Undergraduate Bulletin 2013-2015

Lehman College Bulletins (Catalogs) include information about admission requirements, continuation requirements, courses, degree requirements, and tuition and fees. The online Bulletins are updated periodically throughout the calendar year and provide the most current information for prospective students or for general review. Current students generally follow program requirements based on their date of matriculation, subject to changes in State requirements. All students must speak with a faculty adviser to confirm their requirements.

Lehman College
The City University of New York
250 Bedford Park Blvd. West
Bronx, NY 10468
718-960-8000
www.lehman.edu



Important Notice of Possible Changes

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 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.

The responsibility for compliance with the regulations in each Bulletin rests entirely with the student. The curricular requirements in this Bulletin apply to those students matriculated in the 2013-2014 and 2014-2015 academic years. This Bulletin reflects policies, fees, curricula, and other information as of July 2013.

Statement of Nondiscrimination

Herbert H. Lehman College 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, marital status, disability, genetic predisposition or carrier status, alienage or citizenship, military or veteran status, or status as victim of domestic violence in its student admissions, employment, access to programs, and administration of educational policies.

Mrs. Dawn Ewing-Morgan 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 Shuster Hall, Room 352, and her telephone number is 718-960-8111. She is also the College coordinator for the Americans with Disabilities Act and Section 504, which prohibit discrimination on the basis of disability.

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About Lehman College

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History of Lehman College

Lehman College was established as an independent unit of The City University of New York on July 1, 1968, following a decision by the University's Board of Trustees to create a comprehensive senior college in the Bronx with its own faculty, curriculum, and administration.

The College took over the campus that, since 1931, had served as the Bronx branch of Hunter College, known as Hunter-in-the-Bronx. Adjacent to the historic Jerome Park Reservoir, the first four buildings in the plan—Gillet and Davis halls, the Music Building, and the Gymnasium—were completed in 1931 by the New York State Works Progress Administration. The original campus plan called for nine buildings, but the Great Depression delayed construction, and the ambitious plan was later abandoned by Mayor Fiorello H. LaGuardia.

For a decade before the entry of the United States in the Second World War, only women students attended, taking their first two years of study at the Bronx campus and then transferring to Hunter's Manhattan campus to complete their undergraduate work.

Shortly after U.S. entry into the war, the students and faculty vacated the campus and turned over the facilities to the U.S. Navy, which used them as a training station for the newly organized WAVES (Women Accepted for Volunteer Emergency Service).

To commemorate this period, the Navy later installed a ship's bell from the U.S.S. Columbia on the campus. In 1946 the campus won a niche in world history when it was made available to the United Nations at the urging of New York City officials. From March to August 1946, the first American meetings of the Security Council were held in the Gymnasium Building where intercollegiate basketball, archery, swimming, and other sports have been played. During festivities marking the 40th anniversary of the United Nations in 1986, the Southern New York State Division of the United Nations Association presented the College with a commemorative plaque, now displayed outside the Gymnasium Building. The College participated in the United Nations' 50th anniversary activities in 1995-96.

Normal collegiate activity resumed at the campus in 1947, but, in addition to women, the Bronx branch began accepting former servicemen, who studied in separate classes. In 1951 the campus

became fully coeducational, and a four-year curriculum was introduced. The process of separating the Bronx campus from Hunter College into a separate unit began in 1967. Dr. Leonard Lief, chairman of the English Department, was named provost and made responsible for overseeing the transition. On July 1, 1968, Lehman College began an independent existence, with Dr. Lief as president.

The Board of Higher Education named the new college after Herbert H. Lehman, in recognition of the commitment to public service exemplified by the four-time governor of New York State who later became a U.S. Senator and was the first director-general of UNRRA (the United Nations Relief and Rehabilitation Administration). The College was formally dedicated on March 28, 1969, the 91st anniversary of Governor Lehman's birth. Each year, on or about March 28, the College commemorates the double anniversary by inviting a distinguished speaker to deliver the Herbert H. Lehman Memorial Lecture.

Much has occurred at the colleges of City University since 1968. As the only CUNY senior college in the borough, Lehman College has adapted to meet changing conditions and is poised to respond to new needs and challenges.

Dr. Ricardo R. Fernández succeeded Leonard Lief, the founding president of Lehman College, on September 1, 1990. Dr. Fernández had been assistant vice chancellor for academic affairs and professor of educational policy and community studies at the University of Wisconsin at Milwaukee. Throughout his tenure, Dr. Fernández has affirmed both the College's commitment to access to higher education for the economically disadvantaged and its strong commitment to educational excellence.

On the undergraduate level, Lehman's General Education Curriculum is designed to provide a broad knowledge of the achievements and methods of the liberal arts and sciences and to develop student abilities to participate responsively in informed inquiry into subjects of both public and personal concern. It requires a series of courses in writing, mathematics, foreign language, and natural sciences. Students must also complete at least one course from a list of courses in seven areas: Individuals and Society; Socio-Political Structures; Literature; The Arts; Comparative Culture; Historical Studies; Knowledge, Self, and Values. In addition, students must complete two upper-division interdisciplinary courses: one in Topics in the Humanities and the Sciences and one in the American Experience. To develop writing skills, students must complete four courses designated as writing-intensive. Major and minor fields of study are also required.

On the graduate level, the College has developed professional programs in nursing, teacher and counselor preparation, accounting, business, computer science, health sciences, public health, social work, and speech-language pathology. The College also offers strong traditional liberal arts graduate programs in art, biology, English, history, Spanish, and mathematics.

For more than two decades, Lehman has deepened its involvement with the surrounding community. The opening of the Lehman Center for the Performing Arts in 1980 and the Lehman College Art Gallery in 1984 has made the College a cultural center for the region. Together with the City and the Humanities Program, the Department of Music, and the Theatre program, they present dozens of concerts, plays, dance performances, and exhibitions that are free or nominally priced.

The Art Gallery is housed in the Fine Arts Building, which was designed by the renowned architect Marcel Breuer—as was Shuster Hall, which houses the College's administrative offices. The Concert Hall, the adjacent Lehman College Library, and the two Breuer buildings offer a striking contrast to the Tudor-Gothic architecture of the original College buildings, providing an environment of considerable architectural interest. Anchoring the campus on its northern end is the APEX, designed by the internationally acclaimed architect Rafael Viñoly. Rising immediately to the south of the APEX is Science Hall, a new science facility, designed by the firm of Perkins + Will.

The Multimedia Center, which officially opened in 2010, features an all-digital newsroom, custom-built broadcasting studio, eightroom editing suite, production control facilities, computerized music studio, graphic workstations, and other resources for both student and faculty use.

Lehman College also provides a variety of community services. The Institute for Literacy Studies sponsors classes to teach adults fundamentals of reading and writing, while the Speech and Hearing Center offers comprehensive evaluations of hearing and speech-language disorders.

