include courses chosen from both of the following categories:

1. For strengthening foundations:
   - MTH 306 History of Mathematical Thought
   - MTH 347 Number Theory
   - MTH 350 Mathematical Logic
   - MTH 442 Abstract Algebra

2. For applications and for topics relevant to the adolescence education classroom:
   - MTH 311 Probability Theory and an Introduction to Mathematical Statistics
   - MTH 337 Applied Combinatorics and Graph Theory
   - MTH 337 Operations Research
   - MTH 415 Mathematical Biology
   - MTH 435 Nonlinear Dynamics and Chaos

With permission of the department, qualified undergraduates may also take selected graduate mathematics courses (600-level) as part of the 20 required credits; MTH 625 Geometry for Secondary School Teachers, is especially recommended.

**Mathematics–Adolescence Education Preparation, grades 7-12**

Students interested in teaching mathematics in secondary schools complete the general education requirements, pre-major requirements, and major requirements of the Mathematics (BS) major, and the following requirements of the adolescence education sequence offered by the Department of Education: 24 credits

- EDS 201 Social Foundations of Secondary Education 4 credits
- EDS 202 Psychological Foundations of Secondary Education 4 credits
- EDS 303 The Teaching of Secondary School Curriculum in Mathematics 4 credits
- EDS 307 Discovery Learning and Interdisciplinary Instruction 4 credits
- EDS 400 Student Teaching in Secondary Education 6 credits
- EDS 401 Reflection and Analysis in Student Teaching in Secondary Education 2 credits

**Electives: 28-37 credits**

<table>
<thead>
<tr>
<th>Concentration</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>Pure or Applied Math</td>
<td>4-13</td>
</tr>
<tr>
<td>Mathematics-adolescence education</td>
<td>4-13</td>
</tr>
</tbody>
</table>

**Total Credits Required: 120**

**Honors**

To graduate with Honors in Mathematics a student must have a 3.5 grade point average in mathematics courses and must complete an honors thesis or project. The student must work closely with a Mathematics faculty member to define the project, carry out the research and investigation, and write the final report or prepare the final project. The student may receive credit through independent study for her/his work on an honors project. The project must be accepted by the Honors Committee of the Department of Mathematics.

**Mathematics-Computer Science**

(See Computer Science-Mathematics)

**Minor**
Prerequisite Courses

MTH 229 Calculus Computer Laboratory; MTH 231, MTH 232, MTH 233 Analytic Geometry and Calculus I, II, and II 10 credits or
MTH 229 Calculus Computer Laboratory; MTH 235, MTH 236, Accelerated Calculus I and II 11 credits or
MTH 229 Calculus Computer Laboratory; MTH 230, 232, 233 Calculus I with Pre-Calculus, Analytic Geometry and Calculus II, III 13 credits

Requirements:

At least 12 credits of mathematics courses at the 300 or 400 level including at least one four-credit course that has not been used to satisfy a requirement for another major.

Courses

CMAT
The City University of New York Mathematics Assessment Test (CMAT) consists of five parts. Each student must successfully complete Parts I and II, which tests proficiency in basic mathematical skills. The test includes basic arithmetic skills, fractions, percentages, word problems, and elementary algebra and geometry. Students who pass or are exempt from taking Parts I and II take Parts III, IV, and V of the CMAT for placement into appropriate levels of mathematics courses.

Students who do not get a satisfactory score on Parts I, II and/or Part III of the CMAT on entrance are required to take the appropriate 0-level mathematics course. Students are expected to complete the remedial courses that qualify them to enter college-level writing and mathematics courses in one year, which may include, in addition to two semesters, a pre-freshman and a post-freshman Summer Immersion course and a Winter Intersession workshop.

0-Level Courses in Mathematics

MTH 020 Elementary Algebra
(4 hours; 0 credits)
This course covers material on Parts I and II of the CUNY Mathematics Assessment Test (CMAT) and additional topics in algebra. It is an entry-level course designed for students who failed the first two parts of the CMAT, or who passed the first two parts of the CMAT but did not perform satisfactorily on the elementary algebra part.

MTH 030 Intermediate Algebra
(4 hours; 0 credits)
This course is offered for students who have competence in elementary algebra and require further study in mathematics for their degree program.

MTH 025 Selected Topics in Intermediate Algebra
(4 hours; 0 credits)
This course is offered for students who pass the first two parts of the CUNY Mathematics Assessment Test (CMAT) with a score greater than or equal to 30 (out of 40) and achieve a score on the Mathematics Assessment Test indicating that they need additional work in elementary algebra. This course covers some topics from elementary algebra as well as the content of MTH 030.

College-Level Mathematics Courses
The College offers several introductory mathematics courses meeting a

Placement:

Placement in the mathematics sequences is regulated by the following policies of the Department of Mathematics.

a) All incoming students who have passed Parts I and II of the the CMAT or are exempt from taking the test take additional sections of the CMAT for initial placement into MTH 020, 030, 101, 102, 108, 109, 113, 121, 123, 130, 217, 223, 230, 231. All incoming students are requested to bring a high school transcript to their initial advisement appointment.

b) Transfer students are requested to bring a transcript and catalog descriptions of their previous mathematics courses to their initial advisement appointment for evaluation by the Department of Mathematics.

c) Students who complete MTH 123 with a grade of A may go directly to Calculus MTH 231. Students who complete MTH 123 with a grade of A
or B may go directly to calculus with a pre-calculus component, MTH 230. Initial placement into MTH 020, 102, 108, 109, 113, 030, 121, 123, 130, 217, 223, 230, or 231 for students not covered by the policies above is determined at the recommendation of faculty advisers in the Department of Mathematics.

**MTH 010** Basic Mathematics

4 hours; 0 credits

Arithmetic operations on whole numbers, decimals, fractions, and signed numbers. Ratios, proportions, percents, graphs, and charts. Selected topics from elementary algebra. The emphasis is on skills development and applications of verbal problems.

**MTH 020** Elementary Algebra

4 hours; 0 credits

Selected topics from elementary algebra including factoring, operations on polynomials, solving and graphing linear and quadratic equations. Applications to word problems.

Prerequisite: An appropriate score on the CUNY Mathematics Assessment Test or permission of the Department of Mathematics

**MTH 025** Selected Topics in Intermediate Algebra

4 hours; 0 credits

Linear equations, linear inequalities, absolute value equations, absolute value inequalities, word problems, polynomials, rational functions, factoring, exponents, equations of straight lines, graphing, functions, systems of linear equations in two variables. Not open to students who have passed MTH 020.

Prerequisites: A score on parts I and II of the CUNY Mathematics Assessment Test (CMAT) that is greater than or equal to 30 or an appropriate score on the (CMAT) or permission of the Department of Mathematics

**MTH 030** Intermediate Algebra

4 hours; 0 credits

Inequalities, absolute value, radical and fractional equations, systems of equations in two unknowns, two-by-two determinants, and scientific notation. Extensive treatment of word problems and an introduction to the use of the scientific calculator. Not open to students who have passed MTH 025.

Prerequisite: MTH 020 or an appropriate score on the CUNY Mathematics Assessment Test or permission of the Department of Mathematics

**MTH 102** Mathematics for Liberal Arts Students

4 hours; 4 credits

This course is intended to introduce the nonspecialist to contemporary mathematical thinking. Topics include probability and statistics and other topics chosen by the instructor, such as inductive and deductive reasoning, sequences, geometry, linear programming, graph theory, and mathematics for computer science. (math)

Prerequisite: MTH 020 or an appropriate score on the CUNY Mathematics Assessment Test or permission of the Department of Mathematics

**MTH 108** Medical Dosage Calculations

2 hours; 2 credits

Calculations of medical dosages involving conversions between the metric, apothecary, and household systems of measurement. Emphasis on complex computation of parenteral, non-parenteral, pediatric dosages and calculation and quantitative estimating of medical dosages.

Prerequisite: MTH 020 or an appropriate score on the CUNY Mathematics Assessment Test or permission of the Department of Mathematics

**MTH 109** Mathematics and the Environment

3 hours; 3 credits

Mathematical topics including sequences, graphs, statistics, probability, solution of equations, and mathematical reasoning applied to environmental issues such as population growth, energy demand, and dwindling natural resources. (math)

Not open to students who have taken and successfully completed MTH 106.

Prerequisite: MTH 020 or an appropriate score on the CUNY Mathematics Assessment Test or permission of the Department of Mathematics

**MTH 113** Introduction to Probability and Statistics with Computer Applications

4 hours; 4 credits

Measures of central tendency and dispersion, the normal curve, hypothesis testing. Linear correlation and regression, basic concepts in probability with application to problems in the social, behavioral, and biological sciences. Statistical computer programs will be used extensively.

Students may receive credit for only one of these courses: MTH 113 or MTH 214. (math)

Prerequisite: MTH 020 or MTH 108 or an appropriate score on the CUNY Mathematics Assessment Test or permission of the Department of Mathematics

**MTH 121** Finite Mathematics

3 hours; 3 credits

Matrix algebra, applications of matrices to systems of linear equations and to business problems, determinants, Cramer's rule, graphing techniques, linear inequalities, linear programming, exponential and logarithmic functions, simple and compound interest. This course is intended primarily for business and economics students. (math)

Prerequisite: MTH 025 or MTH 030 or an appropriate score on the CUNY Mathematics Assessment Test or permission of the Department of Mathematics

**MTH 123** College Algebra and Trigonometry

4 hours; 4 credits

Advanced topics in algebra, including inequalities and complex numbers. Logarithmic, exponential, and trigonometric functions; graphs and equations. Inverse functions. Elements of analytic geometry. (math)

Prerequisite: MTH 025 or MTH 030 or an appropriate score on the CUNY Mathematics Assessment Test or permission of the Department of Mathematics

**MTH 129** Algebra and Trigonometry Computer Laboratory

2 laboratory hours; 1 credit

Students will work individually or in small groups on assigned computer projects that will reinforce the concepts of algebra and trigonometry from the numerical and graphical points of view. Suitable mathematical software will be utilized. Applications of algebra and trigonometry as well as general problem solving techniques using the computer will be discussed.

Pre- or corequisite: MTH 123 or MTH 130

**MTH 130** Pre-Calculus Mathematics

4 hours; 3 credits

A functional approach to algebra and trigonometry. Selected topics such as trigonometric functions, trigonometric identities, inverse trigonometric functions, complex numbers, exponential functions, logarithmic functions, introduction to analytic geometry, inequalities, absolute value, theory of equations, binomial theorem, arithmetic and geometric series. (math)

Prerequisite: MTH 123 or an appropriate score on the CUNY Mathematics Assessment Test or permission of the Department of Mathematics
MTH 214  Applied Statistics Using Computers
4 hours; 4 credits
An introduction to statistics using modern statistical software to facilitate exploration of real-world data. The course includes exploratory data analysis, central tendency and spread, elementary probability, confidence intervals, tests of hypotheses, non-parametric tests and linear regression. Prerequisite: MTH 130 or MTH 221 or permission of the Department of Mathematics

MTH 217  Fundamentals of Mathematics I
(Also SLS 217)
4 hours; 4 credits
A study of the basic elements of mathematical thought especially designed for students seeking certification as elementary school teachers. Topics include problem solving techniques, set theory, mathematical logic, number systems and their properties, numeration systems, and algorithms. Prerequisites: A minimum GPA of 2.75 and MTH 025 or MTH 030 or an appropriate score on the CUNY Mathematics Assessment Test or permission of the Department of Mathematics, and a 100-level mathematics general education course.

MTH 218  Fundamentals of Mathematics II
(Also SLS 218)
4 hours; 4 credits
A continuation of MTH 217. Topics include number theory, probability, statics, introductory geometry, and concepts of measurements. Prerequisites: A minimum GPA of 2.75, MTH/SLS 217

MTH 221  Applied Finite Mathematics and Business Calculus
4 hours; 4 credits
Linear programming (simplex method), decision analysis, mathematics of finance, Markov chains, elementary techniques of differentiation and integration of polynomial functions, maxima and minima problems, applications to business problems. This course is intended primarily for business and economics students. Prerequisite: MTH 121 or the permission of the Department of Mathematics

MTH 223  Technical Calculus
4 hours; 4 credits
Elements of calculus. Differentiation and integration involving algebraic, trigonometric, logarithmic and exponential functions. Applications to curve sketching, maximum-minimum, and physical problems. Introduction to series and differential equations. Prerequisite: MTH 123 or an appropriate score on the CUNY Mathematics Assessment Test or permission of the Department of Mathematics

MTH 228  Discrete Mathematical Structures
(Also CSC 228)
3 class hours, 3 laboratory hours; 4 credits
Elementary set theory, functions, relations, and Boolean algebra. Elements of graph theory, matrix representation of finite functions and graphs, and matrix manipulation. Switching circuits, gating networks, and finite state machines. Applications of graph theory to computer science. Related algorithms. Introduction to combinatorial computing. Prerequisites: A grade of C or above in either CSC 126 or CSC 270, MTH 123 or MTH 130 or MTH 230 or MTH 231 or MTH 235

MTH 229  Calculus Computer Laboratory
2 laboratory hours; 1 credit
Computer projects to reinforce calculus concepts from numerical and graphical points of view will be presented. Suitable mathematical software will be utilized. Problem solving techniques using the computer will be discussed. The students will be assigned a number of projects to be completed individually or in small groups. (math) Corequisite: MTH 230 or MTH 231 or MTH 235

MTH 230  Calculus I with Pre-Calculus
6 hours; 6 credits
Pre-calculus material including functions, inverse functions, identities, theory of equations, and the binomial theorem. Material on calculus and analytic geometry corresponding to MTH 231 including differentiation and integration techniques with applications. (math) Prerequisite: MTH 123 with a grade of B or better or an appropriate score on the CUNY Mathematics Assessment Test or permission of the Department of Mathematics Corequisite: MTH 229

MTH 231  Analytic Geometry and Calculus I
4 hours; 3 credits
The first of a three-semester sequence in calculus. Topics include limits, derivatives, rules of differentiation, trigonometric functions and their derivatives, differentials, graph sketching, maximum and minimum problems, related rates, antiderivatives, areas, exponential and logarithmic functions. (math) Prerequisite: MTH 123 with a grade of A or MTH 130 or an appropriate score on the CUNY Mathematics Assessment Test or permission of the Department of Mathematics Corequisite: MTH 229

MTH 232  Analytic Geometry and Calculus II
4 hours; 3 credits
The second of a three-semester sequence in calculus. Topics include areas between curves, volumes of solids of revolution, techniques of integration, sequences and series, improper integrals, polar coordinates, and parametric representative of curves. Prerequisite: MTH 230 or MTH 231 Pre- or corequisite: MTH 229

MTH 233  Analytic Geometry and Calculus III
4 hours; 3 credits
The third of a three-semester sequence in calculus. Topics include vectors, solid analytic geometry, partial derivatives, multiple integrals with applications. Prerequisite: MTH 232

MTH 235  Accelerated Calculus I
6 hours; 5 credits
Differential and integral calculus of functions of a single variable; the derivative, integration, transcendental functions; evaluation of integrals. (math) Prerequisite: MTH 130 or an appropriate score on the CUNY Mathematics Assessment Test or permission of the Department of Mathematics Corequisite: MTH 229

MTH 236  Accelerated Calculus II
6 hours; 5 credits
Differential and integral calculus of functions of more than one variable. Infinite sequences and series, polar coordinates, elements of vector analysis, partial derivatives, multiple integrals. Prerequisite: MTH 235 Pre- or corequisite: MTH 229
MTH 306 History of Mathematical Thought
4 hours; 4 credits
Prerequisite: MTH 233 or MTH 236

MTH 311 Probability Theory and an Introduction to Mathematical Statistics
4 hours; 4 credits
A calculus-based treatment of elementary probability theory, where the notion of sample space, events, and probability is introduced. The basic probability models are discussed. Notion of density and distribution function is introduced. Furthermore, conditioning, independence, and expectation are discussed. Basic concepts of statistics, sample, parameter estimation, confidence interval, hypothesis testing, central limit theorem are treated.
Prerequisite: MTH 233 or MTH 236

MTH 330 Applied Mathematical Analysis I
6 hours; 4 credits
Advanced mathematics for engineering and science students. Linear algebra, ordinary differential equations, eigen value problems, transforms, and special functions.
Credit will not be given for both MTH 330 and MTH 334.
Prerequisite: MTH 233 or MTH 236

MTH 331 Applied Mathematical Analysis II
4 hours; 4 credits
Vector analysis, partial differentiation, partial differential equations, Sturm-Liouville theory, and Fourier analysis.
Prerequisite: MTH 330

MTH 334 Differential Equations
4 hours; 4 credits
Formulation and solution of ordinary differential equations. Reduction of order, operational techniques, a place system of equations, Frobenius methods, boundary value problems, transform solutions, special functions, and existence and uniqueness theorems. Applications from science and engineering. Credit will not be given for both MTH 330 and MTH 334.
Prerequisite: MTH 233 or MTH 236

MTH 335 Numerical Analysis
4 hours; 4 credits
Solution of equations, interpolation and approximation; convergence; numerical differentiation and numerical solution of initial value problems in ordinary differential equations; selected algorithms programmed for solution on computers. The solution of linear systems by direct and iterative methods. Matrix inversion, the calculation of eigenvectors and eigenvalues of matrices. Numerical integration; approximation of polynomials.
Prerequisite: CSC 126 or CSC 270
and
Prerequisite: MTH 338 or Corequisite: MTH 330

MTH 337 Applied Combinatorics and Graph Theory
4 hours; 4 credits
Permutations and counting methods, generating functions, recurrence relations, the principle of inclusion and exclusion, and the pigeonhole principle. Introduction to graph theory, trees and searching, Eulerian and Hamiltonian Circuits, planar graphs and coloring of graphs, applications to optimization problems such as network flows.
Prerequisite: MTH 233 or MTH 236

MTH 338 Linear Algebra
4 hours; 4 credits
Determinants, matrices, and systems of linear equations; linear dependence; vector spaces; eigenvalues and eigenvectors; matrix equations; linear transformations; convex sets; applications to problems in physics, engineering, economics, and social sciences.
Prerequisite: MTH 232
Pre- or corequisite: MTH 233

MTH 339 Applied Algebra
4 hours; 4 credits
Group Theory: groups of symmetries, modular number systems, equivalence relations, properties of groups, subgroups, permutation groups, Lagrange’s Theorem, Burnside’s Theorem, homomorphism, isomorphism theorems. Group Codes: construction of group codes and error-correcting codes.
Prerequisites: MTH 233 or MTH 236 and a pre- or corequisite of MTH 338 or permission of the instructor

MTH 341 Advanced Calculus I
4 hours; 4 credits
The real number system, continuous functions, functions of several variables, partial differentiation, implicit functions, integration theory, infinite series, and power series.
Prerequisite: MTH 233 or MTH 236

MTH 342 Advanced Calculus II
4 hours; 4 credits
Vectors, multiple integrals, line and surface integrals, transformation of coordinates, improper integrals, and special functions.
Prerequisite: MTH 341

MTH 347 Number Theory
4 hours; 4 credits
Divisibility, prime numbers, Euclidean algorithm, residue classes, modulo n, Chinese remainder theorem, mathematical induction, quadratic reciprocity, solutions of systems of congruence equations, and Lagrange’s theorem.
Prerequisite: MTH 233 or MTH 236

MTH 350 Mathematical Logic
4 hours; 4 credits
Prerequisite: MTH 233 or MTH 236

MTH 357 Applied Combinatorics and Graph Theory
4 hours; 4 credits
Permutations and counting methods, generating functions, recurrence relations, the principle of inclusion and exclusion, and the pigeonhole principle. Introduction to graph theory, trees and searching, Eulerian and Hamiltonian Circuits, planar graphs and coloring of graphs, applications to optimization problems such as network flows.
Prerequisite: MTH 233 or MTH 236

MTH 360 Actuarial Science
2 hours; 2 credits
Intensive review of concepts from calculus and linear algebra with special attention to actuarial applications. This course may not be used to satisfy the requirements for the mathematics major.
Prerequisite: MTH 330 or MTH 338
MTH 370  Operations Research
4 hours; 4 credits
Use of linear programming in minimization and maximization problems and the solution of such problems by computer. Topics will include convex sets, linear inequalities, the simplex method, duality, degeneracy procedures, and the transportation model.
Prerequisites: MTH 338 and CSC 126 or CSC 270

MTH 410  Mathematical Statistics I
4 hours; 4 credits
A course in the basic concepts of applied mathematical statistics: parametric models, estimation, confidence intervals, hypothesis testing.
Prerequisite: MTH 311

MTH 411  Mathematical Statistics II
4 hours; 4 credits
A continuation of MTH 410, topics in applied mathematical statistics including regression and correlation, the linear model, analysis of variance, randomized block designs, non-parametric methods.
Prerequisite: MTH 410

MTH 415  Mathematical Biology
(Also BIO 415)
4 hours; 4 credits
This course will address the growing interaction between mathematics and the biological sciences and will provide a practical context for the mathematical description and analysis of biological processes. The emphasis will be on the construction and analysis of models consistent with empirical data. Biological problems in ecology and conservation, epidemiology, cell biology, and neuroscience will be used to illustrate the equations, including especially nonlinear equations. The computer program MATLAB will be used extensively.
Prerequisites: MTH 230 and MTH 231 or equivalent, MTH 229, and one BIO 300-level course

MTH 431  Complex Analysis
4 hours; 4 credits
Functions of a complex variable; Cauchy integral theorem; power series, residues, and poles; elementary conformal mapping. Applications to problems in physics and engineering will be considered.
Prerequisite: MTH 330

MTH 435  Nonlinear Dynamics and Chaos
4 hours; 4 credits
An introduction to nonlinear problems in mathematics. Subjects to be covered include bifurcation theory, nonlinear oscillation, phase plane analysis, limit cycles, Poincare and Lienard theorems. Lorenz equations and chaos, strange attractors, the logistic equation, period doubling, fractals. Applications are to problems in biological and physical systems and engineering science. The course will make extensive use of computers.
Prerequisite: MTH 330

MTH 440  Foundations of Mathematics
(Also PHL 420)
4 hours; 4 credits
Postulate systems and their interpretations; sets, groups, rings, and ordered fields; partially ordered sets and lattices; theory of cardinal and ordinal numbers; well-ordered sets and transfinite induction; Boolean rings; mathematical logic.
Prerequisite: MTH 339 or 350

MTH 441  Topology
4 hours; 4 credits
Set theory; topology of the real line, Cauchy sequences, open sets, connected sets, limit points and closed sets, bounded sets, compactness, continuous functions, topological spaces, mappings, subspaces, homomorphisms, metric spaces.
Prerequisite: MTH 233 or 236

MTH 442  Abstract Algebra
4 hours; 4 credits
The algebra of sets, mappings and equivalence relations, elementary number theory; group theory - subgroups, homomorphisms, isomorphisms, the fundamental theorems; ring theory—ideals and quotient rings, integral domains, division rings; fields.
Prerequisite: MTH 339

Medical Laboratory Technology
(Associate in Applied Science)
Department of Biology
Chair: Professor Jacqueline LeBlanc, Biological Sciences/Chemical Sciences Building (6S), Room 143
This program prepares its graduates for employment as medical laboratory technicians in hospitals, clinics, physicians' offices, public health agencies, the armed forces, industrial and pharmaceutical medical laboratories, and public and private medical research programs.

Medical Laboratory Technology (AAS)
Department Chair: Professor Jacqueline LeBlanc
Medical Director: Dr. Rudolph Howard
Graduates of the program may continue in the BS in Medical Technology program offered by the College of Staten Island.

General Education Requirements:
ENG 111, ENG 151, PED 190: 8 credits
Whenever possible, these three courses should be completed within the first 36 credits.

Scientific Analysis and Social Scientific Analysis: 17-18 credits
1. Scientific Analysis: (11-12 credits)
   a. Science: (8 credits)
      BIO 170* General Biology I 3 credits
      BIO 171* General Biology I Laboratory 1 credit
      BIO 180* General Biology II 3 credits
      BIO 181* General Biology II Laboratory 1 credit
      CHM 141* General Chemistry I 3 credits
      CHM 121* General Chemistry I Laboratory 1 credit
      CHM 142* General Chemistry II 3 credits
      CHM 127* General Chemistry II Laboratory 1 credit
   b. Mathematics: (3-4 credits)
      MTH 123 College Algebra and Trigonometry 4 credits
      or
      MTH 125 Pre-Calculus Mathematics 3 credits

2. Social Scientific Analysis: (6 credits)
   PST 100 Introduction to Psychology 3 credits
   PHL 130 Introduction to Ethics 3 credits
   *a) BIO 150 and BIO 160 may substitute for BIO 170 and BIO 180 but cannot be used to satisfy the Scientific Analysis Requirement.
b) BIO 170 and BIO 171 or BIO 150, CHM 141 and CHM 121, MTH 123 or MTH 130, and ENG 111 satisfy Pre-Medical Laboratory Technology sequence requirements. A 2.5 grade point average in the Pre-MLT sequence is required for admission to the Medical Laboratory Technology Program. Students may repeat courses, if necessary.
c) BIO 180 and 181 or BIO 160, and CHM 142 and 127 will satisfy Core requirements.

Pre-MLT Sequence: 14 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 170</td>
<td>General Biology I</td>
<td>3</td>
</tr>
<tr>
<td>BIO 171</td>
<td>General Biology I Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHM 141</td>
<td>General Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHM 121</td>
<td>General Chemistry Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ENG 111</td>
<td>Communications Workshop</td>
<td>3</td>
</tr>
<tr>
<td>MTH 123</td>
<td>College Algebra and Trigonometry</td>
<td>3-4</td>
</tr>
<tr>
<td>or</td>
<td>MTH 130 Pre-Calculus Mathematics</td>
<td></td>
</tr>
</tbody>
</table>

A 2.5 grade point average in the Pre-MLT sequence will be required for admission into the Medical Laboratory Technology program. Students will be allowed to repeat courses, if necessary.

Core Requirements: 44 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 180</td>
<td>General Biology II</td>
<td>3</td>
</tr>
<tr>
<td>BIO 181</td>
<td>General Biology II Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>BIO 205</td>
<td>General Physiology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 314</td>
<td>General Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 316</td>
<td>Clinical Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>CHM 142</td>
<td>General Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHM 127</td>
<td>General Chemistry II Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>MDT 100</td>
<td>Hematology</td>
<td>4</td>
</tr>
<tr>
<td>MDT 160</td>
<td>Clinical Science</td>
<td>4</td>
</tr>
<tr>
<td>MDT 265**</td>
<td>Hospital Laboratory Practice</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(Hematology)</td>
<td></td>
</tr>
<tr>
<td>MDT 275**</td>
<td>Hospital Laboratory Practice</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(Blood Bank)</td>
<td></td>
</tr>
<tr>
<td>MDT 285**</td>
<td>Hospital Laboratory Practice</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(Microbiology)</td>
<td></td>
</tr>
<tr>
<td>MDT 295**</td>
<td>Hospital Laboratory Practice</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(Clinical Chemistry,Urinalysis)</td>
<td></td>
</tr>
<tr>
<td>MDT 310</td>
<td>Blood Transfusion Technology</td>
<td>4</td>
</tr>
</tbody>
</table>

**Three credits each but all four courses must be successfully completed before credit will be awarded. Required for the AAS Medical Laboratory Technology degree and for the New York City Department of Health Permit or the national certifying examinations.

Total Credits Required: 69

Liberal Arts and Sciences Requirement

All courses designated MDT, and BIO 316, are non-liberal arts and sciences.

Clinical laboratory experience is provided through the cooperation of the following affiliated hospitals:
- St. Vincent’s Medical Center of Richmond
- Staten Island University Hospital
- Doctors’ Hospital of Staten Island

Medical Technology

(Bachelor of Science)

Interdisciplinary Program

Coordinator: Associate Professor Elena McCoy, Biological Sciences/Chemical Sciences Building (6S), Room 112

The Medical Technology baccalaureate program prepares students for interesting and rewarding careers in the health field. Two options are offered in the program: the Medical Technologist option and the Nuclear Medicine Technologist option.

For the Medical Technologist option, the program requires three years of coursework and one year of clinical training. The clinical training may be completed in hospital programs accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) or in hospitals approved for training by the New York State Department of Health.

- The skills acquired encompass a broad range of disciplines, which include hematology, clinical chemistry, microbiology, serology, immunology, histology, cytotechnology, and blood transfusion technology.
- Employment opportunities are available in laboratories of public, private, and voluntary hospitals, in industrial, pharmaceutical and private clinical laboratories, and in physicians’ offices.

On completion of the program, the student is awarded the BS degree in Medical Technology. Graduates completing training in hospitals accredited by NAACLS are also eligible to take the National Board Examination leading to certification by either the American Society of Clinical Pathologists (ASCP) as Medical Technologists (MT), the National Certification Agency for Medical Laboratory Personnel (NCAMLP) as Clinical Laboratory Scientists (CLS), or the International Society for Clinical Laboratory Technology (ISCLT).

For the Nuclear Medicine Technologist option, the program offers advanced theory and training in Nuclear Medicine Technology and prepares students to work in hospitals and research centers. Radioisotopes are utilized in nuclear medicine to perform diagnostic and therapeutic procedures.

This option requires three years of coursework and one year of clinical training that must be completed in a Nuclear Medicine facility accredited by the Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCNMT). On successful completion of the program the student is awarded the BS degree in Medical Technology and is eligible to take the credentialing examinations in Nuclear Medicine Technology offered by the American Registry of Radiologic Technologist and the Nuclear Medicine Technology Certification Board.

The number of available training positions is limited. Placement, therefore, is competitive and acceptance is influenced strongly by academic performance. The College is affiliated with a number of hospitals and provides guidance so that as many students as possible are placed. The College, however, cannot promise or guarantee that each student is placed. Accordingly, each student, in consultation with the program coordinator, should apply early in the third year to as many hospitals as possible, including hospitals that are located further from the student’s home than optimally desired.

Hospital Affiliations:
- The following hospitals are affiliated with the College either formally or informally to provide clinical training in the Medical Technology program to qualified students.
Medical Technologist Option

NAACLS Accredited Programs:
Catholic Medical Center of Brooklyn and Queens, Inc.
  Ann P. Zero, Program Director
  Usha Ruder, MD, Medical Director/Adviser
Methodist Hospital, Brooklyn
  Linda J. Bines, Program Director
  Maryann Nobel, Education Director
  Pedro Daniel Penha, MD, Medical Director
St. Vincent’s Hospital Medical Center, Manhattan
  Sr. Catherine Sherry, Program Director
  Barbara D’Augusta, Educational Coordinator
  John J. Gillooley, MD, Medical Director

Affiliate Hospitals Approved for Training by the NYC Department of Health:
  Coney Island Hospital, Brooklyn
  Elmhurst City Hospital, Elmhurst (Queens)
  Harlem Hospital, Manhattan
  Staten Island University Hospital, Staten Island
  Lutheran Hospital, Brooklyn
  Sea View Hospital and Home, Staten Island
  Consolidated Clinical Laboratories (IBR), Staten Island

Nuclear Medicine Technologist Option

St. Vincent’s Medical Center of Richmond, Staten Island

Note: The student completing third-year requirements for the degree in Medical Technology who decides to change majors either because of the inability to find an appropriate training slot, or for other reasons, can usually transfer to a program in Biology, Biochemistry, or Chemistry without significant loss of progress toward the degree.

Medical Technology (BS)

General Education Requirements for the BS
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 21-27 credits
Whenever possible, these courses should be completed within the first 60 credits.

1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)
2. Social Scientific Analysis: (3-4 credits)
3. The West and the World: (4 credits)
4. Textual, Aesthetic, and Linguistic Analysis: (3-4 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
   c. Arts and Communications: 200-level
5. Pluralism and Diversity Requirement: (0-4 credits)
See section on general education requirements for approved course lists and complete details.

Medical Technologist and Nuclear Medicine Options

Pre-Major Requirements: 20 credits
Students planning to major in the Medical Technology or Nuclear Medicine options must complete the following pre-major requirements. These are minimal pre-major requirements. Students should consult a medical technology adviser about the desirability of choosing additional courses in preparation for the major.

BIO 170 General Biology I 3 credits
BIO 171 General Biology I Laboratory 1 credit
BIO 180 General Biology II 3 credits
BIO 181 General Biology II Laboratory 1 credit
or
BIO 150* Human Anatomy and Physiology I 4 credits
BIO 160* Human Anatomy and Physiology II 4 credits
(*Required in the Nuclear Medicine Technologist option)

CHM 141 General Chemistry I 3 credits
CHM 121 General Chemistry I Laboratory 1 credit
CHM 142 General Chemistry II 3 credits
CHM 127 General Chemistry II Laboratory 1 credit
BIO 314 General Microbiology 4 credits
MDT 100 Hematology 4 credits

(Medical Technologist option)

Major Requirements: 68-70 credits

Pre-clinical:
MTH 223 Technical Calculus I 4 credits
or
MTH 229 Calculus Laboratory 1 credit
with
MTH 231 Analytical Geometry and Calculus I 3 credits
or
MTH 230 Calculus I with Pre-Calculus 6 credits
CHM 250 Organic Chemistry I 4 credits
CHM 256 Organic Chemistry II 4 credits
BIO 316 Clinical Microbiology 4 credits
PHT 116 Introductory Physics I 4 credits
PHT 156 Introductory Physics II 4 credits
BIO 442 Immunology 4 credits
BIO/ MDT 325 Diagnostic Molecular Biology 4 credits
MDT 160 Clinical Chemistry 4 credits
(Medical Technologist option)

or

MDT 365 Radiochemistry and Radiochemical Analysis 4 credits
(Nuclear Medicine Technologist option)

A student must complete a minimum of 16 credits at the College of Staten Island in courses designated pre-clinical to receive the baccalaureate degree in Medical Technology. These credits must include CHM 250 and CHM 256.

Clinical, Three Options:
Option I - New York City Track:
MDT 380 Medical Technology Training I 16 credits
MDT 480 Medical Technology Training II 16 credits
Option II - NAACLS Track:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDT 381 Clinical Chemistry Training</td>
<td>8</td>
</tr>
<tr>
<td>MDT 382 Hematology Coagulation Training</td>
<td>6</td>
</tr>
<tr>
<td>MDT 383 Clinical Microscopy Training</td>
<td>2</td>
</tr>
<tr>
<td>MDT 481 Clinical Microbiology Training</td>
<td>6</td>
</tr>
<tr>
<td>MDT 482 Immunohematology Training</td>
<td>4</td>
</tr>
<tr>
<td>MDT 483 Serology Immunology Training</td>
<td>4</td>
</tr>
<tr>
<td>MDT 484 Clinical Parasitology Training</td>
<td>2</td>
</tr>
</tbody>
</table>

Option III - Nuclear Medicine Track:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDT 395 Nuclear Medicine Training I</td>
<td>16</td>
</tr>
<tr>
<td>MDT 495 Nuclear Medicine Training II</td>
<td>16</td>
</tr>
</tbody>
</table>

Electives: 0-6 credits

Cytotechnology and Histotechnology Options

Pre-Major Requirements: 24 credits

Students planning to major in the Cytotechnology or Histotechnology options must complete the following pre-major requirements. These are minimal pre-major requirements. Students should consult a medical technology adviser about the desirability of choosing additional courses in preparation for the major.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 170 General Biology I</td>
<td>3</td>
</tr>
<tr>
<td>BIO 171 General Biology I Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>BIO 180 General Biology II</td>
<td>3</td>
</tr>
<tr>
<td>BIO 181 General Biology II Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>BIO 150 Human Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>BIO 160 Human Anatomy and Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>CHM 141 General Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHM 121 General Chemistry I Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHM 142 General Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHM 127 General Chemistry II Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>BIO 314 General Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 318 Histology</td>
<td>4</td>
</tr>
</tbody>
</table>

Major Requirements: 67-69 credits

Pre-clinical:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTH 223 Technical Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>MTH 229 Calculus Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>with</td>
<td></td>
</tr>
<tr>
<td>MTH 231 Analytical Geometry and Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>MTH 230 Calculus I with Pre-Calculus</td>
<td>6</td>
</tr>
<tr>
<td>CHM 250 Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHM 256 Organic Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>PHY 116 Introductory Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHY 156 Introductory Physics II</td>
<td>4</td>
</tr>
<tr>
<td>BIO 352 Cell Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 432 Clinical Pathology</td>
<td>3</td>
</tr>
<tr>
<td>BIO 442 Immunology</td>
<td>4</td>
</tr>
<tr>
<td>BIO/</td>
<td></td>
</tr>
<tr>
<td>MDT 325 Diagnostic Molecular Biology</td>
<td>4</td>
</tr>
</tbody>
</table>

Note: A student must complete a minimum of 16 credits at the College of Staten Island in courses designated pre-clinical to receive the Baccalaureate degree in Medical Technology. These credits must include CHM 250 and CHM 256.

Clinical, Two Options:

Option I – Cytotechnology Training

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDT 319 Cytotechnology Training I</td>
<td>16</td>
</tr>
<tr>
<td>MDT 419 Cytotechnology Training II</td>
<td>16</td>
</tr>
</tbody>
</table>

Option II – Histotechnology Track:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDT 321 Histotechnology Training I</td>
<td>16</td>
</tr>
<tr>
<td>MDT 421 Histotechnology Training II</td>
<td>16</td>
</tr>
</tbody>
</table>

Electives: 0-7 credits

Total Credits Required: 120

Liberal Arts and Sciences Requirement

All courses designated MDT and the course BIO 316 are non-liberal arts and sciences.

Medical Technology (BS)

Transfer Program

This program is designed for students who have completed two-year programs in medical laboratory technology. It allows those students to complete the requirements for the BS in Medical Technology in two years of additional study.

Admission Requirements: Students must have received the AAS degree in Medical Laboratory Technology or successfully completed all coursework required for such a degree except the internship.

General Education Requirements

The same as for the BS in Medical Technology, listed above.

Pre-Major Requirements

Same as BS in Medical Technology. Students who have completed the AAS degree in Medical Laboratory Technology at one of the community colleges of CUNY have met the pre-major requirements and are admitted without deficiencies.

Major Requirements

Same as BS in Medical Technology except for students who have completed the 1,000 hours of training as part of their AAS degree. These students may be exempted from the first six months of the one year of training required for the BS degree in consultation with the program coordinator.

Total Credits Required: 120

Honors

To graduate with Honors in Medical Technology a student must have a 3.5 grade point average in medical technology courses and must complete an eight-credit independent study project under the tutelage of a faculty member from one of the physical or biological sciences. The project must be reviewed and approved by the Interdisciplinary Committee for Medical Technology.

Courses

The following courses are part of the Medical Laboratory Technology AAS degree program. (MDT 100 and MDT 160 and MDT 365 are also part of the BS degree program.)
MDT 100  Hematology  
3 class hours, 3 laboratory hours; 4 credits  
Introduction to the study of hematology with emphasis on the formation and functions of normal blood cells, identification of normal and abnormal blood cell types, variations in blood picture associated with hematologic disorders, and hemostasis and coagulation. Laboratory practice includes complete blood counts, studies of peripheral blood and bone marrow smears, special tests for hematologic disorders, and basic coagulation procedures.  
Prerequisite: BIO 090 or a satisfactory score on the Biology Placement Test  
Pre- or corequisites: BIO 170 and 171. Students must receive a grade of C or better in MDT 100 to proceed to MDT 160

MDT 160  Clinical Science  
3 class hours, 3 laboratory hours; 4 credits  
Introduction to clinical chemistry and fundamentals of body fluid and urine analysis. Emphasis on theory and practice of both manual and automated techniques used in clinical chemistry laboratories. Students will learn to operate the autoanalyzer, flame photometer, microgasometer, spectrophotometer, microzone electrophoresis, densitometer, and other instruments. Normal metabolism, abnormal metabolism, and the clinical significance of laboratory tests are discussed.  
Prerequisites: MDT 100 or CHM 141. Students must receive a grade of C or better in MDT 160 to proceed to MDT 265

MDT 265, 275, 285, 295 Hospital Laboratory Practice  
1,000 hours; 12 credits  
Students will perform laboratory tests, work with patients and hospital personnel at affiliate hospital laboratories. They obtain training and practice as they rotate through all of the clinical laboratories. Training is on a full-time, five days per week basis for 25 weeks or until 1,000 hours have been completed.  
All four MDT courses must be completed satisfactorily for credit to be awarded.  
Prerequisites: MDT 310 with a grade of C or better plus completion of all college course requirements for the MLT (AAS) degree

MDT 265  
220 hours; 3 credits  
Hematology, hemostasis, and coagulation

MDT 275  
220 hours; 3 credits  
Blood banking including immunology

MDT 285  
240 hours; 3 credits  
Microbiology including parasitology, mycology, virology

MDT 295  
320 hours; 3 credits  
Clinical chemistry including special test, urine and body fluid analysis  
Students who wish to transfer their credits to the Medical Technology BS degree program must have successfully completed the 1,000 hours required in these Hospital Laboratory Practice courses and have been awarded the Medical Laboratory Technology AAS degree.