There is close collaboration between the College's teacher and counselor education programs and Bronx school districts:

- The New York City Writing Project supports workshops for teachers of writing as well as research at all educational levels.
- The Center for School/College Collaboratives receives external funding for projects that focus on increasing educational success for Bronx students and their families and preparing the students to enter and complete higher education. The Center works with the entire school community—administrators, teachers, students, and parents—and collaborates with the Bronx Regional Offices of the New York City Department of Education.
- The Bronx Institute, funded with private and government grants, is helping more than 8,000 Bronx schoolchildren become academically successful.

Lehman also has joined with the New York City Department of Education to help develop a number of small high schools in the Bronx. The schools—housed within larger, traditional high schools—are formed around the themes of the visual arts, teaching and the professions, music, health sciences, nursing, musical theatre, and international studies.

In addition, in Fall 2003, the High School of American Studies at Lehman College opened on the Lehman campus. One of New York City's new specialized high schools and the only one to focus on American history, the school represents a collaboration among

Lehman College, the New York City Department of Education, and the Gilder-Lehrman Foundation. It has been listed for three consecutive years by U.S. News and World Report as one of the nation's top 100 public high schools.

Mission, Vision, and Values Statements

Mission Statement

Lehman College serves the Bronx and surrounding region as an intellectual, economic, and cultural center. Lehman College provides undergraduate and graduate studies in the liberal arts and sciences and professional education within a dynamic research environment, while embracing diversity and actively engaging students in their academic, personal, and professional development.

Vision Statement

Lehman College has entered a new era in its history as an institution of higher education. Already known for its outstanding faculty, dedicated staff, superb library, art gallery, theaters, speech and hearing clinic, and athletic facilities, the College is now building a new state-of-the-art, environmentally "green" science facility that will invigorate faculty and student research as well as prepare Lehman students for science-based careers.

Supported by the University's expanding technological resources, the College will promote creative teaching strategies, greater access to courses through online learning, off-campus access to library resources and enhanced student services. The new Multimedia Center will stimulate technological innovation in all areas of communications and the arts for both the College and the region.

Lehman has always been a commuter campus that prides itself on its diversity and commitment to multicultural understanding. Now, the College looks forward to providing a residential experience to attract a wider range of students and lead to the development of new learning communities to enhance student success.

Lehman College will prepare students to live and work in the global community through new interdisciplinary programs, such as environmental studies and international business, along with study abroad and experiential learning opportunities. The College's geographic information systems and numerous partnerships with schools, hospitals, social service and governmental agencies, small businesses, major corporations, and cultural and scientific institutions will contribute to the economic development of the region. Service learning and internship opportunities will be further developed to foster the engaged citizenship and commitment to public service embodied in its namesake, Herbert H. Lehman.

Recognized for small classes, close interaction between students and faculty, a successful Teacher Academy and Honors College, and a caring and supportive environment, Lehman College will celebrate its fiftieth anniversary in 2018 as the college of choice in the region, committed to preparing students for graduate studies, professional careers, and lifelong learning.

Values Statement

Lehman College is committed to providing the highest quality education in a caring and supportive environment where respect, integrity, inquiry, creativity, and diversity contribute to individual achievement and the transformation of lives and communities.

The City University of New York

The City University of New York is a twenty college university, with branches located throughout the five boroughs of the city. The University's governing body, the Board of Trustees of the City University of New York, formulates bylaws and policies providing direction for the operation of the University and of its constituent colleges. In addition, the Board passes on the policy recommendations submitted by each of the autonomous colleges. Funds for the City University are provided by the State of New York, City of New York, tuition, fees, and gifts. Federal and State government agencies provide grant funds for research, special programs, and student financial aid.

Although the City University was formally established in 1961, the first college of the University dates from 1847, when New York City established by referendum the Free Academy, now City College. The University today consists of ten senior (four-year) colleges, six community colleges, a four-year technical college, a doctoral-granting graduate school, a law school, a graduate school of journalism, an accelerated medical program, and a medical school. The Mount Sinai School of Medicine is affiliated with the University.

The Graduate School and University Center in mid-Manhattan offers a wide range of doctoral programs, including the Ph.D. program in plant sciences based at Lehman College. The Center also conducts urban research and administers the CUNY Baccalaureate Program, open to students at all CUNY colleges.

College Governance

In 1970 the student body and the faculty approved a new system of campus governance with the establishment of the Lehman College Senate. This body, with specified responsibilities in regard to academic policy and campus life, is made up of approximately 120 representatives of the students, faculty, and administration.

College Accreditation and Affiliations

Lehman College is accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools. Degree programs are registered by the New York State Education Department. Some degree programs are also accredited by professional associations.

Nursing programs are accredited by the Commission on Collegiate Nursing Education, and the social work program is accredited by the Council on Social Work Education. The College also offers nutrition programs approved by the American Dietetic Association and a health services administration program approved by the Association of University Programs in Health Administration. Lehman's B.S. degrees in chemistry are certified

by the American Chemical Society. The graduate program in speech-language pathology is accredited by the American Speech-Language-Hearing Association. All educator preparation programs offered by the College's School of Education are accredited by the National Council for Accreditation of Teacher Education (NCATE). In addition, the School of Education's counselor education program in school counseling offered by the Department of Counseling, Leadership, Literacy, and Special Education is nationally accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP).

Lehman's B.S. and M.S. programs in accounting provide the educational preparation required for licensure as a Certified Public Accountant in New York State. The College offers State-approved teacher education programs that can lead to New York State provisional or permanent certification. Graduates of the undergraduate nursing program are eligible to take the Registered Nurse licensure examination.

Lehman College has chapters of Phi Beta Kappa, Sigma Xi, and Golden Key National Honor Society. Individual disciplines have their own honor societies with national affiliations. The College is a member of the National Collegiate Athletic Association and the Eastern Collegiate Athletic Conference.

Degree Programs

Undergraduate Curriculum

Lehman College offers undergraduates a wide choice of major programs in both the liberal arts and sciences and in the professions. The College offers the degrees of Bachelor of Arts (B.A.), Bachelor of Science (B.S.), Bachelor of Fine Arts (B.F.A.), Bachelor of Business Administration (B.B.A.), and Bachelor of Arts-Master of Arts (B.A.-M.A.). Majors are either departmental or interdepartmental.

Graduate Curriculum

The College offers a choice of more than thirty master's degree programs in arts and sciences, health fields, and teacher education. Advanced certificates are offered in some areas. The degrees offered are the Master of Arts (M.A.), Master of Science (M.S.), Master of Science in Education (M.S. Ed.), Master of Arts in Teaching (M.A.T.) in Music, Master of Fine Arts (M.F.A.) in Art, Master of Public Health (M.P.H.), and Master of Social Work (M.S.W.). In addition, more than seventy-five Lehman College faculty members participate in City University doctoral programs.

Schedule of Courses

Academic Year

During the regular academic year, which runs from late August through the end of May, Lehman offers a full range of undergraduate and graduate courses on a day, evening, and weekend schedule.

Summer Sessions

Lehman offers two sequential summer sessions, one beginning in June and the second in July. Students may shorten the time to their college degree by registering for courses in Session I and/or Session II. Undergraduate and graduate summer programs accept matriculants, as well as visiting and non-degree students, in both day and evening classes.

Academic Organization

The College's academic departments and programs are divided into four schools:

School of Arts and Humanities

African and African American Studies

American Studies

Art

Business and Liberal Arts

City and Humanities

Comparative Literature

Disability Studies

English

History

Institute for Irish American Studies

Journalism, Communication, and Theatre

Languages and Literatures

Latin American, Latino, and Puerto Rican Studies

Linguistics

Middle Eastern Studies

Music

Philosophy

Speech-Language-Hearing Sciences

Urban Studies

Women's Studies

School of Education

Bronx Institute

Center for School/College Collaboratives

Counseling, Leadership, Literacy, and Special Education

Early Childhood and Childhood Education

Institute for Literacy Studies

Middle and High School Education

School of Natural and Social Sciences

Anthropology

Biological Sciences

Chemistry

Economics and Business

Earth, Environmental, and Geospatial Sciences

Health Sciences

Mathematics and Computer Science

Nursing

Physics and Astronomy

Political Science

Psychology

Social Work

School of Adult and Professional Studies

Adult Degree Program

Continuing Education

CUNY on the Concourse

Research Institutes and Community Resources

Bronx Data Center

The Bronx Data Center collects and analyzes demographic material related to the Bronx and adjacent areas, in order to provide service to the Lehman community, as well as to cultural, social service, civic, media, and other organizations. The Center focuses on data for very small geographic units (down to the city block), as well as the Bronx as a whole. Historical data going back several decades complement the latest census information. The Center specializes in the graphic presentation of data through computer-generated maps. See:

www.lehman.edu/deannss/bronxdatactr/discover/bxtext.htm

The Bronx Institute

The mission of the Bronx Institute at Lehman College is to foster faculty research relevant to the improvement of education and the quality of life in the Bronx; and to provide a forum to discuss, analyze, and identify potential solutions to contemporary educational, social, political, cultural, and economic challenges facing the Bronx community, in particular, and other urban areas at large. As a community resource, the Bronx Institute is committed to act in cooperation with other academic institutions, community groups, and organizations to develop joint projects, especially those that enrich the educational needs of all Bronx students. The vision of the Institute is to foster and promote equity and excellence in the education and learning of Bronx students in grades K-16 by involving administrators, teachers, parents, and the students themselves in high-quality programs that support and enhance the educational opportunities of the students.

The Center for School/College Collaboratives

The Center for School/College Collaboratives designs and

implements programs, in partnership with Bronx schools, to enrich student learning and ensure student readiness and motivation to graduate high school and enter college. Programs offered by the Center primarily emphasize student outcomes and achievement. These programs encompass: student and teacher enrichment in mathematics, science, and technology; recruitment of middle and high school students for careers in teaching; intensive work with at-risk students to prepare them for educational transitions from middle to high school and from high school to college; pre-service teacher preparation for bilingual students and paraprofessionals; in-service professional development in technology and interdisciplinary teaching; and close working relationships with over twenty Bronx schools.

Programs focus on working intensively with students and teachers from particular schools and on building pipelines for students since these efforts have been shown to have greater potential for success than programs that draw students from a wide range of schools.

The Center subscribes to several Principles of Collaboration: all partners are equal; planning and implementation involve school administrators/teachers/staff/students/parents; broadening student/teacher contact in informal, hands-on, project-based settings; activating parent and family involvement; focusing on integration of student learning experiences; developing a plan of action; establishing linkages among projects; and encouraging high school students to qualify for, and take, college credit courses while still in high school.

The Center also houses Lehman's well-regarded, CUNY-sponsored College Now Program. The goal of the program is to insure that all students meet and exceed the performance standards required for high school graduation and that all those who wish to pursue postsecondary study are prepared to do so. Lehman has had a version of College Now or Bridge to College since 1985, when qualified students involved in the College's various funded programs were invited to enroll in college-credit courses. The College Now eleventh- and twelfth-grade program offers a variety of college-credit courses depending on student interest and ability. These include courses in psychology, studio art and art history, calculus and pre-calculus, education, biology, English, history, computer science, economics, geology, philosophy, speech, and sociology.

Funding for Center programs has been provided by the New York City Department of Education, U.S. Department of Education, National Aeronautics and Space Agency, New York State Education Department, the City University of New York, Fund for Improvement of Post-Secondary Education, Aaron Diamond Foundation, and others.

Center for Human Rights and Peace Studies

The Center for Human Rights and Peace Studies advances social justice and human dignity in an interdisciplinary fashion through active involvement of faculty, students, and community in research and teaching. The Center builds on the College's unique history: the drafting of the Universal Declaration of Human Rights began at Lehman College when the United Nations met at

the College. Lehman College students, often immigrants and the first in their families to access higher education, engender a broad understanding of human rights. The Center unites student and faculty engagement on local and global rights issues in New York and the greater world community.

CUNY Institute for Health Equity

The CUNY Institute for Health Equity (CIHE) was established to narrow the current gaps in the health status of New York City's underserved ethnic/racial populations. CIHE will work to identify and respond to the social determinants of health that contribute to the high rates of morbidity and mortality among these populations, and provide technical support to its community partners so that they may better serve their respective communities and educate public health students in the importance of addressing health equity. The knowledge obtained through CHIE work will be analyzed, translated, and disseminated to the public so that these issues may be more effectively addressed.

The Institute for Literacy Studies

The Institute for Literacy Studies, founded in 1984, is a research unit of The City University of New York. The Institute's mission—reforming and improving urban education—has deep significance in its home borough of the Bronx as well as throughout New York City and the nation. The Institute defines urban education in its broadest, most inclusive meaning to comprise the complex web of systems, settings, and relationships that foster learning. It works to advance research, articulate theory, and implement effective practice in literacy and mathematics education through initiatives in a variety of educational settings K-16, including schools, community-based after-school programs, adult literacy programs, and CUNY campuses. Through its Adult Learning Center, the Institute offers basic education, English language instruction, and GED preparation to members of the community who are not enrolled in school or college. See www.lehman.edu/literacy-studies.

The Institute for Irish American Studies

The CUNY Institute for Irish American Studies was established by the CUNY Board of Trustees to focus on the Irish-American Diaspora and its impact on American culture and society. The Institute, first and foremost, serves as a clearinghouse for research opportunities in Irish-American studies for students, staff, and faculty on all of the campuses of the City University of New York. Current projects being undertaken by the Institute include Publishing in Irish America 1820-1922, Great Irish Famine Curricula In-Service Training, Documenting Return Emigration, Curriculum Design: Teaching the Irish Language in America, the "New Irish" and Film, Mapping Irish America, and the Irish in the Americas.

In line with the current research projects of the Institute, an extensive program of public lectures and events is sponsored each semester. The Institute invites researchers and leaders in the community to present at its Wednesday evening lecture series. The Institute also sponsors day-long symposia on specific topics,

Irish language conversation circles, and celebrations of the arts. The Institute additionally makes a number of distance education courses arising from its research areas available to students at CUNY campuses and throughout the country. These courses make use of online software as well as tours and lectures in the U.S. and abroad.