MDT 310  Blood Transfusion Technology  
2 class hours, 4 laboratory hours; 4 credits  
An introduction to the nature, significance, and distribution of blood group antigens and antibodies; fundamentals of basic immunology, compatibility testing, and other procedures associated with a clinical blood bank. Laboratory practice includes duplicate testing for blood groups, cross-matching, antibody screening, hepatitis antigen testing, component preparation, and other significant tests.  
Prerequisites: BIO 180, 181, and MDT 100 or equivalent

MDT 318  Cytotechnology and Cytologic Techniques  
3 class hours, 3 laboratory hours; 4 credits  
Topics include cytogenetics, molecular biology, histocytology correlations as well as laboratory techniques in specimen collection, processing procedures, and microscopic interpretations used for the detection of cancerous or pre-cancerous cells.  
Prerequisites: BIO 180 and 181, and BIO 318 and/or equivalent laboratory experience.

MDT 325  Diagnostic Molecular Biology  
(Also BIO 325)  
3 class hours, 3 laboratory hours; 4 credits  
This course will address the theoretical and practical framework for the understanding and application of molecular biology techniques in the clinical laboratory. The course material will cover the principles and applications of recombinant DNA technology including DNA-DNA hybridization, DNA amplification and nonradioactive in situ hybridization (HISH) for the detection and identification of microorganisms associated with infectious diseases.  
Prerequisites: BIO 314, CHM 142

The following courses are part of the Medical Technology BS degree program.

Medical technology students train for 12 months during their senior year in an affiliated hospital that is:

a) approved for training by the New York State Department of Health  
b) accredited for training by NAACLS  
c) accredited by JRCNMT  
MDT 380 and MDT 480 are taken by students in NYS Department of Health-approved hospitals:  
MDT 381, 382, 383 and MDT 481, 482, 483 are taken by students in NAACLS-accredited programs;  
MDT 395 and MDT 495 are taken by students in JRCNMT-accredited programs.

MDT 365  Radiochemistry and Radiochemical Analysis  
4 hours; 4 credits  
Nuclear physics and nuclear and radiochemistry for the clinical laboratory. The theory and characteristics of various types of radiation are discussed. Health physics and statistical analysis of data are included, and the use of radioactive tracers and neutron activation are treated theoretically. In addition, radio-chemicals, radio-pharmaceuticals, and nuclear medicine procedures will be discussed.  
Prerequisites: BIO 180 and BIO 181 or BIO 160 and CHM 250 and PHY 116.

MDT 319  Cytotechnology Training I  
16 credits  
Prerequisite: Permission of the Medical Technology coordinator

MDT 321  Histotechnology Training I  
16 credits  
Prerequisite: Permission of the Medical Technology coordinator
MDT 380  Medical Technology Training I
16 credits
Prerequisite: Permission of the Medical Technology coordinator

MDT 381  Clinical Chemistry Training
8 credits
Prerequisite: Permission of the Medical Technology coordinator

MDT 382  Hematology-Coagulation Training
6 credits
Prerequisite: Permission of the Medical Technology coordinator

MDT 383  Clinical Microscopy Training
2 credits
Prerequisite: Permission of the Medical Technology coordinator

MDT 395  Nuclear Medicine Training I
16 credits
Prerequisite: Permission of the Medical Technology coordinator

MDT 419  Cytotechnology Training II
16 credits
Prerequisite: Permission of the Medical Technology coordinator

MDT 421  Histotechnology Training II
16 credits
Prerequisite: Permission of the Medical Technology coordinator

MDT 480  Medical Technology Training II
16 credits
A continuation of MDT 380.
Prerequisites: MDT 380 and permission of the Medical Technology coordinator

MDT 481  Clinical Microbiology Training
6 credits
A continuation of MDT 381.
Prerequisite: MDT 381 and permission of the Medical Technology coordinator

MDT 482  Immuno-Hematology Training
4 credits
A continuation of MDT 382.
Prerequisites: MDT 382 and permission of the Medical Technology coordinator

MDT 483  Serology-Immunology Training
4 credits
A continuation of MDT 383.
Prerequisites: MDT 383 and permission of the Medical Technology coordinator

MDT 484  Clinical Parasitology Training
2 credits
Prerequisite: Permission of the Medical Technology coordinator

MDT 495  Nuclear Medicine Training II
16 credits
A continuation of MDT 395.
Prerequisites: MDT 395 and permission of the Medical Technology coordinator

Music

(Bachelor of Arts, Bachelor of Science, Electrical Technology Concentration, Minor)
Department of Performing and Creative Arts
Coordinator: Assistant Professor William Bauer, Center for the Arts (1P), Room 206

Music (BA and BS)

General Education Requirements for the BA and BS
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 28–47 credits
Whenever possible, these courses should be completed within the first 60 credits.

1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)
2. Social Scientific Analysis: (7–8 credits)
3. The West and the World: (4 credits)
4. Textual, Aesthetic, and Linguistic Analysis: (6–8 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
5. Pluralism and Diversity Requirement: (0–4 credits)
6. Foreign Language: (0–12 credits)
See section on general education requirements for approved course lists and complete details.

Music (BA)

Pre-Major requirements: 3 credits
MUS 120  Rudiments of Music 3 credits

Major Requirements (45–46 credits)
MUS 150  Chorus I* 1 credit
MUS 151  Chorus II 1 credit
MUS 211  History of Music to 1750 3 credits
MUS 212  History of Music from 1730 3 credits
MUS 223  Keyboard I 1 credit
MUS 224  Keyboard II 1 credit
MUS 225  Harmony in the Classical Tradition I 4 credits
MUS 226  Harmony in the Classical Tradition II 4 credits
MUS 239  History of Jazz 3 credits
MUS 243  Ear-Training and Sight-Singing I 2 credits
MUS 244  Ear-Training and Sight-Singing II 2 credits
MUS 250  Chorus III 1 credit
MUS 251  Chorus IV 1 credit
MUS 322  Tonal Counterpoint 3 credits
MUS 326  Instrumentation and Scoring 2 credits
MUS 363  Ear-Training and Sight-Singing III 2 credits
MUS 364  Ear-Training and Sight-Singing IV 2 credits
MUS 424  Score Analysis 3 credits
One course from the following list of music history courses:

- MUS 338 Innovators in Jazz 3 credits
- MUS 360 Twentieth-Century Directions 3 credits
- MUS 400 The Music of J.S. Bach 3 credits
- MUS 402 Major Composer 1 3 credits
- MUS 403 Major Composer 2 3 credits
- MUS 450 History of the Symphony 3 credits
- MUS 460 History of Chamber Music 3 credits
- MUS 470 History of Opera 3 credits

One course (2-3 credits) from the following list:

- MUS 242 Harmonic Practice in the Jazz Tradition 3 credits
- MUS 258 Introduction to Electronic Synthesis 2 credits
- MUS 270 Composition I 2 credits
- MUS 338 Innovators in Jazz 3 credits
- MUS 370 Composition II 2 credits
- MUS 451 Conducting 2 credits

*Students who qualify for participation in another ensemble such as Ensemble (MUS 115, MUS 116, MUS 215, MUS 216), Guitar Ensemble (MUS 130, MUS 131, MUS 230, MUS 231), Jazz Ensemble (MUS 144, MUS 145, MUS 246, MUS 247) or another professionally led ensemble within the CUNY system may substitute that course or series of courses for Chorus, contingent on permission of a full-time faculty member.

Electives: 12-35 credits

Total Credits Required: 120

Music majors must complete MUS 120 as soon as possible. This course should be followed by MUS 223 and either MUS 225 or MUS 242. Because of course requirements and offerings, all prospective Music majors should request an academic adviser from the Music faculty.

Ensemble Course

Students are required to participate in a minimum of four semesters of a performing ensemble, taken with or without credit. Enrollment in a performing ensemble course each semester is encouraged. Ensemble courses may count as electives, but will not apply toward the credits required for the BA or BS in Music.

Liberal Arts and Sciences Requirement

For the BA in Music, at least 90 credits must be in liberal arts and sciences courses; the BS in Music, at least 60 credits must be in liberal arts and sciences courses. Music performance courses are non-liberal arts and sciences.

Honors

To graduate with Honors in Music a student must have a 3.5 grade point average in music courses and must complete an honors thesis in composition or performance under the supervision of a full-time faculty member.

Music (BS)

Pre-Major Requirements: 3 credits

MUS 120 Rudiments of Music 3 credits

Major Requirements (62-65 credits)

MUS 150 Chorus I* 1 credit
MUS 151 Chorus II 1 credit
MUS 181 First-Semester Private Lessons 1 credit
MUS 182 Performance Workshop I 1 credit
MUS 191 Second-Semester Private Lessons 1 credit
MUS 192 Performance Workshop II 1 credit
MUS 211 History of Music to 1750 3 credits
MUS 212 History of Music from 1730 3 credits
MUS 223 Keyboard I 1 credit
MUS 224 Keyboard II 1 credit
MUS 225 Harmony in the Classical Tradition I 4 credits
MUS 226 Harmony in the Classical Tradition II 4 credits
MUS 239 History of Jazz 3 credits
MUS 242 Harmonic Practice in the Jazz Tradition 3 credits
MUS 243 Ear-Training and Sight-Singing I 2 credits
MUS 244 Ear-Training and Sight-Singing II 2 credits
MUS 250 Chorus III 1 credit
MUS 251 Chorus IV 1 credit
MUS 281 Third-Semester Private Lessons 1 credit
MUS 282 Performance Workshop III 1 credit
MUS 291 Fourth-Semester Private Lessons 1 credit
MUS 292 Performance Workshop IV 1 credit
MUS 322 Tonal Counterpoint 3 credits
MUS 326 Instrumentation and Scoring 2 credits
MUS 363 Ear-Training and Sight-Singing III 2 credits
MUS 364 Ear-Training and Sight-Singing IV 2 credits
MUS 424 Score Analysis 3 credits
MUS 431 Conducting 2 credits

One course from the list of music history courses as shown above for the BA.

Three additional courses (6-9 credits) from the following list chosen in consultation with a Music advisor:

MUS 258 Introduction to Electronic Synthesis 2 credits
MUS 270 Composition I 2 credits
MUS 338 Innovators in Jazz 3 credits
MUS 340 Arranging for Jazz Ensemble 2 credits
MUS 360 Twentieth-Century Directions 3 credits
MUS 370 Composition II 2 credits
MUS 383 Junior Project (Performance) 3 credits
MUS 393 Junior Project (Composition) 3 credits
MUS 400 The Music of J.S. Bach 3 credits
MUS 402 Major Composer I 3 credits
MUS 403 Major Composer II 3 credits
MUS 450 History of the Symphony 3 credits
MUS 460 History of Chamber Music 3 credits
MUS 470 History of Opera 3 credits
MUS 483 Senior Project (Performance) 3 credits
MUS 493 Senior Project (Composition) 3 credits

Electives: 0-15 credits

Total credits required: 120

*Students who qualify for participation in another ensemble such as Ensemble (MUS 115, MUS 116, MUS 215, MUS 216), Guitar Ensemble (MUS 130, MUS 131, MUS 230, MUS 231), Jazz Ensemble (MUS 144, MUS 145, MUS 246, MUS 247), or another professionally led ensemble within the CUNY system may substitute that course or series of courses for Chorus, contingent on permission of a full-time faculty member.
Students enrolled in MUS 181, MUS 191, MUS 281, or MUS 292 must maintain a 2.75 cumulative average in academic music classes (theory, history, and sight-singing/ear-training). Students may be asked to perform scales, arpeggios, two prepared pieces, and sight-reading. (Please contact any full-time member of the Music program or the department secretary to schedule an audition.) For each semester of private lessons, the student must be enrolled in at least six credits of music classes. (Some flexibility is possible for first- and last-semester students.) These courses may not be repeated, and are non-liberal arts courses. Students may receive credit for a maximum of eight semesters and should take the courses in sequence.

**Junior and Senior Project Courses**
Courses numbered MUS 383, MUS 393, MUS 483, and MUS 493 are project courses available to music majors who wish to perform a full-length public recital, write a large-scale composition, or complete a research project in music theory or music history of significant scope and length. Any of these endeavors must be supervised by a full-time music faculty member and/or applied music instructor. At the request of the student, when the grade point average warrants the appellation, these courses may be designated as Junior Honors Project or Senior Honors Project.

**Private Instruction in Voice and Instrument**
Enrollment for credit in private instruction is for students pursuing a major or minor in Music and making appropriate progress toward the degree requirements. Private lessons will be funded by the College for a limited number of qualified Music majors. Admission is by audition, which is required prior to registration. Students may be asked to perform scales or etudes, two prepared pieces, and to sight-read.

These courses (MUS 181, MUS 191, MUS 281, MUS 291, MUS 381, MUS 391, MUS 481, MUS 491), which may not be repeated, are non-liberal arts and sciences courses. Students may receive credit for a maximum of eight semesters of private lessons.

Please call the Department of Performing and Creative Arts at 1.718.982.2520 to schedule an audition. The following is expected of students enrolled in College-funded lessons:

- **a)** at least two daily hours of practice;
- **b)** a juried examination at the end of the semester is required;
- **c)** full-time enrollment (12 credits or more) during each semester lessons are College-funded;
- **d)** students must make satisfactory progress toward completing a music degree. This is at the discretion of the Music faculty.

**Music (BS)**
Electrical Technology Concentration
General education, pre-major, and major requirements are the same as for the Music BS.

**Electrical Technology Concentration: 16 credits**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ELT 121</td>
<td>DC Fundamentals Laboratory</td>
<td>1 credit</td>
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<tr>
<td>ELT 124</td>
<td>Principles of Electricity</td>
<td>3 credits</td>
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<td>(Prerequisite: MTH 123)</td>
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<tr>
<td>ELT 240</td>
<td>Principles of Digital Electronics</td>
<td>3 credits</td>
</tr>
<tr>
<td>ELT 241</td>
<td>Digital Circuit Laboratory</td>
<td>1 credit</td>
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<tr>
<td>ELT 331</td>
<td>Electronic Laboratory I</td>
<td>1 credit</td>
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<tr>
<td>ELT 332</td>
<td>Electronic Circuit Theory and Applications</td>
<td>4 credits</td>
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<tr>
<td>ELT 444</td>
<td>Sound Production</td>
<td>3 credits</td>
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<td>(Course taught elsewhere for CSI credit.)</td>
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</tbody>
</table>

**Electives: 42-61 credits**

**Total Credits Required: 120**

**Liberal Arts and Sciences Requirement**
Music performance courses and electrical technology (ELT) courses are non-liberal arts and sciences.

**Minor Requirements**
At least 18 credits of music to be determined in consultation with a Music faculty adviser. At least 11 credits must be courses required for the music major.

**Courses**

**MUS 105  World Music**
3 hours; 3 credits
An introduction to ethnomusicality geared to students with no musical training. A study of music as a world phenomenon, with emphasis on its relationship to indigenous societal and cultural values and customs, function, and significance. The course will aid students in understanding how different instruments and sounds are integral to all humanity and guide students toward becoming better critical and analytical musical listeners and interpreters. (arts & com.)

**MUS 108  Introduction to Jazz History**
3 hours; 3 credits
A survey of music in the jazz perspective from Scott Joplin to the present, including the social impact of the music on American and European cultures. (arts & com.)

**MUS 110  Introduction to Music History**
3 hours; 3 credits
A study of the evolution of musical style through representative works from every era of the Western musical tradition. Assigned readings, listening, and concerts. (arts & com.)

**MUS 115  Ensemble I**
2 hours; 1 credit
Ensembles from duos to larger groups, such as voice and piano, single instrument and piano, trio, brass ensemble, new music ensemble, and/or other ensemble, that will rehearse and receive coaching on a weekly basis. Groups will be formed based on repertoire available and performance ability, with the goal of public performance. Prerequisites or corequisites: MUS 120, and audition and permission of the instructor or program coordinator.

**MUS 116  Ensemble II**
2 hours; 1 credit
Ensembles from duos to larger groups, such as voice and piano, single instrument and piano, trio, brass ensemble, new music ensemble, and/or other ensemble, that will rehearse and receive coaching on a weekly basis. Groups will be formed based on repertoire available and performance ability, with the goal of public performance. Prerequisite: MUS 115.

**MUS 120  Rudiments of Music**
4 hours; 3 credits
A functional approach to learning elements of rhythm and notation; structure of scales, intervals, and triads; musical terms; introduction to sight-singing, ear-training, and the keyboard. (arts & com.)
MUS 130  Guitar Ensemble I
2 hours; 1 credit
An ensemble of guitarists and other instrumentalists who will perform works in the classical and popular idioms. Several public performances will be given. May be taken without credit.
Prerequisites: Audition and permission of the instructor or program coordinator

MUS 131  Guitar Ensemble II
2 hours; 1 credit
An ensemble of guitarists and other instrumentalists who will perform works in the classical and popular idioms. Several public performances will be given. May be taken without credit.
Prerequisites: Audition and permission of the instructor or program coordinator (MUS 120 Rudiments of Music or its equivalent is recommended as preparation for the audition.)

MUS 144  Jazz Ensemble I
2 hours; 1 credit
An ensemble consisting of a balanced group of selected instrumentalists who perform works in the jazz idiom. Several public performances will be given. May be taken without credit.
Prerequisites: Audition and permission of the instructor or program coordinator

MUS 145  Jazz Ensemble II
2 hours; 1 credit
An ensemble consisting of a balanced group of selected instrumentalists who perform works in the jazz idiom. Several public performances will be given. May be taken without credit.
Prerequisites: Audition and permission of the instructor or program coordinator

MUS 150  Chorus I
2 hours; 1 credit
A mixed chorus of soprano, alto, tenor, and bass (SATB) that sings both classical and popular works. The group contributes to the musical and social life of the College by presenting a concert near the end of the semester.
May be taken without credit.
Prerequisite: Permission of the instructor or program coordinator

MUS 151  Chorus II
2 hours; 1 credit
See description of MUS 150.
Prerequisite: MUS 150 or permission of the instructor

MUS 180  Performance Workshop I
1 hour; 1 credit
Music students will meet once a week to perform before each other and Music faculty in a supportive environment. Discussion of stage deportment, performance anxiety, issues of style, and other topics with the goal of developing readiness for public performance. Performance calendar will be arranged in consultation with the student's private teacher and the program coordinator.
Prerequisite or corequisite: MUS 120
Corequisite: MUS 181

MUS 181  First-Semester Private Lessons
1 hour; 1 credit
Prerequisite: Permission of a full-time Music faculty member
Corequisite: MUS 120 and MUS 180

MUS 190  Performance Workshop II
1 hour; 1 credit
Music students will meet once a week to perform before each other and Music faculty in a supportive environment. Discussion of stage deportment, performance anxiety, issues of style, and other topics with the goal of developing readiness for public performance. Performance calendar will be arranged in consultation with the student's private teacher and the program coordinator.
Prerequisites: MUS 180 and MUS 181
Corequisite: MUS 191

MUS 191  Second-Semester Private Lessons
1 hour; 1 credit
Prerequisites: Permission of a full-time Music faculty member and MUS 181
Corequisite: MUS 190

MUS 211  History of Music to 1750
3 hours; 3 credits
A survey of the history of musical style and materials from the monophonic compositions of the Middle Ages to the works of twentieth-century composers, through a study of representative compositions from each era of stylistic development. (arts & com.)
Prerequisites: ENG 111 and ability to read music

MUS 215  Ensemble III
2 hours; 1 credit
Ensembles from duos to larger groups, such as voice and piano, single instrument and piano, trio, brass ensemble, new music ensemble, and/or other ensemble, that will rehearse and receive coaching on a weekly basis. Groups will be formed based on repertoire available and performance ability, with the goal of public performance.
Prerequisite: MUS 116

MUS 223  Keyboard I
2 hours; 1 credit
An introduction to the keyboard. Simple pieces and studies, simple song harmonizations and transpositions, major and minor scales, two octaves hands together.
Prerequisite: Ability to read music

MUS 224  Keyboard II
2 hours; 1 credit
A continuation of MUS 223. Advanced beginner or early intermediate piano repertoire, major and minor scales, four octaves hands together, cadence patterns, more advanced song harmonizations and transpositions. Prerequisite: MUS 223 or permission of the instructor

MUS 225  Harmony in the Classical Tradition I
4 hours; 4 credits
Four-part diatonic harmony, non-chord tones, dominant seventh, diatonic seventh, modulation, prolongation. Exercises involving Roman numerals, figured bass, soprano and bass harmonization.
Prerequisite: MUS 120 or an appropriate score on the Music placement test and permission of instructor
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
<th>Description</th>
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<tbody>
<tr>
<td>MUS 232</td>
<td>Classic Guitar I</td>
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<td>Beginning students will learn the fundamentals of classic guitar playing</td>
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<td>(School of Tarrega) through the study of technique; scales, chords, etudes,</td>
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<td>simple pieces, and sightreading.</td>
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<td>Prerequisites: MUS 120, or equivalent, and permission of the instructor.</td>
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<td>MUS 233</td>
<td>Guitar Ensemble III</td>
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<td>An ensemble of guitarists and other instrumentalists who will perform</td>
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<td>works in the classical and popular idioms. Several public performances will</td>
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<td>be given. May be taken without credit.</td>
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<td>Prerequisite: MUS 131</td>
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<td>MUS 234</td>
<td>Guitar Ensemble IV</td>
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<td>An ensemble of guitarists and other instrumentalists who will perform</td>
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<td>works in the classical and popular idioms. Several public performances will</td>
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<td>be given. May be taken without credit.</td>
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<td>Prerequisite: MUS 230</td>
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<td>MUS 236</td>
<td>Music in American Life</td>
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<td>The music making and listening habits of the American people, examining</td>
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<td>the musical activities, the musicians, and the social setting. The course</td>
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<td>focuses on the history and significance of rock as an American and</td>
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<td>international phenomenon, exploring issues of gender, race, and the</td>
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<td>multicultural musical traditions that have enriched American popular</td>
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<td>music. This course develops the ability to understand music as an</td>
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<td>expression of cultural values, and does not require instrumental training</td>
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<td>or the ability to read music. This course does not meet requirements for the</td>
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<td></td>
<td>major or the minor in Music. (arts &amp; com.)</td>
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<td>Prerequisite: ENG 111</td>
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<tr>
<td>MUS 237</td>
<td>American Musical Theater</td>
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<td>A survey of American musical theater and its development from the second</td>
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<td>half of the nineteenth century to our own times, considered in the context</td>
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<td>of a changing America. Sousa, Herbert, Friml, Cohan, Kern, Gershwin,</td>
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<td>Bernstein, Arlen, Weil, Thomson, and Copland are some of the composers</td>
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<td>whose works will be covered. (arts &amp; com.)</td>
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<td></td>
<td>Prerequisites: ENG 111; for music majors, MUS 120 or permission of</td>
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<td>instructor</td>
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<tr>
<td>MUS 239</td>
<td>History of Jazz</td>
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<td>3</td>
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<td>Survey of jazz from its origins to the present, through a study of</td>
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<td>representative compositions from each era of stylistic development.</td>
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<td>Prerequisites: ENG 111 and MUS 120 or the ability to read music</td>
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<tr>
<td>MUS 242</td>
<td>Harmonic Practice in the Jazz Tradition</td>
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<td>Chord types, extensions, alterations, voicings, progressions, and</td>
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<td>substitutions found in the jazz idiom. Analysis and written exercises.</td>
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<td>Prerequisite: MUS 225 or permission of the instructor</td>
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<td>MUS 243</td>
<td>Ear-Training and Sight-Singing I</td>
<td>3</td>
<td>2</td>
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<td>Expansion of pitch and rhythmic recognition through extensive drills and</td>
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<td>exercises. Sight-singing and dictation of graduated patterns.</td>
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<td>Prerequisite: MUS 120 or permission of the instructor</td>
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<tr>
<td>MUS 244</td>
<td>Ear-Training and Sight-Singing II</td>
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<td>2</td>
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<td></td>
<td>Continuation of MUS 243.</td>
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<td>Prerequisite: MUS 243</td>
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<tr>
<td>MUS 246</td>
<td>Jazz Ensemble III</td>
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<td>An ensemble consisting of a balanced group of selected instrumentalists</td>
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<td>who perform works in the jazz idiom. Several public performances will be</td>
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<td>given. May be taken without credit.</td>
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<td></td>
<td>Prerequisites: Audition and permission of the instructor or program</td>
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<td>coordinator (MUS 120 Rudiments of Music or its equivalent is recommended as</td>
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<td>preparation for the audition.).</td>
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<tr>
<td>MUS 250</td>
<td>Chorus III</td>
<td>2</td>
<td>1</td>
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<td>See description for MUS 150, Chorus I. May be repeated for credit.</td>
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<td>Prerequisite: MUS 151 or permission of the instructor</td>
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<tr>
<td>MUS 251</td>
<td>Chorus IV</td>
<td>2</td>
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<td>See description for MUS 150, Chorus I. May be repeated for credit.</td>
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<td>Prerequisite: MUS 250 or permission of the instructor</td>
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<tr>
<td>MUS 252</td>
<td>Musical Performance I</td>
<td>3</td>
<td>1</td>
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<td></td>
<td>Study and performance of representative literature from all periods of music</td>
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<td>history, involving instrumental as well as vocal ensembles. May be taken</td>
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<td></td>
<td>without credit.</td>
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<td>Prerequisite: For MUS 252, permission of the instructor; for MUS 253, MUS</td>
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<td>252 or permission of the instructor</td>
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<tr>
<td>MUS 258</td>
<td>Introduction to Electronic Music Synthesis</td>
<td>3</td>
<td>2</td>
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<td>Students will learn the practical and technological aspects of electronic</td>
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<td>music by gaining familiarity with the synthesizer. Each student will have</td>
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<td>regular access to the equipment of the electronic music studio. A deposit</td>
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<td>against breakage will be required, to be refunded at the end of the semester.</td>
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<td>Prerequisite: MUS 225 or permission of the instructor</td>
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<tr>
<td>MUS 280</td>
<td>Performance Workshop III</td>
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<td>Music students will meet once a week to perform before each other and</td>
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<td>Music faculty in a supportive environment. Discussion of stage deportment,</td>
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<td>performance anxiety, issues of style, and other topics with the goal of</td>
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<td>developing readiness for public performance. Performance calendar will be</td>
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<td>arranged in consultation with the student’s private teacher and the program</td>
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<td>MUS 281</td>
<td>Third-Semester Private Lessons</td>
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<td>Prerequisites: Permission of a full-time Music faculty member and MUS 191;</td>
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<td>co-require: MUS 280</td>
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<tr>
<td>MUS 270</td>
<td>Composition I</td>
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<td>Composition of original music in a seminar setting. Extensive writing and</td>
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</table>
listening assignments. Study of contemporary music literature in a variety of styles. Aspects of orchestration and arranging.
Prerequisites: MUS 212 or MUS 360 and MUS 225

MUS 290 Performance Workshop IV
1 hour; 1 credit
Music students will meet once a week to perform before each other and Music faculty in a supportive environment. Discussion of stage deportment, performance anxiety, issues of style, and other topics with the goal of developing readiness for public performance. Performance calendar will be arranged in consultation with the student’s private teacher and the program coordinator.
Prerequisites: MUS 280 and MUS 281
Corequisite: MUS 291

MUS 291 Fourth-Semester Private Lessons
1 hour; 1 credit
Prerequisites: Permission of a full-time music faculty member and MUS 281
Corequisite: MUS 290

MUS 322 Tonal Counterpoint
3 hours; 3 credits
Analysis and writing of two- and three-part linear textures and three-voice harmony; study of related repertory; outside listening.  
Prerequisite: MUS 225 or MUS 241 or MUS 242

MUS 326 Instrumentation and Scoring
2 hours; 2 credits
The study of woodwinds, brass, strings, and percussion; ranges and voicing; score analysis and notation; articulation and phrasing.  
Prerequisite: MUS 241 or MUS 242 or MUS 225

MUS 332 Classical Guitar II
2 hours; 1 credit
Study of Segovia major and minor scales through four sharps and one flat; Roch transcriptions, Tarrega preludes, and studies by Sor, Aguado, Carcassi, and others. Ensemble performance of transcriptions of Renaissance and Baroque compositions.  
Prerequisites: MUS 232 with a grade of C or better, or equivalent, and permission of the instructor

MUS 338 Innovators in Jazz
3 hours; 3 credits
Analysis of style and form of major figures in jazz history.  
Prerequisite: MUS 242

MUS 340 Arranging for Jazz Ensemble
2 hours; 2 credits
A practical study of voicing techniques in the jazz idiom. Students will be expected to orchestrate for ensembles ranging from combo to big band, and to master the writing of “charts” for the rhythm section.  
Prerequisite: MUS 326 or permission of the instructor

MUS 352 Musical Performance III
3 hours; 1 credit
See description for MUS 252.  
Prerequisite: MUS 253 or permission of the instructor

MUS 355 Musical Performance IV
3 hours; 1 credit
See description for MUS 252. May be repeated for credit.  
Prerequisite: MUS 352 or permission of the instructor

MUS 360 Twentieth-Century Directions
3 hours; 3 credits
Prerequisite: MUS 241 or MUS 242 or MUS 225

MUS 363 Ear-Training and Sight-Singing III
2 hours; 2 credits
Continuation of MUS 244, intermediate work in ear-training and sight-singing.  
Prerequisites: MUS 225 and MUS 244

MUS 364 Ear-Training and Sight-Singing IV
2 hours; 2 credits
Continuation of MUS 363 Ear-Training and Sight-Singing III.  
Prerequisites: MUS 225 and MUS 363

MUS 370 Composition II
2 hours; 2 credits
Continuation of MUS 270. Composition of original music in a seminar setting. Extensive writing and listening assignments. Study of contemporary music literature in a variety of styles. Aspects of orchestration and arranging.  
Prerequisite: MUS 270

MUS 380 Performance Workshop V
1 hour; 1 credit
Music students will meet once a week to perform before each other and Music faculty in a supportive environment. Discussion of stage deportment, performance anxiety, issues of style, and other topics with the goal of developing readiness for public performance. Performance calendar will be arranged in consultation with the student’s private teacher and the program coordinator.  
Prerequisites: MUS 290 and 291; corequisite: MUS 381 or MUS 383

MUS 381 Fifth-Semester Private Lessons
1 hour; 1 credit
Prerequisites: Permission of a full-time Music faculty member and MUS 291
Corequisite: MUS 380

MUS 383 Junior Project (Performance)
1 hour; 3 credits
Prerequisites: Junior standing and permission of a full-time Music faculty member  
Corequisite: MUS 380 or MUS 290

MUS 390 Performance Workshop VI
1 hour; 1 credit
Music students will meet once a week to perform before each other and Music faculty in a supportive environment. Discussion of stage deportment, performance anxiety, issues of style, and other topics with the goal of developing readiness for public performance. Performance calendar will be arranged in consultation with the student’s private teacher and the program coordinator.  
Prerequisites: MUS 381 or MUS 383 and MUS 380
Corequisite: MUS 383 or MUS 391

MUS 391 Sixth-Semester Private Lessons
1 hour; 1 credit
Prerequisites: Permission of a full-time music faculty member and MUS 381
Corequisite: MUS 390
MUS 393  Junior Project (Composition or Research)
1 hour; 3 credits
Prerequisites: Junior standing and permission of a full-time Music faculty member

MUS 400  The Music of J.S. Bach
3 hours; 3 credits
An examination of the music of J.S. Bach in a variety of genres: keyboard, chamber, orchestral, and cantata. Issues of musical style and structure will be emphasized. Secondary considerations include issues of theology, symbolism, and historical theory. Extensive listening assignments. Prerequisites: MUS 120 and ENG 111
Corequisite: MUS 225 or MUS 241 or MUS 242

MUS 402  Major Composer I
3 hours; 3 credits
The course will focus on a particular composer or (composers). It will cover the composer's life, major repertoire in various genres, and significant contributions to the music literature. Issues of form and style will be emphasized. The course will include extensive listening assignments and score analysis. The course will be open to majors and non-majors. Prerequisites: MUS 120 and ENG 111

MUS 403  Major Composer II
The course will focus on a particular composer (or composers). It will cover the composer's life, major repertoire in various genres, and significant contributions to the music literature. Issues of form and style will be emphasized. The course will include extensive listening assignments and score analysis. The course will be open to majors and non-majors. Prerequisites: MUS 120 and ENG 111

MUS 420  Modal Counterpoint
2 hours; 2 credits
The polyphonic modes; soprano, mezzo-soprano, alto, tenor, and baritone clefs; shaping a line, with special care for pitch structure, rhythmic flexibility, and ease of performance (students must sing their own examples); combining two, three, and four lines. The models to be studied and emulated are primarily Lassus and Palestrina. Prerequisite: MUS 322

MUS 422  Tonal Counterpoint II
2 hours; 2 credits
The study of fugue. Canons (at various intervals: in augmentation, diminution, inversion, and crab); two-part fugue (subject, answer, countersubject, exposition, etc.). Prerequisite: MUS 322

MUS 424  Score Analysis
3 hours; 3 credits
Study of works that demonstrate the variety of musical forms found in Western music. Prerequisite: MUS 225 or MUS 241 or MUS 242

MUS 430  Orchestration
2 hours; 2 credits
Score reading; the study of the instruments of the orchestra; the timbres, ranges, and sound potentials; practical exercises in the instrumentation of compositions for ensembles of all varieties, including full symphony orchestra. Prerequisite: MUS 326 or permission of instructor

MUS 431  Conducting
2 hours; 2 credits
Baton techniques; score reading; the study of choral and instrumental repertory and associated problems of interpretation; preparation for performance of representative compositions. Prerequisites: MUS 243 and MUS 241, or MUS 242 or MUS 225

MUS 441  Composing in the Popular Idiom
3 hours; 3 credits
An analytic approach to writing popular songs through the study of selected music of various composers such as Gershwin, Rodgers, Ellington, Mancini, Bacharach, and Wonder. Composing in several forms and styles. Prerequisites: MUS 243 and MUS 241, or MUS 242 or MUS 225

MUS 450  History of the Symphony
3 hours; 3 credits
A study of the origins, content, and style of significant works in symphonic literature from the Baroque to the present. Prerequisites: MUS 120 and ENG 111

MUS 460  History of Chamber Music
3 hours; 3 credits
A study of the origins, content and style of significant works in chamber music literature from the Baroque to the present. Prerequisites: MUS 120 and ENG 111

MUS 470  History of Opera
3 hours; 3 credits
A study of the origins, content, and style of significant works in opera literature from the Florentine Camerata to the present. Prerequisites: MUS 120 and ENG 111

MUS 480  Performance Workshop VII
1 hour; 1 credit
Music students will meet once a week to perform before each other and Music faculty in a supportive environment. Discussion of stage deportment, performance anxiety, issues of style, and other topics with the goal of developing readiness for public performance. Performance calendar will be arranged in consultation with the student's private teacher and the program coordinator. Prerequisites: MUS 383 or MUS 391 and MUS 390 Corequisite: MUS 481 or MUS 483

MUS 481  Seventh-Semester Private Lessons
1 hour; 1 credit
Prerequisites: Permission of a full-time music faculty member and MUS 391 Corequisite: MUS 480

MUS 483  Senior Project (Performance)
1 hour; 3 credits
Prerequisites: Senior standing and permission of a full-time Music faculty member Corequisite: MUS 480 or MUS 490

MUS 490  Performance Workshop VIII
1 hour; 1 credit
Music students will meet once a week to perform before each other and Music faculty in a supportive environment. Discussion of stage deportment, performance anxiety, issues of style, and other topics with the goal of developing readiness for public performance. Performance calendar will be arranged in consultation with the student's private teacher and the program coordinator. Prerequisites: MUS 481 or MUS 483 and MUS 480 Corequisite: MUS 483 or 491
MUS 491  Eighth-Semester Private Lessons
1 hour; 1 credit
Prerequisites: Permission of a full-time Music faculty member and MUS 481
Corequisite: MUS 490

MUS 493  Senior Project (Composition or Research)
1 hour; 3 credits
Prerequisites: Senior standing and permission of a full-time Music faculty member

Nursing

(Bachelor of Science, Associate in Applied Science, Master of Science in
Adult Health Nursing - see Graduate Catalog for information on graduate
program)
Department of Nursing
Chair: Associate Professor Linda Reese, Marcus Hall (5S), Room 213

Nursing (AAS)

General Education Requirements:
ENG 111*, ENG 151, PED 190:  8 credits
Whenever possible, these three courses should be completed within the first
36 credits.

Scientific Analysis; Social Scientific Analysis:  16 credits
1. Scientific Analysis
   a. Science and Technology
      BIO 150 Human Anatomy and Physiology I*  4 credits
      BIO 160 Human Anatomy and Physiology II**  4 credits
   b. Mathematics
      MTH 108 Medical Dosage Calculations  2 credits
2. Social Scientific Analysis
      PHL 130 Ethics*  3 credits
      PSY 100 Introduction to Psychology*  3 credits
* Satisfies Prerequisite Courses Requirement
** Satisfies Core Requirement

Prerequisite Courses: 13 credits
BIO 150  Human Anatomy and Physiology I
ENG 111  Communications Workshop
PHL 130  Introduction to Ethics
PSY 100  Psychology

To qualify for admission to the Nursing program, students are required to
successfully complete proficiency examinations in mathematics and
English and to take the Biology Placement Examination. Successful
completion of the prerequisite courses, with any necessary remediation, is a
prerequisite to the clinical phase of the Nursing curriculum.

Students must have a minimum cumulative average of 2.5 in the
prerequisite courses with a minimum grade of C in Biology 150 to be
considered for admission to the clinical phase of the Nursing program.

The number of admissions is limited. Students who have repeated
any courses in the prerequisite courses may not be considered for admission
to the Nursing program. The letter grades earned in prerequisite courses at
other colleges are used in the calculation of the index in the prerequisite
courses for transfer students. Once admitted to Nursing, any student who
fails to complete NRS 110 successfully must reapply for admission to the
program on an appeals basis.

Admissions to the Nursing program are made in June and January
each year. Applications for admission are available during each registration
period in the Nursing Department Office, Room 213, Marcus Hall (SS).

Health Documentation: Each student must maintain a completed
health and immunization record on file in the Health Center Office, Room
112, Campus Center. At the beginning of each semester, the student must
present a current copy of the health and immunization record to the
clinical instructor. This includes an annual physical examination, required
immunizations, proof of measles and varicella vaccination or blood titer,
PPD test, and drug screen (urine) results. Hepatitis B immunization is
highly recommended.

Insurance: The application form for malpractice insurance for
nursing students is available in Room 213, Marcus Hall. This insurance
must be maintained during the time enrolled in the Nursing education
program and is to be renewed yearly. Applications for the insurance are
issued at registration. Clinical practice may not begin until the insurance is
in effect.

Uniforms: Nursing students are required to wear a uniform during
clinical practice. Information about uniforms is available in the
department.

CPR Certification: At the start of each clinical course, each student
must submit proof of current American Red Cross, National Safety Council,
or American Heart Association certification for cardiopulmonary
resuscitation.