Admissions

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General Information

Lehman College accepts both entering freshmen and transfer students. The admission categories fall into two classifications: degree students (matriculants) and non-degree students (non-matriculants). A matriculant is a student who is admitted to a program leading to a degree. Undergraduate matriculants at Lehman, either full-time or part-time, may attend classes during any hours in which the College is in session. A non-degree student may enroll in credit-bearing courses on a space-available basis, but is not officially registered in a degree program and is not a candidate for a degree. Credits earned by such students may later be transferred to a degree program. Freshmen and transfer students who were educated outside the United States must file their applications through the University Application Processing Center (UAPC) year-round. Lehman College does not process late applications with foreign credentials.

Applicants who wish to receive admission information should consult the following offices:

Lehman College

Undergraduate Office of Admissions

Shuster Hall, Room 161

Phone: 1-877-LEHMAN-1

City University Office of Admission Services

1114 Ave. of the Americas, 15th Floor

New York, NY 10036

Phone: 212-997-CUNY (2869)

New York State Resident Tuition Rate

Students may qualify for the New York State resident tuition rate by proving that they have resided within New York State for the twelve-month period preceding the first day of classes and that they either are U.S. citizens or permanent residents or that they possess an eligible non-immigrant alien status. Residency forms and a list of the documents that may be used to prove residency can be obtained in the Office of Admissions, Shuster Hall, Room 161. Failure to provide this documentation results in classification as a non-New York State resident and a tuition assessment at the out-of-state tuition rate.

Admission to Undergraduate Degree Programs

Freshmen

Students who have not attended a college, university, or postsecondary institution are admitted through the University Application Processing Center (UAPC) as freshmen. The City University's application form can be accessed online at www.cuny.edu.

Freshman applications must be accompanied by a \$65.00 application fee and official copies of any documents (for example, high school transcripts; GED, SAT, and/or TOEFL scores) that are needed to prove the student's eligibility for admission.

Admission is based on a variety of factors, and each applicant is considered individually. The minimum requirements for admission as a first-time entering freshman are as follows:

- 16 credits earned in college preparatory classes
- An average of 80 or higher in college preparatory classes and a combined reading and math SAT of 900 or higher, or the ACT equivalent. The Office of Admissions and Recruitment will review each applicant's overall academic performance. The following distribution of high school courses is recommended:

Four years of English

Four years of Social Studies

Three years of Mathematics

Two years of Foreign Language

Two years of Lab Science

One year of Fine Arts

All students are subject to City University of New York testing requirements. For details, see the Office of Testing and Scholarships website at www.lehman.edu. An applicant who fails to meet all of the above criteria may still be considered for admission if she or he shows evidence of strong academic preparation, such as exceeding the minimum requirements in college preparatory classes, or strong performance on other assessments of academic skills, such as Regents examinations.

• GED and TOEFL Score Requirements:

Applicants with a minimum total standard G.E.D. score of 3100 or higher on all five content area tests will be considered. Applicants educated in non-English speaking schools must score 500 or higher on the Test of English as a Foreign Language (TOEFL) to be considered for admission. The above admission criteria are subject to change. Inquiries and appeals may be directed to Laurie Austin, director, Admissions and Recruitment, at 718-960-8706.

The SEEK Program

SEEK (Search for Education, Elevation, and Knowledge) is a New York State sponsored higher education opportunity program of CUNY. The program's special admission standards provide access to Lehman College and other City University senior colleges to talented and motivated high school graduates who do not meet traditional admission requirements. Students must also meet specific low-income requirements.

SEEK students receive specialized support services to enrich their academic career and personal development. Services include intensive instructional support, including tutoring, computer-assisted-instruction, study skills training, and small-group course reviews (supplemental instruction); academic counseling support; and a small amount of supplemental financial aid for college-related expenses, including college fees, books, and supplies. The amount of SEEK financial aid is based on individual need and fiscal availability. SEEK students are eligible for up to ten semesters of TAP assistance, if needed.

Admitted SEEK freshmen are required to participate in a four-tosix-week enrichment pre-freshman summer program at the College before they enroll for their first semester of study. Once enrolled, they are required to maintain full-time matriculated day status, sustain a satisfactory academic standing, and participate in all recommended program support activities. SEEK students are eligible for up to ten semesters of SEEK sponsorship while working toward their bachelor's degree.

Freshman applicants who wish to be admitted under the Lehman College SEEK Program should file a CUNY Freshman Application and complete section four, entitled "SEEK/CD Opportunity Programs." Freshman applicants should have no prior college experience. Freshman admission to SEEK occurs mostly in the fall semester. Transfer student applicants—those students who have attended another college, university, or post-secondary institution—may be eligible for admission as SEEK students if they have previously participated in SEEK/CD, EOP, or HEOP at CUNY, SUNY or New York state private institutions respectively. Transfer applicants should contact the SEEK Program.

Inquiries about the SEEK. Program at Lehman College may be made to the SEEK Program Office at 718-960-7979 or <code>seek@lehman.cuny.edu</code>. More information about the program is available on the Lehman College website: <code>www.lehman.edu</code>.

Testing Requirements

Freshman applicants must take the CUNY Assessment Tests for admissions purposes. As of Fall 2001, entering students are required to pass all three CUNY Assessment Tests (reading, writing, Math1 and Math2) before enrolling at Lehman and other senior colleges of the City University of New York. Students who are eligible for the SEEK program may be admitted to a baccalaureate program without first demonstrating basic skills proficiency; however, these students must demonstrate the requisite level of proficiency in reading, writing, and mathematics within two years of initial enrollment. The two-year time limit is interpreted as consisting of the required pre-freshman immersion

program, four regular semesters, two winter immersion programs, and the summer immersion program at the end of each academic year.

Transfer Students

Transfer student applicants—those students who have attended another college, university, or postsecondary institution—are admitted through the University Application Processing Center (UAPC). Transfer students can access the online application at *www.cuny.edu*. Transfer applications must be accompanied by a \$70.00 application fee.

Transfer applicants must submit their high school transcripts and all official college and other postsecondary educational transcripts. Students who fail to provide all transcripts are subject to penalty.

All transfer students are subject to City University of New York testing requirements. For details, see the Office of Testing and Scholarships at *www.lehman.edu*.

The minimum requirements for transfer students are as follows:

- Students transferring fewer than 12 college credits must satisfy Lehman's freshman admission criteria.
- Applicants transferring from 12 up to 24 college credits must satisfy either the freshman admission criteria or present a 2.75 cumulative Grade Point Average.
- Students with 24 or more credits must have a cumulative Grade Point Average of 2.3 or better.
- Students with a CUNY/SUNY A.A. or A.S. degree must have a 2.0 cumulative Grade Point Average or better.
- Students with an A.A.S. degree or a degree from outside CUNY/SUNY must have a cumulative Grade Point Average of 2.3 or better.

These admission criteria are subject to change. Inquiries and appeals may be directed to Laurie Austin, director, Admissions and Recruitment, located in Shuster Hall, Room 161, or call 718-960-8706.