Core Requirements: (total credit requirement: 44)
(BIO 150, BIO 160, and MTH 108 from general education
requirements listed above)
BIO 350  Bacteriology  3 credits
BIO 351  Bacteriology Laboratory  1 credit
NRS 110  Medical-Surgical Nursing I*  6 credits
NRS 120  Medical-Surgical Nursing II  9 credits
NRS 210  Medical-Surgical Nursing III*  4.5 credits
NRS 211  Psychiatric Nursing*  4.5 credits
NRS 220  Family-Centered Maternity Nursing*  5 credits
NRS 221  Child Health Nursing*  5 credits
* Half-semester course

Electives: 2 credits
Total Credits Required: 64

Liberal Arts and Sciences Requirement:
Courses in human services, health education, and nursing are non-liberal
arts and sciences.

Criteria for Continuation in Associate's Degree Nursing
Curriculum:
1. The student must be admitted to and matriculated in the clinical
   phase of the nursing curriculum in order to register for any required
   nursing course.
2. The student must achieve a minimum grade of C+ in each of the
   required courses and a minimum grade of C in MTH 108 and the
   required biology courses.
   The student may repeat only one biology course with a minimum
   grade of C and only one nursing course with a minimum grade of B.
Withdrawal (WU) from any nursing and/or required biology course for academic reasons will be permitted only once. The student has the right to appeal the grade, after consultation with the faculty member and the chairperson.

3. Students with two withdrawals (W) in nursing courses must apply to the Departmental Advisory Committee to request permission to register for any further nursing courses.

4. The time limit for completion of the clinical phase of the Associate’s Degree Nursing Program is five years.

5. Students seeking readmission to the clinical phase after a break of three or more years in enrollment in clinical courses must apply to the Department Advisory Committee. In the event of readmission, the Committee may require additional work, including repeating a previously completed clinical course.

6. Students are expected to adhere to standards that reflect ethical and professional responsibility.

7. Failure of a student to meet any of the above standards will warrant review by the Department Advisory Committee.

8. The criteria for continuation in the Nursing curriculum will be implemented by the Department Advisory Committee. Voting members include one representative from each nursing course. Non-voting members include the departmental representative to the Committee on Course and Standing, a faculty member secretary, and the Chairperson of the Nursing Department. The elected chairperson of the Advisory Committee votes if there is a tie vote:

   a) The Department Advisory Committee will review each student’s total college record at the end of the fall and spring semesters.
   b) Students who fail to meet the criteria for continuation will be advised to see a counselor or adviser for clarification of the difficulty.
   c) The Department Advisory Committee will refer those students who fail to meet the above criteria to the Committee on Course and Standing for appropriate action.
   d) The student may appeal the decision of the Department Advisory Committee and/or the Committee on Course and Standing.

Nursing (BS)
The College offers an upper-division program leading to the BS degree with a major in Nursing. The program is designed for students who are licensed registered nurses but do not hold the baccalaureate degree.

Admission Requirements:
Applicants to the BS degree program in Nursing must be graduates of a nursing program from a degree-granting college or a diploma-granting nursing school that prepares students for licensure as Registered Professional Nurses.

Applicants should have at least a 2.0 cumulative grade point average and grades of at least 2.0 in all nursing courses taken prior to application. Deadlines for application and supporting documentation are April 1 for the fall semester and November 1 for the spring semester. Applications for admission are available in the Office of Recruitment and Admissions.

General Education Requirements for the BS
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 21–27 credits
Whenever possible, these courses should be completed within the first 60 credits.

1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)

2. Social Scientific Analysis: (3–4 credits)

3. The West and the World: (4 credits)

4. Textual, Aesthetic, and Linguistic Analysis: (3–4 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
   c. Arts and Communications: 200-level

5. Pluralism and Diversity Requirement: (0–4 credits)

See section on general education requirements for approved course lists and complete details.

The science and mathematics courses listed under Major Requirements will be accepted as satisfying Scientific Analysis requirements.

Pre-major Requirements: 54 credits
Students are expected to have completed all the following courses or their equivalent prior to admission to the BSN curriculum.

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>PSY 100</td>
<td>Introduction to Psychology</td>
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<tr>
<td>PHL 130</td>
<td>Introduction to Ethics</td>
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<tr>
<td>BIO 150</td>
<td>Human Anatomy and Physiology I</td>
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<td>BIO 160</td>
<td>Human Anatomy and Physiology II</td>
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<td>BIO 350</td>
<td>Bacteriology</td>
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<td>BIO 351</td>
<td>Bacteriology Laboratory</td>
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<td>MTH 108</td>
<td>Medical Dosage Calculations</td>
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<td>NRS 110</td>
<td>Medical Surgical Nursing I</td>
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<td>NRS 120</td>
<td>Medical Surgical Nursing II</td>
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<td>NRS 210</td>
<td>Medical Surgical Nursing III</td>
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<tr>
<td>NRS 211</td>
<td>Psychiatric Nursing</td>
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<tr>
<td>NRS 220</td>
<td>Family-Centered Maternity Nursing</td>
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<tr>
<td>NRS 221</td>
<td>Child Health Nursing</td>
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The maximum number of nursing credits applied to the BS major is 25.

Major Requirements: 52 credits

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<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>BIO 382</td>
<td>Pharmacotherapeutics</td>
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<tr>
<td>CHM 110</td>
<td>Principles of Chemistry I</td>
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<tr>
<td>CHM 111</td>
<td>Principles of Chemistry I Laboratory</td>
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<td>CHM 116</td>
<td>Principles of Chemistry II</td>
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<tr>
<td>CHM 117</td>
<td>Principles of Chemistry II Laboratory</td>
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<td>MTH 113</td>
<td>Introduction to Probability and Statistics</td>
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<td>NRS 305</td>
<td>Seminar in Professional Development</td>
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<td>NRS 310</td>
<td>Interpersonal Dynamics for Professional Nurses</td>
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<td>NRS 320</td>
<td>Health Assessment and Physical Examinations</td>
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<td>NRS 321</td>
<td>Introduction to Research in Nursing</td>
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<td>NRS 410</td>
<td>Community Health Nursing</td>
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<tr>
<td>NRS 411</td>
<td>Leadership in the Management of Patient Care</td>
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<tr>
<td>NRS 421</td>
<td>Critical Care Nursing</td>
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</tbody>
</table>
NURSING

NRS 425  Issues in Health Care and Professional Nursing  3 credits

Nursing electives:  3 credits
Electives:  0-1 credits
Total Credits Required:  120

Honors
To graduate with Honors in Nursing, a student must have a 3.5 grade point average in Nursing courses, an overall GPA of 3.25, and must complete an honors project. Upon approval by the Baccalaureate Nursing Curriculum Committee, the student will work under the close supervision of a member of the Nursing faculty while conducting this project. Students may receive credit through independent study for their work on an honors project.

Criteria for Progression to 400-level courses:
All students must meet the following requirements prior to taking NRS 400 courses:
1. Current New York State License as a Registered Professional Nurse.
2. Completion of the pre-major requirements, either by examination or by completion of the appropriate courses. A maximum of 25 nursing credits are applied toward the BS in Nursing.

Graduates of diploma-granting nursing schools and college programs not accredited by the National League for Nursing Accrediting Commission must demonstrate successful completion of the Excelsior College Examinations currently designated by the Department (see a faculty adviser for information on names of specific examinations.)

Upon successful completion of these requirements, the student must file a change in curriculum form in the BS in Nursing program with the Office of the Registrar (registrar’s curriculum designation N4).

To qualify for continuation in and graduation from the Nursing curriculum, students must receive a grade of at least C in each of the required nursing and biology courses. A student may repeat only one of the required nursing courses and only one of the required biology courses if a grade of less than C is received. Only one Withdrawal for Academic Reasons (WU) from required courses in nursing or biology is permitted.

Health Documentation
Students taking NRS 410/411 and NRS 421 must present the following on the first clinical day: a completed copy of the College Health Record that includes annual physical examination, required immunizations, proof of measles and varicella vaccination or a positive titer, PPD test, and drug screen (urine) result. Hepatitis B immunization is highly recommended.

Professional Documentation
Students taking NRS 410/411 and NRS 421 must present the following on the first clinical day: copy of current RN license; copy of malpractice insurance face-sheet showing dates and coverage.

Courses

NRS 110  Medical-Surgical Nursing I
3 class hours, 9 laboratory hours; 6 credits
Principles and concepts basic to the practice of nursing. Emphasis is on the maintenance and meeting of the basic needs of the adult patient. Introduces the student to alterations in human basic needs as a result of simple health problems. Clinical experience in a general hospital.
Prerequisite: Satisfactory completion of the pre-nursing sequence
Corequisite: MTH 108

NRS 120  Medical-Surgical Nursing II
6 class hours, 9 laboratory hours; 9 credits
Focus is on the identification of alterations in human basic needs resulting from common health problems and nursing intervention to restore and/or maintain optimal health. Clinical experience in a general hospital.
Prerequisites: NRS 110, MTH 108
Pre- or corequisite: BIO 160

NRS 125  Nursing Informatics - Computers in Nursing
1 class hour, 2 laboratory hours; 2 credits
Introduction to the basic concepts and skills necessary for the student to interact with a computer. Emphasis is on nursing informatics, computers related to clinical practice, nurse-patient education, basic administrative and research applications.
Prerequisite: Open to students in the Nursing curriculum

NRS 210  Medical-Surgical Nursing III
6 class hours, 9 laboratory hours for one-half semester; 4.5 credits
Focus is on the nursing problems of a patient with catastrophic illness. Short- and long-term goals of care will be included and the many ramifications that these illnesses have upon the patient, family, society, and the nurse. Clinical experience in general hospital and community agencies.
Prerequisite: NRS 120
Pre- or corequisite: BIO 350 and BIO 351

NRS 211  Psychiatric Nursing
6 class hours, 9 laboratory hours for one-half semester; 4.5 credits
The development of concepts and skills in psychiatric nursing. Special emphasis is placed on developing increased understanding of the nurse’s own behavior and the role she/he plays in interpersonal relationships. The student learns to recognize the components of mental health and the impact of mental illness upon the patient, the patient’s family, and the community. Laboratory experiences in clinical settings and community agencies.
Prerequisite: NRS 120
Pre- or corequisite: BIO 350 and BIO 351

NRS 220  Family-Centered Maternity Nursing
6 class hours, 12 laboratory hours for one-half semester; 5 credits
Development of principles and skills in identifying and meeting the needs of the expectant family. The family structure and changing roles are emphasized throughout the pregnancy and birth cycle. Laboratory experiences in clinical settings and community agencies.
Prerequisites: NRS 210 and 211

NRS 221  Child Health Nursing
6 class hours, 12 laboratory hours for one-half semester; 5 credits
Basic needs and primary care of the well and ill child as a member within the family and community. Encompasses nursing assessment and intervention in the promotion, maintenance, and restorative aspects of childcare. Psycho-social aspects of growth and development are emphasized. Laboratory experiences in general hospital and community agencies.
Prerequisites: NRS 210 and 211
NRS 223 Perspectives and Issues in Professional Nursing
3 hours; 3 credits
An exploration of current topics and issues that influence the practice of professional nursing. Content includes legal, ethical, cultural, managerial, and economic issues as they affect the practice of nursing.
Prerequisites: NRS 110 or 113, and NRS 120

NRS 303 Seminar in Professional Development
3 hours; 3 credits
This course consists of seminar-based discussions of nursing as a profession and a science. The theory and research-based aspects of professional practice are explored. The history of nursing provides a foundation for growth as professionals. A model for health promotion is introduced as a foundation for community-based nursing care. Theories of critical thinking are applied through the use of case studies.
Prerequisite: Matriculated status in the BS degree program in Nursing

NRS 310 Interpersonal Dynamics for Professional Nurses
2 lecture hours, 2 laboratory hours; 3 credits
Theories and research related to verbal, nonverbal, written, and computer-based communication are explored. Students increase proficiency in the use of a broad range of communication strategies with people from culturally diverse backgrounds.
Prerequisite: Matriculated status in the BS degree program in Nursing

NRS 320 Health Assessment and Physical Examination
2 lecture hours, 2 laboratory hours; 3 credits
The skills and techniques to perform a comprehensive health assessment and physical examination for generalist-nursing practice are refined. Nursing assessments of normal health parameters serve to differentiate the health patterns of culturally diverse individuals across the life span. Data from interviews, health histories, and case studies will be critically analyzed. Standardized nursing classification systems are used throughout the course.
Pre- or corequisites: NRS 303, NRS 310

NRS 321 Introduction to Research in Nursing
3 hours; 3 credits
Introduction to steps of the research process and to strategies for critically appraising nursing research. Research utilization, applications for clinical nursing practice, the use of the computer in nursing research, and future directions of nursing research will be discussed. Students will read and critique a selection of current published nursing research articles. Emphasis will be on clinical nursing research, including both qualitative and quantitative designs.
Prerequisite: NRS 303, NRS 310
Pre- or corequisite: MTH 113

NRS 323 Health Care Needs of Vulnerable Populations
3 hours; 3 credits
This course explores the concept of vulnerability and its effect on health care needs. Factors that predispose people to vulnerability are discussed. Specific populations are identified and interventions to break the cycle of vulnerability are presented.
Pre- or corequisites: NRS 303, NRS 310

NRS 410 Community Health Nursing
2.5 class hours, 5 laboratory hours; 5 credits
Nursing and public health theories and research are integrated to provide students with knowledge and competencies for holistic nursing care of culturally diverse individuals, families, and communities. Theories and research related to health promotion, health protection, disease and illness management are applied. Skills in mutual collaboration with consumers and interdisciplinary teams are developed.
Prerequisites: BIO 382, MTH 108, NRS 310, NRS 303, NRS 320, and successful completion of the Criteria for Progression to NRS 400 courses
Pre- or corequisite: NRS 321

NRS 411 Leadership in Management of Patient Care
2.5 class hours, 5 laboratory hours; 5 credits
In this course, nursing, transcultural, organizational, and change theories are examined in relation to application to the practice setting. Emphasis is placed on professional communication skills, principles, and practices of care management. Conceptual themes of critical thinking, decision making, and therapeutic nursing interventions as they apply to the management of patient care and quality improvement initiatives are integrated throughout the course. Issues and research findings are analyzed and the impact of various models of health care on the nursing profession is examined.
Prerequisites: NRS 320, NRS 321, and successful completion of the Criteria for Progression to NRS 400 courses

NRS 420 Nursing Critical Illness
3 hours; 3 credits
This course focuses on the roles of professional nurses in the specialty of critical care nursing. It provides students with opportunities to develop clinical judgement, use advanced technology, participate in ethical decision making, and integrate research findings into practice.
Prerequisites: NRS 303, NRS 310, NRS 320, CHM 110, CHM 111, CHM 116, and CHM 117; and successful completion of the Criteria for Progression to NRS 400 courses.
Pre- or corequisites: NRS 321, PHY 114

NRS 423 Issues in Health Care and Professional Nursing
3 hours; 3 credits
Current issues in health care and nursing are discussed and analyzed. Pro and con positions are addressed through discussions and presentations. Political strategies to negotiate and effect change are outlined and demonstrated. This course should be taken in the student's last semester of the BS degree program in Nursing.
Pre- or corequisites: NRS 410, NRS 411, NRS 421

Philosophy

(Bachelor of Arts, Dual Major with Political Science, Minor)
Department of Political Science, Economics, Philosophy
Coordinator: Professor Peter Simpson, History/Political Science, Economics, and Philosophy Building (2N), Room 232

Philosophy (BA)

General Education Requirements for the BA
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 28–47 credits
Whenever possible, these courses should be completed within the first 60 credits.
1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)
2. Social Scientific Analysis: (7-8 credits)
3. The West and the World: (4 credits)
4. Textual, Aesthetic, and Linguistic Analysis: (6-8 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
      Arts and Communications: 200-level
5. Pluralism and Diversity Requirement: (0-4 credits)
6. Foreign Language: (0-12 credits)

See section on general education requirements for approved course lists and complete details.

**Major Requirements:** 28 credits
At least 28 credits of courses at the 200 level or higher. These 28 credits must include courses in at least three of the following four areas, including a minimum of two in 1. History of Philosophy and one in 2. Knowledge, Logic, and Scientific Method.

1. History of Philosophy (PHL 200-219, 300-319)
4. Culture and Religion (PHL 240-249, 340-349)
The 28 credits must also include at least two courses at the 300 level and a Senior Seminar (PHL 400, 401, or 490).

In addition, students must complete at least 12 credits of work in related subjects chosen in consultation with an adviser. Relevant areas include history, politics, psychology, sociology, literature, science, law, economics, education, public administration, and the arts. These courses may also be used to satisfy general education requirements.

**Electives:** 54-55 credits

**Total Credits Required:** 120

**Honors**
To graduate with Honors in Philosophy a student must have a 3.5 grade point average in philosophy courses and must complete a thesis or project determined by the student and his or her faculty sponsor and the course POL/ECO/PHL 490 Senior Seminar in Political Science, Economics, and Philosophy.

**Minor**
Prerequisite course:
Any 100-level philosophy course 3 credits

**Minor Requirements**
At least 12 credits in philosophy at or above the 200 level.

**Dual Major in Philosophy and Political Science (BA)**
Requirements for the dual major in Philosophy and Political Science (BA) include the general education requirements and 19 credits in philosophy, and 19 - 20 credits in political science, total of 120 credits required.

**Required Courses in the Dual Major:**
- PHL 101 Introduction to Philosophy or
- PHL 130 Introduction to Ethics 3 credits
- Four 200-level or above courses in philosophy including at least one course at the 300 level or above. Of these four courses, one must be in the history of philosophy (PHL 210-219, 310-319) and one in philosophical method (PHL 220-229, 320-329, 420).
- 16 credits

- POL 100 American Government and Politics or
- POL 235 The American Political System 3-4 credits
- Four 200-level or above courses in political science including at least one course at the 300 level or above. These four courses must be chosen from at least two of the following areas: American politics (POL 220-239; POL 320-339), political theory (POL 200-219; POL 300-319), comparative government (POL 240-259; POL 340-359), international politics (POL 260-279, POL 360-379).
- 16 credits

- POL/ECO/PHL 490 Senior Seminar in Political Science, Economics, and Philosophy 4 credits

**Elective credits:** 39-40

**Total Credits in the Dual Major:** 38-39

**Courses**

**PHL 101 Introduction to Philosophy**
3 hours; 3 credits
A study of those systems of Western thought that have had the greatest effect and that have best illuminated the central problems of human existence. (social science)

**PHL 130 Introduction to Ethics**
3 hours; 3 credits
Social and individual conduct in the light of important ethical theories of Western civilization. Topics include the meaning of good and evil, the meaning of right and wrong, free will, and the validity of ethical judgment. (social science)

**PHL 131 Field Work in Ethics**
3 hours; 3 credits
The student must be working at a job, paid or volunteer, for at least six hours a week in an organizational setting. Through an extensive ongoing journal, the student develops ethical analysis of job-related events and integrates these ethical theory as taught in PHL 130. Four areas of knowledge will be stressed: ethical self-observation and judgment; assessment of relations between individuals on different status levels of the organizations; how the built-in structures of the organization may aid or hamper self-esteem and/or work performance; and, finally, how truly the organization functions according to its socially mandated goals. Periodic individual conferences will be scheduled with the instructor. Pre- or corequisite: PHL 130

**PHL 200 Early Political Theory**
(Also POL 201)
4 hours; 4 credits
Analysis of major ideas and concepts of Western political theory from the Greeks to Hobbes. Such questions as the ends of politics, the nature of citizenship, the extent and limits of political obligation, and the relationship between rulers and the ruled will be discussed. (social science)
Prerequisites: ENG 111, COR 100
PHL 202 Modern Political Theory
(Also POL 202)
4 hours; 4 credits
The development of modern theories of the state, with emphasis on democracy and theories of representation, the forces underlying political change and revolution, and the growth of "collectivism." Such authors as Locke, Rousseau, Hegel, Mill, and Marx will be read. (social science)
Prerequisites: ENG 111, COR 100

PHL 204 American Political and Legal Thought
(Also POL 204)
4 hours; 4 credits
A study of the political ideology dominating several periods of American history, including the Puritan, revolutionary, pre-Civil War, populist, and New Deal eras. Analysis of the writing of at least one current theorist and one major legal philosopher. (social science)
Prerequisites: ENG 111, COR 100

PHL 210 American Philosophy
(Also AMS 210)
4 hours; 4 credits
A study of philosophy in America. Topics of inquiry will be selected from such movements and figures as the following: Puritanism, empiricism, idealism, and pragmatism; Jonathan Edwards, Ralph Waldo Emerson, Josiah Royce, Charles S. Peirce, William James, John Dewey, George Santayana, and Alfred North Whitehead. (social science)
Prerequisites: ENG 111, COR 100

PHL 213 Existentialism
4 hours; 4 credits
Major figures and directions in existential philosophy will be studied, including such figures as Kierkegaard, Nietzsche, Heidegger, Sartre, Camus, and Ricoeur. Existential philosophy will be considered both as a reaction against rationalist and positivist thought and as a new attempt to examine and define human values. The course will pay some attention to related developments in religion and psychology. (social science)
Prerequisites: A 100-level course in philosophy or sophomore standing; ENG 111, COR 100

PHL 214 Philosophy of History
4 hours; 4 credits
Epistemological and metaphysical presuppositions and problems of major theories (e.g., those of Augustine, Vico, Kant, Marx, Collingwood, Toynbee, and Teilhard de Chardin. Prerequisite: A 100-level course in philosophy or sophomore standing:

PHL 216 Ideas and the World: 600 B.C. to 1600 A.D.
4 hours; 4 credits
The development of philosophy from pre-Socratic times through the sixteenth century. Emphasis on the dialogues of Plato and the writings of Aristotle with attention to such other thinkers as Epicurus, Marcus Aurelius, Plotinus, Augustine, and Aquinas. (social science)
Prerequisites: A 100-level course in philosophy or sophomore standing; ENG 111, COR 100

PHL 217 Ideas and the World: 1600 to the Present
4 hours; 4 credits
The development of philosophy from the beginning of the seventeenth century to the present through the study of philosophical texts. Readings will be drawn from such authors as Descartes, Hume, Kant, Marx, Mill, Nietzsche, Dostoevsky, and Ayer. (social science)
Prerequisites: A 100-level course in philosophy or sophomore standing; ENG 111, COR 100

PHL 218 Major Philosopher I
4 hours; 4 credits
This course will focus on a particular philosopher. It will cover the life, the main theories and ideas, the main contributions, and the main problems and difficulties. Philosophers will be chosen from all periods of philosophy (ancient, medieval, modern) and from all cultures (American, European, Asian, Islamic, African, etc.). Typical assignments will be quizzes on the philosopher's life and ideas and on logical analysis; three or four analytical papers; final examination. The course is open to majors and non-majors.
Prerequisites: ENG 111 and COR 100

PHL 219 Major Philosopher II
4 hours; 4 credits
Intensive study of the work of a major philosopher. Prerequisites: ENG 111 and COR 100

PHL 220 Experience and Knowledge
4 hours; 4 credits
A study of various theories of knowledge and of the relation of experience to knowledge. Inquiry will include such topics as experience and nature, knowledge and belief, perception, memory and the past, meaning and meaningfulness, thought and feeling, and observation in the natural and social sciences. (social science)
Prerequisites: A 100-level course in philosophy or sophomore standing; ENG 111, COR 100

PHL 221 Logic and Scientific Method
4 hours; 4 credits
An analysis of the pitfalls of language, and an investigation into the formal structure and methodology of deductive and empirical sciences. (social science)
Prerequisites: A 100-level course in philosophy or sophomore standing; ENG 111, COR 100

PHL 222 Philosophical Thinking
4 hours; 4 credits
This course will explore different types of philosophical argument with the aim of developing the student's capacity for critical thought. Important texts from the history of philosophy will be analyzed in class discussions and essays; students will also be asked to develop and to criticize arguments on the issues discussed. Emphasis will be on the methods of philosophy rather than on its history. (social science)
Prerequisites: A 100-level course in philosophy or sophomore standing; ENG 111, COR 100

PHL 223 Race Discrimination: A Philosophical Analysis
4 hours; 4 credits
The fundamental nature of racism is examined by studying its meaning, causality, and "usefulness" to the individual and to society. Ethical analysis will be made, and students can choose to do research at organizations dedicated to fighting discrimination.
Prerequisite: A 100-level course in philosophy or sophomore standing

PHL 226 Life and Death: Bioethics
4 hours; 4 credits
An examination of basic human mysteries and dilemmas including the nature of life and self-identity, the implications of death, and the complex moral issues arising from technological advances. Among topics considered are euthanasia, abortion, human experimentation, behavioral and genetic control, and the rights and responsibilities of patients and professionals. Open to all students, it will have special significance for those preparing for health care services. (social science)
Prerequisites: ENG 111, COR 100; a 100-level course in philosophy or sophomore standing
PHL 237  The Tragic Dilemma
4 hours; 4 credits
Analysis of the consequences of human finitude (mortality, fallibility, ignorance) in an attempt to illustrate the meaning of tragedy as a lived experience. Discussion of the ways in which humans attempt to avoid the recognition of tragedy or attempt to make it bearable. Orientation will be accomplished through a study of the literature of tragedy. (social science)
Prerequisites: A 100-level course in philosophy or sophomore standing; ENG 111, COR 100

PHL 238  Ethical Issues in Business and Society
(Also BUS 238)
4 hours; 4 credits
Critical examination of economic and social responsibility of business in the U.S. and around the world; exploration of the appropriate scope of ethical involvement from points of view of management and society; the limitations of responsibility and the establishment of ethical criteria for the evaluation of business performance; the role of public policy in shaping corporate responsibility; consideration of ethical issues arising from the changing nature and implementation of computer and information technology.
Prerequisites: ENG 111; PHL 101 or PHL 130 or MGT 110 or sophomore standing

PHL 240  Philosophy of Religion
4 hours; 4 credits
A study of some of the classical problems in the philosophy of religion, including arguments for the existence of God, religious language, the unique features of religious experience, and the relation between reason and faith. (social science)
Prerequisites: A 100-level course in philosophy or sophomore standing; ENG 111, COR 100

PHL 242  Biblical Themes
4 hours; 4 credits
An introduction to the fundamentals of Biblical research and a close examination of selected themes in the Old and New Testaments: creation, covenant, prophetic protest, messiah, community, and the meaning and fulfillment of history. The purpose will be to gain an overall view of the Bible and to develop skills requisite to its fuller understanding.
Prerequisites: ENG 111 and a 100-level course in philosophy or sophomore standing

PHL 243  Comparative Religion
4 hours; 4 credits
A comparative study of the great religious systems (e.g., Hinduism, Buddhism, Confucianism, Taoism, Zoroastrianism, Judaism, Christianity, and Islam). (social science) (P&D)
Prerequisites: A 100-level course in philosophy or sophomore standing; ENG 111, COR 100

PHL 266  Environmental Ethics
(Also GEG 266)
4 hours; 4 credits
This course provides a critical forum to examine the roots and results of our attitudes toward the environment. How should we view the apparent connections between pollution, economic development, and poverty; what (if anything) do we owe future generations; how should we consider non-human animals in the environment; is there justice or injustice in environmental civil disobedience? The course will draw on issues related to philosophy, geography, biology, economics, geology, and political science, and will challenge the exercise of global consciousness in "real world" terms. (West & World)
Prerequisites: A 100-level course in philosophy or sophomore standing; ENG 111, COR 100

PHL 303  Recent Political Theory
(Also POL 303)
4 hours; 4 credits
An examination of leading works in political theory of the late nineteenth and twentieth centuries. The central theme will be the attacks on and the reaffirmations of liberal democratic thought. Discussion of problems of order and violence, social and political revolutions, and democratic processes. Readings will be drawn from original works in political theory by writers such as Arendt, Dewey, Freud, Hayek, Lenin, Marx, and Sorel.
Prerequisites: Sophomore standing and any 100-level political science or philosophy course

PHL 307  History of Legal Thought
(Also POL 307)
4 hours; 4 credits
An analysis of the writings of major legal philosophers from classical times to the present. Writers to be studied include Aristotle, Cicero, Aquinas, Austin, Savigny, Cardozo, and Holmes.
Prerequisites: Sophomore standing and any political science or philosophy course

PHL 312  Descartes to Kant
4 hours; 4 credits
The beginning of modern philosophy - epistemology, ethics, and political thought - will be studied through readings from some of the major figures of the seventeenth and eighteenth centuries. Readings will be drawn from the works of Descartes, Leibniz, Spinoza, Locke, Hume, Rousseau, and Kant. Special attention will be given to the opposition of empiricism and rationalism and to its resolution in Kant's work.
Prerequisites: At least one 200-level course in philosophy or permission of the department

PHL 314  Nineteenth-Century Philosophy
4 hours; 4 credits
This course attempts to form a coherent view of nineteenth-century philosophy by studying the major philosophical developments in Hegel, Marx, Kierkegaard, and Nietzsche. Discussion topics will include the nature of man as a historical being, the problem of a foundation of values, and the problem of alienation.
Prerequisites: At least one 200-level course in philosophy or permission of the department

PHL 320  Philosophy, Religion, and Psychology
4 hours; 4 credits
A study of the common and conflicting aspects of philosophy, religion, and psychology and their assumptions and methods; the debate between science and religion; contrasting views of the human predicament, proposals for change, and their intended results. Consideration of such authors as Freud, Jung, James, Fromm, Teilhard de Chardin, Watts, Tillich, and Skinner.
Prerequisites: At least one 200-level course in philosophy or permission of the department

PHL 321  Mathematical Logic
(Also MTH 350)
4 hours; 4 credits
The calculus of propositions. Existential and universal quantifiers. Turing machines and computability theory. Non-computable functions. The
PHL 331 Moral, Legal, and Political Philosophy
4 hours; 4 credits
The nature of moral and legal principles and, in particular, their
application to political life. Such topics as: freedom of speech, the control
of sexual behavior, the distribution of property and income, punishment,
the morality of war, the choice of political means. Particular attention will
be paid to the question of the extent to which the state should employ the
technique of law in enforcing the community's moral and political
principles.
Prerequisites: At least one 200-level course in philosophy or permission of
the department

PHL 333 Economics and Philosophy
(Also ECO 333)
4 hours; 4 credits
This course will cover topics that overlap in the fields of economics and
philosophy. It will enlighten economics majors about the philosophical
underpinnings of economics and introduce philosophy majors to the more
"thoughtful" aspects of economics. Topics discussed will include: rational
choice and ethics; social welfare; justice, efficiency, and equity; social
choice; and game theory.
Prerequisites: ENG 111 and any introductory-level economics or
philosophy course

PHL 336 Advanced Topics in Ethics and Social Philosophy
4 hours; 4 credits
A study of a selected issue or issues in ethics and social philosophy. The
particular topic for the semester will be announced in the Schedule of
Classes. Possible topics include physician-assisted suicide, eugenics, health
care rights, welfare, and property rights.
Prerequisites: At least one 200-level course in philosophy or permission of
the department

PHL 334 Eastern Philosophy
4 hours; 4 credits
An inquiry, both theoretical and experiential, into great philosophies of the
Far East. Readings selected from the classical writings of Hinduism,
Buddhism, Confucianism, and Taoism. Attention will also be paid to such
modern thinkers as Gandhi and Mao Zedong. (P&D)
Prerequisites: At least one 200-level course in philosophy or permission of
the department

PHL 345 Art and Criticism
4 hours; 4 credits
A discussion of theories concerning the nature of art and of aesthetic
experience: the ideas of mimesis, beauty, and expression; methods of
criticism and standards of judgment in the arts; the relation of art to morals
and politics.
Prerequisites: At least one 200-level course in philosophy or permission of
the department

PHL 350 Theories of Literature and Criticism
(Also ENL 460)
4 hours; 4 credits
A consideration of some of the main historical and contemporary theories
of the nature of literature and the problems of criticism. Readings will be
drawn from Aristotle to the post-structuralists. Major topics will be mimesis,
PHO 230  Color Photography
4 hours; 3 credits
An introduction to expressive color photography, utilizing transparencies and color printing. Projects will explore the creative and technical possibilities of color film. The class will focus on color theory, field and studio production, and critiques of student work.
Prerequisites: PHO 120 or permission of the instructor

PHO 240  Photojournalism
4 hours; 3 credits
An in-depth study of photojournalism, including, news photography, the journalistic portrait, the picture sequence, picture story, and picture essay. The development of photojournalism and its role in society will be explored. Students will produce news photographs, a journalistic portrait, and a picture story.
Prerequisite: PHO 120 or permission of the instructor

PHO 250  Studio Photography I
4 hours; 3 credits
Photography studio techniques. Students will work both in large and small formats, utilizing tungsten and studio strobe lighting. Techniques of still life, portraiture, fashion, and figure photography will be stressed.
Prerequisite: PHO 120 or permission of the instructor

PHO 320  The Photographic Portfolio
4 hours; 3 credits
Goals and marketing for photography. The definition and preparation of a personal photographic portfolio. A survey of ideas leading to a photographic direction, and the techniques necessary to realize the portfolio needed to pursue that direction.
Prerequisites: Any 200-level PHO course or permission of the instructor
This course may be repeated for credit.

PHO 360  Studio Photography II
4 hours; 3 credits
Methodology of producing pictures under totally controlled conditions. Lighting and camera techniques for portraiture, still life, and illustrations will be stressed. Both artistic concerns and professional studio practices are covered.
Prerequisite: PHO 250 or permission of the instructor

Physical Education Course
Department of Nursing
Chair: Associate Professor Linda Reese, Marcus Hall (5S), Room 213

PED 190  Fitness for Life
2 hours; 1 credit
This course is designed to inform students about current issues and practices in fitness and wellness. It combines theory and practice in lectures and physical activities to enable students to plan for a healthy independent future.
Prerequisite: Current medical examination on file with the College Health Center
Successful completion of PED 190 fulfills the general education requirement in Physical Education.

Physical Therapy
(Bachelor of Science/Master of Science)
Department of Biology
Coordinator: Professor Jeffrey Rothman, Engineering Technologies-East Building (5N), Room 207
The combined Bachelor of Science/Master of Science degree program in Physical Therapy is designed to prepare graduates for entry-level positions in the profession. Upon successful completion of all the requirements, students will be awarded both degrees: the BS in Physical Therapy and the MS in Physical Therapy. The two degrees will be awarded concurrently.

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

Admission Requirements to the Professional Phase of the Program:
The Physical Therapy admissions committee, comprised of Physical Therapy faculty, Biology faculty, Physical Therapy clinicians, and a representative of the Admissions Office, determines the admission of candidates to the program. Students must successfully complete the general education requirements and the pre-major requirements with a minimum cumulative grade point average of 2.8 in the Pre-Major Requirements to be considered for the program.

Admission to the program is competitive and criteria for selection include the strength of the academic record (with particular emphasis on performance in science courses); written and oral communication skills; volunteer and/or work experience in a physical therapy setting, minimum of 200 hours, of which 100 hours must be in a hospital or skilled nursing facility; and recommendations.

Retention Standards
Students must have a minimum grade point average (GPA) of 3.0 (B) to be retained in a graduate program. Students whose GPAs fall below 3.0 are on probationary status. If a student has completed the number of credits required for both the graduate and undergraduate degrees and has less than a 3.0 average in the graduate phase (600-level courses or above), he/she may repeat no more than two 600-level or above courses (6-8 credits) in order to bring the average to 3.0. Written permission of the program coordinator is required. The specific courses to be taken must be approved in writing by the program coordinator.

Physical Therapy (BS/MS)
Students must maintain an average of 3.0 (B) in the 41 credits of graduate courses for retention in the program.

General Education Requirements for the BS
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 21-27 credits
Whenever possible, these courses should be completed within the first 60 credits.
1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)
2. Social Scientific Analysis: (3-4 credits)
3. The West and the World: (4 credits)
4. Textual, Aesthetic, and Linguistic Analysis: (3-4 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
   c. Arts and Communications: 200-level
5. Pluralism and Diversity Requirement: (0-4 credits)

See section on general education requirements for approved course lists and complete details.