Testing Requirements for Incoming Freshmen, Transfer Students, and Information Regarding CUNY Assessment Tests Exemptions

As of October 2008, all transfer applicants are required to show proficiency in all three CUNY Assessment Tests (reading, writing, math1 and math2) before being admitted to a senior college of CUNY.

The University has set the following standards for determining readiness to do college-level work:

- The minimum passing score on the Reading CUNY Assessment Test is 70.
- The minimum passing score on the Writing CUNY Assessment Test is 56.
- The minimum passing score on the Math1 CUNY Assessment Test is 45.

- The minimum passing score on the Math2 CUNY Assessment Test is 45
- Entering students are exempt from taking the CUNY Reading and Writing Assessment Tests if they achieve an SAT Verbal score of 480 or above; an ACT Verbal score of 20 or above; or a score of 75 or above on the New York State Regents Examination in English.
- Entering students are exempt from taking the CUNY Math1 and Math2 Tests if they achieve an SAT Math score of 510 or above; an ACT Math score of 21 or above; for applicants for freshman and transfer admission for fall 2012 and thereafter, applicants may demonstrate proficiency by passing at least two of the three new Regents math tests with a scaled score of 65 or higher and scoring at least a 75 on one of the tests. This will be the uniform minimum standard for the University for all applicants starting fall 2012 regardless of high school graduation date.
- Transfer students who have taken a three-credit Freshman Composition course (or a higher level English course for which Freshman Composition is a prerequisite) at an accredited college and earned a grade of "C" or higher ("C-" is not acceptable) are exempt.
- Transfer students with the equivalent of a Freshman
 Composition course (or a higher level course for which
 Freshman Composition is a prerequisite) earned through
 testing (e.g., AP or IB) or a "College Now" -type course taken in
 high school are exempt, provided the equivalency appears on
 the official transcript of an accredited college.
- Transfer students who have taken a three-credit college-level math course at an accredited college and earned a grade of "C" or higher ("C-" is not acceptable) are exempt.
- Transfer students with the equivalent of a college-level math course earned through testing (e.g., AP or IB) or a "College Now" -type course taken in high school are exempt, provided the equivalency appears on the official transcript of an accredited college.
- Any student admitted for Fall 2008 or prior who has a historical exemption based on an SAT math score of 480 (or ACT score of 20) is exempt.
- Any student with a historical pass on the CUNY Assessment Test in Math (including the old CUNY Math Test) is exempt.

CUNY/SUNY Community College Graduates

To earn the bachelor's degree at Lehman, CUNY/SUNY Associate Degree graduates need to complete the courses required for the major/minor, two upper-division interdisciplinary courses, one writing-intensive course, and elective courses if needed to meet the minimum 120-credit requirement.

CUNY/SUNY Associate Degree graduates who have substantial liberal arts and science credits from their community colleges will generally need only 60 credits to complete the Lehman bachelor's degree. Students transferring fewer liberal arts and science credits to Lehman from their Associate Degree programs may need more than 60 Lehman credits to meet New York State education regulations. New York State education regulations mandate a

minimum of 90 liberal arts and sciences credits for the B.A., 60 credits for the B.S., and 30 for the B.F.A. and B.B.A.

Second Degree Students Transferring to Lehman

Students who previously have earned a bachelor's degree or higher from an accredited program verified by CUNY are deemed skills proficient. Only students who document the degree at the time of application for admission to the College they currently attend are entitled to this exemption.

Prohibition on Submission of Fraudulent Admission Documents

The submission of documents in support of applications for admission, such as transcripts, diplomas, test scores, references, or the applications themselves, that are forged, fraudulent, altered from the original, obtained under false pretenses, or otherwise deceptive is prohibited and is punishable by a five-year ban on applying for admission or five-year suspension from CUNY. A second violation is punishable by a lifetime ban on applying for admission or expulsion from CUNY.

Admission of Students Who May Pose a Risk to the College

The College reserves the right to deny admission to any student if in its judgment, the presence of that student on campus poses an undue risk to the safety or security of the College or the college community. That judgment will be based on an individualized determination taking into account any information the College has about a student's criminal record and the particular circumstances of the college, including the presence of a child care center, a public school or public school students on the campus. In addition, the College may consider factors such as the amount of time since the crime was committed; the amount of jail time served by the student; the number of years the student was on probation or parole; whether the student has satisfied probation or parole requirements at the time of the student's application; whether the student has completed drug, alcohol, sex offender or other treatment; and what work or educational experience the student has had after the conviction. Finally, if the student is known to have been assisted by a CUNY-sponsored or other reentry program or initiative, the college will consult with a counselor or representative from said program.

Special Admission Categories

Applicants for the Bachelor of Arts (B.A.) in Social Work

All students who wish to become candidates for the B.A. degree in social work shall have completed 48 credits, including SWK 237 (Introduction to Social Work) and SOC 166 (Fundamentals of Sociology), achieved a minimum cumulative index of 2.7, and submitted an application to the Social Work Program.

Persons interested in the Social Work Program should request a program brochure and application from the Office of the Director (Carman Hall, Room B-18, 718-960-8418).

Applicants for The Bachelor of Science (B.S.) in Nursing

Prenursing

All students who wish to become candidates for the B.S. in nursing degree are required to take a prenursing sequence of courses in which they must achieve a minimum of a 2.75 index in the required science courses, attain basic skills levels set by the Department of Nursing, be in good academic standing in the College, and meet any other criteria established by the Department of Nursing. Students are admitted at the start of their junior year to the B.S. in Nursing Program on a space-available basis. All candidates for the Program in Nursing should request, prior to admission to the College, copies of the Departmental curriculum and the brochure, "Nursing at Lehman," available in the Department of Nursing (T-3 Building, Room 209, 718-960-8374).

Freshmen

Freshman applicants to Prenursing are admitted through the University Application Processing Center (UAPC) by the usual City University admission procedure. UAPC determines eligibility by the uniform admission standards applied to all Lehman freshman applicants.

Registered Nurses

City University A.A.S. nursing graduates are allocated by the University Application Processing Center (UAPC) to Lehman College on the basis of space availability, Grade Point Average, and success on the National Council Licensing Examination (NCLEX). Other transfer students must satisfy these same eligibility requirements. Applicants who attended a hospital school of nursing and have earned no previous college credits should file the transfer application through UAPC. Those who have earned previous college credits, in addition to having attended a hospital school of nursing, should also file a transfer application through UAPC. To earn credit for courses taken at a hospital school of nursing, students must (1) present a license to practice as a registered nurse and (2) earn credits from Excelsior College (formerly Regents College) by examination in specific nursing courses.

Readmission to Lehman College

Former Lehman students must file a re-admit application with the Office of Admissions (Shuster Hall, Room 161). Eligible students who do not have stops on their record, have a 2.0 GPA. or greater, and are in test compliance may apply. Applications may be obtained online at

www.lehman.edu/provost/admissions/pdf/readmitu.pdf or in person in the Office of Undergraduate Admissions, Shuster Hall 161. The completed application and a \$10.00 non-refundable processing fee should be submitted before the end of registration;

official transcripts of any coursework completed during his or her absence also must be submitted with the application in order to be accepted for credit evaluation.

Former students who were dropped by the College for poor scholarship must file an appeal for readmission. The deadline dates are December 15 for the Spring semester and July 31 for the Fall semester. The appeal should be filed with the Office of Academic Standards and Evaluation, Shuster Hall, Room 280.

Non-Degree Students

The admission requirements for non-degree students are the same as the admission requirements for matriculants. (See "Admission Requirements for Freshmen" and "Admission Requirements for Transfer Students.") Non-degree students (non-matriculants) must apply directly to the Lehman College Admissions Office. The deadline for all non-degree admissions is the last day of registration.

Visiting Students

CUNY students who are pursuing a degree at another CUNY college who wish to take courses at Lehman on a non-degree basis must request a CUNY e-permit online at *www.cuny.edu* from their home college in order to attend Lehman. Tuition for courses taken at Lehman is paid at the student's home college. The student will not be required to submit any fees to Lehman College.

Non-CUNY students who are attending a non-CUNY college must submit an unofficial copy of their college transcript or a letter from their primary college to the Lehman Admissions Office that verifies their current enrollment and good academic standing. Visiting students must file an application for Visiting College Students and pay a \$65 application processing fee. Returning visiting students will pay a \$10 readmission fee.

Permission to register as a visiting student is valid for only one semester at a time. Students who wish to renew their status as visiting students must submit new documentation from their primary colleges for each succeeding semester.

International Student Admissions

International students who are neither U.S. citizens nor permanent residents must file the appropriate freshman or transfer student application and meet the corresponding admission requirements. (See "Admission Requirements for Freshmen" and "Admission Requirements for Transfer Students" in this Bulletin.) In addition, those students who were educated in a language other than English are required to submit a minimum TOEFL score of 500 on the paper exam.

Once the student has been admitted to Lehman by the University Admissions Processing Center (UAPC), he or she will be asked to submit financial and other documents that will satisfy the requirements for the I-20 form. Once the I-20 form is sent, the student must present the form to the American embassy or consulate in his or her home country in order to obtain an F-1 visa.

All applicants, including those who are U.S. citizens and permanent residents, may be classified as international students for admissions-processing purposes if their education has taken place outside the United States. These applicants must submit their applications and transcripts through UAPC; they may not apply directly through the College during Direct Admissions periods. All non-English transcripts must be accompanied by an official translation into English as defined by City University guidelines.

Veterans

The City University maintains a special outreach program for returning veterans who might not be familiar with the opportunities for college study open to them.

Veterans desiring to avail themselves of the benefits provided under Public Law 89-358 may register at Lehman as matriculants, paying tuition and fees. If they matriculate, the College may allow them up to eight credits for United States Armed Forces Institute courses in which they have passed final examinations.

Matriculated veterans of the U.S. armed forces who (a) have paid tuition and fees, (b) are upper-division students (an upper-division student is one who has received passing grades in courses representing 61 or more credits), and (c) have satisfactorily completed a minimum of 30 credits at Lehman will be awarded credit, but must file an application in order to receive it.

The Veterans Counseling Service (Shuster Hall, Room 238) advises veterans on the benefits for which they are eligible. The application form for benefits to be paid by the Veterans Administration may be obtained in the Office of the Registrar (Shuster Hall, Room 114).

Candidates for a Second Undergraduate Degree

Lehman College accepts candidates for a second undergraduate degree when the second degree represents preparation discrete from the first bachelor's degree. Candidates must complete a minimum of 30 credits in residence (see the definition of residence credits under the heading of "Credit Requirements" in this Bulletin). Second-degree applicants must file the City University Transfer Student Application.

College Now for High School Students

College Now is a collaborative initiative of the City University of New York and the New York City Department of Education. Its primary goals are to improve the academic achievement of high school students and to help New York City public high school students meet or exceed the requirements for high school graduation and the admissions requirements for baccalaureate degree programs at the City University of New York. College Now also seeks to provide underprepared high school students with the enriched instruction and enhanced support services they need to do well in high school and to be prepared for college.

In most cases, a public high school partners with a CUNY college to design a program of academic and preparatory courses and

workshops. College Now also offers two summer programs and professional development opportunities for teachers.

High school students can attend a variety of on-campus activities and, depending on their qualifications, choose from the following courses and workshops:

- introductory-level college credit courses; and/or
- non-credit preparatory courses and workshops; and/or
- specially developed high school credit classes.

Each college/high school partnership develops its own course offerings based on the needs of the student population at a particular school and the strengths and resources of the institutions involved. Students who enroll in college credit courses must pass the ELA or Math A/B Regents examinations with grades of 75 or better, or achieve a 480 (or equivalent on the revised test) on the SAT verbal and math sections.

Senior Citizens

New York State residents 60 years and older as of the first day of classes are permitted to enroll as auditors in Lehman College undergraduate courses on a space-available basis, tuition-free; proof of age is required for admission to the program. Individuals enrolling under this program are charged a \$65 fee per semester plus the \$15 Consolidated Fee. Applications can be obtained and filed in Shuster Hall, Room 161. Senior citizens who wish to enroll for credit must pay full tuition and fees.

Immunization Registration Requirement

Students who do not submit proof of measles, mumps, and rubella (MMR) immunization or who fail to return the meningococcal meningitis response form within a statutory grace period shall be prohibited from attending the institution. For additional information, contact the Health Services Center located in Room 188 of the T-3 Building at 718-960-8900.

Public Health Law 2165 requires that postsecondary students be immunized against measles, mumps, and rubella (MMR).

All registered full-time students and part-time students born on or after January 1, 1957 who are enrolled for at least six, but fewer than twelve semester hours (or equivalent) per semester in an approved degree program or registered certificate program must submit proof of MMR immunization. Students may be exempt from the required MMR immunizations for religious or medical reasons. To qualify for a religious exception, students must submit a signed statement, or in the event the student is a minor (under 18), a signed statement from their parent or guardian, that they hold sincere and genuine religious beliefs that prohibit immunization. To qualify for a medical exception, students must submit a written statement from a licensed physician or nurse practitioner indicating that such immunization may be detrimental to their health.

Public Health Law 2167 requires that postsecondary institutions provide written information about meningococcal meningitis to its students and that students complete, sign, and return a meningococcal meningitis response form. Public Health Law 2167 does *not* require that students be immunized against meningitis.

Public Health Law 2167 requires colleges to distribute written information about meningococcal meningitis disease and vaccination and students to complete, sign, and return to the college, a meningococcal meningitis response form that: (a) confirms that the college has provided the information about meningococcal meningitis; and (b) indicates that either: (1) the student has received immunization against meningococcal meningitis within the ten years preceding the date of the response form; or (2) the student has decided against receiving the vaccination. This law applies to students who are enrolled in at least six semester hours (or the equivalent) per semester. No student may be exempt from receiving information or returning the response form.