Pre-Major Requirements: 37-39 credits

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIO 150</td>
<td>Human Anatomy and Physiology I</td>
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</tr>
<tr>
<td>BIO 160</td>
<td>Human Anatomy and Physiology II</td>
<td>4</td>
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<td>CHM 141</td>
<td>General Chemistry I</td>
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<td>CHM 121</td>
<td>General Chemistry I Laboratory</td>
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<td>CHM 142</td>
<td>General Chemistry II</td>
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<td>CHM 127</td>
<td>General Chemistry II Laboratory</td>
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<td>BIO 272</td>
<td>Biometrics</td>
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<tr>
<td>MTH 214</td>
<td>Applied Statistics Using Computers</td>
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<td>MTH 123</td>
<td>College Algebra and Trigonometry</td>
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<td>MTH 130</td>
<td>Pre-Calculus Mathematics</td>
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<td>PHY 116</td>
<td>Physics I</td>
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<td>PHY 156</td>
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<td>PSY 100</td>
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<td>PSY 242</td>
<td>Developmental Psychology</td>
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Major Requirements: 94 credits: 53 undergraduate credits and 41 graduate credits

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<th>Course</th>
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<tr>
<td>BIO 318</td>
<td>Histology</td>
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<td>BIO 332</td>
<td>Advanced Physiology</td>
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<td>BIO 342</td>
<td>Advanced Human Anatomy</td>
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<td>BIO 368</td>
<td>Neuroscience</td>
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<td>BIO 382</td>
<td>Pharmacotherapeutics</td>
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<td>BIO 432</td>
<td>Clinical Pathology</td>
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<td>PHT 310</td>
<td>Health Promotion for Self and Society</td>
<td>3</td>
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<td>PHT 200</td>
<td>Physical Therapy Praxis I: Basic Patient Skills</td>
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<td>PHT 230</td>
<td>Biomechanics and Kinesiology</td>
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<td>PHT 250</td>
<td>Physical Therapy Praxis II: Tests and Measurements</td>
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<td>PHT 270</td>
<td>Clinical Practicum I</td>
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<td>PHT 300</td>
<td>Physical Therapy Praxis III: Therapeutics Modalities</td>
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<td>PHT 350</td>
<td>Physical Therapy Praxis IV: Cardiopulmonary Rehabilitation</td>
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<td>PHT 370</td>
<td>Clinical Practicum II</td>
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<td>PHT 405</td>
<td>Research Methodologies</td>
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<td>PHT 600</td>
<td>Physical Therapy Praxis V: Orthopedic Evaluation and Treatment</td>
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<td>PHT 605</td>
<td>Research Design</td>
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<td>PHT 606</td>
<td>Research Seminar I</td>
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<td>PHT 608</td>
<td>Health Care Administration</td>
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<td>PHT 615</td>
<td>Interventions in Developmental Disabilities</td>
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<td>PHT 630</td>
<td>Pathokinesiology</td>
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<td>PHT 631</td>
<td>Advanced Assessment of Human Motion</td>
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<td>PHT 650</td>
<td>Physical Therapy Praxis VI: Neuromotor Facilitation</td>
<td>4</td>
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<tr>
<td>PHT 651</td>
<td>Physical Therapy Praxis VII: Current Topics in Rehabilitation</td>
<td>3</td>
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<tr>
<td>PHT 660</td>
<td>Advanced Topics in Physical Therapy</td>
<td>3</td>
</tr>
<tr>
<td>PHT 670</td>
<td>Clinical Practicum III</td>
<td>6</td>
</tr>
<tr>
<td>PHT 706</td>
<td>Research Seminar II</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives: 7-10 credits

Total Credits Required: 162

Courses

PHT 200    Physical Therapy Praxis I: Basic Patient Skills
3 class hours, 3 laboratory hours; 4 credits
Examines the multifaceted role of the physical therapist in the health care delivery system. Introduces the student to basic clinical skills and problem solving abilities that will serve as the foundation for future coursework. Application of basic evaluation tools and intervention strategies introduced in lectures.
Prerequisites: BIO 160, PHY 156, and acceptance into the PT program

PHT 230    Biomechanics and Kinesiology
2 class hours, 3 laboratory hours; 3 credits
This course provides an in-depth study of the biomechanics and kinesiology of human motion. Examines the normal patterns in preparation for clinical assessment and integration.
Prerequisites: BIO 332, BIO 342, PHT 200

PHT 250    Physical Therapy Praxis II: Test and Measurements
3 class hours, 3 laboratory hours; 4 credits
Evaluation and clinical interventions related to therapeutic exercise techniques; includes goniometry, manual muscle testing, posture and gait assessment as they are adapted to pathokinesiological conditions and their relationship to specific exercise choices. History and evolution of therapeutic exercise leading to techniques for isolated and segmental manual exercises followed by multisegmental and full-body integration methods.
Prerequisites: PHT 200, PHT 230

PHT 270    Clinical Practicum
40 hours per week, full-time for 6 weeks; 3 credits
A clinical internship in a general hospital setting. Under the supervision of a licensed physical therapist, the student will integrate and apply coursework to provide quality care in the evaluation and treatment of patients with a variety of diagnoses. The emphasis is on exposure to and participation in the environment in which a staff therapist functions.
Prerequisites: PHT 300, PHT 350

PHT 300    Physical Therapy Praxis III: Therapeutics Modalities
3 class hours, 3 laboratory hours; 4 credits
This course is designed to acquaint the student with thermal, electrotherapeutic, and hydrotherapeutic procedures used in the evaluation and treatment of pain and dysfunction. Includes the examination of the effect of thermal and electrical modalities on the human body. Includes a laboratory component that is designed to provide the necessary experiences for the student to develop problem solving skills in the application of
therapeutic modalities along the wellness-illness continuum, (i.e., consideration of the psychological, social, and environmental factors that may contribute to the success of the therapeutic program).
Prerequisite: PHT 250

PHT 310 Health Promotion for Self and Society
3 hours; 3 credits
The study of traditional and contemporary definitions of health. Describes the holistic approach to health care with emphasis on the illness-wellness health continuum across the life span. Examines the interrelationships between nutrition and health; mind and body; physical activity and health. Students will assess their own health status from a holistic perspective. Students will begin to identify community needs that would benefit from a program of health promotion and disease prevention.
Prerequisites: PHT 350, PHT 450

PHT 350 Physical Therapy Praxis IV: Cardiopulmonary Rehabilitation
3 class hours, 3 laboratory hours; 4 credits
Application of principles of cardiopulmonary physiology to an understanding of pathology and disease and prevention. The student will learn to evaluate and treat chronic and acute cardiopulmonary problems, and to teach clients strategies for preventing cardiopulmonary dysfunction. The student will also learn to predict and manage cardiopulmonary dysfunction in patients with other primary diagnoses.
Prerequisite: PHT 250

PHT 370 Clinical Practicum II
40 hours per week, full-time for 8 weeks; 3 credits
An eight-week affiliation in a facility for the developmentally disabled that will serve to further refine and enhance students’ skills while building on past clinical experiences. Provides the opportunity for the student to concentrate on skills and increase poise and efficiency, especially in the area of developmentally disabled.
Prerequisites: PHT 600, PHT 650

PHT 405 Research Methodologies
3 hours; 3 credits
Introduction to the scientific methods of inquiry used in research and their meaning in physical therapy practice. Includes identification of problems, research design, methodology, and reporting of results. Applications of computer technology to research are emphasized. Students begin to identify a research area of interest related to the developmental disabilities.
Prerequisite: PHT 250

PHT 600 Physical Therapy Praxis V: Orthopedic Evaluation and Treatment
3 class hours, 3 laboratory hours; 4 credits
Examines the theoretical applications of various mobilization techniques and pain and stress management for the orthopedic patient. Emphasis upon joint and vertebrae evaluation and mobilization techniques.
Prerequisites: PHT 270, PHT 350

PHT 605 Research Design
3 hours; 3 credits
Emphasis will be placed in the acquisition of methods and techniques for extending the scientific base of knowledge for advanced physical therapy practice. Research studies that address questions of impact on rehabilitation and that are drawn from an interdisciplinary health perspective will serve as the focus for discussion. Research designs and related statistical processes will be examined in terms of their appropriateness for addressing various rehabilitation problems.
Prerequisite: PHT 405

PHT 606 Research Seminar I
3 hours; 3 credits
Implementation of research study and preparation to submit for publication in a professional journal. Independent study with faculty adviser.
Prerequisites: PHT 405, PHT 310

PHT 608 Health Care Administration
3 hours; 3 credits
Lectures and discussions will provide information concerning the physical therapist’s responsibility in the management of the physical therapy department within a health care system. Areas include financial consideration, supervision and leadership skills, hospital administration, and socioeconomic aspects of health care.
Prerequisite: PHT 270

PHT 615 Interventions for Developmental Disability
3 hours; 3 credits
Through lecture and laboratory experiences, discussion, clinical visits, and readings, the student will be able to examine the various theories and practices designed for intervention for developmental disabilities and discuss and analyze current research findings in the area.
Prerequisite: PHT 650

PHT 630 Pathokinesiology
2 class hours, 3 laboratory hours; 3 credits
Critical review and assessment of physical therapy treatments and evaluation for pain and stress management as related to the musculoskeletal system. Students will compare and analyze current theories of orthopedic physical therapy management. Students will design a corporate fitness or pain presentation program.
Prerequisites: PHT 600, PHT 650

PHT 631 Advanced Assessment of Human Motion
2 class hours, 3 laboratory hours; 3 credits
Advanced study of the neurophysiological principles underlying human motion with special attention to the application of principles to assess normal and abnormal motion. Examination of theoretical concepts that attempt to explain motor control. Examination of principles of motor learning and task analysis, and their application to rehabilitation and patient and family education. Evaluation of neurophysiological techniques to improve the quality of motion.
Prerequisites: PHT 650, PHT 310

PHT 650 Physical Therapy Praxis VI: Neuromotor Facilitation
3 class hours, 3 laboratory hours; 4 credits
Evaluation of patients with neuromotor dysfunction and application of therapeutic techniques to facilitate improved neuromotor function. Introduction to theoretical applications of Bobath, Brunnstrom, Rood, and Voss. Also includes rehabilitation of the spinal cord patient.
Prerequisites: PHT 270, PHT 350

PHT 651 Physical Therapy Praxis VII: Current Topics in Rehabilitation
2 class hours, 3 laboratory hours; 3 credits
Study of advanced assessment and specialized treatment methodologies in physical therapy practice. Areas include dance and athletic injuries, burns, hand and cancer rehabilitation. Includes laboratory prosthetics and orthotics, and clinical activities.
Prerequisite: PHT 631
Students who have completed most of the pre-major and major requirements may apply to the didactic/clinical portion of the program at Bayley Seton Hospital. Students will be interviewed by a joint committee of CSI and Bayley Seton Hospital faculty; admission is competitive. The remainder of the requirements must be completed prior to entering the hospital portion of the program.

Transfer students may apply for admission prior to the didactic/clinical portion of the program. They must complete a 12-credit residency at CSI before entering the hospital portion of the program.

Health Documentation: Each student must have an annual physical examination and provide documentation of a chest x-ray, PPD test, varicella titer, and immunization for MMR (measles, mumps, rubella), hepatitis B, and poliomyelitis. This documentation must be completed and on file in the College Health Center located in the Campus Center before the first day of classes. Students may not participate in clinical activities without a completed health record on file, and must have a copy of the health documentation available on the first clinical day of the program.

Insurance: The form for liability insurance for students in the Physician Assistant program is available through Bayley Seton Hospital. This insurance must be obtained before beginning the hospital component of the program and must be maintained until completion of the program. Didactic/clinical practice at Bayley Seton Hospital may not begin until the insurance is in effect.

Uniforms: Physician Assistant students are required to wear uniforms at Bayley Seton Hospital and its affiliates. Information about uniforms is available in the department.

**Physician Assistant (BS)**

**General Education Requirements for the BS**

ENG 111, ENG 151, COR 100, PED 190: 12 credits

Whenever possible, these four courses should be completed within the first 36 credits.

**Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 21-27 credits**

Whenever possible, these courses should be completed within the first 60 credits.

1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)
2. Social Scientific Analysis: (3-4 credits)
3. The West and the World: (4 credits)
4. Textual, Aesthetic, and Linguistic Analysis: (3-4 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
   c. Arts and Communications: 200-level
5. Pluralism and Diversity Requirement: (0-4 credits)

See section on general education requirements for approved course lists and complete details.

**Pre-Major Requirements: 30 credits**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIO 150 Human Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>BIO 160 Human Anatomy and Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>CHM 141 General Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHM 121 General Chemistry I Lab</td>
<td>1</td>
</tr>
<tr>
<td>CHM 142 General Chemistry II</td>
<td>3</td>
</tr>
</tbody>
</table>
Major Requirements: 71 credits

BIO 342 Advanced Human Anatomy  4 credits
PHY 156 Physics II  4 credits
BIO 382 Pharmacotherapeutics  3 credits
PAT 100 Physician Assistant Training 1  15 credits
PAT 200 Physician Assistant Training 2  15 credits
PAT 300 Physician Assistant Training 3  15 credits
PAT 400 Physician Assistant Training 4  15 credits

Electives: 0-7 credits

Total Credits Required: 121-128

Liberal Arts and Sciences Requirement:

Of the credits required for the BS in Physician Assistant degree, at least one-half must be in liberal arts and sciences courses. All PAT courses are non-liberal arts and sciences.

Criteria for Continuation in the Program

Once accepted as a Physician Assistant major, a student must maintain a 3.0 grade point average with a minimum grade of C in all courses required for the major, including BIO 342. Courses in the didactic/clinical component are graded pass/fail. Failure in the didactic portion in one phase (as defined in the Bayley Seton Hospital student handbook) will result in academic probation; failure in any subsequent phase will result in immediate dismissal from the PA program. In the clinical portion of the program, students must pass all clinical examinations. If an examination is failed, a second examination must be taken and passed to continue in the program.

Students take at least 12 credits at the College of Staten Island prior to beginning the hospital component of the program. A minimum of two courses, including at least one advanced biology course, must be taken prior to the didactic/clinical admissions interview. The advanced course must be approved by the Physician Assistant program coordinator; courses designed for non-science majors and courses included in the pre-major requirements for PA majors do not fulfill the requirement for an advanced biology course.

Admission to the hospital portion of the program is competitive. A minimum GPA of 3.0 is required for application to the hospital component. Applicants must present documentation of 40 hours spent shadowing a Physician Assistant prior to application to the hospital component.

Courses

PAT 100  Physician Assistant Training 1
PAT 200  Physician Assistant Training 2

42 weeks; 30 credits

The didactic material is presented in 12 phases during the first 42 weeks of instruction. The 12 phases are: integumentary, head and neck, musculoskeletal, respiratory, cardiovascular, neurology, endocrine, gastrointestinal, genitourinary, reproductive, and pediatric.

Within each phase, didactic material is grouped into the following categories: anatomy and physiology, medical/surgical techniques, clinical pharmacology, dietetics, health history and physical examination, medicine, pathology, radiology, and surgery. In addition to the integrated phases, concomitant courses are taught in cardiopulmonary resuscitation, clinical chemistry, clinical laboratory, clinical laboratory practical, communications and healing, epidemiology, geriatrics, home health care, human behavior in family practice, introduction to primary care, survey of medical microbiology, and quality assurance.

Common clinical disorders, diagnostic tests, and management of the patient are taught in each phase. While basic medical and surgical theories are taught, emphasis is placed on provision of care, follow-up care, and counseling in a primary care setting.

PAT 300  Physician Assistant Training 3
PAT 400  Physician Assistant Training 4

52 weeks; 30 credits.

Clinical practice training provides exposure in the following areas: surgical laboratory, operating room inpatient and outpatient care in medicine, surgery, pediatrics, obstetrics, gynecology, emergency medicine, psychiatry, and primary care.

Elective rotations are offered in: orthopedics, urology, radiology, hemodialysis, and ophthalmology. The rotations are designed to emphasize the performance of diagnostic, therapeutic, preventive, and health maintenance services in any setting. The Hospital has clinical affiliates in nine locations throughout the five boroughs.

Elective rotations are offered in: orthopedics, urology, radiology, hemodialysis, and ophthalmology. The rotations are designed to emphasize the performance of diagnostic, therapeutic, preventive, and health maintenance services in any setting. The Hospital has clinical affiliates in nine locations throughout the five boroughs.

Physics

Department of Engineering Science and Physics
Coordinator: Professor William Schreiber, Computer Science/Engineering Science and Physics Building (1N), Room 238

Physics (BS)

General Education Requirements for the BS
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 21-27 credits
Whenever possible, these courses should be completed within the first 60 credits.

1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)

2. Social Scientific Analysis: (3-4 credits)

3. The West and the World: (4 credits)

4. Textual, Aesthetic, and Linguistic Analysis: (3-4 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
   c. Arts and Communications: 200-level

5. Pluralism and Diversity Requirement: (0-4 credits)
See section on general education requirements for approved course lists and complete details.

Pre-Major Requirements: 32 credits

Students planning to major in physics must complete the following pre-major requirements. These courses may also be used to satisfy general
education requirements.

PHY 120  General Physics I 3 credits
PHY 121  General Physics I Laboratory 1 credit
PHY 160  General Physics II 3 credits
PHY 161  General Physics II Laboratory 1 credit
PHY 240  Waves and Modern Physics 3 credits
PHY 250  Engineering Mechanics 3 credits
MTH 229  Calculus Computer Laboratory
MTH 230  Calculus I with Pre-Calculus or
MTH 229  Calculus Computer Laboratory
MTH 231  Analytic Geometry and Calculus I
MTH 232  Analytic Geometry and Calculus II
MTH 233  Analytic Geometry and Calculus III or
MTH 229  Calculus Computer Laboratory
MTH 235  Accelerated Calculus I
MTH 236  Accelerated Calculus II 10 credits

CHM 141  General Chemistry I 3 credits
CHM 121  General Chemistry I Laboratory 1 credit
CHM 142  General Chemistry II 3 credits
CHM 127  General Chemistry II Laboratory 1 credit

Major Requirements: 47 credits
CSC 270  Introduction to Scientific Computing 4 credits
MTH 330  Applied Mathematical Analysis I 4 credits
MTH 331  Applied Mathematical Analysis II 4 credits
PHY 310  Thermodynamics 4 credits
PHY 316  Dynamics 4 credits
PHY 356  Theory of Electromagnetic Radiation 4 credits
PHY 383  Electrical Properties of Materials or
PHY 384  Mechanical Properties of Materials 3 credits
PHY 309  Basic Measurements Laboratory 2 credits
PHY 315  Advanced Physics Laboratory 2 credits
PHY 442  Quantum Mechanics 4 credits

One advanced mathematics course at the 300 or 400 level 4 credits
Two advanced physics courses at the 300 or 400 level 8 credits
One but not both PHY 318 and PHY 381 may be used to satisfy this requirement.

Electives: 1 credit
Total Credits Required: 120

Courses
PHY 102  Sound and Light
5 class hours, 2 laboratory hours; 4 credits
Study of sources, transmission, and reception of sound and light. Application to music, art, and photography. Topics to be discussed will include the general nature of waves, optical and musical instruments, pigments, physics of seeing and hearing, and other related subjects. (science)
Prerequisite: MTH 020 or an appropriate score on the CUNY Mathematics Assessment Test

PHY 105  Matter and Antimatter
5 class hours, 2 laboratory hours; 4 credits
A study of the elementary particles in the universe. Interactions, symmetries, accelerators, and cosmic rays. Designed for non-science students. (science)
Prerequisite: MTH 020 or an appropriate score on the CUNY Mathematics Assessment Test

PHY 105  Galileo to Newton and Beyond
5 class hours, 2 laboratory hours; 4 credits
A presentation of traditional physics that considers its historical development. The coverage of topics is traditional: mechanics, fluids, and heat, taking into account the innovative contributions of the major figures in physics. Readings in the original literature in English translation will be required. (science)
Prerequisites: MTH 020 or an appropriate score on the CUNY Mathematics Assessment Test and the CUNY/ACT Reading Skills and Writing Sample tests.

PHY 107  Maxwell to Einstein and Beyond
3 class hours, 2 laboratory hours; 4 credits
A presentation of traditional physics that takes into account its historical development. The coverage of topics is traditional: electricity and magnetism, waves, light, and modern physics, taking into account the innovative contributions of the major figures in these areas of physics. (science)
Prerequisite: MTH 030

PHY 110  College Physics I
3 hours; 3 credits
Non-calculus physics for technology students. Units, vectors, uniformly accelerated motion; forces, equilibrium, Newton’s laws and applications; work energy, conservation laws, circular motion; temperature, expansion, heat capacity, thermal properties. (science)
Pre- or corequisite: MTH 123 or Mathematics Department Examination
Corequisite: PHY 111

PHY 111  College Physics I Laboratory
2 laboratory hours; 1 credit
Measurement, density, pendulum, vectors, free fall, projectiles acceleration, friction, Newton’s laws, circular motion, collisions, energy, rigid body. (science)
Corequisite: PHY 110

PHY 114  Introduction to Physics
2 laboratory hours, 3 class hours; 4 credits
A quantitative survey of physics with emphasis on the scientific method. Topics covered are motion, energy, temperature and heat, electricity and magnetism, light, sound, atomic structure, and nuclear radiation. Not intended for physical science majors. (science)
Prerequisite: MTH 020 or an appropriate score on the CUNY Mathematics Assessment Test or MTH 108

PHY 116  Physics I
3 class hours, 2 laboratory hours; 4 credits
Intended for biology and health science majors. Weight, balance; forces and torques exerted by muscles; introduction to motion and fluid flow; conservation of energy in animate and inanimate systems; energy consumption and metabolism; heat, gravitation, molecular potential energies; energy levels and transitions; binding and dissociation in large and small systems; free energy in chemistry and biology. Articulated experiments include mechanical systems simulating forces and torques in
the human arm, energy conversion such as electrical energy to heat.

Prerequisite: MTH 123

PHY 120 General Physics I
4 hours; 3 credits
Calculus-based physics for science and engineering majors. Vectors, forces, kinematics, Newton’s laws and applications, particle dynamics, work, energy, conservation laws, collisions, rotational dynamics, ideal gas, thermal properties, heat transfer, thermodynamics. (science)
Pre- or corequisites: MTH 230 or MTH 231 or MTH 235, and PHY 121

PHY 121 General Physics I Laboratory
2 laboratory hours; 1 credit
Measurement, pendulum, gravity, projectiles, force equilibria, acceleration, friction, energy, collisions, centripetal force, calorimetry, Boyle’s law. (science)
Corequisite: PHY 120

PHY 150 College Physics II
3 hours; 3 credits
Non-calculus physics for technology students. Waves, sound, light, geometrical optics, mirrors, lenses, diffraction; electric charge, potential, capacitance, current, resistance, magnetism, induction. (science)
Prerequisite: PHY 110
Corequisite: PHY 151

PHY 151 College Physics II Laboratory
2 laboratory hours; 1 credit
Standing waves, reflection, refraction, lenses, Millikan experiment, electric fields, capacitance, Ohm’s law, Wheatstone bridge, meters, magnetic field, AC circuits. (science)
Corequisite: PHY 150

PHY 153 Waves, Optics, and Modern Physics
3 class hours, 2 laboratory hours; 4 credits
Non-calculus physics for technology students. Simple harmonic motion, wave motion, sound, light, optics, electric and magnetic fields, atomic and nuclear physics. (science)
Prerequisite: PHY 110

PHY 156 Physics II
3 class hours, 2 laboratory hours; 4 credits
Continuation of PHY 116 for students requiring one year of physics. Extension of the energy concept to atoms and electricity; nuclear energy and radioactivity; electricity as energy and information transfer in animate and inanimate systems; magnetism; mass spectroscopy and its uses; light, with applications to the eye, the camera, microscopes, fiber-optical diagnostic instruments and spectroscopy. Articulated experiments include optics, optical and mass spectroscopy, electricity, heat, instrumentation. (science)
Prerequisite: PHY 116

PHY 160 General Physics II
4 hours; 3 credits
Calculus-based physics for science and engineering majors. Electrostatics, potential, Ohm’s law, resistance, capacitance, RC circuits, magnetism, induction, waves and geometric optics. (science)
Prerequisite: PHY 120
Corequisites: MTH 232 or MTH 236, and PHY 161

PHY 161 General Physics II Laboratory
2 laboratory hours; 1 credit
Millikan experiment, electric fields, capacitance, Ohm’s law, Wheatstone bridge, DC circuits, meters, RC circuits, electron beams, CRO, AC circuits, standing waves, spectroscopy. (science)
Corequisite: PHY 160

PHY 206 Nature of Physical Processes
(Also SLS 261)
3 class hours, 2 laboratory hours; 4 credits
A culturally oriented course and associated laboratory for liberal arts students who seek to deepen their understanding and appreciation of the style and status of modern physical inquiry. Topics will be drawn from Newtonian mechanics, quantum theory, relativity, and nuclear physics.
Prerequisites: A minimum GPA of 2.75; MTH 025 or MTH 030 or an appropriate score on the Mathematics Department Placement Examination; and at least one Scientific Analysis course other than ELT, MET, or SCI courses.

PHY 230 Physics for Engineers
6 hours; 4 credits
A review of the natural laws necessary for the understanding of engineering and applied problems. Included will be topics in classical mechanics, electricity and magnetism, and wave motion.
Prerequisite: PHY 150 or equivalent
Corequisite: ENS 200 or equivalent

PHY 240 Waves and Modern Physics
4 hours; 3 credits
Calculus-based physics for engineering and physical science majors. Wave mechanics, electromagnetic spectrum, radiation, photo-electric and Compton effects, spectra. Introductory quantum mechanics, harmonic oscillator, hydrogen atom, many-electron atoms, binding and energy bands in solids.
Prerequisite: PHY 160 or 230
Pre- or corequisite: MTH 330

PHY 250 Engineering Mechanics
(Also ENS 250)
3 hours; 3 credits
Prerequisites: PHY 120 and 121 or PHY 230
Pre- or corequisites: MTH 233 or MTH 236

PHY 309 Basic Measurements Laboratory
(Also ENS 309)
4 laboratory hours; 2 credits
Basic instrumentation and precise measurements in engineering applications. Design, construction, testing, and analysis of simple analog systems using the circuit design tools and simulation software. Comparison of measured data to simulated data and reconciliation of discrepancies is emphasized. (Non-liberal arts designation)
Prerequisite: PHY 310

PHY 310 Thermodynamics
(Also ENS 310)
4 hours; 4 credits
Basic concepts: systems, temperature, work, and heat. First and second laws of thermodynamics. Entropy, vapor, and gas power systems. Refrigeration
and heat pump systems. Nonreacting gas mixtures and psychrometrics.
Prerequisite: PHY 160 or PHY 230
Pre- or corequisites: MTH 233 or MTH 236

PHY 312  Nuclear Physics
4 hours; 4 credits
Nuclear force, nuclear structure, applications of special relativity, nuclear reactions, radioactive decay.
Prerequisite: PHY 240

PHY 315  Advanced Physics Laboratory
4 laboratory hours; 2 credits
Experiments in atomic absorption spectroscopy, fluids, mechanics, microwaves, optics, semiconductors, statistical physics, and turbulence.
Prerequisite: PHY 309

PHY 316  Dynamics
(Also ENS 316)
4 hours; 4 credits
Prerequisites: PHY 250 and CSC 270 or CSC 126
Pre- or corequisite: MTH 330

PHY 318  The Scientific Revolution
4 hours; 4 credits
The history of physics from Galileo to Newton. Readings and study in the original literature.
Prerequisite: MTH 233 or MTH 236

PHY 350  Transport Processes
(Also ENS 350)
4 hours; 4 credits
Introduction to momentum, heat, and mass transfer. Introduction to continuous media, control volume formulation of conservation laws, momentum and energy consideration of fluid flow, heat transfer by conduction and radiation, mass diffusion, analogies and breakdown of analogies among momentum, heat, and mass transfer.
Prerequisites: ENS 310 and CSC 270 or CSC 126
Pre- or corequisite: MTH 330

PHY 356  Theory of Electromagnetic Radiation
(Also ENS 356)
4 hours; 4 credits
This course is designed to give the student an understanding of the way in which electromagnetic waves are produced, propagated, scattered, and absorbed. Building on the knowledge obtained from an introductory treatment of electromagnetism, students proceed to a study of the Maxwell equations in differential form, of wave equation, energy transfer, and the behavior of waves at metallic and dielectric surfaces. Production of radiation by dipoles and its absorption. Antennas, wave guides, and other applications.
Prerequisite: PHY 160 and CSC 270 or CSC 126
Pre- or corequisite: MTH 331

PHY 360  Relativity
4 hours; 4 credits
The principle of relativity, the Michelson-Morley experiment, the relativity of simultaneity, the relativity of length and time, the Lorentz transformation, relativistic momentum and energy, relativistic mechanics, relativistic electromagnetism, general relativity.
Prerequisite: PHY 240

PHY 365  Optics
4 hours; 4 credits
Applications of Maxwell’s equations, polarization, Fresnel equations, Fermat’s principle, interaction of light with matter, nonlinear optical phenomena.
Prerequisites: PHY 240

PHY 381  History of Modern Physics
4 hours; 4 credits
The history of modern physics. Selected topics from relativity, quantum theory, nuclear physics, solid state physics, and particle physics. Readings in the original literature.
Pre- or corequisite: PHY 240

PHY 383  Electrical Properties of Materials
(Also ENS 385)
3 hours; 3 credits
Electrons in atoms, electrons in crystals, contacts between materials and p-n junctions, bipolar transistors, optoelectronic devices, field-effect transistors, charge transfer devices, integrated circuits, solid state lasers. Photo cells and LEDs.
Prerequisites: PHY 240 and CSC 270

PHY 384  Mechanical Properties of Materials
(Also ENS 383)
3 hours; 3 credits
Prerequisites: PHY 310 and CSC 270

PHY 385  Properties of Materials
(Also ENS 385)
4 hours; 4 credits
Prerequisite: Physics 240 or permission of the instructor

PHY 425  Astrophysics
4 hours; 4 credits
Applications of the major areas of physics in space-related fields. Random processes - the Boltzman and Saha equations and thermodynamic applications; relativistic effects - Poynting-Robertson drag and synchrotron radiation; Electromagnetic-Faraday rotation, plasmas, and Compton effect; Quantum-Ionized hydrogen spectra, cosmic masers, radiative transfer in stellar atmospheres.
Prerequisites: PHY 310, PHY 316, and PHY 356

PHY 442  Quantum Mechanics
4 hours; 4 credits
Schrödinger equation, solutions to barrier and well potentials, quantum harmonic oscillator, angular momentum and spin, perturbation theory, atomic structure and transitions.
Prerequisite: PHY 240
PHY 450 Fluid Mechanics
(Also ENS 450)
4 hours; 4 credits
Fluid properties, fluid statics, buoyancy and stability, fluids in rigid-body motion. Basic fluid equations in differential and integral form, Navier-Stokes equation. Euler equation, Bernoulli equation and engineering applications. Dimensional analysis and similitude. Internal incompressible viscous flow and flow measurement.
Prerequisite: ENS 310
Pre- or corequisite: MTH 330

Political Science
(Bachelor of Arts, Dual Major with Philosophy, Minor)
Department of Political Science, Economics, and Philosophy
Coordinator: Associate Professor Michaela Richter, History/Political Science, Economics, and Philosophy Building (2N), Room 234

Political Science (BA)

General Education Requirements for the BA
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 28–47 credits
Whenever possible, these courses should be completed within the first 60 credits.
1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)
2. Social Scientific Analysis: (7-8 credits)
3. The West and the World: (4 credits)
4. Textual, Aesthetic, and Linguistic Analysis: (6-8 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
      Arts and Communications: 200-level
5. Pluralism and Diversity Requirement: (0-4 credits)
6. Foreign Language: (0-12 credits)
See section on general education requirements for approved course lists and complete details.

Major Requirements: 31 credits
Thirty-one credits in political science courses including POL 100 American Government and Politics or POL 235 The American Political System, and at least one course above the 100 level in each of the following areas:
1. American Politics (POL 220-239, 320-339)
2. Political Theory (POL 200-219, 300-319)
3. Comparative Politics (POL 240-259, 340-359)
4. International Politics (POL 260-279, 360-394)
At least 28 credits must be at or above the 200 level and, of these, at least 12 credits must be at or above the 300 level.
In addition, students must take 12 credits in social science courses other than political science chosen in consultation with a faculty adviser.

Electives: 48 credits
Total Credits Required: 120

Honors
To graduate with Honors in Political Science a student must have a 3.5 grade point average in political science courses and must complete POL/EFC/PHL 490 Senior Seminar in Political Science, Economics, and Philosophy, and a thesis or project determined by the student and his or her faculty sponsor.

Dual Major in Philosophy and Political Science
Requirements for the dual major in Philosophy and Political Science (BA) are the general education requirements, 19 credits in philosophy, and 19–20 credits in political science; total of 120 credits required.
(See description of program under Philosophy.)

Minor
At least 15 credits in political science including at least 12 credits at or above the 200 level. The courses must include:
   a. Either
      POL 100 American Government and Politics
      or
      POL 235 The American Political System 3-4 credits
   b. At least one course in one of the following:
      Political Theory
      Comparative Government
      International Politics 4 credits
   c. At least one 300-level course 4 credits

Courses

POL 100 American Government and Politics
3 hours; 3 credits
A study of the structure and operations of the American political system, the process of its evolution, the philosophical principles and theories on which it rests, the social pressures and forces operating on it. (social science) Not open to students who have taken POL/SLS 235.

POL 103 Understanding the Political World: An Introduction to Political Science
3 hours; 3 credits
An introduction to the world of politics and the fundamentals of political science. Major topics: the basics of politics: power, government, nation, state; forms of political behavior from democratic participation to revolutionary violence; political ideas and norms; varieties of democratic and non-democratic forms of government; politics and society; the global context of politics. (social science)

POL 201 Early Political Theory
(Also PHIL 200)
4 hours; 4 credits
Analysis of major ideas and concepts of Western political theory from the Greeks to Hobbes. Such questions as the ends of politics, the nature of citizenship, the extent and limits of political obligation, and the relationship between rulers and the ruled will be discussed. (social science)
Prerequisites: ENG 111, COR 100
POL 202 Modern Political Theory
(Also PHIL 202)
4 hours; 4 credits
The development of modern theories of the state, with emphasis on democracy and theories of representation, the forces underlying political change and revolution, and the growth of "collectivism." Such authors as Locke, Rousseau, Hegel, Mill, and Marx will be read. (social science)
Prerequisites: ENG 111, COR 100

POL 204 American Political and Legal Thought
(Also PHIL 204)
4 hours; 4 credits
A study of the political ideology dominating several periods of American history, including the Puritan, revolutionary, pre-Civil War, populist, and New Deal eras. Analysis of the writing of at least one current theorist and one major legal philosopher. (social science)
Prerequisites: ENG 111, COR 100

POL 218 Politics and the Novel
4 hours; 4 credits
An analysis of a number of nineteenth- and twentieth-century novels dealing with the relationship of the individual to the political world. Writers such as Conrad, Stendhal, Malraux, and Mailer will be read and discussed. (social science) (arts & com.)
Prerequisites: ENG 111, COR 100

POL 219 Politics and Film
(Also CIN 204)
4 hours; 4 credits
An analysis of the political and social perspectives and directing styles of a variety of European and American directors. The course will examine how race, social class, gender, ethnicity, revolution, the city, and national character and culture are represented in these films. (social science) (arts & com.)
Prerequisites: ENG 111, COR 100

POL 221 The American Presidency
4 hours; 4 credits
A study of the executive branch of the federal government, including the American presidency. The President's relations with Congress, political parties, and the cabinet. (social science)
Prerequisites: ENG 111, COR 100

POL 222 The American Legal System
4 hours; 4 credits
The role of law and the courts in American society and the historical background and philosophical principles upon which the American legal system is based. Examination of the powers and workings of courts, how judges and lawyers act, and how Americans are affected by the legal system. (social science)
Prerequisites: COR 100, ENG 111

POL 223 Public Administration
(Also MGT 223)
4 hours; 4 credits
Examination of the concepts in the execution of public policy. Relationships of administrative process to the executive, legislative bodies, the public, special interest groups, the clientele, and the courts. Considers personnel administration and administrative law and regulation. (social science)
Prerequisites: ENG 111, COR 100

POL 227 Political Parties, Elections, and Interest Groups
4 hours; 4 credits
The role and significance of political parties and interest groups in the American political process: the development, organization functions, the finances of American political parties; campaigning and voting behavior, and the goals and techniques of the major formal and informal pressure groups that influence public policy in the United States. Prerequisite: ENG 111, COR 100

POL 231 City Hall and Albany
4 hours; 4 credits
A study of New York City's mayoralty, New York State's governorship, the City and State legislatures, the interest groups and political parties to which these institutions are sometimes beholden, and the use and decline of patronage. Attention will be paid to City-State relations and to the financial problems and the racial-ethnic tensions that City and State must confront. Comparisons with other cities and states will be made. (social science)
Prerequisites: ENG 111, COR 100

POL 233 CUNY Internship Program in New York Government and Politics I
4 hours; 4 credits
A program common to all the senior colleges of the City University that involves working eight hours a week for a public official, city agency, or public service organization. In addition, all students attend four seminars a month, one at the University's graduate center and three at their own college. (social science)
Prerequisites: Permission of the instructor, ENG 111, COR 100

POL 234 CUNY Internship Program in New York Government and Politics II
4 hours; 4 credits
A continuation of POL 233. (social science)
Prerequisite: POL 233

POL 235 The American Political System
(Also SLS 235)
4 hours; 4 credits
Study of major American political institutions: the Presidency, Congress, Supreme Court, bureaucracy, and the Democratic and Republican parties. The course will emphasize the extent to which the actual workings of our political systems differ from, and are affected by, constitutional theory and legal rules and thus will discuss the impact of pressure groups and public opinion. It will also cover selected state and local political issues. (social science) Not open to students who have taken POL 100. Prerequisites: A minimum GPA of 2.75; ENG 111 and ENG 151, COR 100

POL 239 The American Civil War
(Also AMS 239)
4 hours; 4 credits
The course focuses on the civil and military aspects of the Civil War, including the events and issues leading up to the war, the struggle over the expansion of slavery, the Union's and the Confederacy's military strategies, and analysis of key battles. The course will examine the presidency of Lincoln and will explore major constitutional issues, such as the right of secession and the problems of maintaining civil liberties during a civil war. Prerequisites: ENG 111, COR 100
POL 240  Comparative Government
4 hours; 4 credits
A study of the classic political systems and theories; such modern systems as
cabinet government, proportional representation, socialisms, and
communisms; and the interaction between politics and social or economic
structure. (social science)  (West & World) (P&D)
Prerequisites: ENG 111, COR 100

POL 241  Western European Politics: United Kingdom, France, Italy, Germany
4 hours; 4 credits
An introduction to four Western European democracies, with the principal
focus on the United Kingdom, France, Germany, and Italy. Student
understanding of the democratic experience is broadened by comparing
four different forms of democratic government, their relationship to market
economics, their way of dealing with social diversity, their divergent
solutions to social and economic problems. (social science)
Prerequisites: ENG 111, COR 100

POL 244  From the Soviet Union to the Commonwealth of Independent States
4 hours; 4 credits
The development of the Soviet Union from the 1917 Revolution to the
collapse of communism. Major topics: the historical and ideological
foundations of the Soviet Union; the communist system in practice; the
collapse of communism and the breakup of the Soviet Union into the
Commonwealth of Independent States; the chances for democracy and a
market economy in Russia and the newly independent republics. (social
science)
Prerequisites: ENG 111, COR 100

POL 246  Nazism and The Holocaust
4 hours; 4 credits
An examination of the political, moral, and legal problems arising out of
the extermination of the European Jews. The course will study the rise of
Nazism, the construction of a totalitarian society, the terror apparatus, the
institution of the concentration camp, and the planning and implementation of the killing process. There will be further examination of
the responses of the Jews, the Allies, neutrals, and important institutions like
the Church and the Red Cross. At all points the question will be asked: What
does this phenomenon reveal about the nature of modern society and modern politics? (social science)
Prerequisites: ENG 111, COR 100; sophomore standing or permission of the instructor

POL 251  International Political Economy
(Also ECO 251)
4 hours; 4 credits
This course examines the relationships among nation-states, corporations,
and key international trade and financial organizations. It also examines
how world politics affects distribution of economic wealth and, in turn, how
economic growth/changes affect world politics. (West and World)
Prerequisites: At least one political science or economics course, ENG 111, COR 100.

POL 252  Middle East Politics
4 hours; 4 credits
This course analyzes various stages of regional and international relations
in the Middle East from the conclusion of World War II to the present. The
course will also provide an introduction to the domestic politics of the region’s most important countries, paying special attention to the religious,
cultural, and ideological uniqueness of the modern Middle East. (social
science)  (P&D)
Prerequisites: ENG 111, COR 100; sophomore standing

POL 253  African Politics
(Also AFA 253)
4 hours; 4 credits
An examination of the colonial and post-colonial problems of Africa, and
the developmental process in general. Other topics to be discussed include
the socio-political and historical-philosophical appeal of communism to
Africa; ideology, strategy, and the communist model of development; and
the idea of revolution as an agent of rapid transformation versus the Euro-
American model of evolutionary change. (P&D)
Prerequisite: ENG 111, COR 100

POL 256  East Asian Politics
4 hours; 4 credits
East Asian political problems of the post-World War II period, with
emphasis on China, Japan, and Southeast Asia. Ideology, modernization,
revolutions, governments, and foreign policies of these areas will be among
the problems examined. (social science)  (P&D) (West and World)
Prerequisites: ENG 111, COR 100

POL 260  International Politics: In Search of a New World Order
4 hours; 4 credits
An analysis of the political and economic problems of the world today. The
emphasis is on current trends in international relations, problems of war
and peace, and prospects for the development of a new world order or global
chaos. (West and World)
Prerequisites: ENG 111, COR 100

POL 261  International Organizations
4 hours; 4 credits
Examination of intergovernmental, regional, and functional organizations
with special emphasis on the structure and functions of the United Nations.
Regional organizations such as the European Union, the Organization of
American States, and the Organization of African Unity will also be
considered, as will functional organizations such as the World Trade
Organization, the International Monetary Fund, and the World Bank. (West
and the World)
Prerequisite: ENG 111, COR 100

POL 264  Political Geography
(Also GEG 264)
4 hours; 4 credits
A study of the relationships between the Earth and political life, with
primary emphasis on international as distinct from intranational problems
of such factors as shape, size, and geographic positions of selected nation
states; the political significance of variation in quantity, quality, and area
distribution of national resources—agricultural, mineral, and human.
(social science)  (West and the World)
Prerequisites: ENG 111, COR 100
POL 303 Recent Political Theory
(Also PHL 303)
4 hours; 4 credits
An examination of leading works in political theory of the late nineteenth and twentieth centuries. The central theme will be the attacks on and the reaffirmations of liberal democratic thought. Discussion of problems of order and violence, social and political revolutions, and democratic processes. Readings will be drawn from original works in political theory by writers such as Arendt, Dewey, Freud, Hayek, Lenin, Marx, and Sorel. Prerequisites: Sophomore standing and any 100-level political science or philosophy course.

POL 307 History of Legal Thought
(Also PHL 307)
4 hours; 4 credits
An analysis of the writings of major legal philosophers from classical times to the present. Writers to be studied include Aristotle, Cicero, Aquinas, Austin, Savigny, Cardozo, and Holmes. Prerequisites: Sophomore standing and any political science or philosophy course.

POL 323 Public Policy Analysis
(Also MGT 323)
4 hours; 4 credits
A study of how government deals with problems in such areas as health, energy, environment, education, crime, and economic stability. In addition to focusing on substantive policies in these fields, the course will examine how problems come to government’s attention and analyze various techniques for determining whether a governmental program is successful. Prerequisite: POL 100.

POL 335 Internships in New York State Government
12 credits
Students spend an entire semester in Albany interning for the New York State Senate, New York State Assembly, or an interest group dealing with the New York State legislature. Internship duties average 35 hours a week and may include research, memoranda and bill writing, lobbying, talking with lobbyists, and meeting constituents. All students write a term paper of 12-15 pages based upon their experiences and assigned readings. Students interning for the State Assembly must attend a course on New York State politics given by a professional social scientist employed by the Assembly. Majors in political science may apply these 12 credits toward their major. Minors in political science may apply eight of these credits toward their minor. Prerequisites: Sophomore standing, permission of the instructor, prior acceptance by the internship program.

POL 336 American Constitutional Law
4 hours; 4 credits
An examination of how the Supreme Court has interpreted the economic and military powers of the federal government, how it deals with state attempts to regulate business, and how it has resolved disputes about the proper jurisdiction of the three branches of the federal government. The problems facing the American court systems, and the variables affecting the formulation of judicial policy are considered. Prerequisite: Sophomore standing or permission of the instructor.

POL 338 Civil Rights and Liberties
4 hours; 4 credits
A normative and empirical analysis of the behavior and decisions of the Supreme Court in the area of civil rights and liberties. Emphasis on freedom of speech and association, church-state relations, racial problems, and the rights of the criminal defendant. (P&D) Prerequisite: Sophomore standing or permission of the instructor.

POL 340 Uniting Europe: The Political Economy of the European Union
4 hours; 4 credits
The course focuses on post-1945 movement toward the economic, monetary, and political union of European states. It examines origins of European integration, the evolution from a six-nation common market in the 1950s to a single European market with a common currency. Analyzes the European Union’s distinctive political system—its governing institutions, policy process, party politics, the problems created by expanding membership, persisting tensions between national and European interests—as well as Europe’s external relations and role as global actor. Prerequisite: A college-level course in political science, preferably POL 240, or permission of the instructor.

POL 341 The Politics of the New Germany
4 hours; 4 credits
This course examines Germany’s political development after 1945. Major topics: formation of East and West Germany as two distinctive political systems; the collapse of communist East Germany; German unification and its domestic as well as external impact; united Germany’s new international role. Prerequisite: Sophomore standing or permission of instructor.

POL 342 Comparative Politics of Developing Countries
4 hours; 4 credits
A study of political systems of developing countries; some theories and problems of political and economic development. Countries in Latin America, Africa, and Southeast Asia will be studied as examples. (P&D) Prerequisite: A previous college-level course in politics or economics or permission of the instructor. The course POL 240 is recommended.

POL 343 Democracy and Democratization
4 hours; 4 credits
Designed to examine the social, economic, and political conditions needed for democracy to emerge; the nature and problems of transitions to democracy in different settings; the difficulties of consolidating democracies; why democracies survive or break down. The original emergence of democracy will be compared to recent democratic transitions in Southern Europe, former communist nations, and the Third World. Prerequisite: Sophomore standing or permission of instructor.

POL 349 Comparative Human Rights
4 hours; 4 credits
A comparison of how human rights are conceptualized and protected in various western and non-western nations. The focus will be on such rights as speech, religion, fair trial, and equitable treatment of ethnic and racial
minorsities in countries such as Canada, the United Kingdom, India, Russia, South Africa, Nigeria, Israel, and China. (P&D)
Prerequisite: POL 100 or POL 240 or POL 336 or POL 338

**POL 353  China: Politics and Foreign Relations**
4 hours; 4 credits
A discussion of basic institutions and major issues in contemporary Chinese politics and China's behavior both at home and internationally. It examines the communist revolution and its aftermath in China, and political development under Mao Zedong; but the focus of this course is on the policies (both internal and foreign), process, and problems of the changing communist system in China under the post-Mao reforms. (P&D)
Prerequisites: Sophomore standing and ENG 111

**POL 365  Current American Foreign Policy**
4 hours; 4 credits
An analysis of the historical roots of American foreign policy: how it is made, how it affects the average American, and how it is likely to develop. Includes an examination of the Cold War, Vietnam, military alliances, the United States in the United Nations, and American policy in the multipolar world of today.
Prerequisite: POL 100 or POL 260 or POL 261 or POL 262

**POL 375  International Law**
4 hours; 4 credits
A study of the nature and sources of international law, tracing its historical development, and concluding with a discussion of recent proposals to strengthen world law and recent events that have made international law more enforceable. Some time will be devoted to an analysis of the work of international tribunals, including the International Court of Justice.
Prerequisite: Sophomore standing or permission of the instructor

**POL 394  CUNY World Affairs Internship**
4 hours; 4 credits
A program common to all the senior colleges of the City University that involves working eight to ten hours a week for an international or domestic governmental agency or non-governmental organization involved with international affairs. In addition, all students attend four seminars a month, one at the University's Graduate Center and three at their own college.
Prerequisites: Junior or senior standing, POL 260, and permission of the instructor

**POL 490  Senior Seminar in Political Science, Economics, and Philosophy**
(Also ECO 490 and PHL 490)
4 hours; 4 credits
Selected topics in which ideas and approaches from economics, political science, and philosophy either mesh or collide will be explored. Required of all students expecting to graduate with honors in political science, economics, or philosophy, but not limited to these students.
Prerequisites: Senior standing and completion of at least 16 credits in intermediate and advanced social science courses and permission of the instructor.

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**Preparation for Professional School**

**Pre-Law Preparation**
Recommended preparation for the study of law includes study of the social sciences, the humanities, and the technological aspects of contemporary life, as well as mastery of the English language. There is no particular pre-law curriculum. Students should consult the faculty adviser early in the planning of their program. The Law School Admission Test, required by most law schools, should be taken early in the senior year. Professor Emeritus Larry Nachman and Assistant Professor Richard Flanagan, Department of Political Science, Economics, and Philosophy, are pre-law advisers.

**Pre-Dentistry Preparation**
Dental schools in the United States do not require or recommend any particular field of study as an undergraduate major for applicants. Most schools suggest that the study in depth of any of the liberal arts and sciences is valuable preparation for dentistry. Some dental schools have established admissions criteria and additional recommendations. It is important for pre-dental students to choose appropriate courses to prepare for admission to dental school. Students should become familiar with the recommendations of the schools to which they intend to apply. The minimal requirements for admission to dental schools in the United States are: one year of English, biology with laboratories (may include a half-year of genetics and a half-year of botany), general physics with laboratories, and organic chemistry with laboratories. Also recommended are at least one year of advanced mathematics, one or more advanced courses in science, sociology, and psychology.

All applicants to dental schools in the United States must participate in the Dental College Admission Testing Program and take the Dental College Admissions Test (DAT). The four examinations that comprise the testing program cover: principles of biology; general chemistry; organic chemistry; perceptual ability; reading comprehension; and quantitative reasoning. Most dental schools use the DAT scores, evaluated in conjunction with college grades, as predictors of performance in dental school. DAT scores and college transcripts are the most important determinants of admission to dental school. Also considered are letters of recommendation, extracurricular activities, work-related experience, required essay, and personal interview.

**Pre-Medicine Preparation**
Medical schools in the United States do not require or recommend any particular undergraduate major for applicants. Most schools suggest that the study in depth of any of the liberal arts and sciences is valuable preparation for medical studies. All medical schools require a strong foundation in the natural sciences (biology, chemistry, physics, and mathematics), effective communication skills, and a solid background in the social sciences and humanities. Some medical schools have established admissions criteria and additional recommendations. It is important for pre-medicine students to choose appropriate courses to prepare for admission to medical school. Students should become familiar with the recommendations of the schools to which they intend to apply. The minimal requirements for admission to medical schools in the United States are: one year of English, general biology with laboratories, general chemistry with laboratories, general physics with laboratories, and organic chemistry with laboratories. Also recommended are at least one year of
advanced mathematics, including calculus, and one or more advanced courses in science.

All applicants to medical schools in the United States must take the Medical College Admission Test (MCAT). The four areas tested are: verbal reasoning, physical sciences, biological sciences, and writing. Most medical schools use the MCAT scores, evaluated in conjunction with college grades, as predictors of performance in medical school. MCAT scores and college transcripts are the most important determinants of admission to medical school. Also strongly considered are a letter of recommendation from the College’s pre-medical advisory committee, research experience, extracurricular activities, work-related experience, required essay, and personal interview.

In recent years, graduates of CSI have been admitted to medical schools throughout the region including: Albert Einstein, SUNY Upstate and Downstate, Harvard, Cornell, New York University, Buffalo, Baltimore, Albany, Stony Brook, and Mount Sinai.

Pre-Chiropractic Preparation
Chiropractic schools in the United States do not require or recommend any particular undergraduate major for applicants.

Most schools suggest that the study in depth of any of the liberal arts and sciences is valuable preparation for chiropractic medicine studies. All programs in chiropractic medicine require a strong foundation in the natural sciences (biology, chemistry, physics, and mathematics), effective communications skills, and a solid background in the social sciences and humanities. Some chiropractic programs have established admissions criteria and additional recommendations. It is important for students to choose appropriate courses to prepare for admission to professional schools. Since pre-chiropractic requirements vary, students should become familiar with the recommendations of the schools to which they intend to apply. The minimal pre-professional requirements for admission to a chiropractic program in the United States are: one year of English, biology with laboratories, general physics with laboratories, general chemistry and organic chemistry with laboratories. Also recommended are at least one year of advanced mathematics, and one or more advanced courses in science. Most chiropractic schools evaluate college grades as the most important determinant of admission to a chiropractic program. Also considered are letters of recommendation, research experience, extracurricular activities, work-related experience, required essay, and personal interview.

Pre-Medical Advisory Committee
Students interested in dentistry, medicine, or chiropractic medicine should consult the Pre-Medical Advisory Committee, chaired by Associate Professor Elena C. McCoy, Department of Biology, as soon as possible after enrolling in the College. The Committee will advise students about their choice of courses starting with the freshman year. A student guide for the Pre-Medical Advisory Committee letter of recommendation is available from the Office of the Dean of Science and Technology.

Professional School Affiliations
Medical School
The College of Staten Island has an early assurance agreement with the State University of New York Health Science Center at Brooklyn (SUNY/HSCB) whereby up to five places per year will be reserved in the entering medical school class for those CSI students who complete a bachelor’s degree. Assurance of a seat in the medical college will be given after the student has completed the sophomore year and has met the following requirements:

a) A minimum overall GPA of 3.5.
b) A minimum science GPA of 3.5, calculated from all courses completed in the areas of biology, chemistry, physics, and mathematics.
c) An MCAT score acceptable to SUNY/HSCB, where no individual quantitative score would be lower than 9; applicants must take the test by the April administration during their junior year in college.
d) All courses required by the medical school would have a grade no lower than C; courses required by the medical school are:
   - one year of general chemistry with lab (CHM 141/121 and CHM 142/127)
   - one year of organic chemistry with lab (CHM 250/256)
   - one year of biology with lab (BIO 170/171 and BIO 180/181)
   - one year of physics with lab (PHY 116/116 or PHY 120/121, and PHY 160/161)
   - one year of English composition and/or literature.

Students who meet the biology requirement with AP credit must take at least one advanced biology course at CSI; in addition, it is strongly recommended that students take a course in calculus and a course in biochemistry.

e) Course loads each semester must be a minimum of 12 credits and applicants must complete a minimum of three years at CSI before applying to the medical school.
f) All pre-med required courses must be completed at CSI.
g) The organic chemistry sequence should be completed at CSI by the end of the sophomore year, but no later than the fall semester of the junior year.
h) Students must take two science courses together during three of the five semesters they complete before applying to the medical school.
i) The program will give preference to applicants who have demonstrated commitment to community/social service outreach activities.
j) Students are required to have health-related work/volunteer/observational experiences before entering the medical school.
k) The program is limited to U.S. citizens or permanent residents who qualify as NY State residents.

Application procedure:
A. No later than March 15 of each year, CSI recommends to the medical school students in their junior year of college who are interested in early conditional admission to the medical school and who meet all the above criteria.
B. The recommended applicants fill out an HSCB supplemental application and write a short biographical statement including the reasons for applying to the program. CSI submits these materials to the medical school with a letter of recommendation from the Pre-Med Advisory Committee and a CSI transcript.
C. The College of Medicine reviews the applicants in April and selects five candidates.
D. Students selected by the medical school will receive conditional admission for the following year’s entering class, pending submission of satisfactory MCAT scores and satisfactory
Completion of the senior year and/or requirements for the BS/BA degree at CSI.

E. Accepted students fill out an “Early Decision” AMCAS application by June 1, designating the HSCB as their school of choice, and submit the application to the Admissions Office of the Medical School. All administrative procedures related to an official application will be taken care of by the medical school and there will be no application fees involved.

Students interested in this program should contact Associate Professor Elena C. McCoy, Room 6S-312, 1.718.982.3860, as soon as possible after enrolling at CSI.

Optometry
The College of Staten Island has an affiliation agreement with the State University of New York College of Optometry, located in Manhattan. The foundation of this affiliation is a seven-year program that allows students to complete their baccalaureate and professional studies through three years of study at CSI followed by the four-year optometry program at the College of Optometry. The bachelor’s degree is awarded after one year of successful study in the optometry program.

The minimum pre-optometry requirements are: one year of general biology; general physics; general chemistry; social science; one year of calculus (I & II), English composition and literature, one semester of general psychology, organic chemistry, statistics.

In addition, a student must maintain a 3.2 grade point average, achieve a score of 320 on the Optometry Admissions Test, and have a successful personal interview.

Podiatric Medicine
The College of Staten Island has an affiliation agreement with the California College of Podiatric Medicine located in San Francisco. Students pursue a curriculum pre-approved by both the College of Staten Island and the California College of Podiatric Medicine. The foundation of this affiliation is a seven-year program that allows students to complete their baccalaureate and professional studies through three years of study at CSI followed by the four-year podiatric medicine program at the California College of Podiatric Medicine. The bachelor’s degree is awarded after one year of successful study in the podiatric medicine program.

The minimum pre-podiatric medicine requirements are: two years of biological sciences; one year of general chemistry, organic chemistry or biochemistry, physics, English/communications skills; and two years of other courses in liberal arts and sciences.

A student must maintain a 3.2 grade point average or higher in required pre-podiatry courses, achieve a score of 35 or higher on the Medical College Admissions Test, and have a successful personal interview at the time of entry to the California College of Podiatric Medicine.

For detailed information, consult the Pre-Medical Advisory Committee.

Psychology
(Bachelor of Arts, Minor)
Department of Psychology
Chair: Associate Professor Wallace Orlowsky, Psychology/Sociology, Anthropology, and Social Work Building (4S), Room 112
(See the Graduate Catalog for information on graduate programs.)

Psychology (BA)

General Education Requirements for the BA
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 28–47 credits
Whenever possible, these courses should be completed within the first 60 credits.

1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)
2. Social Scientific Analysis: (7-8 credits)
3. The West and the World: (4 credits)
4. Textual, Aesthetic, and Linguistic Analysis: (6-8 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
       Arts and Communications: 200-level
5. Pluralism and Diversity Requirement: (0-4 credits)
6. Foreign Language: (0-12 credits)

See section on general education requirements for approved course lists and complete details.

Major Requirements: 37 credits
Psychology majors must complete:

A. PSY 100 Psychology 3 credits
   PSY 201 Foundations of Psychological Research 4 credits
   PSY 266 Statistics in Psychology 4 credits
   PSY 352 History and Systems of Psychology 4 credits

And a Psychology laboratory course chosen from:
   PSY 330 Experimental Psychology: Cognition and Perception 6 credits
   or
   PSY 333 Experimental Psychology: Learning and Behavior 6 credits

B. At least four credits chosen from:
   PSY 232 Physiological Psychology: Cognitive and Behavioral Neuroscience 4 credits
   PSY 239 Physiological Psychology: Motivated Behavior 4 credits
   PSY 254 Phenomenological Psychology 4 credits
   PSY 288 Cognitive Psychology 4 credits
   PSY 332 Psychological Tests and Measurements 4 credits

C. At least four credits chosen from:
   PSY 202 Psychopathology 4 credits
PSY 212 Social Psychology 4 credits
PSY 226 Theories of Personality 4 credits
PSY 242 Developmental Psychology 4 credits

D. At least eight additional credits chosen from any psychology courses at the 200 or higher level. The courses chosen for the Psychology major must include at least 14 credits at the 300 or 400 level. This means one additional four-credit course at the 300 or 400 level beyond the required PSY 352 and laboratory course. PSY 598 Internship in Psychology counts as such a course.

Electives: 42 credits

Total Credits Required: 120
PSY 103, 211, 318, 340, and 368 are non-liberal arts and science courses.

Honors
To graduate with Honors in Psychology a student must have a 3.5 grade point average in psychology courses and must complete an honors thesis or project under the supervision of a psychology faculty member.

Minor
Prerequisite course:
PSY 100 Psychology 3 credits

Requirements:
One course chosen from each of the following four categories:
1. PSY 232 Physiological Psychology: Cognitive and Behavioral Neuroscience 4 credits
PSY 254 Phenomenological Psychology 4 credits
PSY 330 Experimental Psychology: Cognition and Perception 6 credits
PSY 332 Psychological Tests and Measurements 4 credits
PSY 333 Experimental Psychology: Learning and Behavior 6 credits
2. PSY 202 Psychopathology 4 credits
PSY 212 Social Psychology 4 credits
PSY 226 Theories of Personality 4 credits
PSY 242 Developmental Psychology 4 credits
PSY 352 History and Systems of Psychology 4 credits
3. An additional course from one of the groups above. Students who take PSY 330 Experimental Psychology: Cognition and Perception or PSY 333 Experimental Psychology: Learning and Behavior are exempt from the requirement to take a course in this category. 4 credits
4. An additional course in psychology at or above the 200 level. 4-5 credits

Courses

PSY 103 Stress Management
(Also SKO 105)
3 hours; 3 credits
A comprehensive presentation of the physical, social, and psychological understanding of the human stress response. Opportunities for students to learn concrete scientific insights, practical stress management skills, and beneficial relaxation techniques are offered.

PSY 201 Foundations of Psychological Research
4 hours; 4 credits
An introduction to the methods of psychological research. Comparison, evaluation, and illustration of research methods such as survey, case study, questionnaire, interview, experiential, correlational, and experimental using a broad range of psychological topics such as physiological, developmental, learning, perception, personality, social, clinical, and industrial. Research design, data presentation and analysis, relation of data and theory; and ethical problems in research will be discussed. Prerequisites: PSY 100 and successful completion of the CUNY Mathematics Assessment Test

PSY 202 Psychopathology
4 hours; 4 credits
A study of the development, symptoms, prevention, and treatment of a wide variety of behavioral disorders including anxiety, depressive, personality, somatoform, and psychotic disorders. These and other disorders will be examined from a variety of theoretical perspectives. Equivalent to courses titled Abnormal Psychology. (social science)
Prerequisites: PSY 100, ENG 111, COR 100

PSY 211 Methods of Applied Behavioral Analysis
4 hours; 4 credits
Introduction to applied behavioral methods for persons with developmental disabilities including: defining and measuring behavior, treatment program development and evaluation, behavior modification methods, behaviorally based teaching methods, and special applications such as token economies, self-management, professional responsibility, and ethics. An analysis of behavior will be undertaken through the use of pre-recorded videotapes. (Non-Liberal Arts)
Pre- or corequisites: SWK 107 and successful completion of CUNY Mathematics Assessment Test

PSY 212 Social Psychology
4 hours; 4 credits
Social Psychology is the study of human social behavior viewed from an interpersonal perspective. The role of others in shaping self-concept will be explored as well as the formation of attitudes, attribution theory, the causes and methods of reducing prejudice, social influence and obedience, interpersonal attraction, aggression, altruism, and the development of gender roles and stereotypes, and nonverbal behavior. Research methods and results will serve as the context in which each topic will be discussed. Prerequisite: PSY 100

PSY 213 Cross-Cultural Psychology
4 hours; 4 credits
The pervasive role of culture in shaping behavior, thought, motivations, and emotions will be introduced. Various theories will be described that explain the transmission and modification of culture, the psychological outcomes
of cultural transitions, and the behavioral and attributional errors that occur as a result of the lack of cultural understanding. Students will be exposed to various research methodologies and will utilize several of these analytic tools. Empirical findings will be applied to education, health care, and work settings. (P&D)

Prerequisite: PSY 100

PSY 214  Psychology of Advertising
4 hours; 4 credits
How and why advertising influences behavior. Contemporary examples of magazine, television, and radio advertising are analyzed according to their application of basic principles of motivation, perception, learning, memory, personality, and social psychology, with the major focus on motivational concepts.
Prerequisite: PSY 100

PSY 216  Drugs and Behavior
4 hours; 4 credits
An examination of the effects of psychoactive drugs (including alcohol, nicotine, and caffeine) on mood, motivation, thinking, and behavior. Emphasis is on the pharmacology, therapeutic potential, and side effects of these substances and how they aid brain function and mental disorders. The course also considers how drugs affect reproductive and neonatal health, and alternative non-drug treatments of mental disorders.
Prerequisite: PSY 100

PSY 220  Motivation
4 hours; 4 credits
A consideration of theory and research in human motivation from various points of view including those of learning theory, psychoanalysis, and biology. The course will discuss conscious and unconscious processes in motivation as well as concepts related to anxiety, curiosity, and the needs for achievement, affiliation, and power.
Prerequisite: PSY 100

PSY 223  Health Psychology
4 hours; 4 credits
Health psychology is the study of the relationships among cognition, behavior, social environment, and health. The class will focus on the interaction between social/psychological factors, stress, immunology, and diseases. There will be an emphasis on how health professionals can promote health-enhancing behaviors and modify health-compromising behaviors.
Pre- or corequisite: PSY 100

PSY 226  Theories of Personality
4 hours; 4 credits
A survey of the important factors and theories underlying personality patterns, their origins, and development. Such topics as the review of major theories, integration and conflict, and the development of personality in childhood and adolescence. Emphasis on experimental, clinical, and cross-cultural data with special attention to case studies. (social science)
Prerequisites: PSY 100, ENG 111, COR 100

PSY 232  Physiological Psychology: Cognitive and Behavioral Neuroscience
4 hours; 4 credits
A study of the brain-behavior relationship with focus on neuroanatomy, neuronal potentials, neuronal conduction, synaptic chemistry, sensory psychophysiology, learning and memory, language, and lateralization.
Prerequisite: PSY 100

PSY 235  Gender and Sexuality
(Also WMS 235)
4 hours; 4 credits
A critical examination of the way in which human sexual functioning has been viewed by both women and men. Critical consideration of theories of sexuality in psychology, including psychoanalytic, evolutionary, social constructionist, and feminist theories of sexuality. Evaluation of recent research on AIDS/HIV, lesbian and gay issues, sexual violence against women, and sex education. Special attention to cultural factors which influence women’s and men’s understandings of their sexuality and of other sexually transmissible diseases. Present problems and practices as well as future possibilities will be discussed.

PSY 236  Biological Origins of Behavior
4 hours; 4 credits
A survey of the biological origins of diverse areas of behavior. While focusing primarily on human behavior, the course will also discuss relevant examples of behavior in animals and continuities between man and animals. Topics will include areas such as the evolution of behavior, methods of comparative psychology and ethology, critical periods, imprinting, aggressive behavior, social behavior, language, sexual behavior, personality, biological rhythms, certain forms of psychopathology, and nutritional factors in behavior.
Prerequisite: PSY 100

PSY 239  Physiological Psychology: Motivated Behavior
4 hours; 4 credits
A study of the nervous system mechanisms that operate in the control of feeding, drinking, sexual and reproductive behavior, temperature regulation, sleep and dreaming, wakefulness, attention, and psychopathology.
Prerequisite: PSY 100

PSY 242  Developmental Psychology
4 hours; 4 credits
A survey of psychological growth and development during childhood, adolescence, young adulthood, middle age, and old age. The emphasis will be placed on developmental tasks as distinguishing features of successive life stages. Patterns of intellectual growth, psychological growth under different social-cultural conditions, personality, and social development will be considered. (social science)
Prerequisites: PSY 100, ENG 111, COR 100

PSY 246  The Atypical Child
4 hours; 4 credits
An investigation into deviancy of personality development, thinking, learning, perception, and behavior of children. Major child psychology theories and aberrations in growth processes will be explored.
Prerequisite: PSY 100

PSY 254  Phenomenological Psychology
4 hours; 4 credits
A study of the phenomenological research method, the descriptive analysis of human behavior. The course explores such topics as moral and aesthetic values, creativity, love, freedom, insight, and various states of consciousness.
Prerequisite: PSY 100
PSY 266  Statistics in Psychology
4 hours; 4 credits
A study of statistical methods most commonly used in psychology. Descriptive techniques including the measurement of central tendency, dispersion, and association as well as inferential techniques including the analysis of differences among groups will be considered, as will parametric and nonparametric techniques. Prerequisites: PSY 201, MTH 020 or an appropriate score on the CUNY Mathematics Assessment Test

PSY 268  Psychology of Women
(Also WMS 268)
4 hours; 4 credits
A critical review of theories and issues concerning the psychology of women. Theories of gender including biological, psychoanalytic, and social learning, among others will be discussed. Issues particularly relevant to the lives of women and to the psychology of gender will be explored, including gender stereotypes, physical and mental health issues, sexuality, personal relationships, and violence against women. Prerequisite: PSY 100

PSY 272  Parapsychology
4 hours; 4 credits
An exploration of phenomena traditionally considered impossible. Parapsychology, which includes the study of telepathy, clairvoyance, precognition, and psychokinesis, will be examined from an historical, scientific, and theoretical perspective. The philosophical implications will also be discussed. Prerequisite: PSY 100

PSY 280  Psychological Perspectives on Religion
4 hours; 4 credits
A review of the positions that various psychologists have taken regarding the function of religious experience in human life. Included are viewpoints that deny the validity of such experience (e.g., Freud and Watson, as well as those who believe it is of central importance, e.g., James, Jung, Allport, Maslow, Frankl, and Watts). The probable nature of the function of religious experience is explored. A discussion of the truth value of religions is outside the scope of this course. Prerequisite: PSY 100

PSY 286  Psychology of Creativity
4 hours; 4 credits
Theory and research concerning the identification, measurement, development, and appreciation of creativity. Cognitive processes underlying creativity are discussed and possible physiological components in creativity are explored. Analysis of selected works of music, literature, art, and/or scientific problem solving illustrate basic concepts. Prerequisite: PSY 100

PSY 288  Cognitive Psychology
4 hours; 4 credits
An introduction to theory and research on cognitive processes underlying attention, memory, thinking, language, categorization, and perception. Among the topics covered in the area of memory are long-term memory, logical thought, problem solving, concept formation, creativity, language production and comprehension, and object recognition. Prerequisite: PSY 100

PSY 290  Psychology of Death and Dying
4 hours; 4 credits
An exploration of the emotional, social, medical, and religious aspects of facing death. Personal attitudes toward living and dying will be examined with a view to providing a better understanding of the dynamics of death, dying, suicide, separation, mourning, and grief. Prerequisites: PSY 100 and permission of the instructor

PSY 302  Advanced Psychopathology
4 hours; 4 credits
An exploration in-depth of behavior disorders due to paranoia, schizophrenia, and manic-depressive psychoses as well as organic dysfunctions. Current research is investigated. Differential diagnostic procedures and case studies are examined. Prerequisite: PSY 202

PSY 318  The Child in Community Fieldwork
4 hours; 4 credits
One aim of the course is to teach students to analyze the preventive and rehabilitative efforts of social agencies serving children and youth. Another is to help students develop and refine psychological skills that foster the growth of children and youth within social agencies. These aims are implemented through supervised fieldwork in various social agencies. Prerequisites: PSY 242 and permission of the instructor

PSY 322  Industrial Psychology
4 hours; 4 credits
A study of the application of psychological principles to business and industry. Topics discussed will include: personnel selection and placement, employee and public relations, analysis and design of the work environment, organizational psychology. Prerequisite: PSY 266 or permission of the instructor

PSY 330  Experimental Psychology: Cognition and Perception
4 class hours, 4 laboratory hours; 6 credits
A laboratory course introducing basic findings and techniques in the scientific study of behavior. Topics discussed will include research design, data analysis and presentation; research in cognition and perception. In the laboratory students will collect and analyze data from representative areas of psychology and write laboratory reports in APA format. Prerequisite: PSY 266 or permission of the instructor

PSY 332  Psychological Tests and Measurements
4 hours; 4 credits
Introduction to test construction and application: item analysis, reliability, validity, establishing norms, and scoring procedures. A survey of available tests is undertaken: intelligence, aptitude, achievement, personality. Special problems in test administration and interpretation are considered. Prerequisite: PSY 266 or permission of the instructor

PSY 333  Experimental Psychology: Learning and Behavior
4 class hours, 4 laboratory hours; 6 credits
Basic principles of behavior analysis will be taught in a systematic fashion and applied to the analysis of simple and complex animal and human behavior. Students also conduct experiments designed to illustrate basic concepts in learning theory and principles of scientific methodology as appropriate for experimental psychology. Acquisition and analysis of experimental data and relating empirical data to theoretical concepts will be emphasized. Laboratory reports are written in APA format. Prerequisite: PSY 266 or permission of the instructor
PSY 340  Mentoring and Adolescent Development
(Also WMS 340)
3 class hours, 2 fieldwork hours; 4 credits
Introduction to the developmental concerns and clinical skills needed to form mentoring relationships with at-risk adolescent populations. Coursework entails review of the literature on mentoring as well as specific issues regarding adolescent development, with an emphasis on gender identity. Other topics addressed may include race, ethnicity, class, and sexual orientation. Students do on-site mentoring under faculty supervision and have the opportunity to evaluate these fieldwork experiences in class. Prerequisites: Permission of the instructor, a minimum of 45 credits completed, and successful completion of PSY 226 or PSY 242

PSY 342  Research in Child Language Development
4 hours; 4 credits
Research in social and cognitive processes involved in language development and early communication is explored. Topics include listening to speech in the first year of life, babbling, word learning, grammatical development, the critical period hypotheses, and developmental language disorders such as dyslexia and Specific Language Impairment. Prerequisite: PSY 242

PSY 350  Prejudice and Social Identity
4 hours; 4 credits.
The relationship between prejudice, stereotyping, and social identity will be discussed. Social psychological research on prejudice in regard to areas such as ageism, gender, ethnicity, sexual orientation, and body weight will be reviewed. Students will be introduced to a variety of research paradigms in social psychology including cognitive, attitudinal, behavioral, social identity, feminist, and postmodern frameworks. Students will also gain research experience by conducting an interview and an observational study. Prerequisite: PSY 212

PSY 352  History and Systems of Psychology
4 hours; 4 credits
Historical development of contemporary psychology including a critical survey of its chief contemporary systems: structuralism, functionalism, psychoanalysis, behaviorism, Gestalt psychology, and others. Prerequisite: At least 12 credits of psychology courses numbered 200 or higher

PSY 362  Approaches to Psychotherapy
4 hours; 4 credits
Primary source readings in representative schools of psychotherapy. Undertaken are an evaluation, description, and comparison of major treatment theories and techniques (e.g., the rationale and methods involved in one-to-one therapy, group therapy, encounter and sensitivity groups, and counseling). Prerequisite: PSY 202 or PSY 226

PSY 366  Psychology of Dreams
4 hours; 4 credits
A review of theories of dream interpretation within the context of the recent data collected in sleep and dream laboratories. Major theories will be compared and contrasted. Basic physiological correlates of dreaming will be discussed and empirical findings of content analysis presented. The structure and function of dreams will be compared to the structure and function of hallucinations, myths, and fairy tales. Prerequisite: PSY 202 or PSY 226

PSY 368  Counseling Psychology
3 class hours, 5 fieldwork hours; 5 credits
Introduction to the principles of counseling, psychological and philosophical issues in counseling, the interview and its role in counseling. This course includes five hours per week of fieldwork experience in a school guidance setting or another psychological service. Students must reserve one day per week for this fieldwork assignment. Prerequisites: PSY 202 and permission of the instructor

PSY 416  Group Dynamics
4 hours; 4 credits
Group experience as a path to effective interpersonal relationships. The course aims to provide an understanding of the nature of group goal setting and leadership training. Explored are one's attitudes toward oneself and their relationship to ethnic groups and social action. A variety of encounter techniques will be used to achieve course aims. Prerequisites: At least 12 credits of psychology courses numbered 200 or higher including at least two from PSY 202, PSY 212, PSY 226, PSY 362; and permission of the instructor

PSY 420  Advanced Seminar in Psychology
4 hours; 4 credits
Critical study of a selected area of psychology. Students will be encouraged to work on experimental, theoretical, and applied problems. Prerequisite: Permission of the instructor

PSY 464  Applied Behavior Analysis
4 hours; 4 credits
Introduction to the methods and theory of applied behavior analysis with a special focus on individuals with developmental disabilities. Topics include, but are not limited to, classical and operant conditioning, reinforcement theory, schedules of reinforcement, stimulus control, single-subject design, development of treatment programs, assessment procedures, data analysis, token economies, and professional responsibilities and ethics. All students will receive supervised experience in behavior modification settings using the principles of Applied Behavior Analysis. Prerequisite: PSY 333

PSY 480  Advanced Learning and Behavior
4 hours; 4 credits
Behavioral principles will be related to complex processes such as attention, memory, and concept formation. Students will read and discuss relevant literature, design, and conduct research projects related to the subject matter, and write reports describing the results of projects. Prerequisites: At least three of the following courses: PSY 242, PSY 266, PSY 288, PSY 330, PSY 333; or permission of the instructor

Public Administration

(Minor)
Interdisciplinary Program
Coordinators: Associate Professor Thomas Bucaro, Assistant Professor Richard Flanagan, Associate Professor Vasilios Petratos
Students in any major may minor in Public Administration.

Minor Requirements: 15-16 credits
Required courses
POL/ MGT 223  Public Administration 4 credits
SOC 274  Social Welfare 4 credits
(SOC 370 Urban Sociology [4 crs.] may be substituted for SOC 274)
with permission of a program coordinator.)

MGT 320 Management of Organizational Behavior 4 credits

One course from the following list:

Economics
ECO 292 Urban Economics 4 credits
ECO 330 Public Finance 4 credits
ECO 338 Government and Business 4 credits

Management
MGT 320 Management of Organizational Behavior 4 credits
MGT 322 Human Resource Administration 4 credits
SOC 380 Sociology of Organizations 4 credits

Government
POL 231 City Hall and Albany 4 credits
POL/ MGT 323 Public Policy Analysis 3 credits
POL/ MGT 339 Administrative Law 4 credits
HST 248 New York City: History and Problems 4 credits
HST 251 History of the U.S. City 4 credits
POL 233 CUNY Internship in New York Government and Politics 1 4 credits
(or another internship for at least 3 credits)

Science Course

Department of Engineering Science and Physics

SCI 106 Power, Pollution, and Energy
3 class hours, 2 laboratory hours; 4 credits

Topics include the effects of radioactivity, noise, heat, and various forms of energy on the environment. The physical principles will be developed to understand these phenomena and the scope of the related environmental problem. Laboratory studies and student projects illustrative of the fundamental principles associated with power, pollution, and energy complement the lectures. Not intended for the physical science or engineering major. (science)
Prerequisite: MTH 025 or MTH 030 or an appropriate score on the CUNY Mathematics Assessment Test

Romance Languages

Department of Modern Languages

Chair: Professor Kathryn Talarico, English, Speech, and World Literature/Modern Languages Building (2S), Room 109

The College offers a major in Spanish leading to the BA degree and a major in Spanish with an Adolescence Education sequence. Courses in French and Italian are available, but advanced work must be completed through independent study or at other institutions.

All students with prior knowledge or training must take the placement examination before registering for language courses. (See Foreign Language Requirement.)

Students with some native ability in a foreign language taught at the College are not eligible for credits in the 101, 102, 113 and 114 levels of that language. These students should begin their language study at the 115 or 116 level, if Spanish natives, and at the 208 level or higher in other languages. Students who are totally bilingual and who speak, read, and write a second language well, may register for any 300- or 400-level courses in that language. Students who have successfully completed a 200-, 300- or 400-level course in a foreign language may not take a 100-level course in the same language for credit. Students should consult an adviser in the Department of Modern Languages.

For course descriptions, please refer to sections on French, Italian, and Spanish.

Science, Letters, and Society

(Bachelor of Arts)

Interdisciplinary Program

Coordinator: Associate Professor Deborah Franzblau; Science, Letters, and Society Office, History/Political Science, Economics, and Philosophy Building (2N), Room 224

The major in Science, Letters, and Society (SLS) is designed for students seeking an overview of the liberal arts and sciences rather than a specialization in a single discipline. It undertakes to present a unified view of the modern intellectual enterprise. Consequently, the program requires a balanced sequence of broadly conceived upper-level courses in humanities, social sciences, mathematics, and science. The development of high levels of competence in reading and writing is particularly emphasized.

SLS is the major ordinarily required of students seeking certification in early childhood and childhood education. These students receive academic advisement from both the coordinator of SLS and an adviser from the appropriate program in the Department of Education. Issues relating to substitution of another liberal arts and sciences major for the SLS major must be referred to the SLS-Education Undergraduate Admissions and Standing Committee; students seeking to pursue a major other than SLS should write to the Committee, care of the Chairperson, Department of Education, 3S-208.

For admission to and continuation in the major of Science, Letters, and Society, a minimum GPA of 2.75 is required.

General Education Requirements for the BA

ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 28-47 credits
Whenever possible, these courses should be completed within the first 60 credits.

1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)

2. Social Scientific Analysis: (7-8 credits)
   A course in American history: HST 244 United States History: 1607-1865 or HST 245 United States History: 1865-Present is required for SLS majors in fulfilling this requirement.