Tuition, Fees, and Financial Aid

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Financial Aid

Attendance/Academic Requirements for Recipients of Student Financial Aid

Regulations of both New York State (TAP/APTS) and Federal programs of student financial aid require regular class attendance. Funds will not be delivered to students who do not maintain satisfactory attendance records. Financial aid regulations also require that students make satisfactory progress toward a degree. Students should be aware that all financial assistance awards are subject to student compliance with Federal, State, and/or College regulations concerning satisfactory academic progress and standing. Students withdrawing from courses should report to the Financial Aid Office for information on their eligibility for aid. Students on probation who make satisfactory progress will continue to be eligible for financial aid. All Federal undergraduate financial aid is limited to 150 percent of the credits required for the bachelor's degree. Minimum standards in satisfactory progress by students, adopted by the City University, are indicated in the charts in this section of the Bulletin. For more information, visit www.lehman.edu/financialaid.

Financial Aid is available, in various forms, to full- and part-time undergraduate degree students. Information on application procedures and eligibility requirements may be obtained in the Financial Aid Office, located in Room 136 of Shuster Hall. Call 718-960-8545 or e-mail financialaid@lehman.cuny.edu.

The City University of New York Policy on Withholding Student Records

Students who are delinquent and/or in default in any of their financial accounts with the College, the University, or an appropriate State or Federal agency for which the University acts as either a disbursing or certifying agent, and students who have not completed exit interviews as required by the Federal Perkins Loan Program, the Federal Family Education Loan Programs, the William D. Ford Federal Direct Loan Program, and the Nursing Student Loan Program, are not to be permitted to complete registration, or issued a copy of their grades, a transcript of academic record, certificate, or degree, nor are they to receive

funds under the Federal campus-based student assistance programs or the Federal Pell Grant Program unless the designated officer, in exceptional hardship cases and consistent with Federal and State regulations, waives in writing the application of this regulation.

Students who have not met all their financial obligations to the College will not be issued a transcript, certificate, degree, or grade until they have made all outstanding payments. Students will not be allowed to register for a new semester unless they have satisfied all previous financial obligations to the College.

New York State Programs (HESC) Tuition Assistance Program (TAP)

Applicants must apply annually to the New York State Higher Education Services Corporation (HESC), Albany, NY 12255. The Higher Education Services Corporation determines the applicant's eligibility and mails an award certificate indicating the amount of the grant directly to the applicant.

The Tuition Assistance Program (TAP) is an entitlement program: awards are noncompetitive, and any student who meets the criteria for eligibility will receive funds. The applicant must:

- 1. be a New York State resident and an eligible U.S. citizen or permanent resident alien;
- 2. be enrolled full time (12 or more credits/equated credits) and matriculated. Equated credits, applicable to certain courses, are the number of scheduled hours of course meetings in excess of the credits that may be earned in that course;
- 3. be in good academic standing and meet TAP Progress and Pursuit Requirements (see adjacent charts);
- 4. officially file an area of concentration (major) form once 60 credits have been completed. This form may be obtained in the Registrar's Office, Shuster Hall, Room 106;
- 5. Students who are eligible for New York State financial aid (TAP) are required to register for 12 credit-hours of courses per semester that satisfy their degree requirements (General Education, writing-intensive, major, minor, and appropriate electives). Students who receive part-time TAP must follow the same regulations. For more information, visit www.lehman.edu/provost/registrar/tapnotice.html.

All income data are subject to verification by the New York State Department of Taxation and Finance. Undergraduate students may generally receive TAP awards for eight semesters of study. The amount of the TAP award is based on tuition charges and the student's New York State net taxable family income. To apply for TAP, students should complete a Free Application for Federal Student Aid (FAFSA) and the CUNY TAP/APTS Supplement Form. Applications are required annually. The Lehman College TAP code is 1412. For more information, visit www.lehman.edu/financialaid.

Aid for Part-Time Study (APTS)

APTS is a financial aid program for matriculated part-time undergraduate students. It is not an entitlement program, nor is it part-time TAP. To be eligible for APTS, students must enroll for a minimum of 6 but fewer than 12 credits/equated credits per term. To apply for APTS, students should complete a Free Application for Federal Student Aid form (FAFSA) and the CUNY TAP/APTS Supplement Form. Applications are required annually. For more information, visit: www.lehman.edu/financialaid.

Course Repeat Rule for New York State Financial Aid

As of May 1987, if a student repeats a course in which a passing grade acceptable to the institution has already been received, the course cannot be included as part of the student's minimum fulltime or part-time course load for financial aid purposes. When such courses are included in meeting the minimum requirement, they render the student ineligible for a State award. In the following instances, repeated courses may count toward full-time or part-time study: (1) when a failed course is repeated; (2) when a course may be repeated and credit earned each time.

Area of Concentration (Major)

Undergraduates who have earned at least 60 credits must file an Area of Concentration form (a major) in the Registrar's Office (Shuster Hall, Room 106) in order to receive any New York State awards.

Vietnam Veterans and Persian Gulf Veterans Tuition Award (VVTA and PGVTA)

VVTA and PGVTA are awards for full-time or part-time New York State resident undergraduate or graduate degree students who served in the Vietnam or Persian Gulf wars. Full-time students receive \$1,000 per semester or the amount of tuition, whichever is less. Part-time students receive \$500 per semester or tuition, whichever is less. Total awards received cannot exceed \$5,000. Recipients must also apply for the Tuition Assistance Program and Pell Grant awards. Applications are available in the Financial Aid Office.

Regents Awards for Children of Deceased of Disabled Veterans

A special application must be filed with the New York State Higher Education Services Corporation, Albany, NY 12255. Documentary evidence to establish eligibility is required with the application. The applicant must be:

(1) the child of a veteran who died, or who has a current disability of 50 percent or more, or who had such disability at the time of death resulting from U.S. military service during one of the following periods:

April 16, 1917-November 11, 1918 December 7, 1941-December 31, 1946 June 25, 1950-July 27, 1953 October 1, 1961-March 29, 1973

(2) a legal resident of New York State. Legal residence in New York State is also required of the parent at the time of entry into military service, or at death resulting from military service. The amount of the award is \$450 per year, for up to five years.

New York State Aid to Native Americans

Application forms may be obtained from the Native American Education Unit, New York State Education Department, Albany, NY 12230. The applicant must be a member of one of the Native American tribes within New York State and a New York State resident. The award is \$1,100 per year for a maximum of four years of full-time study (or five years, where a fifth year is required for completion of degree requirements). Students must submit semester grades at the end of each semester.

SEEK (Search For Education, Evaluation, and Knowledge

Application may be made by filing the City University Freshman Application and indicating an interest in being considered for the program in section four of the SEEK/CD Opportunity Programs section. The amount of financial assistance and other support provided to SEEK participants is based on need and fiscal availability. SEEK students must maintain full-time day matriculated status.

The applicant must:

- 1. be a resident of New York State;
- 2. be academically eligible (assessed by the University Application Admission Center;
- 3. be economically eligible (guidelines established by New York
- 4. be an applicant for admission to one of the senior colleges of the City University;
- 5. File a Free Application for Federal Student Aid (FAFSA) annually.