3. The West and the World: (4 credits)

4. Textual, Aesthetic, and Linguistic Analysis: (6-8 credits)
   a. Literature: 200-level
An introduction to the thought of key figures in the social sciences in 4 hours; 4 credits
(Also SOC 225)

SLS 225 Social Thought
Prerequisites: A minimum GPA of 2.75 and MTH 217

Euclidian and non-Euclidian geometries, probability, statistics. A continuation of MTH 217. Linear inequalities and linear programming, 4 hours; 4 credits
(Also MTH 218)

SLS 218 Fundamentals of Mathematics II
(Also MTH 218)
4 hours; 4 credits
A continuation of MTH 217. Linear inequalities and linear programming, Euclidian and non-Euclidian geometries, probability, statistics.
Prerequisites: A minimum GPA of 2.75 and MTH 217

SLS 225 Social Thought
(Also SOC 225)
4 hours; 4 credits
An introduction to the thought of key figures in the social sciences in developing the idea of society from classical Greece to modern times, and dealing with the emergence of notions of community, the state, secularism, toleration, individualism, liberty, egalitarianism, irrationalism, etc. (social science) Prerequisites: A minimum GPA of 2.75, ENG 111, ENG 151, COR 100

SLS 230 American Society
4 hours; 4 credits
An introduction to the forces that have shaped American society. Emphasis is placed on the interaction of political, economic, and cultural factors. Themes include the creation of American myths, the triumph of majority traditions, the American heritage of dissent, and the responses to social crises. (social science) Prerequisites: A minimum GPA of 2.75, ENG 111, ENG 151, COR 100

SLS 235 The American Political System
(Also POL 235)
4 hours; 4 credits
Study of major American political institutions - the Presidency, Congress, Supreme Court, bureaucracy, and the Democratic and Republican parties. The course will emphasize the extent to which the actual workings of our political systems differ from, and are affected by, constitutional theory and legal rules and thus will discuss the impact of pressure groups and public opinion. It will also cover selected state and local political issues. (social science) Not open to students who have taken POL 100. Prerequisites: A minimum GPA of 2.75, ENG 111, ENG 151, COR 100

SLS 240 World Civilization I
(Also HST 238)
4 hours; 4 credits
A comparative study of the growth and development of the major global civilizations from earliest times to the onset of modernity. An overview of the development of civilizations, examining their structure and organization, characteristic ideas and institutions, and the processes of cultural diffusion and conflict within and between them. (P&D)
Prerequisites: A minimum GPA of 2.75, ENG 111 and ENG 151

SLS 241 World Civilization II
(Also HST 239)
4 hours; 4 credits
The growth and development of the major civilizations around the globe from the onset of modernity to present times, with particular attention to the changing relationships among global communities. (P&D)
Prerequisites: A minimum GPA of 2.75, ENG 111 and ENG 151

SLS 245 Contemporary Social Issues
(Also SOC 245)
4 hours; 4 credits
A study of selected contemporary social problems such as poverty, criminal justice, ethnicity, or race relations from the perspectives of political science, economics, and sociology. The emphasis will be on urban problems. The course will explore the types of questions that might be raised about the topics by persons trained in the social sciences and will explore the methods used to answer such questions. Relationships between modes of inquiry, types of questions asked, and the answers obtained. An emphasis on developing ability to read, understand, and think critically about writings in the social sciences. (social science) Prerequisites: A minimum GPA of 2.75, ENG 111, ENG 151, COR 100
SLS 261 Nature of Physical Processes  
(Also PHY 206)  
3 class hours, 2 laboratory hours; 4 credits  
A culturally oriented course and associated laboratory for liberal arts students who seek to deepen their understanding and appreciation of the style and status of modern physical inquiry. Topics will be drawn from Newtonian mechanics, quantum theory, relativity, and nuclear physics.  
Prerequisites: A minimum GPA of 2.75, MTH 025 or MTH 030 or an appropriate score on the Mathematics Department Placement Examination; and at least one Scientific Analysis course other than ELT, MET, or SCI courses

SLS 301 Humanities I: Ancient Culture  
4 hours; 4 credits  
A study of selected works from the literature, history, and philosophy of ancient civilization with some attention to the fine arts of the period.  
Prerequisites: A minimum GPA of 2.75, ENG 111, ENG 151, and an ENH 200-level course

SLS 302 Humanities II: Medieval and Early Modern Culture  
4 hours; 4 credits  
A study of selected works from the literature, history, and philosophy of the medieval and early modern world, with some attention to the fine arts of the period.  
Prerequisites: A minimum GPA of 2.75, ENG 111 and ENG 151 and an ENH 200-level course

SLS 303 Humanities III: Modern Culture  
4 hours; 4 credits  
A study of selected works from the literature and philosophy of modern civilization with some attention to the fine arts of the period.  
Prerequisites: A minimum GPA of 2.75, ENG 111 and ENG 151 and an ENH 200-level course

SEEK Courses

Department of Student Services  
SEEK Director, Assistant Professor Gloria Garcia, South Administration Building (1A), Room 112

The SEEK Program offers a series of courses aimed at enhancing the college experience and increasing the retention of its students. An orientation course is offered each semester to students entering the SEEK program.

SKO 100 Freshman Orientation  
2 class hours; 1 credit  
A means of helping incoming freshmen to develop educational and career goals through a group process of self-awareness with an emphasis on learning as a cooperative venture. In addition to providing information relative to the College setting, the course offers a systematic vehicle for interaction between student and counselor. A major theme throughout is a focus on the responsibility of the student for his or her own life and college career. The course also offers assistance with basic study skills and study habits.

SKO 101 Psycho-Dynamics of Student Life  
4 hours, 2 credits; 4 equated credits  
An analysis of personal and contemporary issues that affect the everyday life of students. Emphasis is on topics that play a major role in student development and the educational process such as adjustment to college life, strategies for change, and insights into personal success.

SKO 102 Learning to Learn  
3 hours; 3 credits  
A learning approach that provides study techniques geared to college success. The course focuses on the use of an inquiry method for new subject matter by which students learn to identify the component parts of complex principles and ideas in content courses. Topics include note taking, time management, reading and writing techniques, information mapping, and test taking strategies. Informal feedback mechanisms are included to help students assess their own progress.  
Prerequisite: Permission of the department

SKO 103 Stress: Understanding and Management  
(Also PSY 103)  
3 hours; 3 credits  
A comprehensive presentation of the physical, social, and psychological understanding of the human stress response. Opportunities for students to learn concrete scientific insights, practical stress management skills, and beneficial relaxation techniques are offered.

Social Work  

(Bachelor of Arts)  

Department of Sociology, Anthropology, and Social Work  
Coordinator, Associate Professor Sondra Brandler, Psychology/Sociology, Anthropology, and Social Work Building (4S), Room 226

The curriculum of the Bachelor of Arts in Social Work, also called the BASW, is designed to prepare students for social work practice as generalists and for advanced study in graduate schools of social work. The BASW is recognized as the entry level by the social work profession. As practitioners, graduates are able to work with people of diverse backgrounds and needs in a variety of settings in such fields as child welfare, mental health, family services, criminal justice, housing, developmental disabilities, services to the elderly, urban development, health and medical care.

Social Work (BA)  

Admission and Retention Requirements  

Students should apply during their upper sophomore year and must have completed 40 credits before applying to the program. Entering students are required to have attained a 2.5 grade point average and to maintain at least a 2.5 GPA to continue in the program.  
The academic records of transfer students will be reviewed and equated with the academic major and general education course offerings of the College of Staten Island to determine the placement of the students in the program.  

Please consult the program coordinator about admission procedures.

General Education Requirements for the BA  

ENG 111, ENG 151, COR 100, PED 190: 12 credits  
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 28-47 credits  
Whenever possible, these courses should be completed within the first 60 credits.
1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)
2. Social Scientific Analysis: (7-8 credits)
3. The West and the World: (4 credits)
4. Textual, Aesthetic, and Linguistic Analysis: (6-8 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
   Arts and Communications: 200-level
5. Pluralism and Diversity Requirement: (0-4 credits)
6. Foreign Language: (0-12 credits)

See section on general education requirements for approved course lists and complete details.

Pre-Major Requirement: 14 credits

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<tr>
<th>Course</th>
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<tr>
<td>SWK 200</td>
<td>Introduction to Social Work</td>
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<tr>
<td>BIO 106</td>
<td>Principles of Biology I</td>
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<td>BIO 170</td>
<td>General Biology I</td>
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<td>BIO 171</td>
<td>General Biology I Laboratory</td>
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<td>PSY 100</td>
<td>Psychology</td>
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<td>SOC 100</td>
<td>Sociology</td>
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Professional Foundation Content Requirements 40 credits

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<tr>
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<tbody>
<tr>
<td>SWK 301</td>
<td>Social Work Practice Research</td>
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<td>SWK 274</td>
<td>Social Welfare</td>
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<tr>
<td>SWK 378</td>
<td>Social Policy and Planning</td>
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<tr>
<td>SWK 310</td>
<td>Human Behavior and Social Environment I</td>
</tr>
<tr>
<td>SWK 320</td>
<td>Human Behavior and Social Environment II</td>
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<tr>
<td>SWK 350</td>
<td>Social Work Methods I</td>
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<tr>
<td>SWK 360</td>
<td>Social Work Methods II</td>
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<td>SWK 451</td>
<td>Field Instruction I</td>
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<td>SWK 461</td>
<td>Field Instruction II</td>
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Required Courses: 20 credits

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<td>SOC 200</td>
<td>Sociological Theory</td>
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<td>SOC 370</td>
<td>Urban Sociology</td>
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<td>ANT 370</td>
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<td>SOC 240</td>
<td>Minority Groups</td>
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<td>Class, Status, and Power</td>
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<td>SOC 340</td>
<td>Ethnicity and Immigration</td>
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<td>PSY 202</td>
<td>Psychopathology</td>
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<td>POL 204</td>
<td>American Political and Legal Thought</td>
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Electives: 0-6 credits

Total credits required: 120

Field Work

Field Work courses are included in the Professional Foundation Content Requirement. Field Work is designed to facilitate the integration of theoretical knowledge and professional skills. Students are placed in health, education, and social service agencies on Staten Island and in other boroughs for two semesters during their senior year. Under the supervision of professional social workers, students work with individuals, families, groups, and communities. Students are evaluated by the agency supervisor at the end of each semester. Students participate in the evaluation process and sign the evaluation forms.

Courses

SWK 107  Introduction to Developmental Disabilities
3 hours; 3 credits
Overview of the key knowledge on developmental disabilities. Issues to be explored include defining the disabled throughout the life cycle, normalization, deinstitutionalization, mainstreaming, case management and advocacy, ethical and legal issues, the Developmental Disabilities Movement and its impact on the family and community.

SWK 200  Introduction to Social Work
4 hours; 4 credits
Introduction to the field of social work and the social welfare system of the United States. Topics will include the development and sociology of the profession, theoretical foundations and current methods of practice, exploration of the diverse fields of practice, and the agencies that provide services to individuals, families, groups, and communities. The course will also explore the role and function of social workers in the face of expanding concepts of need and a changing political, social, and economic environment. Cross-cultural, feminist, and radical perspectives will also be examined.
Pre- or corequisites: ENG 111, SOC 100

SWK 274  Social Welfare
(Also SOC 274)
4 hours; 4 credits
The social welfare system in the contemporary state. Social functions and the historical, economic, and political foundations of the welfare system, including the structure of transfer payments and the social relations that it establishes. (social science)
Prerequisite: ENG 111, COR 100, SOC 100

SWK 301  Social Work Practice Research
4 hours; 4 credits
Advanced social and behavioral science methods as they are applied to research in generalist practice. Examination of qualitative and quantitative approaches. Important research paradigms, models, and issues of data collection and analysis. Procedures and techniques instrumental for the advancement of professional practice. Students carry out a research design of their own and collect data for analysis.
Prerequisite: SOC 201

SWK 310  Human Behavior in the Social Environment I
4 hours; 4 credits
The influence of biological, psychological, and social contexts of individual experience on human development in the period from infancy through adolescence and young adulthood. Exploration of how individuals and families cope with difficulties such as mental illness, alcoholism, poverty, drug abuse, crime, and family strife and of the influences of racism, classism, and discrimination of all kinds on human development.
Prerequisites: SWK 200, PSY 100

SWK 320  Human Behavior in the Social Environment II
4 hours; 4 credits
The influence of biological, psychological, and social contexts of individual experience on human development in the period from young adulthood...
through old age. Emphasis on the role of gender biases, social stigmas, and ageism in the achievement of full potential and economic self-sufficiency.
Prerequisite: SWK 310

SWK 350 Social Work Methods I
4 hours; 4 credits
This course provides an introduction to the basic theory and methods of social work practice with individuals, families, groups, organizations, and communities and an overview of the generalist approach to social work practice. The generalist approach is linked to system theory, ecological theory, and problem solving approaches to social work practice. Interviewing skills are studied and case studies are reviewed to identify and develop social work processes and skills within the framework of an ecological model.
Prerequisites: SWK 200 and admission to the BA degree program in Social Work.

SWK 360 Social Work Methods II
4 hours; 4 credits
This course builds on the generalist approach introduced in Social Work Methods I with an emphasis on the study of generalist skills as applied to small and large groups, communities, and organizations. The interaction of individual change, group processes, and community dynamics are demonstrated through case materials, role playing, and class projects.
Prerequisite: SWK 350

SWK 378 Social Planning
(Also SOC 378)
4 hours; 4 credits
Analysis of the underlying assumptions and values embedded in social policy with respect to such issues as poverty, homelessness, education, drug abuse, family violence, community development, human rights, affirmative action. Cross-cultural models of social planning and the planning process.
Prerequisite: SOC 274

SWK 440 Internship in Developmental Disabilities
2 class hours, 6 field hours; 4 credits
The student is assigned to an agency devoted to the care and supervision of persons with developmental disabilities. The two hours per week in class are devoted to feedback and discussion of issues related to field experiences. Written records are an integral part of the field experience. In semesters when this course is not offered, students may register for an individual internship.

SWK 451 Field Instruction I
2 class hours, 16 field hours; 6 credits
This course provides students with experience in applying knowledge and theory from the professional foundation and developing practice skills. The practicum assists in producing a reflective, self-evaluating, beginning-level professional practitioner. Students are required to work at an approved agency under the supervision of an agency-based supervisor for a total of 240 hours a semester (an average of 16 hours per week). Weekly class seminars are structured to provide support and the exploration of the agency learning experience with other students.
Prerequisite: SWK 360 or permission of the instructor.

SWK 461 Field Instruction II
2 class hours, 16 field hours; 6 credits
Continuation in the participation of the delivery of social work services. Students are required to work at an approved agency under the supervision of an agency-based supervisor for a total of 240 hours a semester (an average of 16 hours per week). Weekly class seminars are structured to provide support and the exploration of the agency learning experience with other students.
Prerequisite: SWK 451

Sociology-Anthropology
(Bachelor of Arts, Minor)
Department of Sociology, Anthropology, and Social Work
Chair: Professor Shieving Chen, Psychology/Sociology, Anthropology, and Social Work Building (4S), Room 223
The joint major in Sociology-Anthropology offers several options: most of the 35-credit requirement may be met by courses in sociology or in anthropology, according to the student's primary interest; courses from both disciplines may be mixed equally. The program prepares students for such areas as teaching sociology or anthropology, social work, urban planning, public health, management, and law. Selected sociology and anthropology courses will also be of particular interest to majors in Biology, Psychology, History, Economics, International Studies, Nursing, and Computer Science.

Sociology-Anthropology (BA)

General Education Requirements for the BA
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 28–47 credits
Whenever possible, these courses should be completed within the first 60 credits.
1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)
2. Social Scientific Analysis: (7-8 credits)
3. The West and the World: (4 credits)
4. Textual, Aesthetic, and Linguistic Analysis: (6-8 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
   Arts and Communications: 200-level
5. Pluralism and Diversity Requirement: (0-4 credits)
6. Foreign Language: (0-12 credits)
See section on general education requirements for approved course lists and complete details.

Major Requirements: 35 credits
SOC 100 Sociology 3 credits
SOC 200 Sociological Theory 4 credits
SOC 201 Methods of Sociological Research 4 credits
ANT 201 Cultural Anthropology 4 credits
Any additional four-credit anthropology course at or above the 200 level, included among at least 16 additional credits in sociology or anthropology at the 200 level or above, of which 12 credits must be at the 300 or 400 level. The 35 credits must include at least 12 credits at the 300 or 400 level.

Electives: 44 credits
Total Credits Required: 120
Honors
To graduate with Honors in Sociology/Anthropology a student must have a
3.5 grade point average in sociology/anthropology courses and must
complete an honors thesis or project under the supervision of a sociology or
anthropology faculty member.

Minor
Prerequisite Course
SOC 100 Sociology 3 credits

Requirements
SOC 200 Sociological Theory 4 credits
SOC 201 Methods of Sociological Research 4 credits
Eight additional credits of courses in sociology at or above the 200
level 8 credits

Courses
SOC 100 Sociology
3 hours; 3 credits
A study of modern society with emphasis on such fundamental groupings as
the family, class, the community, the state, the interaction between cultures
and the individual, and the processes by which institutions come into being
and develop, and important social theories. (social science)

SOC 200 Sociological Theory
4 hours; 4 credits
Nineteenth- and early twentieth-century European sociological theory as it bears on our own time. How Marx, Weber, and Durkheim analyze society,
culture, religion, the economy, modes of domination, suicide, alienation,
charisma, and other social phenomena. Cultural and gender biases in social thought.
Prerequisites: SOC 100 and one 200-level SOC course

SOC 201 Methods of Sociological Research
4 hours; 4 credits
How sociologists collect and analyze data. Examination of various methods of research, including questionnaires, interviews, participant observation, and the use of historical and literary sources.
Prerequisites: ENG 111, COR 100, SOC 100

SOC 202 Gender, Race, Ethnicity, and Class
(Also WMS 202)
4 hours; 4 credits
How gender, race, ethnicity, and class interact with each other and influence personal identities, opportunities, and life experiences. The effects of these factors on attitudes and ideology, from the perspectives of scholars to those of political groups within and among nation states. The effects of political economy and the division of labor on gender, race, and class. (social science) (P&D)
Prerequisites: ENG 111, COR 100

SOC 210 Sociology of Health and Medicine
4 hours; 4 credits
Examination of the norms, values, beliefs, role relationships, and organizations of medical practice as a form of human behavior. Emphasis on the social processes that occur in the medical setting. Analysis of the medical environment from a sociological perspective. (social science)
Prerequisites: ENG 111, COR 100, SOC 100

SOC 212 Criminology
4 hours; 4 credits
Sociological research and theory on crime and criminal behavior. Social, cultural, economic, and psychological factors affecting crime. The definition of crime in historical and cross-cultural perspectives: interpersonal violence, organized crime, corporate crime, and political violations of human rights. (social science)
Prerequisites: ENG 111, COR 100, SOC 100

SOC 220 Marriage and the Family
4 hours; 4 credits
Marriage and the family as social institutions. The historical development of these institutions, with special emphasis on the personal and social problems of the matrimonial relationship and of modern family life. (social science)
Prerequisites: ENG 111, COR 100

SOC 225 Social Thought
(Also SLS 225)
4 hours; 4 credits
An introduction to the thought of key figures in the social sciences in developing the idea of society from classical Greece to modern times, and dealing with the emergence of notions of community, the state, secularism, toleration, individualism, liberty, egalitarianism, irrationalism, etc. (social science)
Prerequisites: A minimum GPA of 2.75; ENG 111, ENG 151, COR 100

SOC 226 Socialization of the Child
4 hours; 4 credits
The socialization of the child will be examined in detail in the context of social, cultural, economic, and political institutions; various sociological and psychological theories concerning child rearing. Adolescent socialization, moral development, and the impact of factors such as sex, birth order, social class, and ethnicity will be discussed. (social science)
Prerequisites: ENG 111, COR 100; SOC 100 or PSY 100 or permission of the instructor

SOC 230 Sociology of Women
(Also WMS 230)
4 hours; 4 credits
Social and cultural forces affecting women’s lives. The problems, struggles, and accomplishments of women in social and historical contexts. Changing sex roles and relationships as affected by ethnicity, race, and class. (social science) (P&D)
Prerequisites: ENG 111, COR 100

SOC 232 Sociology of Aging
4 hours; 4 credits
Social implications of aging in contemporary society. The changing roles, relationships, and opportunities of people as they grow older, affected by social, cultural, medical, political, and economic conditions. Issues related to the elderly who need care. (social science)
Prerequisites: ENG 111, COR 100; and SOC 100 or permission of the instructor

SOC 238 Sociology of Men
(Also WMS 238)
4 hours; 4 credits
Comparative, historical perspectives on the male gender role and male domination through social institutions and male gender role socialization. Issues regarding the relationships of men with each other as well as between men and women. (social science) (P&D)
Prerequisites: ENG 111, COR 100
SOC 240  Minority Groups
4 hours; 4 credits
Social, political, economic, and historical factors affecting minority group status. The roots of prejudice and discrimination; analysis of their psychological and social causes and consequences in modern society. (West and World) (P&D)
Prerequisites: ENG 111, COR 100

SOC 245  Contemporary Social Issues
(Also SLS 245)
4 hours; 4 credits
A study of selected contemporary social problems such as poverty, criminal justice, ethnicity, or race relations from the perspectives of political science, economics, and sociology. The emphasis will be on urban problems. The course will explore the types of questions that might be raised about the topics by persons trained in the social sciences and will explore the methods used to answer such questions. Relationships between modes of inquiry, types of questions asked, and the answers obtained. An emphasis on developing ability to read, understand, and think critically about writings in the social sciences. (social science)
Prerequisites: A minimum GPA of 2.75, ENG 111, ENG 151, COR 100

SOC 250  Sociology of Religion
4 hours; 4 credits
The relationship between religion and society from historical and cross-cultural perspectives. Effects of religion on the culture of groups and societies. The effects of social structure and social change on religion; emergence of new religious forms. (social science)
Prerequisites: ENG 111, COR 100, SOC 100

SOC 255  Sociology of the Arts
4 hours; 4 credits
The relationship between the arts and other institutions of contemporary society (e.g., economics, politics, religion). The structure of different art worlds, and the function of both High and Popular art forms in both strengthening and weakening class boundaries. (social science)
Prerequisites: ENG 111, COR 100; and SOC 100 or permission of the instructor

SOC 260  Class, Status, and Power
4 hours; 4 credits
Historical and comparative analysis of social classes and strata—their emergence, persistence, and change—in different types of societies. The effects of class, status, and power on the quality of life and social relations. Recent changes in class structure. (West & World) (P&D)
Prerequisites: ENG 111, COR 100, SOC 100

SOC 270  The Community
4 hours; 4 credits
Processes of neighborhood identity formation, cohesion, conflict, decline, and revitalization. The role of women, and ethnic and class-determined groups in community institutions and community organizing. Staten Island as a case study. (social science)
Prerequisites: ENG 111, COR 100; and SOC 100 or permission of the instructor

SOC 274  Social Welfare
(Also SWK 274)
4 hours; 4 credits
The social welfare system in the contemporary state. Social functions and the historical, economic, and political foundations of the welfare system, including the structure of transfer payments and the social relations that it establishes. (social science)
Prerequisites: ENG 111, COR 100, SOC 100

SOC 275  Sociology of Education
4 hours; 4 credits
The changing social and cultural context of contemporary American education. The relationship between education and social inequality, social mobility, and social change. Issues and debates regarding contemporary education. This course does not meet New York State requirements for teacher certification. (social science)
Prerequisites: ENG 111, COR 100

SOC 280  Sociology and Politics
4 hours; 4 credits
The social background of political elites and movements, bureaucracy and the problem of political power, conflict and social class, and industrial and postindustrial society. Readings from classical theorists and contemporary empirical work. (social science)
Prerequisites: ENG 111, COR 100, SOC 100

SOC 292  The Individual in Society
4 hours; 4 credits
The social context and meaning of individual behavior and face-to-face interaction. An examination of sociological theory and research, from the classic writings of Mead to recent phenomenologists and critics of psychotherapy. (social science)
Prerequisites: ENG 111, COR 100

SOC 301  Computerized Research Analysis
4 hours; 4 credits
This course will help students to acquire quantitative research skills by introducing them to important computer applications in the social sciences. It covers data management and analysis using appropriate software packages such as SPSS. Topics on social statistics will focus on the understanding of principles, selection of procedures, and interpretation of results.
Prerequisites: SOC 201; MTH 102, MTH 113, or a higher-level mathematics course

SOC 302  Contemporary Sociological Theory
4 hours; 4 credits
Theoretical traditions and schools of thought within contemporary sociology including those of functionalism, conflict theory, exchange theory, neo-Marxism, feminism, ethnmethodology, world-systems theory, and historical-comparative theory. Underlying assumptions and cultural biases in social thought.
Prerequisite: SOC 200

SOC 330  Women and Work
(Also WMS 330, ANT 331)
4 hours; 4 credits
The social and cultural constraints affecting women’s participation and attainments in the world of work. Conflicts between work role expectations and gender role expectations (e.g., femininity, nurturance, maternity). The effects of class background and race/ethnicity on women’s occupations, professions, and incomes. (P&D)
Prerequisites: Any 100-level SOC or ANT course and any 200-level SOC or ANT course or permission of the instructor.
SOC 340  Ethnicity and Immigration  
4 hours; 4 credits  
Social, cultural, and historical factors affecting ethnic group experience and socio-economic status, both in the United States and among immigrants in other societies. Comparison of immigrant groups of first, second, and third generations. The role of women in different ethnic groups. (P&D)  
Prerequisites: ANT or SOC 100 and a 200-level ANT or SOC course or permission of the instructor

SOC 350  Psychosocial Aspects of Disability  
4 hours; 4 credits  
The psychosocial impact of disability, differential development and social adjustment among disabled groups, friendships, intimacy, and sexuality. The changing role and status of the disabled in our society with particular emphasis on the issues of stigmatization and labeling. (P&D)  
Prerequisites: SWK 107 and SOC 100

SOC 360  Sociology of Work and Leisure  
4 hours; 4 credits  
Analysis of the world of work and the separate world of leisure, and their social and economic pre-conditions and consequences. Theories of occupations and professions, career patterns, and their relationship to the social structuring of class, status, power, race, and gender.  
Prerequisites: ANT or SOC 100 and a 200-level ANT or SOC course or permission of the instructor

SOC 370  Urban Sociology  
4 hours; 4 credits  
The social structure and culture of city life. Issues of urban politics, racial and ethnic relationships, housing, crime, cultural institutions, economics, communications, city planning and design. Historical origins of the city in the Western world; the future of cities worldwide. New York City as a case study.  
Prerequisites: ANT or SOC 100 and a 200-level ANT or SOC course or permission of the instructor

SOC 371  Minorities and the Media  
(Also COM 371)  
4 hours; 4 credits  
This course will examine the role of the mass media as cultural institutions in shaping the images and self-images of different minority groups. Definitions and images to be analyzed are drawn from religious, medical, and social scientific sources, as well as elite and popular culture. (P&D)  
Prerequisite: COM 150 or a 100-level and a 200-level ANT or SOC course

SOC 372  Institutions of Control  
4 hours; 4 credits  
How leading social institutions (family, schools, mass media, government, and the economy) shape and control American society. The role of racism, sexism, violence, and economic exploitation as forms of social control. Existing patterns of domination and subordination.  
Prerequisites: ANT or SOC 100 and a 200-level ANT or SOC course or permission of the instructor

SOC 374  Mass Media in Modern Society  
(Also COM 374)  
4 hours; 4 credits  
Sociological analysis of the mass media: their comparative histories and organizations, and their political and social effects. Their persuasive role in propaganda and public opinion, and their function in providing information and entertainment for the common culture.  
Prerequisites: COM 150 and a 200-level ANT or SOC course

SOC 376  Social Change  
4 hours; 4 credits  
Analysis of societal and cultural transformations. Leading theories of social change. Empirical case studies in interpersonal relationships and race relations as well as technological, economic, and political changes. The role of mass media, communities, and organizations.  
Prerequisites: ANT or SOC 100 and a 200-level ANT or SOC course or permission of the instructor

SOC 378  Social Planning  
(Also SWK 378)  
4 hours; 4 credits  
Analysis of the underlying assumptions and values embedded in social policy with respect to such issues as poverty, homelessness, education, drug abuse, family violence, community development, human rights, and affirmative action. Cross-cultural models of social planning and the planning process.  
Prerequisite: SOC 274

SOC 380  Sociology of Organizations  
4 hours; 4 credits  
The analysis of modern organizational structures and processes, focusing on social control through specific collective and bureaucratic organizations (business, educational, medical, legal, service, etc). Comparison of internal organizational cultures in public, voluntary, and private sectors.  
Prerequisites: ANT or SOC 100 and a 200-level ANT or SOC course or permission of the instructor

SOC 410  Sociological Issues  
4 hours; 4 credits  
Detailed exploration of selected social issues according to student interest (e.g., homelessness, health care, substance abuse, domestic violence), as affected by such variables as social class, race, religion, gender, technological change.  
Prerequisite: SOC 201 or permission of the instructor

SOC 420  Birth and Death  
(Also WMS 420)  
4 hours; 4 credits  
An exploration of the different sociological renderings of birth and death in contemporary societies. Understanding the concepts of birth and death from a sociological perspective offers an excellent opportunity to explore the intersections of race, class, gender, spirituality, and age. This course will be heavily geared toward feminist and critical perspectives. It will explore recent technological innovations and their implications for representations of conception, birth, and death.  
Prerequisites: ANT 100 or SOC 100 and a 200-level ANT or SOC course or permission of the instructor

SOC 427  Sociology of Language  
(Also ENL 427)  
4 hours; 4 credits  
Areas of discussion include language and class, language and sex, language and race, and language and ethnicity.  
Prerequisite: ENG 151
Spanish

(Bachelor of Arts, Minor)

Department of Modern Languages

Chair: Professor Kathryn Talarico, English, Speech, and World Literature/Modern Languages Building (2S), Room 109

The department offers a major in Spanish (Track 1) and a major in Spanish with an Adolescence Education sequence (Track 2) that prepares students for teacher certification for grades 7-12.

All students with prior training in Spanish must take a proficiency examination to determine placement at an appropriate level. Students interested in Early Childhood or Childhood Education should see the Department of Education Coordinator of these programs for permission to enroll in this major.

Transfer students must take at least four courses at the 300 or 400 level.

Spanish (BA)

General Education Requirements for the BA

ENG 111, ENG 151, COR 100, PED 190: 12 credits

Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 28-47 credits

Whenever possible, these courses should be completed within the first 60 credits.

1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)
2. Social Scientific Analysis: (7-8 credits)
3. The West and the World: (4 credits)
4. Textual, Aesthetic, and Linguistic Analysis: (6-8 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
      Arts and Communications: 200-level
5. Pluralism and Diversity Requirement: (0-4 credits)
6. Foreign Language: (0-12 credits)

See section on general education requirements for approved course lists and complete details.

1. Track One: Spanish:

Pre-Major Requirements: 14 credits

Four semesters of college-level language study (SPN 113, SPN 114, SPN 213, SPN 215) or the equivalent. Students who enter the College with ability in Spanish take a placement examination to determine the level at which they should begin language study. These courses may also be used to satisfy general education requirements.

Major Requirements: 36 credits

Students majoring in Spanish must complete the following requirements:

   - An advanced communication skills course (SPN 313) 4 credits
   - A civilization course (SPN 320, 325, 330) 4 credits
   - A literature survey course (SPN 340, 350) 4 credits
   - An additional 24 credits of courses chosen from
     300- or 400-level Spanish courses 24 credits

Electives: 35-51 credits

Total Credits Required: 120

2. Track Two: Spanish, grades 7-12:

In addition to the requirements for the Spanish major, students wishing to be recommended by the College for teacher certification must complete the following sequence of education courses for 24 credits:

   - EDS 201 Social Foundations of Secondary Education 4 credits
   - EDS 202 Psychological Foundations of Secondary Education 4 credits
   - EDS 305 The Teaching of Secondary School Curriculum in Foreign Language 4 credits
   - EDS 307 Discovery Learning and Interdisciplinary Instruction 4 credits
   - EDS 400 Student Teaching in Secondary Education 6 credits
   - EDS 401 Reflection and Analysis in Student Teaching in Secondary Education 2 credits

Liberal Arts and Sciences Requirement

Most education courses are non-liberal arts and sciences.

Honors

To graduate with Honors in Spanish a student must have a 3.5 grade point average in Spanish language courses and must complete a special project under the direction of a faculty member. A faculty committee will vote on the recommendation for honors.

Minor

At least 12 credits in courses in Spanish at or above the 200 level.

Courses

SPN 101 Spanish Conversation I

2 hours; 2 credits

Practical Spanish for business, community relations, travel, and simple technical application. For beginners with no previous knowledge of the language. Regular attendance in the Modern Languages Media Center is required.

SPN 102 Spanish Conversation II

2 hours; 2 credits

A continuation of SPN 101. Regular attendance in the Modern Languages Media Center is required.

Prerequisite: SPN 101 or equivalent

SPN 113 Basic Spanish I (Closed to Native Speakers)

4 hours; 4 credits

A beginning course in fundamentals of expression and communication for those who have had no previous work in the language. Regular attendance in the Modern Languages Media Center is required. (foreign lang.)

SPN 114 Basic Spanish II (Closed to Native Speakers)

4 hours; 4 credits

A continuation of SPN 113. Regular attendance in the Modern Languages Media Center is required. (foreign lang.)

Prerequisite: SPN 113 or equivalent

SPN 115 Basic Spanish I for Native Speakers

4 hours; 4 credits

A beginning course in the fundamentals of expression and communication for those who have a speaking knowledge of Spanish but have little or no
formal training in the language. Regular attendance in the Modern Languages Media Center is required.

**SPN 116 Basic Spanish II for Native Speakers**
4 hours; 4 credits
A continuation of SPN 115. Regular attendance in the Modern Languages Media Center is required.
Prerequisite: SPN 115 or equivalent

**SPN 117 Spanish for Allied Health Personnel**
3 hours; 3 credits
Basic communication for physicians, nurses, and others dealing with Spanish-speaking clients. Emphasis on technical and medical terminology. Regular attendance in the Modern Languages Media Center is required.
Prerequisites: SPN 115 or SPN 101 and 102 or equivalent preparation in Spanish

**SPN 213 Continuing Spanish I**
4 hours; 4 credits
Grammar review and more intensive training in the fundamentals of expression and communication, both written and oral, based on selected cultural readings. Regular attendance in the Modern Languages Media Center is required. (foreign lang.)
Prerequisite: SPN 114 or equivalent

**SPN 215 Continuing Spanish II**
4 hours; 4 credits
A continuation of SPN 213 with stress on written and oral composition and on selected cultural and literary readings of intermediate difficulty. Regular attendance in the Modern Languages Media Center is required. (foreign lang.)
Prerequisite: SPN 213 or equivalent

**SPN 313 Advanced Communication Skills**
4 hours; 4 credits
Refinement of written and oral expression through composition, translation, oral reports and critical study of the Spanish grammar based on the analysis of selected literary readings of advanced difficulty. Regular attendance in the Modern Languages Media Center is required.
Prerequisite: SPN 215 or equivalent

**SPN 315 Advanced Composition**
4 hours; 4 credits
Designed to improve students’ written Spanish and to provide advanced training. Students will write in a variety of situations, learn to distinguish between spoken and written styles, and focus on problems of contrastive grammar. Emphasis is on developing fluency and accuracy in the written language. Regular attendance in the Modern Languages Media Center is required.
Prerequisite: SPN 313 or equivalent

**SPN 319 Introduction to Translation**
4 hours; 4 credits
Development of skills for reading and translating technical and literary Spanish into English. Emphasis on the use of general and specialized dictionaries and other tools of the professional translator.
Prerequisites: SPN 313 or equivalent, and ENG 151 or ENG 152 or an ENH 200-level course

**SPN 320 The Civilization of Spain**
4 hours; 4 credits
A panoramic approach to the history, art, literature, and other aspects of Spanish civilization.
Prerequisite: SPN 313 or equivalent

**SPN 325 The Civilization of Pre-Colombian Spanish America**
4 hours; 4 credits
The Mayan, Incan, and Aztec cultures of pre-Columbian Spanish America. Taught bilingually. Readings and assignments in Spanish required for majors; readings and assignments may be done in English for non-majors. (P&D)
Prerequisite: SPN 313 or equivalent

**SPN 330 The Civilization of Spanish America**
4 hours; 4 credits
A panoramic approach to the history, art, literature, and other aspects of the civilization of Spanish America. (P&D)
Prerequisite: SPN 313 or equivalent

**SPN 340 An Introduction to the Literature of Spain**
4 hours; 4 credits
A survey of Spanish literature from medieval times through the Romantic period. (literature)
Prerequisite: SPN 313 or equivalent

**SPN 345 Spanish Theater**
(Also DRA 345)
4 hours; 4 credits
Discussion of ideas, background, and staging traditions of representative Spanish language plays from the Golden Age to the present. The course is taught in English. Readings and assignments in Spanish required for majors; readings and assignments may be done in English for non-majors. (literature)
Prerequisite: SPN 313 or equivalent for those doing readings and assignments in Spanish; ENG 151 or a 200-level English course for those doing readings and assignments in English

**SPN 350 Introduction to Spanish American Literature**
4 hours; 4 credits
A survey of the development of Spanish-American literature from pre-Colombian literature to modernism. (literature) (P&D)
Prerequisite: SPN 313 or equivalent

**SPN 425 The Golden Age of Spanish Drama**
(Also DRA 425)
4 hours; 4 credits
Works by Cervantes, Lope de Vega, Tirso de Molina, Guillén de Castro, Mira de Amescua, Ruiz de Alarcón, Calderón de la Barca, Rojas Zorrilla, Agustín Moreto, and others. (literature)
Prerequisite: SPN 313 or equivalent

**SPN 430 Cervantes: Don Quixote and Other Works**
4 hours; 4 credits
A study of the language, thought, and art of Cervantes as seen in his masterpieces. (literature)
Prerequisite: SPN 313 or equivalent

**SPN 450 The Modern Spanish Novel**
4 hours; 4 credits
A study of Spanish novelists from Galdós to the present. (literature)
Prerequisite: SPN 313 or equivalent

**SPN 455 The Modern Spanish American Novel**
4 hours; 4 credits
Reading and interpretation of the works of representative modern and contemporary writers from several Spanish American countries. (literature)
Prerequisite: SPN 313 or equivalent
SPN 462  Lorca and the Spanish Poetry of the Twentieth Century  
4 hours; 4 credits  
The works of Lorca, Machado, Unamuno, J.R. Jiménez, Aleixandre, Guillén, Gernuda, and Salinas will be considered. (literature)  
Prerequisite: SPN 313 or equivalent  

SPN 465  Spanish Theater in the Twentieth Century  
(Also DRA 465)  
4 hours; 4 credits  
Principal tendencies in Spanish theater in the twentieth century. Including an analysis of the major works of dramatists such as Benavente, Valle-Inclán, García Lorca, Mihura, Buero Vallejo, Alfonso Sastre, Carlos Muniz, Lauro Olmo, Arrabal, Antonio Gala, and others. (literature)  
Prerequisite: SPN 313 or equivalent  

SPN 470  Spanish American Theater in the Twentieth Century  
4 hours; 4 credits  
A study of the main trends and an analysis of the most significant plays of contemporary Spanish American playwrights. (literature)  
Prerequisite: SPN 313 or equivalent  

SPN 475  The Contemporary Spanish American Short Story  
4 hours; 4 credits  
Readings and discussion of the works of outstanding contemporary authors. (literature)  
Prerequisite: SPN 313 or equivalent  

SPN 480  Literature of the Hispanic Caribbean  
4 hours; 4 credits  
Reading and discussion of literary works of outstanding modern and contemporary Cuban, Dominican, and Puerto Rican authors. (literature)  
(P&D)  
Prerequisite: SPN 313 or equivalent  

SPN 480  Literature of the Hispanic Caribbean  
4 hours; 4 credits  
Reading and discussion of literary works of outstanding modern and contemporary Cuban, Dominican, and Puerto Rican authors. (literature)  
(P&D)  
Prerequisite: SPN 313 or equivalent  

SPD 101  Issues in College Life  
2 hours; 1 credit  
A developmental overview of college life. Emphasis is placed on those concepts and skills that relate to broader life issues. Through discussion of the individual's educational goals, attitudes, and values, the student explores the learning community, educational options, choices, and techniques to improve study and college survival skills. The course is graded on a pass/fail basis.  
Not to be taken in the same semester with SPD 102 or SKO 100.

SPD 102  Career Development  
2 hours; 1 credit  
Factors to be considered in career decision making; the value and limitations of test data; clarification of work values; mid-career change; non-traditional careers; trends in the world of work; career opportunities in various professional, technical, and business fields; the changing labor market; reasons for attending college; educational options; job finding techniques (resources, résumés, interviews).  

SPD 105  Personal Growth and Development  
2 hours; 1 credit  
Exploration of personal growth, individual differences and their origins, methods of coping with stress, and personality change. The focus is on the development of self and the influences of external and internal forces on it. Strategies for coping with life’s challenges will be discussed and explored.  

Women’s Studies  
(Bachelor of Arts, Minor)  
Interdisciplinary Program  
Coordinator, Associate Professor Kate Crehan, Psychology/Sociology, Anthropology, and Social Work Building (4S), Room 213; Women’s Studies Program Office, History/Political Science, Economics, and Philosophy Building (2N), Room 216  
Women’s Studies is an interdisciplinary program that draws on anthropological, economic, historical, literary, psychological, and sociological perspectives to explore women’s lives, and the significance of gender in general, in contemporary and past societies both in the United States and across the globe.

Women’s Studies (BA)  
General Education Requirements for the BA  
ENG 111, ENG 151, COR 100, PED 190: 12 credits  
Whenever possible, these four courses should be completed within the first 36 credits.  

Scientific Analysis; Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 28–47 credits  
Whenever possible, these courses should be completed within the first 60 credits.  

1. Scientific Analysis: (11 credits)  
   a. Science and Technology: (8 credits)  
   b. Mathematics: (3 credits)  
2. Social Scientific Analysis: (7-8 credits)  
3. The West and the World: (4 credits)  
4. Textual, Aesthetic, and Linguistic Analysis: (6-8 credits)  
   a. Literature: 200-level  
   b. Arts and Communications: 100-level  
   Arts and Communications: 200-level  
5. Pluralism and Diversity Requirement: (0-4 credits)  
6. Foreign Language: (0-12 credits)  
See section on general education requirements for approved course lists and complete details.
Major Requirements: 31-32 credits

31-32 credits of Women's Studies courses, with at least 12 credits at the 300 level or higher, including:

1. At least one WMS course with a focus in history, American studies, or African American studies from among the following:
   
   - WMS 100 Introduction to Women's History
   - WMS 286 History of American Women
   - WMS 386 The Recovery of Women's Past
   - WMS 389 Themes in American Women's History

2. At least one WMS course with a focus in English, modern languages, or arts from among the following:
   
   - WMS 222 Women and Literature
   - WMS 256 Women in European Literature
   - WMS 263 Mythology of Women
   - WMS 266 Women in European Literature to the Renaissance
   - WMS 267 Women in European Literature after the Renaissance
   - WMS 270 Women and the Fine Arts
   - WMS 280 Introduction to Women's Written Expression
   - WMS 348 Women Novelists
   - WMS 353 The Feminist Challenge in French Literature
   - WMS 384 Major Woman Author I
   - WMS 385 Major Woman Author II
   - WMS 387 Major Woman Author III
   - WMS 390 Women in Literature and the Arts
   - WMS 391 Woman as Hero
   - WMS 442 Women's Written Expression

3. At least one WMS course with a focus in psychology, sociology, or anthropology from among the following:
   
   - WMS 202 Gender, Race, Ethnicity, and Class
   - WMS 230 Sociology of Women
   - WMS 234 Anthropology of Women
   - WMS 235 Gender and Sexuality
   - WMS 238 Sociology of Men
   - WMS 268 Psychology of Women
   - WMS 330 Women and Work
   - WMS 340 Mentoring and Adolescent Development
   - WMS 420 Birth and Death

4. Additional WMS courses from either those listed in categories 1-3 above or those listed below:
   
   - WMS 235 Gender and Sexuality
   - WMS 240 Sex Roles and the Law
   - WMS 272 Women as Creative Persons
   - WMS 300 Research Problems in Feminism
   - WMS 304 Non-Sexist Education
   - WMS 306 Community Workshop

Electives: 47-48 credits

Total Credits Required: 120

Minor

A total of 15-16 credits in women's studies courses, with at least 12 credits at the 200 level or higher, including:

1. At least one WMS course with a focus in history, American studies, or African American studies, as listed for the major requirements.

2. At least one WMS course with a focus in English, modern languages, or arts, as listed for the major requirements.

3. At least one WMS course with a focus in psychology, sociology, or anthropology, as listed for the major requirements.

4. One additional WMS course, as listed for the major requirements.

Courses

WMS 100 Women's History and Feminist Theory
(Also HST 182)
3 hours; 3 credits

This course explores both the history of women's experience and feminist interpretations of their historical condition. Emphasis is on the development of analytic and writing skills. (social science)

WMS 202 Gender, Race, Ethnicity, and Class
(Also SOC 202)
4 hours; 4 credits

How gender, race, ethnicity, and class interact with each other and influence personal identities, opportunities, and life experiences. The effects of these factors on attitudes and ideology, from the perspectives of scholars to those of political groups within and among nation-states. The effects of political economy and the division of labor on gender, race, and class. (social science) (P&D)

Prerequisites: ENG 111, COR 100

WMS 222 Women and Literature
(Also ENH 222)
4 hours; 4 credits

A study of works by and about women drawn from a variety of periods and genres. (literature) (P&D)

Prerequisites: ENG 111, ENG 151

WMS 230 Sociology of Women
(Also SOC 230)
4 hours; 4 credits

Social and cultural forces affecting women's lives. The problems, struggles, and accomplishments of women in social and historical contexts. Changing sex roles and relationships as affected by ethnicity, race, and class. (social science) (P&D)

Prerequisites: ENG 111, ENG 151

WMS 235 Gender and Sexuality
(Also PSY 235)
4 hours; 4 credits

A critical examination of the way in which human sexual functioning has been viewed by both women and men. Critical consideration of theories of sexuality in psychology, including psychoanalytic, evolutionary, social constructionist, and feminist theories of sexuality. Evaluation of recent research on AIDS/HIV, lesbian and gay issues, sexual violence against women, and sex education. Special attention to cultural factors that influence women's and men's understandings of their sexuality and of other sexually transmissible diseases. Present problems and practices as well as future possibilities will be discussed.

WMS 238 Sociology of Men
(Also SOC 238)
4 hours; 4 credits

Comparative, historical perspectives on the male gender role and male domination through social institutions and male gender role socialization.
Issues regarding the relationships of men with each other as well as between men and women. (social science) (P&D)
Prerequisites: ENG 111, COR 100

**WMS 240  Sex Roles and the Law**  
4 hours; 4 credits  
Examination of the legal rights of women and men in employment, marital law, housing, and other areas where sex discrimination can be observed.

**WMS 263  Mythology of Women**  
(Also ENH 223)  
4 hours; 4 credits  
An analysis of myths that continue to influence the way men look at women and women look at themselves. (literature) (P&D)
Prerequisites: ENG 111, ENG 151

**WMS 266  Women in European Literature to the Renaissance**  
(Also LNG 266)  
4 hours; 4 credits  
Women as writers and characters in European literature from classical antiquity to the Renaissance. (literature) (P&D)
Prerequisites: ENG 111, ENG 151

**WMS 267  Women in European Literature after the Renaissance**  
(Also LNG 267)  
4 hours; 4 credits  
Women as writers and characters in European literature from the Renaissance to modern times. (literature) (P&D)
Prerequisites: ENG 111, ENG 151

**WMS 268  Psychology of Women**  
(Also PSY 268)  
4 hours; 4 credits  
A critical review of theories and issues concerning the psychology of women. Theories of gender including biological, psychoanalytic, and social learning, among others will be discussed. Issues particularly relevant to the lives of women and to the psychology of gender will be explored including gender stereotypes, physical and mental health issues, sexuality, personal relationships, and violence against women.
Prerequisite: PSY 100

**WMS 270  Women and the Fine Arts**  
(Also ART 240)  
4 hours; 4 credits  
This course examines the two-fold relationship of women to the fine arts; their role as subjects and as artists. Topics such as the portrayal of women as goddess, mother and housewife, and as artist will be undertaken with a view to the social and historical input and implications of this imagery. The circumstances of women artists from the Renaissance to the present will also be considered. Prerequisites: ENG 111, and WMS 100 or ART 100 or 105 or 104 or permission of the instructor

**WMS 272  Women as Creative Persons**  
4 hours; 4 credits  
Exploration of women’s aesthetic in the visual arts.

**WMS 280  Introduction to Women’s Written Expression**  
(Also ENL 280)  
4 hours; 4 credits  
A course to develop skills in both imaginative and critical writing based primarily on the student’s personal experiences with some analysis of poetry and short stories written by selected women authors.
Prerequisite: ENG 151

**WMS 286  History of American Women**  
(Also HST 286)  
4 hours; 4 credits  
This course introduces students to broad themes in American women’s history from colonial times to the present and focuses on women as historical actors and on the historical forces shaping the construction of womanhood. The course will pay particular attention to differences among women with respect to race, class, ethnicity, and sexual orientation. (social science) (P&D)
Prerequisites: ENG 111, and COR 100 or any college-level history course

**WMS 300  Research Problems in Feminism**  
4 hours; 4 credits  
Review of current feminist research emphasizing specific problems. Students will complete original research projects.

**WMS 306  Community Workshop**  
4 hours; 4 credits  
This course will provide students with an opportunity to learn about and discuss methods for social change, to plan their own fieldwork, and to evaluate its effectiveness.

**WMS 330  Women and Work**  
(Also SOC 330, ANT 331)  
4 hours; 4 credits  
The social and cultural constraints affecting women’s participation and attainments in the world of work. Conflicts between work role expectations and gender role expectations (e.g., femininity, nurturance, maternity). The effects of class background and race/ethnicity on women’s occupations, professions, and incomes. (P&D)
Prerequisites: Any 100-level sociology or anthropology course and any 200-level sociology or anthropology course or permission of the instructor

**WMS 340  Mentoring and Adolescent Development**  
(Also PSY 340)  
3 classroom hours, 2 fieldwork hours; 4 credits  
Introduction to the developmental concerns and clinical skills needed to form mentoring relationships with at-risk adolescent populations. Coursework entails review of the literature on mentoring as well as specific issues regarding adolescent development, with an emphasis on gender identity. Other topics addressed may include race, ethnicity, class, and sexual orientation. Students do on-site mentoring under faculty supervision and have the opportunity to evaluate these fieldwork experiences in class.
Prerequisites: Permission of the instructor, a minimum of 45 credits completed, and successful completion of PSY 226 or PSY 242.
WMS 348  Women Novelists  
(Also ENL 348)  
4 hours; 4 credits  
Significant novels by such women authors as Jane Austen, George Eliot, Elizabeth Gaskell, Willa Cather, Virginia Woolf, Doris Lessing, Jean Rhys.  
(P&D)  
Prerequisite: An ENH 200-level course

WMS 353  The Feminist Challenge in French Literature  
(Also FRN 350)  
4 hours; 4 credits  
A study of the most important women writers in French literature, focusing primarily on selected works of Christine de Pisan, Marguerite de Navarre, Madame de Staël, George Sand, Colette, Simone de Beauvoir, Françoise Sagan, Nathalie Sarraute. Taught in French. (literature)  
Prerequisite: FRN 313 or equivalent

WMS 384  Major Woman Author I  
(Also ENL 384)  
4 hours; 4 credits  
Intensive study of the works of a major woman author. (P&D)  
Prerequisite: An ENH 200-level course

WMS 385  Major Woman Author II  
(Also ENL 385)  
4 hours; 4 credits  
Intensive study of the works of a major woman author. (P&D)  
Prerequisite: An ENH 200-level course

WMS 386  The Recovery of Women's Past  
(Also HST 386)  
4 hours; 4 credits  
An examination of the history of women, beginning with ancient and classical notions of patriarchy in Mediterranean and Near Eastern cultures. Review of Jewish, Christian, and Islamic prescriptions about women as a basis for understanding the changes in modern Western history. Approximately half the course will examine the past two centuries when women's movements, feminisms, gender analysis, and sexual liberation evolved. (P&D)  
Prerequisites: Any 200-level history course and ENG 151

WMS 387  Major Woman Author III  
(Also ENL 386)  
4 hours; 4 credits  
Intensive study of the works of a major woman author. (P&D)  
Prerequisite: An ENH 200-level course

WMS 389  Themes in American Women's History  
(Also HST 389)  
4 hours; 4 credits  
An exploration of selected themes in American women's history from the colonial era to the present. This course, which is organized either around a chronological period, a thematic topic, or a geographical region, also examines women's historical methodology and literature. (P&D)  
Prerequisites: Any 200-level history course and ENG 151

WMS 390  Studies in Women in Literature and the Arts  
(Also ENL 390)  
4 hours; 4 credits  
This course examines women's literature, art, and film as shaped by national culture, historical circumstances, class, and age. (P&D)  
Prerequisite: An ENH 200-level course

WMS 391  Woman as Hero  
(Also ENL 391)  
4 hours; 4 credits  
Selected readings from Greek drama through current literature, revealing the position and experience of women as heroes. (P&D)  
Prerequisite: An ENH 200-level course

WMS 420  Birth and Death  
(Also SOC 420)  
4 hours; 4 credits  
An exploration of the different sociological renderings of birth and death in contemporary societies. Understanding the concepts of birth and death from a sociological perspective offers an excellent opportunity to explore the intersections of race, class, gender, spirituality and age. This course will be heavily geared toward feminist and critical perspectives. It will explore recent technological innovations and their implications for representations of conception, birth, and death.  
Prerequisites: ANT 100 or SOC 100 and a 200-level ANT or SOC course or permission of the instructor

WMS 442  Women's Written Expression  
(Also ENL 442)  
4 hours; 4 credits  
A seminar to develop skills in both imaginative and critical writing, incorporating an analysis and comparison of the stylistic developments of women authors.  
Prerequisites: ENG 111, ENG 151
Research Centers

Academic centers at CSI devoted to research are the Center for Developmental Neuroscience and Developmental Disabilities and the Center for Environmental Science.

Center for Developmental Neuroscience and Developmental Disabilities

Dr. Ekkehart Trenkner, Managing Director
Office: Biological Sciences/Chemical Sciences Building (6S), Room 320

The Center for Developmental Neuroscience and Developmental Disabilities (CDN) is supported jointly with the New York State Institute for Basic Research (IBR). The Center conducts, promotes, and sponsors research, education, and training in the developmental neurosciences with special emphasis on research and educational programs in the specific field of developmental disabilities. The Center provides for collaborative efforts between the College and IBR in offering the Master of Science degree in Neuroscience, Developmental Disabilities, and Mental Retardation, as well as with the University’s doctoral programs in Biology, subprogram in Neuroscience and Physiology, and in Psychology, subprogram in Learning Processes. On the CSI campus, the Center has established research laboratories for investigations in cellular and molecular neuroscience and provides advanced research training for graduate and undergraduate students.

Center for Environmental Science

Dr. Alfred M. Levine, Director
Office: Biological Sciences/Chemical Sciences Building (6S), Room 310

The Center for Environmental Science, established in 1987, provides support for research and policy recommendations concerning environmental problems. One of the major purposes of the Center is to define and solve environmental problems on Staten Island and its environs through research that includes studies of respiratory diseases, toxic and carcinogenic chemicals in the air, and the population at risk of lung cancer.

New York State Registration

The following listing gives the title of each of the undergraduate degree programs of the College and the HEGIS code number under which that program is registered with the New York State Department of Education, Office of Higher Education and the Professions, Cultural Education Center, Room 5B28, Albany, NY 12230, 1.528.474.5851.

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The City University of New York reserves the right, because of changing conditions, to make modifications of any nature in the academic programs and requirements of the University and its constituent colleges without advance notice.
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Appendix

Student Rights and Responsibilities and College Regulations

College of Staten Island of The City University of New York

Appendix i

Campus Behavior Code


Rules and Regulations for the Maintenance of Public Order pursuant to Article 129 A of the Education Law.

The tradition of the university as a sanctuary of academic freedom and center of informed discussion is an honored one, to be guarded vigilantly. The basic significance of that sanctuary lies in the protection of intellectual freedom: the right of professors to teach, of scholars to engage in the advancement of knowledge, of students to learn and to express their views, free from external pressures or interference. These freedoms can flourish only in an atmosphere of mutual respect, civility, and trust among teachers and students, only when members of the university community are willing to accept self-restraint and reciprocity as the condition upon which they share in its intellectual autonomy.

Academic freedom and the sanctuary of the University campus extend to all who share these aims and responsibilities. They cannot be invoked by those who would subvert the intellectual freedom to political ends, or who violate the norms of conduct established to protect that freedom. Against such offenders the University has the right, and indeed the obligation, to defend itself. We accordingly announce the following rules and regulations to be in effect at each of our colleges which are to be administered in accordance with the requirements of due process as provided in the Bylaws of the Board of Higher Education.

With respect to enforcement of these rules and regulations we note that the Bylaws of the Board of Higher Education provide that:

THE PRESIDENT. The president, with respect to his educational unit, shall:

a. Have the affirmative responsibility of conserving and enhancing the educational standards of the college and schools under his jurisdiction;

b. Be the advisor and executive agent of the Board and of his respective College Committee and in such shall have the immediate supervision with full discretionary power in carrying into effect the Bylaws, resolutions and policies of the Board, the lawful resolutions of any of its committees and the policies, programs and lawful resolutions of the several faculties;

c. Exercise general superintending over the concerns, officers, employees and students of his educational unit.

I. Rules:

1. A member of the academic community shall not intentionally obstruct and/or forcibly prevent others from the exercise of their rights. Nor shall he interfere with the institution's educational processes or facilities, or the right of those who wish to avail themselves of any of the institution’s instructional, personal, administrative, recreational, and community services.

2. Individuals are liable for failure to comply with lawful directions issued by representatives of the University/college when they are acting in their official capacities. Members of the academic community are required to show their identification cards when requested to do so by an official of the college.

3. Unauthorized occupancy of University/college facilities or blocking access to or from such areas is prohibited. Permission from appropriate college authorities must be obtained for removal, relocation and use of University/college equipment and/or supplies.

4. Theft from or damage to University/college premises or property, or theft of or damage to property of any person on University/college premises is prohibited.

5. Each member of the academic community or an invited guest has the right to advocate his position without having to fear abuse, physical, verbal, or otherwise from others supporting conflicting points of view. Members of the academic community and other persons on the college grounds shall not use language or take actions reasonably likely to provide or encourage physical violence by demonstration, those demonstrated against, or spectators.

6. Action may be taken against any and all persons who have no legitimate reason for their presence on any campus within the University/college or whose presence on any such campus obstructs and/or forcibly prevents others from the exercise of their rights or interferes with the institution’s educational processes or facilities, or the rights of those who wish to avail themselves of any of the institution’s instructional, personal, administrative, recreational, and community services.

7. Disorderly or indecent conduct on University/college owned or controlled property is prohibited.

8. No individual shall have in his possession a rifle, shotgun or firearm or knowingly have in his possession any other dangerous instrument or material that can be used to inflict bodily harm on an individual or damage upon a building or the grounds of the University/college without the written authorization of such educational institution. Nor shall any individual have in his possession any other instrument or material which can be used and is intended to inflict bodily harm on an individual or damage upon a building or the grounds of the University/college.

9. Any action or situation which recklessly or intentionally endangers mental or physical health or involves the forced consumption of liquor or drugs for the purpose of initiation into or affiliation with any organization is prohibited.

10. The unlawful manufacture, distribution, dispensation, possession, or use of illegal drugs or other controlled substances by University students or employees on University/college premises, or as part of any University/college activities is prohibited. Employees of the University must also notify the College Personnel Director of any criminal drug statute conviction for a violation occurring in the workplace not later than five days after such conviction.

11. The unlawful possession, use, or distribution of alcohol by students or employees on University/college premises or as part of any University/college activities is prohibited.

II. Penalties:

1. Any student engaging in any manner in conduct prohibited under Substantive Rules 1-8 shall be subject to the following range of sanctions as hereafter defined: admonition, warning, censure, disciplinary probation, restitution, suspension, expulsion, ejection, and/or arrest by the civil authorities.

2. Any tenured or non-tenured faculty member, or tenured or non-tenured member of the administrative or custodial staff engaging in any manner in conduct prohibited under Substantive Rules 1-8 shall be subject to the following range of penalties: warning, censure, restitution, fine not exceeding those permitted by law or by the Bylaws of the Board of Higher Education, or suspension with or without pay pending a hearing before an appropriate college authority, dismissal after a hearing, ejection, and/or arrest by the civil authorities. In addition, in the case of a tenured faculty member, or tenured member of the administrative or custodial staff, engaging in any manner in conduct prohibited under substantive Rules 1-11 shall be entitled to be treated in accordance with applicable provisions of the Education Law, or Civil Service Law, or the applicable collective bargaining agreement, or the Bylaws or written policies of The City University of New York.

3. Any visitor, licensee, or inveter, engaging in any manner in conduct prohibited under substantive Rules 1-11 shall be subject to ejection, and/or arrest by the civil authorities.

4. Any organization which authorized the conduct prohibited under substantive rules 1-11 shall have its permission to operate on campus rescinded. Penalties 1-4 shall be in addition to any other penalty provided by law or by The City University Trustees.

Sanctions defined:

A. Admonition: An oral statement to the offender that he has violated university rules.

B. Warning: Notice to the offender, orally or in writing, that continuation or repetition of the wrongful conduct, within a period of time stated in the warning, may cause for more severe disciplinary action.

C. Censure: Written reprimand for violation of specified regulation, including the possibility of more severe disciplinary sanction in the event of conviction for the violation of any university regulation within a period stated in the letter of reprimand.

D. Disciplinary Probation: Exclusion from participation in privileges or extra-curricular university activities as set forth in the notice of disciplinary probation for a specified period of time.

E. Restitution: Reimbursement for damage to or misappropriation of property. Reimbursement may take the form of appropriate service to repair or otherwise compensate for damages.

F. Suspension: Exclusion from classes and other privileges or activities as set forth in the notice of suspension for a definite period of time.

G. Expulsion: Termination of student status for an indefinite period. The conditions of readmission, if any is permitted, shall be stated in the order of expulsion.

H. Complaint to Civil Authorities.

I. Ejection.

Resolved. That a copy of these rules and regulations be filed with the Regents of the State of New York and with the Commissioner of Education. Resolved, That these rules and regulations be incorporated in each college bulletin.

Appendix ii

Computer User Responsibilities

The computer resources of The City University of New York and The College of Staten Island must be used in a manner that is consistent with the University’s educational purposes and environment. All users of computer resources are expected to act in a spirit of mutual respect and cooperation, and to adhere to the regulations for their use set forth in this document. As a user of CUNY computer resources:

- You are required to have a valid authorized account to use computer resources that require one and may use only those computer resources that are specifically authorized. You may use your account only in accordance with its authorized purposes and may not use an unauthorized account for any purpose.

- You are responsible for the safeguarding of your computer account. For a mainframe computer account, you should change your password frequently and should not disclose it to anyone. You should take all necessary precautions in protecting the account, no matter what type of computer resource is being used.

- You may not circumvent system protection facilities.

- You may not knowingly use any systems to produce system failure or degraded performance.

- You may not engage in unauthorized duplication, alteration or destruction of data, programs or software. You may not transmit or disclose data, programs or software belonging to others and may not copy material protected by copyright.

- You may not engage in abusive or improper use of computer hardware. This includes, but is not limited to, tampering with equipment, unauthorized attempts at repairing equipment and...
unauthorized removal of equipment components.
- You may not use computer resources for personal purposes, including, but not limited to, the use of computer resources for profit-making or illegal purposes.
- You may not use computer resources to engage in abuse of computer personnel or other users. Such abuse includes the sending of abusive or obscene messages within CUNY or beyond via network facilities.
- The use of college computer resources may be subject to college regulations, and you are expected to be familiar with those regulations.
- These regulations and college regulations are subject to revision. You are expected to be familiar with any revisions in the regulations. The University reserves the right to monitor, under appropriate conditions, all data contained in the system to protect the integrity of the system and to ensure compliance with regulations.

Any user who is found to be in violation of these rules is subject to the following:
- Suspension and/or termination of computer privileges;
- Disciplinary action by appropriate college and/or University officials;
- Referral to law enforcement authorities for criminal prosecution;
- Other legal action, including action to recover civil damages and penalties.

"Computer Resources" is an inclusive term referring to any and all computing/technology: hardware, software, and access. Hardware includes, but is not limited to, terminals, personal computers, workstations, printers, minis, monitors, cabling, peripheral devices. Software includes, but is not limited to, mainframe shared software, networked software, and stand-alone software residing on personal computers. Access includes, but is not limited to, accounts on timesharing systems as well as access to stand-alone personal computing systems and other relevant technology.

Appendix iii
Immunization Requirement
New York State law requires that students attending postsecondary institutions be immunized against measles, mumps, and rubella. Specifically, all matriculated students born on or after January 1, 1957 must file a form with the Medical Office, signed by a physician, certifying immunity to these diseases prior to registering for more than five credits.

Appendix iv
New York State Education Law Section 224-a
Students unable because of religious beliefs to register or attend classes on certain days:
1. No student shall be expelled from or be refused admission as a student to an institution of higher education for the reason that he/she is unable, because of his/her religious beliefs, to register or to attend classes or to participate in any examination, study, or work requirements on a particular day or days.
2. Any student in an institution of higher education who is unable, because of his/her religious beliefs, to register or to attend classes on a particular day or days shall, because of such absence on the particular day or days, be excused from any examination or any study or work requirements.
3. It shall be the responsibility of the faculty and of the administrative officials of each institution of higher education to make available to each student who is absent from school, because of his/her religious beliefs, an equivalent opportunity to register for classes or to make up any examination, study, or work requirements which he/she may have missed because of such absence on any particular day or days. No fees of any kind shall be charged by the institution for making available to the said student such equivalent opportunity.
4. If registration, classes, examinations, study, or work requirements are held on Friday after four o'clock post meridian or on Saturday, similar or makeup classes, examinations, study, opportunity to register, or work requirements shall be made available on other days, where it is possible and practicable to do so. No special fees shall be charged to the student for these classes, examinations, study, registration, or work requirements held on other days.
5. In effectuating the provisions of this section, it shall be the duty of the faculty and of the administrative officials of each institution of higher education to exercise the fullest measure of good faith. No adverse or prejudicial effects shall result to any student because of his or her availing himself or herself of the provisions of this section.
6. Any student, who is aggrieved by the alleged failure of any faculty or administrative officials to comply with the provisions of this section, shall be entitled to maintain an action or proceeding in the supreme court of the county in which such institution of higher education is located for the enforcement of his/her rights under this section.
6-a. It shall be the responsibility of the administrative officials of each institution of higher education to give written notice to students of their rights under this section, informing them that each student who is absent from school, because of his or her religious beliefs, must be given an equivalent opportunity to register for classes or make up any examination, study, or work requirements which he or she may have missed because of such absence on any particular day or days. No fees of any kind shall be charged by the institution for making available to each student such equivalent opportunity.
7. As used in this section, the term "institution of higher education" shall mean any institution of higher education, recognized and approved by the regents of the University of the State of New York, which provides a course of study leading to the granting of a postsecondary degree or diploma. Such term shall not include any institution which is operated, supervised, or controlled by a church or by a religious or denominational organization whose educational programs are principally designed for the purpose of training ministers or other religious functionaries or for the purpose of propagating religious doctrines. As used in this section, the term "religious belief" shall mean beliefs associated with any corporation organized and operated exclusively for religious purposes, which is not disqualified for tax exemption under section 501 of the United States Code.

Appendix v.
Access to Student Records
The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. See Section 6 below on your right to prevent the disclosure of directory information. The FERPA rights of students are:

(1) The right to inspect and review your education records.
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. If the records are not maintained by the college official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.
All requests shall be granted or denied in writing within 45 days of receipt. If the request is granted, you will be notified of the time and place where the records may be inspected. If the request is denied, you may appeal the decision in writing to the college's FERPA appeals officer. Additional information regarding the appeal procedures will be provided to you if a request is denied.
(2) The right to request the amendment of the student's education records that the student believes are inaccurate or misleading.
You may ask the college to amend a record that you believe is inaccurate or misleading. You should write to the college official responsible for the record, clearly identifying the part of the record you want changed, and specify why it is inaccurate or misleading.
If the college decides not to amend the record as requested by you, you will be notified of the decision and advise you of your right to a hearing before the college's FERPA appeals officer. Additional information regarding the request for amendment and the procedures for hearing will be provided to you when notified of your right to a hearing.
(3) The right to consent to disclosure of personally identifiable information contained in your education records, except to the extent that FERPA authorizes disclosure without consent.
One exception which permits disclosure without consent is disclosure to college officials with legitimate educational interests. A college official is a person employed by the university in an administrative, supervisory, academic or research, or support staff position; a person or company with whom the University has contracted, 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 college official in performing his or her tasks.
A college official has a legitimate educational interest if access is reasonably necessary in order to perform his/her instructional, research, administrative or other duties and responsibilities.
Upon request, the college discloses education records without consent to officials of another college or school in which a student seeks or intends to enroll.
(4) You may appeal the alleged denial of FERPA rights to the:
- General Counsel and Vice Chancellor for Legal Affairs
The City University of New York
555 East 86th Street
New York, NY 10029
- Family Policy Compliance Officer
U.S. Department of Education
600 Independence Avenue, SW
Washington, DC 20202-4605
(5) The right to file a complaint with the U.S. Department of Education concerning alleged failures by the college 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
600 Independence Avenue, SW
Washington, DC 20202-4605
(6) The college will make the following "directory information" concerning current and former students available to those parties having a legitimate interest in the information: name, attendance dates (periods of enrollment), address, telephone number, date and place of birth, photograph, email address, full- or part-time status, enrollment status (undergraduate, graduate, etc.), level of education (credits completed), major field of study, degree enrolled for, participation in officially recognized activities and sports, height and weight of athletic team members, previous school attended, and degrees, honors and awards received. By filing a form with the Registrar's Office, current and former students may request that any or all of this directory information not be released without prior written consent. This form is available in the Registrar's Office and may be filed, withdrawn, or modified at any time.

Appendix vi.
Section 504
Statement of Nondiscrimination
The College of Staten Island is an Equal Opportunity and Affirmative Action Institution. The College does not discriminate on the basis of race, color, national or ethnic origin, religion, age, sex, sexual orientation, transgender, disability, genetic predisposition or carrier status, alienage or citizenship, veteran or marital status in its student admissions, employment, access to programs, and administration of educational policies.
Ms. M. Lin Wu, Esq., is the College Affirmative Action Officer, Coordinator for Title IX, which prohibits sex discrimination in federally assisted education programs, and Coordinator for the Age Discrimination Act, which prohibits age discrimination in federally assisted education programs. Her office is located in the South
The University, through its colleges, will disseminate this policy and take other steps to educate the University illegal under Federal, State, and City laws, and will not be tolerated within the University.

Appendix vii.

Federal Rehabilitation Act

The 1975 Federal Rehabilitation Act as amended (29 U.S.C. 796) and 1990 Americans with Disabilities Act (ADA) require reasonable accommodation and prohibit discrimination on the basis of disability. Section 504 states, in part, that “no otherwise qualified individual with handicaps . . . shall, solely by reason of his/her handicap, be excluded from the participation in, be denied benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance . . . .”

Policies and Procedures for Moving Programs/Activities to Accessible Areas

The campus of the College of Staten Island was designed according to the accessibility guidelines at the time of its construction. However, events such as broken equipment or elevators, or unique needs of a student or College employee with a disability may require reasonable accommodations. The student or employee requesting that a class, academic program, or academic activity on campus be moved to make it accessible should contact the Office of Disability Services, 1P-101, extension 2510. Ms. Margaret Venditti, Director of Disability Services, 1P-101D, extension 2513. It is assigned for administering for the change of site or an accessible area. It is the responsibility of the student or employee to make the Office of Disability Services aware of the need for accommodations to allow adequate time for the change. If an activity or program other than a class or an academic program/activity needs to be moved, the responsibility to ensure accessibility lies with the sponsoring agent.

Informal Procedure for Handling a Complaint

Students and employees may avail themselves of an informal procedure for handling complaints. Ms. Margaret Venditti may be contacted by students at Room 101D Center for the Arts, telephone 1.718.982.2513. Employees may contact Professor Jeffrey Rothman, 504/ADA Compliance Coordinator. His office is located in the Engineering Technologies East Building (5N), Room 203, and his telephone number is 1.718.982.2513 or 3156. Discussions of complaints will be entirely informal and Ms. Venditti and Professor Rothman will attempt an informal resolution.

Formal Procedures for Handling a Complaint

A formal complaint shall be filed with the 504/ADA Coordinator, Professor Jeffrey Rothman. The complaint, which may be transmitted in writing or verbally, should briefly describe the alleged violation of the regulations and contain the name, address, and telephone number of the person filing it. The complaint must be filed within 45 days after the complainant becomes aware of the alleged violation. This requirement may be waived at the discretion of the 504/ADA Committee.

An investigation, as may be appropriate, shall follow a filing of a complaint. The 504/ADA Coordinator may request the assistance of one or more members of the 504/ADA Committee. The investigation will afford all interested persons and their representatives, if any, an opportunity to submit evidence relevant to a complaint. Under the Office for Civil Rights regulations, the College need not process complaints from applicants for employment or from applicants for admission to post-secondary educational institutions.

A written determination as to the validity of the complaint and a description of the resolution, if any, shall be issued by the 504/ADA Coordinator and a copy forwarded to the complainant no later than 60 days after its filing. This requirement extended an additional 45 days at the discretion of the 504/ADA Committee. The 504/ADA Compliance Coordinator shall maintain the files and records of the College relating to the complaints filed.

A complainant may appeal a determination directly to the Office of the President. An appeal shall be made in writing within 15 days after the delivery of the decision. This requirement may be waived in a particular case for good cause by the President, who shall consider the appeal and communicate her/his decision to the complainant within 20 days of receipt.

Appendix viii.

Policy Against Sexual Harassment

Action of The City University Board of Trustees

at the meeting of June 26, 1995:

Policy Statement

It is the policy of The City University of New York to promote a cooperative work and academic environment in which there exists mutual respect for all University students, faculty, and staff. Harassment of employees or students based upon sex is inconsistent with this objective and contrary to the University policy of equal employment and academic opportunity without regard to age, sex, sexual orientation, alienation or citizenship, religion, race, color, national or ethnic origin, handicap, and veteran or marital status. Sexual harassment is illegal under Federal, State, and City laws, and will not be tolerated within the University.

The University, through its colleges, will disseminate this policy and take other steps to educate the University community about sexual harassment. The University will establish procedures to ensure that investigations of allegations of sexual harassment are conducted in a manner that is prompt, fair, thorough, and as confidential as possible under the circumstances, and that appropriate corrective and/or disciplinary action is taken as warranted by the circumstances when sexual harassment is determined to have occurred. Members of the University community who believe themselves to be aggrieved under this policy are strongly encouraged to report the allegations of sexual harassment as promptly as possible. Delay in making a complaint of sexual harassment may make it more difficult for the college to investigate the allegations.

A. Prohibited Conduct

It is a violation of University policy for any member of the University community to engage in sexual harassment or to retaliate against any member of the University community for raising an allegation of sexual harassment, for filing a complaint alleging sexual harassment, or for participating in any proceeding to determine if sexual harassment has occurred.

B. Definition of Sexual Harassment

For purposes of this policy, sexual harassment is defined as unwelcome sexual advances, requests for sexual favors, and other oral or written communications or physical conduct of a sexual nature when:

1. submission to such conduct is made either explicitly or implicitly a term or condition of an individual’s employment or academic standing;
2. submission to or rejection of such conduct by an individual is used as a basis for employment or academic decisions affecting such individual; or
3. such conduct has the purpose or effect of unreasonably interfering with an individual’s work or academic performance or creating an intimidating, hostile or abusive work or academic environment.

Sexual harassment can occur between individuals of different sexes or of the same sex. Although sexual harassment most often exploits a relationship between individuals of unequal power (such as between faculty/staff member and student, supervisior and employee, or tenure and untenured faculty members), it may also occur between individuals of equal power (such as between fellows students or co-workers, or in some circumstances even where it appears that the harasser has less power than the individual harassed (for example, a student sexually harassing a faculty member). A lack of intent to harass may be relevant to, but will not be determinative of, whether sexual harassment has occurred.

C. Examples of Sexual Harassment

Sexual harassment may take different forms. Using a person’s response to a request for sexual favors as a basis for an academic or employment decision is one form of sexual harassment. Examples of this type of sexual harassment (known as quid pro quo harassment) include, but are not limited to the following:

requesting or demanding sexual favors in exchange for employment or academic opportunities (such as hiring, promotions, grades, or recommendations);
submitting unfair or inaccurate job or academic evaluations or grades, or denying training, promotion, or access to any other employment or academic opportunity, because sexual advances have been rejected.

Other types of unwelcome conduct of a sexual nature can also constitute sexual harassment, if sufficiently severe or pervasive that the target does find, and a reasonable person would find, that an intimidating, hostile or abusive work or academic environment has been created. Examples of this kind of sexual harassment (known as hostile environment harassment) include, but are not limited to, the following:

sexual comments, teasing, or jokes;
sexual slurs, demeaning epithets, derogatory statements, or other verbal abuse;
graphic or sexually suggestive comments about an individual’s attire or body;
graphic or sexually suggestive gestures or conduct about sexual activities;
pressure to accept social invitations, to meet privately, to date, or to have sexual relations—sexually suggestive letters or other written materials;
sexual touching, brushing up against another in a sexual manner, graphic or sexually suggestive gestures, cornering, pinching, grabbing, kissing, or fondling; coerced sexual intercourse or sexual assault.

D. Consensual Relationships

Amarous, dating, or sexual relationships that might be appropriate in other circumstances have inherent dangers when they occur between a faculty, member, supervisor, or other member of the University community and any person for whom he or she has a professional responsibility. These dangers can include that a student or employee may feel coerced into an unwarranted relationship because he or she fears that refusal to enter into the relationship will adversely affect his or her education or employment; that conflicts of interest may arise when a faculty member, supervisor, or other member of the University community is required to evaluate the work or make personnel or academic decisions with respect to an individual with whom he or she is having a romantic relationship; that students or employees may perceive that a fellow student or co-worker who is involved in a romantic relationship will receive an unfair advantage; and that if the relationship ends in a way that is not amicable, either or both of the parties may wish to take action to injure the other party.

Faculty members, supervisors, and other members of the University community who have professional responsibility for other individuals, accordingly, should be aware that any romantic or sexual involvement with a student or employee for whom they have such a responsibility may raise questions as to the mutuality of the relationship and may lead to charges of sexual harassment. For the reasons stated above, such relationships are strongly discouraged. For purposes of this section, an individual has "professional responsibility" for another individual at the University if he or she performs functions including, but not limited to, teaching, counseling, grading, advising, evaluating, hiring, supervising, or making decisions or recommendations that confer benefits such as promotions, financial aid or awards or other remuneration, or that may impact upon other academic or employment opportunities.

E. Academic Freedom

This policy shall not be interpreted so as to constitute interference with academic freedom.

F. False and Malicious Accusations
Members of the University community who make false and malicious complaints of sexual harassment, as opposed to complaints which, even if erroneous, are made in good faith, will be subject to disciplinary action.

G. Procedures

The University shall develop procedures to implement this policy. The President of each constituent college of the University, the Deputy Chancellor at the Central Office, and the Dean of the Law School shall have ultimate responsibility for overseeing compliance with this policy at his or her respective unit of the University. In addition, each dean, director, department chairperson, executive officer, administrator, or other person with supervisory responsibility shall be required to report any complaint of sexual harassment to an individual or individual designated in the procedure. All members of the University community are required to cooperate in any investigation of a sexual harassment complaint.

H. Enforcement

There is a range of corrective actions and penalties available to the University for violations of this policy. Students, faculty, or staff who are found, following applicable disciplinary proceedings, to have violated this Policy are subject to various penalties, including termination of employment and permanent dismissal from the University.

Procedures for Implementation of The City University’s Policy Against Sexual Harassment

The following are procedures for the implementation of the Policy Against Sexual Harassment of The City University of New York (hereinafter “Policy”):

1. Responsibilities of the Presidents

The President of each constituent college of The City University of New York, the Deputy Chancellor at the Central Office, and the Dean of the Law School (hereinafter “Presidents” and “colleges”) are responsible for overseeing compliance with the implementation of the Policy. Each President shall:

a. Appoint and provide for appropriate training to a Sexual Harassment Panel (hereinafter “Panel”) to be available to students and employees who wish to make complaints of sexual harassment. The structure of the Panel and respective responsibilities of the various Panel members are set forth in paragraph 2 below.

b. Appoint and provide for appropriate training to a Sexual Harassment Education Committee to be responsible for educating the college community about sexual harassment, through printed materials, workshops, and the like.

c. Disseminate the Policy against sexual harassment, including the names, titles, telephone numbers, and office locations of college Panel members, annually to all students and employees. It is recommended that such information be included in student, faculty, and staff handbooks and newsletters.

d. Submit annually to the Chancellor, or his/her designee, a report regarding sexual harassment, including a summary of the educational activities undertaken at the college during the year and a summary of the number of complaints filed and the general outcomes thereof. An annual summary report will also be provided to the Board of Trustees.

2. Structure and Responsibilities of the Sexual Harassment Panel

a. The Panel shall consist of a Coordinator, a Deputy Coordinator, and four to six additional members, all of whom shall be appointed by and serve at the pleasure of the President. The President must include among those number two instructional staff members selected by the College-wide Personnel and Budget (P&B) Committee, or equivalent personnel committee, from among a list of four to six instructional staff member nominees submitted to it by the President. It is strongly recommended that the President select one of these two Panel members as the Deputy Coordinator. Further, it is strongly recommended that the Panel reflect the diversity of the college, be composed of faculty, administrators, staff, and students, and include the college Affirmative Action Officer.

b. Panel members shall be appointed by the President as described in paragraph 2(a) above for two-year terms and may be reappointed for additional two-year terms, subject to at-will removal by the President at any time. The initial appointments shall be staggered, as follows: half of the Panel members, including the Coordinator; shall be appointed for three-year terms; the remaining members of the Panel, including the Deputy Coordinator, shall be appointed for two-year terms. Thereafter, terms for all Panel members shall be two years. An appointment to fill a vacancy on the Panel shall be made pursuant to the procedures described above, and shall be for the remainder of the unexpired term of the vacancy.

c. All members of the Panel shall be available to receive complaints of sexual harassment from any member of the college community, to explain the University complaint procedures, and to refer individuals to appropriate resources. All Panel members have an obligation to maintain confidentiality to the fullest extent possible.

d. The Panel Coordinator is responsible for reviewing all complaints of sexual harassment; and for making efforts to resolve those complaints informally, if possible. When informal resolution is not possible, the Panel Coordinator and the Deputy Coordinator shall fully investigate the complaint, and the Panel Coordinator shall report to the President (and the Chief Student Affairs Officer, if the accused is a student) the results of the investigation. The Deputy Coordinator may also assume responsibility for the informal resolution or investigation of a complaint to the extent directed by the Panel Coordinator or Deputy Coordinator.

e. In the event that the Panel Coordinator is unavailable, the functions of the Panel Coordinator shall be performed by the Deputy Coordinator.

f. In the event that the complainant, the accused, or a third party believes that any member of the panel, including the Panel Coordinator or Deputy Coordinator, has a conflict of interest or for some other reason should not participate in the informal resolution or investigation of a particular complaint, he or she may ask the Panel Coordinator not to allow the Panel member (including the Panel Coordinator him or herself) to participate. Alternatively, the individual raising the issue may ask the President to direct that a particular Panel member not be involved in the informal resolution or investigation of a particular complaint.

3. Confidentiality

The privacy of individuals who bring complaints of sexual harassment, who are accused of sexual harassment, or who are otherwise involved in the complaint process should be respected, and information obtained in connection with the bringing or investigation, or resolution of complaints should be handled as confidentially as possible. It is not possible, however, to guarantee absolute confidentiality and no such promises should be made by any member of the Panel or other University employee who may be involved in the complaint process.

4. Making a Complaint of Sexual Harassment

Any member of the University community may report allegations of sexual harassment to any member of the Panel. Employees who are covered by collective bargaining agreements may either use their contractual grievance procedures, within the time limits provided in those agreements, to report allegations of sexual harassment, or they may report such allegations directly to a member of the Panel as provided in these Procedures. Members of the University community who believe themselves to be aggrieved under the Policy are strongly encouraged to report the allegations of sexual harassment as promptly as possible. Delay in making a complaint may make it more difficult for the college to investigate the allegations.

5. Responsibilities of Supervisors

a. Each dean, director, department chairperson, executive officer, administrator, or other person with supervisory responsibility (hereinafter “supervisor”) is responsible within his or her area of jurisdiction for the implementation of the Policy and must report to the Panel Coordinator any complaint of sexual harassment made to him or her and any other incidents of sexual harassment of which he or she becomes aware or reasonably believes to exist. Having reported such complaint or incident to the Panel Coordinator, the supervisor should keep it confidential and not disclose it further except as necessary during the complaint process.

b. Each supervisor shall arrange for the posting, in his or her area, of the University policy against sexual harassment, the names, titles, telephone numbers, and office locations of college Panel members, and any other materials provided to him or her by the Sexual Harassment Education Committee for posting.

6. Responsibilities of the University Community-At-Large

Members of the University Community who become aware of allegations of sexual harassment should encourage the aggrieved individual to report the alleged sexual harassment to a member of the Panel.

7. Informal Resolution of Sexual Harassment Complaints

a. Any member of the Panel who receives a complaint of sexual harassment shall promptly advise the Panel Coordinator or, in his or her absence, the Deputy Coordinator of the complaint. Once the Panel Coordinator becomes aware of a complaint of sexual harassment, either through a member of the Panel or through another source, he or she shall conduct a preliminary investigation and make efforts, whenever possible, to resolve the complaint informally, i.e., by an arrangement that is acceptable to the complainant, the accused, and the college. Examples of informal resolutions include, but are not limited to:

- arranging for a workshop on sexual harassment to be conducted for the unit, division, or department in which the sexual harassment is alleged to have occurred;
- having a supervisor or a member of the Panel speak to the accused regarding the allegations of sexual harassment and counsel the accused as to appropriate action;
- arranging for a meeting between the complainant and the accused, with a third party present, to discuss and resolve the allegations;
- having the accused write a letter of apology.

Whenever possible, an informal resolution should be acknowledged in writing, signed by the complainant. The accused should also be asked to sign such an acknowledgment.

b. If no informal resolution of a complaint is achieved following the preliminary investigation, the Panel Coordinator and the Deputy Coordinator shall conduct a formal investigation of the complaint. It is recognized, however, that complaints may be resolved by mutual agreement of the complainant, the accused, and the college at any time in the process.

8. Investigations of Sexual Harassment Complaints

While the investigation of sexual harassment complaints may vary depending upon the nature of each case, it is recommended that an investigation include the following, to the extent feasible:

a. The Panel Coordinator and the Deputy Coordinator should interview the complainant. The complainant may request that the Panel member to whom he or she originally brought the complaint be present at the interview. The complainant should be informed that an investigation is being commenced, that interviews of the accused and possibly other people will be conducted, and that the President (or the Chief Student Affairs Officer, if the accused is a student) will determine what action, if any, to take after the investigation is completed. A written statement, signed and dated by the complainant, should be obtained, which sets forth the particulars of the complaint, including dates and places, as well as the impact of the alleged harassment. The complainant should also be asked for the names of potential witnesses or others who may have relevant information.

b. The Panel Coordinator and the Deputy Coordinator should interview the accused. The accused should be advised that a complaint of sexual harassment has been received, that an investigation has begun, which may include interviews with third parties, and that the President (or the Chief Student Affairs Officer, if the accused is a student) will determine what action, if any, to take after the investigation is completed. The accused should be advised of the nature of the allegations against him or her and be given an opportunity to respond. A written
Appendix ix

Campus Safety and Security

The main Campus Public Safety office is located in the North Administration Building (2A), Room 108. Two satellite desks are located in the lobbies of the Campus Center and the Library. Campus Public Safety officers are on duty at the main gate and patrol the campus 24 hours a day. Emergency pull stations, identified by a blue light, are located throughout the campus, indoors and outdoors. The Office of Public Safety is charged with the maintenance of security and personal safety of all members of the College community and visitors while on campus. All students and members of the faculty and staff are required to have a valid, updated college identification card in their possession while on campus.

Crime Awareness and Campus Security Act

The Federal Crime Awareness and Campus Security Act of 1990 mandates that every college in the United States publish the incidents of crime reported on its campus. Following is the current CSI report.

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* Arrests only

No Smoking Policy

The College complies with the City University policy regarding smoking which prohibits smoking inside all facilities of the College.

Members of the Sexual Harassment Panel

Prof. Gloria Garcia, Coordinator (SEED)
South Administration Building (1A), Room 112, Ext. 2415

Prof. Deborah Sturm, Deputy Coordinator (Computer Science)
Computer Science/Engineering Science and Physics Building (1N), Room 207, Ext. 2948

Prof. Lisa Moore, Department of Sociology, Anthropology, and Social Work
Psychology/ Sociology, Anthropology, and Social Work Building (4S), Room 205, Ext. 3779

Dr. Allyson Straker-Banks, Instructional Support Services
Library (1N), Room 117, Ext. 4241

Ms. M. Lin Wu, Esq. (Affirmative Action Officer, Title IX Coordinator, and Coordinator for the Age Discrimination Act), South Administration Building (3A), Room 103, Ext. 2250.

Members of the Sexual Harassment Education Committee

Prof. Sonali Brandler, Department of Sociology, Anthropology, and Social Work
Psychology/ Sociology, Anthropology, and Social Work Building (4S), Room 224, Ext. 3769

Ms. Kathleen Gibson, Department of Education
Education Building (3S), Room 208, Ext. 3718

Students and members of the faculty and staff are required to have a valid, updated college identification card in their possession while on campus.

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<td>Arson</td>
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<td>Liquor Violation*</td>
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<td>Drug Abuse*</td>
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<tr>
<td>Weapons Possession*</td>
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* Arrests only

No Smoking Policy

The College complies with the City University policy regarding smoking which prohibits smoking inside all facilities of the College.

Members of the Sexual Harassment Panel

Prof. Gloria Garcia, Coordinator (SEED)
South Administration Building (1A), Room 112, Ext. 2415

Prof. Deborah Sturm, Deputy Coordinator (Computer Science)
Computer Science/Engineering Science and Physics Building (1N), Room 207, Ext. 2948

Prof. Lisa Moore, Department of Sociology, Anthropology, and Social Work
Psychology/ Sociology, Anthropology, and Social Work Building (4S), Room 205, Ext. 3779

Dr. Allyson Straker-Banks, Instructional Support Services
Library (1N), Room 117, Ext. 4241

Ms. M. Lin Wu, Esq. (Affirmative Action Officer, Title IX Coordinator, and Coordinator for the Age Discrimination Act), South Administration Building (3A), Room 103, Ext. 2250.

Members of the Sexual Harassment Education Committee

Prof. Sonali Brandler, Department of Sociology, Anthropology, and Social Work
Psychology/ Sociology, Anthropology, and Social Work Building (4S), Room 224, Ext. 3769

Ms. Kathleen Gibson, Department of Education
Education Building (3S), Room 208, Ext. 3718
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**Travel Information**

2800 Victory Boulevard

**Victory Boulevard buses - St. George/Travis**
S62 - frequent weekday service and service every 30 minutes on Saturdays and Sunday.
From 8:30 a.m. to 11:30 p.m. to the ferry, and from 7:30 a.m. to 12:20 a.m. from the ferry; the S62 makes a stop inside the Victory Boulevard entrance to the campus.
S92 - commuter schedule from Travis every 15 minutes from 6:30 to 7:42 a.m. and from St. George every 15 minutes from 4:50 to 6:00 p.m.

**Richmond Avenue buses - North/South route**
The Richmond Avenue and Victory Boulevard stop is two blocks from the entrance to the campus.
S44 - frequent service on weekdays and runs every 30 minutes on Saturday and Sunday.
S59 - every 30 minutes every day.

**Forest Hill Road buses - South Shore/St. George route**
S61 - frequent daily and weekend service.
S91 - commuter schedule weekdays.

**Brooklyn buses**
S53 - Bay Ridge - 95th Street/Port Richmond
  Frequent weekday service; stops at Victory Boulevard for transfer to S62 or S92.
S93 - 86th Street and 4th Avenue/College of Staten Island campus
  Limited service Monday-Friday
  Departs 86th Street at 6:55am, 7:55am, 8:55am
  Departs CSI 3:00pm, 5:00pm, 7:00pm.

**Manhattan/Staten Island Express bus**
X-10 Express bus - frequent daily schedule from 57th Street and 3rd Avenue to Victory Boulevard and the return route; stops at the campus main entrance.

Call 1.718.330.1234 for information and schedules for local buses and Manhattan/Staten Island express buses.

By automobile from the Staten Island Expressway (Interstate 278)
Traveling westbound on the Staten Island Expressway from the Verrazano-Narrows Bridge, take the Victory Boulevard Exit (#10). At Victory Boulevard, turn left and continue under the Expressway and turn left into the campus at the first traffic light. Eastbound on the SI Expressway, take the Victory Boulevard Exit (#8) and turn left onto Victory Boulevard, and turn right at the traffic light to enter the campus.

**Parking**
Students are sold permits for on-campus parking at the time of registration on a first-come, first-served basis.
Speed limit: 25 m.p.h.

**Transportation within the Campus**
Loop Bus - leaves the main gate approximately every ten minutes for a trip around the campus with regular stops; in operation during regular class schedule with adjusted hours for advisement and registration periods.

**Van for Disabled**
Dispatched by the Office of Operational Services or Security as requested (extension 3220 or 2112).
NORTH ACADEMIC QUADRANGLE
Campus Center .................1C
Computer Science ............1N
Engineering Sciences and Physics
History .......................2N
Political Science,
Economics, and Philosophy
Business ....................3N
Engineering Technologies—West
..............................................4N
Engineering Technologies—East
..............................................5N
Sports and Recreation Center .1R
The Children’s Center ........2R
Center for the Arts ..........1P

SOUTH ACADEMIC QUADRANGLE
Library .......................1L
Mathematics ..................1S
English, Speech, and ........2S
World Literature
Modern Languages
Education ....................3S
Psychology ....................4S
Sociology, Anthropology, and
Social Work
Marcus Hall .................5S
Nursing
Biological Sciences ..........6S
Chemical Sciences

ADMINISTRATION
South Administration ..........1A
North Administration ..........2A
West Administration ..........2A
Campus Services and .........3A
Central Plant
Statement of Nondiscrimination

The College of Staten Island is an Equal Opportunity and Affirmative Action institution. The College does not discriminate on the basis of race, color, national or ethnic origin, religion, age, sex, sexual orientation, transgender, disability, genetic predisposition or carrier status, alienage or citizenship, veteran or marital status in its student admissions, employment, access to programs, and administration of educational policies.

Ms. M. Lin Wu, Esq. is the College Affirmative Action Officer, Coordinator for Title IX, which prohibits sex discrimination in federally assisted education programs, and Coordinator for the Age Discrimination Act, which prohibits age discrimination in federally assisted education programs. Her office is located in the South Administration Building (1A), Room 103, and her telephone number is 1.718.982.2250.

Professor Jeffrey Rothman, Physical Therapy Program, and Ms. Margaret Venditti, Coordinator of Disabilities Services, are the College coordinators for the Americans with Disabilities Act and Section 504, which prohibit discrimination on the basis of disability. Professor Rothman’s office is located in Building 5N, Room 207, and his telephone number is 1.718.982.3153. Ms. Venditti’s office is located in the Center for the Arts (1P), Room 101, and her telephone number is 1.718.982.2513.

For information, telephone:

College of Staten Island 1.718.982.2000
Office of Student Recruitment/Admissions 1.718.982.2010
Office of Financial Aid 1.718.982.2030
Public Safety (Office) 1.718.982.2116
(Emergency) 1.718.982.2111
Affirmative Action Office/Title IX 1.718.982.2250
CSI Website: www.csi.cuny.edu

The City University of New York reserves the right, because of changing conditions, to make modifications of any nature in the academic programs and requirements of the University and its constituent colleges without advance notice. Tuition and fees set forth in this publication are similarly subject to change by the Board of Trustees of The City University of New York. The University regrets any inconvenience this may cause.
This Curriculum Supplement contains information about new courses, changes in courses, and changes in degree requirements implemented by the College since the printing of the current undergraduate catalog (date 2003-2005) effective fall 2004.
NEW UNDERGRADUATE COURSES

ENH 230 Introduction to Language
4 hours; 4 credits
This course is an introduction to the study of language. It explores the following relationships: language and society, language and culture, language and thought, language and biology.
Prerequisite: ENG 151
Meets the general education requirement in Textual, Aesthetic, and Linguistic Analysis.

MKT 360 Internet Marketing
4 hours; 4 credits
This course is an introduction to the use of the Internet and electronic commerce as a marketing tool. A major team project will require students to develop a marketing plan along with a Website for a new or existing product or service. Data collection as well as legal and ethical issues, including security, surrounding commerce in a Web-mediated environment will be discussed.
Prerequisites: MKT 111, BUS 150/CSC102 or permission of the instructor

SPN 352 Studies in Spanish American Literature and Culture I
4 hours; 4 credits
Intensive study of selected topics in Spanish American literature and culture. The specific emphasis will vary from semester to semester and will be announced in the Schedule of Classes.
Prerequisite: SPN 313

SPN 452 Studies in Spanish American Literature and Culture II
4 hours; 4 credits
Intensive study of selected topics in Spanish American literature and culture. The specific emphasis will vary from semester to semester and will be announced in the Schedule of Classes.
Prerequisite: SPN 313

SPN 359 Studies in Peninsular Spanish Literature and Culture I
4 hours; 4 credits
Intensive study of selected topics in Peninsular Spanish literature and culture. The specific emphasis will vary from semester to semester and will be announced in the Schedule of Classes.
Prerequisite: SPN 313

SPN 459 Studies in Peninsular Spanish Literature and Culture II
4 hours; 4 credits
Intensive study of selected topics in Peninsular Spanish literature and culture. The specific emphasis will vary from semester to semester and will be announced in the Schedule of Classes.
Prerequisite: SPN 313
Changes to Courses:
Changes are in bold type

ACC 114 Introduction to Accounting I
Prerequisite: MTH 030 or an appropriate score on the CUNY Mathematics Assessment Test, and successful completion of the C/ACT Writing Skills test, and C/ACT Reading Sample Test or the equivalent.

CIN 210 Film Theory
Study of film theory and its relation to international cinema of the silent and sound periods. Readings include the major theoretical works of various critics, philosophers, and filmmakers. Required for the Cinema Studies major.

CIN 220 Film History
Survey history of world cinemas. The course will consider research practices, historiography, film style, and industrial models of production; viewing and discussion of films by various American and international filmmakers. Required for the Cinema Studies major.

CSC/MTH 228 Discrete Mathematical Structures for Computer Science
An intermediate-level programming and discrete mathematics course where concepts of discrete structures will be applied to computer science. Topics include elementary set theory, logic, functions, relations, Boolean algebra, elements of graph theory, matrix representation of graphs, and matrix manipulations. Programming projects will be related to mathematical topics. Compound data types, recursive programming and mathematical induction will be introduced.

CSC 382 Analysis of Algorithms
Algorithm development, including running time analysis and correctness arguments. Topics include: asymptotic notation and complexity analysis; use of mathematical techniques to determine the computational complexity of algorithms such as sorting and searching. The course provides an introduction and analysis of elementary graph algorithms and programming techniques such as greedy, backtracking, and dynamic programming. Projects will be assigned to correlate the computational complexity and real-time execution time of the algorithms.
Prerequisites: CSC 326 and MTH 311

CSC 430 Software Engineering
3 class hours, 2 laboratory hours; 4 credits
CSC 470 Introductory Computer Graphics

Introduction to the basic concepts and techniques of interactive computer graphics including the hardware and software components of computer graphics systems and mathematical handling of graphical objects. Algorithms for two-dimensional and three-dimensional graphics: windowing, clipping, and transformations. Viewing with parallel and perspective projections. Possible additional topics include: curves and surface modeling; realistic rendering (shading with illumination and material, shadowing, reflection, and surface texturing).

EDC 217 Affective Development of the Child
An examination of the relationship between the infant and the primary caretaker, and its importance in personality development. Influences on the primary relation, broadening of affectional ties; comparison of child rearing across and within cultures. Students learn to use a variety of observational approaches and recording techniques to increase their understanding of children who are developing normally and children with disturbances in development. School and community partnerships are explored for their emotional impact on children. Diverse infant and toddler programs are studied through 20 hours of fieldwork.

EDC 218 Language Development through an Integrated Curriculum
Prerequisites: EDC 215 and EDC 216, or EDE 200 and EDE 260, and a GPA of 2.75 or above. Corequisite: EDC 350

EDC 350 Fieldwork in Preschool Classrooms
This field-based course introduces students to preschool classrooms in diverse and inclusive settings. This course connects practice with prior education coursework and is especially related to the content of EDC 218 Language Development through an Integrated Curriculum. In addition, students are given opportunities both to observe and to practice long- and short-term curriculum planning that reflects specific provisioning for children with special needs and linguistically diverse children. Students also practice a variety of observational approaches and recording techniques in order to assess the development of individual children. Students are observed interacting with small and larger groupings of children. Alcohol, tobacco, and drug abuse, and other dangers to children are discussed within the context of pre-natal and infant development with specific attention paid to the teacher’s role and responsibilities. Students will be in attendance at the assigned school three mornings a week for a full semester, which accounts for 150 hours of fieldwork prior to student teaching. Grade Pass (P) or Fail (F).
Prerequisites: EDC 215, EDC 216, and a GPA of 2.75 or above
Corequisite: EDC 218
EDC 360  **Workshop in Social Studies and the Expressive Arts**
An investigation of how multicultural imaginative historical narratives can be used as an ongoing structure within early primary grades to foster students’ intellectual development in diverse and inclusive educational settings. To create these instructional materials, students will use the Internet and other media for educational applications. **Formal and informal assessment tools as well as classroom management strategies for whole class and small group interaction are presented.** Particular attention is paid to fostering **community relations.** The course will offer students opportunities to develop the skills of history storytelling and facilitating discussions that **provoke children’s imaginative and problem solving responses.** Opportunities will also be given to develop history storytelling units that offer young children multiple media to represent thought. **Workshops in creative dramatics and the plastic arts are explored to promote young children’s expressiveness and creativity.**

EDC 440  **Student Teaching in Kindergarten and Early Primary Classrooms**
Practice and problem solving in **kindergarten and early primary classrooms.** Designed for public schools. Students will be in attendance at the assigned school **25 hours a week for a complete semester** for a minimum of **350 hours (175 hours in a kindergarten classroom and 175 hours in an early primary grade classroom).** Students will be observed provisioning and interacting with small and larger groupings of children. Application for a student teaching assignment must be completed and filed with the Student Teaching Office the semester preceding the semester in which the student plans to student teach. Students must also submit three letters of recommendation from full-time Education faculty. Graded Pass (P) or Fail (F).

**ELT 101  Introduction to Measurements and Instrumentation**
(Formerly ENT 101)

**ELT 224  Electrical Circuit Analysis**
Pre- or corequisites: MTH 030 and either ELT 101 or ELT 102; or MTH 123

**ENL 302  Oral Interpretation of Literature**
Pre- or corequisite: An ENH 200-level course

**ENS 100  Introduction to Engineering**
Introduction to **engineering** disciplines, organizations, and ethics; basic engineering parameters; engineering standards and codes, principles for engineering data acquisition and presentations, and effective experimentation; engineering statistics and data analysis; problem solving and case studies illustrating engineering solutions.
ENS 110    Engineering Graphics
(Formerly ENT 110)
Prerequisite: **Appropriate scores on the CUNY Skills Assessment Tests**

ENS 220    Introduction to Computer Engineering
Prerequisite: **ENS 100**
Pre- or corequisite: **CSC 126**

ENS 250    Engineering Mechanics
Prerequisites: **ENS 100; PHY 120 and PHY 121, or PHY 230**
Pre- or corequisite: **MTH 233**

ENS 241    Electrical and Electronic Circuits
(Formerly ENS 340)
Analysis of linear time invariant passive and active circuits. Kirchoff's laws, Thevenin and Norton equivalents, node and mesh analysis. **Signal waveforms, diodes, bipolar, and MOS transistors.** **Transistor-level digital circuit analysis and design.** Analysis and design of single-stage amplifiers. **Operational amplifiers and their applications.**
Prerequisites: **ENS 100, PHY 160, and MTH 232**

ENS/PHY 356    Theory of Electromagnetic Radiation
Prerequisites: PHY 160 and **CSC 126**
Pre- or corequisite: **MTH 330**

ENS 471    Control Systems
(Formerly ENS 370)
Prerequisites: **ENS 241, ENS 310, ENS 336, and MTH 330**

ENS/PHY 485    Properties of Materials
(Formerly ENS/PHY 385)

ENS 420    Analog and Digital Systems Design
Prerequisite: **ENS 220 and ENS 241**

ENS 422    Signals and Noise
Prerequisite: **ENS 241 and senior-level status or permission of instructor**
ENS 331  Digital Signal Processing  
(Formerly ENS 430)  
Prerequisites: ENS 221 or CSC 347; and MTH 232

ENS 432  Digital and Analog Communication Systems  
Prerequisite: ENS 241 and senior-level status, or permission of instructor

ENS 341  Electrical Network Analysis  
(Formerly ENS 440  Network Theory)  
Power and three-phase circuits, power transmission, and transformers. Review of Convolution.  
Prerequisite: ENS 241  
Pre- or corequisite: MTH 330

ENS 436  Electric Energy Systems  
Prerequisite: ENS 241  
Pre- or corequisite: MTH 330

HST 213  Chinese Civilization  
For History majors and minors, this is designated as either a pre-1700 History course or a World history course.

HST 290  The West and the World: Africa Encounters Europe  
For History majors and minors, this is designated as a World history course.

HST 291  The West and the World: The Americas Encounter Europe  
For History majors and minors, this is designated as a World history course.

HST 292  The West and the World: Cross-Cultural Encounters in the Medieval World  
For History majors and minors, this is designated as a World history course.

MGT 210  Management Process  
(Formerly MGT 310 )

MTH/  
CSC 228  Discrete Mathematical Structures for Computer Science  
An intermediate-level programming and discrete mathematics course where concepts of discrete structures will be applied to computer science. Topics include
elementary set theory, logic, functions, relations, Boolean algebra, elements of graph theory, matrix representation of graphs, and matrix manipulations. Programming projects will be related to mathematical topics. Compound data types, recursive programming, and mathematical induction will be introduced.

**PHY/ENS 485**  
Properties of Materials  
*(Formerly ENS/PHY 385)*

**POL 229**  
Law, Justice, and Politics  
*(Formerly LGS 230)*

4 hours; 4 credits  
The course looks at law as a political instrument, politics in legislation, structure of politics, including government and political parties; surveys the basic documents of the American judicial system. Current political events, national and local, are examined in the light of legal principles.  
**Prerequisites:** ENG 111, COR 100

**POL 237**  
Criminal Courts and Defendants’ Rights  
*(Formerly LGS 260)*

4 hours; 4 credits  
This course deals with the purposes and aims of the criminal justice and the criminal court system. It examines law enforcement arraignments and bail, the legal profession, plea bargaining, and sentencing. The structure, concepts, and theories of criminal law are studied and a comparison is made between the adversary and inquisitorial systems.  
**Prerequisites:** ENG 111, COR 100

**CHANGES IN DEGREE REQUIREMENT**

Changes shown in bold type

**BIOLOGY**

Biology BS

addition of courses to the offerings that fulfill the requirements for the major.

Option I — Biology

Major Requirements: 63 credits  
A minimum grade of C is required for a biology course to be used to satisfy a prerequisite for a biology course required for the major requirements for the BS in Biology.
A. Required courses

- BIO 205 General Physiology 4 credits
- BIO 312 Genetics 4 credits
- BIO 322 Evolution 4 credits
- BIO 352 Cell Biology 4 credits

or

- BIO 360 Ecology 4 credits

B. One of the following courses: 4 credits

- BIO 370 Biochemistry
- BIO 372 Cell Biochemistry
- BIO 213 Comparative Vertebrate Anatomy
- BIO 215 Invertebrate Zoology and Paleontology
- BIO 228 Botany

C. One advanced six-hour laboratory course from the following: 3 credits

- BIO 424 Molecular Biology and Biotechnology Laboratory
- BIO 450 Experimental Methods in Animal Physiology
- BIO 452 Experimental Methods in Behavioral Biology
- BIO 454 Advanced Methods in Cell Biology
- BIO 456 Experimental Methods in Ecology
- BIO 458 Experimental Methods in Cell Biochemistry
- BIO 460 Experimental Methods in Advanced Genetics

D. Four courses selected from the following: 12 credits

Courses not selected in groups A, B, or C and these additional courses:

- BIO 222 Field Biology
- BIO 240 Biology of Disease
- BIO 314 General Microbiology
- BIO 318 Histology
- BIO 324 Developmental Biology
- BIO 325
- MDT 325 Diagnostic Molecular Biology

- BIO 326 Introduction to Bioinformatics and Genomics
- BIO 327 Molecular Biology
- BIO 332 Advanced Physiology
- BIO 338 Behavioral Biology
- BIO 365 Principles of Neurobiology

- BIO/ MTH 415 Mathematical Biology
- BIO 420 Comparative Endocrinology

- BIO 425 Computational Molecular Biology
- BIO 428 Plant Physiology
BIO 434 Comparative Physiology
BIO 442 Immunology

E. Required related science courses:

- PHY 116 Physics I
- PHY 156 Physics II
- or (with appropriate mathematics background)
  - PHY 120 General Physics I
  - PHY 121 General Physics I Laboratory
  - PHY 160 General Physics II
  - PHY 161 General Physics II Laboratory 8 credits
- CHM 141 General Chemistry I 3 credits
- CHM 121 General Chemistry I Lab 1 credit
- CHM 142 General Chemistry II 3 credits
- CHM 127 General Chemistry II Lab 1 credit
- CHM 250 Organic Chemistry I 4 credits
- CHM 256 Organic Chemistry II 4 credits

Electives: 18-28 credits
Total Credits Required: 128

Option II — Biology/Adolescence Education, grades 7-12: no change

Option III — Biology/Bioinformatics

Major Requirements: 82-83 credits

A minimum grade of C is required for a biology course to be used to satisfy a prerequisite for a biology course required for the major requirements for the BS in Biology/Bioinformatics.

A. Required Courses
- BIO 205 General Physiology 4 credits
- BIO 312 Genetics 4 credits
- BIO 322 Evolution 4 credits
- BIO 352 Cell Biology 4 credits
  - or
  - BIO 360 Ecology 4 credits

B. All of the following courses:
- BIO 327 Molecular Biology 4 credits
- BIO/
  - CHM 370 Biochemistry I 4 credits
- BIO/
  - CHM 376 Biochemistry II 4 credits
- BIO 326 Introduction to Bioinformatics and Genomics 4 credits
- MTH/
  - BIO 415 Mathematical Biology 4 credits
C. One advanced six-hour laboratory course from the following: 3 credits

**BIO 424 Molecular Biology and Biotechnology Laboratory**

- BIO 450 Experimental Methods in Animal Physiology
- BIO 452 Experimental Methods in Behavioral Biology
- BIO 454 Advanced Methods in Cell Biology
- BIO 456 Experimental Methods in Ecology
- BIO 458 Experimental Methods in Cell Biochemistry
- BIO 460 Experimental Methods in Advanced Genetics

D. One elective from the following: 3-4 credits

Courses not selected in groups A or C and these additional courses:

- BIO 213 Comparative Vertebrate Anatomy
- BIO 215 Invertebrate Zoology and Paleontology
- BIO 228 Botany
- BIO 240 Biology of Disease
- BIO 314 General Microbiology
- BIO 318 Histology
- BIO 324 Developmental Biology
- BIO 325/ MDT 325 Diagnostic Molecular Biology
- BIO 332 Advanced Physiology
- BIO 338 Behavioral Biology
- BIO 365 Principles of Neurobiology
- BIO 372 Cell Biochemistry

**BIO 425 Computational Molecular Biology**

- BIO 428 Plant Physiology
- BIO 442 Immunology

E. Required related science courses:

- CSC 220 Computers and Programming 4 credits
- CSC 228 Discrete Mathematical Structures 4 credits
- CSC 326 Information Structures 4 credits
- CSC 424 Database Management 4 credits
- PHY 116 Physics I
- PHY 156 Physics II
- or (with appropriate mathematics background)
- PHY 120 General Physics I
- PHY 121 General Physics I Laboratory
- PHY 160 General Physics II
- PHY 161 General Physics II Laboratory 8 credits
- CHM 141 General Chemistry I 3 credits
- CHM 121 General Chemistry I Lab 1 credit
CHM 142  General Chemistry II  3 credits
CHM 127  General Chemistry II Lab  1 credit
CHM 250  Organic Chemistry I  4 credits
CHM 256  Organic Chemistry II  4 credits
Electives: 0-4 credits
Total Credits Required: 128

ENGINEERING SCIENCE
Engineering Science AS

Core Requirements: 41 credits

ENS 100  Introduction to Engineering  2 credits
ENS 110  Engineering Graphics  2 credits
ENS 220  Introduction to Computer Engineering  4 credits
ENS 241  Electrical and Electronic Circuits  4 credits
ENS 250  Engineering Mechanics  3 credits
CSC 126  Introduction to Computer Science  4 credits
MTH 229  Calculus Computer Laboratory
MTH 230  Calculus I with Pre-Calculus
or
MTH 231  Analytic Geometry and Calculus I
MTH 232  Analytic Geometry and Calculus II
MTH 233  Analytic Geometry and Calculus III  10 credits
PHY 120  General Physics I  3 credits
PHY 121  General Physics I Laboratory  1 credit
PHY 160  General Physics II  3 credits
PHY 161  General Physics II Laboratory  1 credit
CHM 141  General Chemistry I  3 credits
CHM 121  General Chemistry I Laboratory  1 credit
Electives: 3
Total Credits Required: 60

Engineering Science BS

Pre-Major Requirements: 41 credits
Students beginning the engineering science program as freshmen should complete the following requirements:

ENS 100  Introduction to Engineering  2 credits
ENS 110  Engineering Graphics  2 credits
ENS 220  Introduction to Computer Engineering  4 credits
ENS 241 Electrical and Electronic Circuits 4 credits
ENS 250 Engineering Mechanics 3 credits
CSC 126 Introduction to Computer Science 4 credits
MTH 229 Calculus Computer Laboratory
MTH 230 Calculus I with Pre-Calculus
or
MTH 231 Analytic Geometry and Calculus I
MTH 232 Analytic Geometry and Calculus II
MTH 233 Analytic Geometry and Calculus III 10 credits
PHY 120 General Physics I 3 credits
PHY 121 General Physics I Laboratory 1 credit
PHY 160 General Physics II 3 credits
PHY 161 General Physics II Laboratory 1 credit
CHM 141 General Chemistry I 3 credits
CHM 121 General Chemistry I Laboratory 1 credit

Major Requirements: 62-63 credits
MTH 330 Applied Mathematical Analysis I 4 credits
PHY 240 Waves and Modern Physics 3 credits
MTH 311 Probability and an Introduction to Mathematical Statistics
or
MTH 331 Applied Mathematical Analysis II 4 credits
ENS 221 Digital Electronics Laboratory 2 credits
ENS 310 Thermodynamics 4 credits
ENS 362 Microprocessors 4 credits
ENS 336 Computer-Aided Engineering 4 credits
ENS 383 Electrical Properties of Materials
or
ENS 384 Mechanical Properties of Materials 3 credits
or
ENS 485 Properties of Materials 4 credits
ENS 331 Digital Signal Processing
or
ENS 450 Fluid Mechanics 4 credits
CSC 326 Information Structures
or
ENS 341 Electrical Network Analysis
or
ENS 380 Mechanics of Solids 4 credits
CSC 332 Operating Systems I
or
ENS 356 Theory of Electromagnetic Radiation
or
ENS 316 Dynamics
ENS 471 Control Systems
ENS 480 Advanced Engineering Design

4 credits
4 credits
4 credits

At least two of the following laboratories:

ENS 309 Basic Measurements Laboratory
or
ENS 359 Mechanical Materials Laboratory
ENS 439 Systems Laboratory
or
ENS 459 Applied Mechanics Laboratory

2 credits
2 credits

Four credits of technical electives approved by an engineering science adviser

4 credits

At least six credits of advanced ENS electives

6 credits

The total number of ENS credits must be at least 58 as approved by an engineering science adviser.

Computer Engineering Specialization:

Courses recommended as fulfilling the pre-major and major requirements include:
CSC 326, ENS 362, ENS 331, ENS 356, ENS 309, CSC 332, ENS 439, ENS 383, or ENS 485; and courses fulfilling the technical electives chosen from among: CSC 330, CSC 430, CSC 435, CSC 480, CSC 482, CSC 490; ENS 341, ENS 420, ENS 422, ENS 432, ENS 446.

Electrical Engineering Specialization:

Courses recommended as fulfilling the pre-major and major requirements include:
MTH 331, ENS 331, ENS 356, ENS 309, ENS 362, ENS 341, ENS 439, ENS 383, or ENS 485; and courses fulfilling the technical electives chosen from among: ENS 420, ENS 422, ENS 432, ENS 446, ENS 434, ENS 436, ENS 438, ENS 359, ENS 459.

Mechanical Engineering Specialization:

Courses recommended as fulfilling the pre-major and major requirements include:
ENS 316, MTH 331, ENS 380, ENS 362, ENS 450, ENS 359, ENS 384, or ENS 485, ENS 459; and courses fulfilling the technical electives chosen from among: ENS 350, ENS 410, ENS 416, ENS 422, ENS 434, ENS 436, ENS 438, ENS 470, ENS 309, ENS 439.

Electives: 0-7 credits
Total Credits Required: 133
Changes to major requirements in three options.

Writing Option
Students majoring in English with an option in writing must complete 36 credits of courses in English beyond the general education requirements. These courses must be at the 300 or 400 level except up to eight credits may be in 200-level ENL writing courses. The 36 credits must include 20 credits in such writing courses and 16 additional credits, 12 of which must be in Literature at the ENL level, and the remaining four of which must be in Literature (at the ENH or ENL level) or in Linguistics (ENL). Literature courses must be from at least two of the Coverage Areas listed under Literature Option.

Dramatic Literature Option
At least 24 credits of courses in dramatic literature (DRA 260, 261, 460; and DRA/ENG, DRA/ENL, DRA/FRN, or DRA/SPN courses) including at least eight credits of courses at the 300 or 400 level. The 24 credits must include at least one course in dramatic literature before 1800 and at least one course in dramatic literature after 1800. At least 12 credits in dramatic arts courses including at least three credits at the 300 or 400 level. The 12 credits must include courses in at least two areas of dramatic arts (production, acting, directing, set design, lighting and costume design, or technical theater). ENL 302 also may be included in this second option.

Literature Option
Students majoring in English with an option in literature must complete 36 credits of courses in English beyond the general education requirements. Up to eight credits (of nine courses) may be in ENL writing courses and/or linguistics courses and/or ENL 302. With permission of the chairperson, four credits may be an ENH 200-level course. The remaining courses must be ENL courses. Students must satisfy the following requirements within the 36 credits:

A. Literary Approaches
One course from each of the following:
   1. A literary period or movement prior to 1800 or Shakespeare
   2. A literary period or movement after 1800
   3. A specific literary genre
   4. A major figure

B. Coverage Areas
One course from each of the following:
   1. English literature
   2. American literature
   3. Literature translated into English
4. Literature written by women, American minorities, or Third World authors
C. At least two (of the nine) courses (eight credits) must deal primarily with material written before 1800 — no change
The same course may be used to satisfy more than one of these requirements.

**HISTORY**

History BA

Major Requirements: 36 credits
Twenty-four credits of history courses at the 200 level or higher, of which at least **three** courses must be at the 300 level including:
- At least one history course designated as pre-1700 history
- At least one history course designated as modern European history
- At least one history course designated as United States history
- At least one history course from a geographical area other than Europe or the United States, designated as World history

A 200-level geography course may be used to meet this 24-credit requirement. At most, one independent study course may be used to satisfy this requirement. The cumulative grade point average in history courses must be 2.0 or higher for graduation.

**MATHEMATICS**

Mathematics BS

Major Requirements: 36 credits

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<td>Applied Mathematical Analysis I</td>
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Four additional mathematics courses (**16 credits**) at the 300 or 400 level chosen with the approval of an adviser.
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Appendix i

The “Grandfather” Clause

Requirements in this Catalog supplement were approved effective fall 2004. The “Grandfather” clause is designed for students who matriculated in a degree program, major, or curriculum prior to that semester. This provides that a student may meet degree requirements in effect the semester of his/her matriculation in a particular program, curriculum, or major, provided the student has not had an interruption in matriculation exceeding four consecutive fall and spring semesters.

Students changing major or curriculum are subject to the requirements in effect the year of the change. For general education degree requirements only, students may choose to follow requirements of the Catalog in effect the first time they matriculated at the College, provided that no more than ten years have elapsed from initial matriculation to the change of major or curriculum. Students must notify the Registrar in writing that they are exercising this option.

Students who hold the associate in arts degree, students who hold the associate in science degree, or students who hold a baccalaureate degree from an accredited post-secondary institution are considered to have completed general education requirements. Students who hold the associate in applied science degree must complete the general education requirements specified by further degrees.