Vocational Rehabilitation

Handicapped persons may be eligible for benefits under State rehabilitation programs. New York State residents should apply to VESID (Vocational and Educational Services for Individuals with Disabilities), New York State Education Department, 99 Washington Avenue, Albany, NY 12234, or any of its local offices.

For TAP/APTS Purposes Only

TAP Program Pursuit and Academic Progress Chart for Undergraduate Students

(For Students Who Received First TAP Award Summer 2006 or Later)

To be	You must have	You must have	You must have a
eligible for	completed at least	earned at least	cumulative GPA
TAP	this many credits	this many total	of:
payment #	during the	credits toward	
	previous term:	your degree:	
1	0	0	0.0
2	6	3	1.1
3	6	9	1.2
4	9	21	1.3
5	9	33	2.0
6	12	45	2.0
7	12	60	2.0
8	12	75	2.0
9*	12	90	2.0
10*	12	105	2.0

^{*}SEEK students only

TAP Program Pursuit and Academic Progress Chart for Undergraduate Students

(For Students Who Received First TAP Award BEFORE Summer 2006)

To be eligible for TAP payment #	You must have completed at least this many credits during the previous term:	You must have earned at least this many total credits toward your degree:	You must have a cumulative GPA of:
1	0	0	0.0
2	6	0	0.0
3	6	6	1.0
4	9	18	1.2
5	9	31	2.0
6	12	45	2.0
7	12	60	2.0
8	12	75	2.0
9*	12	90	2.0
10*	12	105	2.0

^{*}SEEK students only

Federal Programs

Federal Pell Grant

The Pell Grant Program is an entitlement program for first degree undergraduates: awards are noncompetitive and any student who meets the eligibility criteria will receive funds. Application is made by filing a Free Application For Federal Student Aid (FAFSA) via the Internet at www.fafsa.ed.gov. Lehman College's Federal Title IV code is 007022.

After the FAFSA has been processed, a Student Aid Report (SAR), which produces an Expected Family Contribution (EFC), is electronically submitted to the Financial Aid Office. The amount of the applicant's award is based on the Expected Family Contribution, enrollment status, and the cost of education. Recipients must be enrolled as a first-degree matriculated undergraduate student. Students selected for verification must provide the Financial Aid Office with certain documents to verify the accuracy of the information reported.

Pell Grant awards are paid to eligible students for a maximum of 150 percent of the 128 credits required for the student's first bachelor's degree as long as satisfactory program progress and pursuit is maintained. For more information, visit www.lehman.edu/financialaid.

Academic Competitive Grant

An eligible student may receive an Academic Competitiveness Grant of up to \$750 for the first academic year of study and up to \$1,300 for the second academic year of study. To be eligible for each academic year, the student must:

- 1. be a U.S. citizen;
- 2. be a Federal Pell Grant recipient;
- 3. be enrolled full-time in a degree program;
- 4. be enrolled in the first or second year of his/her program of study at a two-year or four-year degree-granting institution (such as CUNY);
- 5. have completed a rigorous secondary school program of study (after January 1, 2006 if a first-year student, and after January 1, 2005 if a second-year student);
- 6. if a first-year student, not have been previously enrolled in an undergraduate program; and
- 7. if a second-year student, have at least a cumulative 3.0 Grade Point Average on a 4.0 scale for the first academic year.

In New York State, a Regents Diploma with Honors or Advance Designation serves as evidence of a rigorous secondary school program. A student may also qualify through completion of a prescribed set of courses taken, or two AdvanceD Placement (AP) courses with a minimum score of three (3) on the AP exams or two International Baccalaureate (IB) courses with a score of four (4) on the I.B. exams.

The prescribed set of courses must include four years of English, three years of Math (including Algebra I and higher-level courses, such as Algebra II, Geometry, or Data Analysis and Statistics), three years of science (including at least two courses from biology, physics, or chemistry), three years of social studies, and one year of a foreign language.

Most potential recipients will be notified by the U.S. Department of Education and will be given a website link that will help them determine whether they have completed a "qualifying rigorous secondary school program." A student's college will then be notified and will verify eligibility. Students who are not notified by the Department of Education and think they may be eligible, should contact the Financial Aid Office to determine eligibility.

National Science and Mathematics Access to Retain Talent (SMART) Grants

The U.S. Department of Education has created a new grant program for third- and fourth-year students who are majoring in math, engineering, or science. An eligible student may receive a national SMART grant of up to \$4,000 for each of the third and fourth academic years of study. To be eligible for each academic year, a student must:

- 1. be a U.S. citizen;
- 2. be a Federal Pell Grant recipient;
- 3. be enrolled full-time in a degree program;
- 4. be enrolled in a four-year degree-granting institution;
- major in physical, life, or computer science, engineering, mathematics, technology, or a critical foreign language (defined as Arabic, Chinese, Japanese, Hebrew and Semetic, and Russian); and
- 6. have at least a cumulative 3.0 Grade Point Average on a 4.0 scale in the coursework required for the student's major.

Under the SMART Program, CUNY will identify Pell-eligible Federal student aid recipients who are majoring in physical, life, or computer science, engineering, mathematics, technology, or a critical foreign language. A Student's college will be able to provide information on which of its academic programs are designated by the Department of Education as eligible for SMART grants.

For the National SMART program, the amount of the grant, in combination with the Federal Pell Grant, other resources, and estimated financial assistance, may not exceed the student's financial need (cost of attendance, minus EFC, equals financial need). A student may not receive more than one SMART Grant award in each academic year for which the student is eligible.

All annual award amounts for an academic year may be reduced if sufficient funds are not available for all eligible students nationally in an award year.

Federal Supplemental Educational Opportunity Grants (FSEOG)

Grants are available to first-degree undergraduate students with exceptional need, enrolled for courses totaling at least 6 credits/equated credits per term. Application is made by filing the Free Application for Federal Student Aid (FAFSA) or via the Internet at www.fafsa.ed.gov. For more information, visit www.lehman.edu/financialaid.

Federal Direct Student Loan

To be eligible for a Federal Direct Student Loan, a student must be:

- 1. a U.S. citizen or eligible non-citizen;
- 2. enrolled or admitted as a matriculated student; and
- 3. determined to be eligible for the loan after completion of the FAFSA, which results in the calculation of the "Expected Family Contribution."

Students must also be registered for at least 6 credits/equated credits per semester. Freshmen may borrow up to \$2,625 per academic year; sophomores, up to \$3,500 per academic year; juniors and seniors, up to \$5,500 per academic year. There is a maximum cap of \$23,000 for an undergraduate education. Students may borrow at a relatively low variable interest rate, set each June. Repayment is not expected while he/she remains enrolled continuously at least half-time (6 credits/equated credits), and for six months after he/she ceases to be at least a half-time student.

For information regarding the unsubsidized Federal loan, which requires the borrower to pay interest while in school, consult a counselor in the Financial Aid Office. The FAFSA Student Aid Report must be on file with the Financial Aid Office before a Federal Direct Student Loan can be processed. For more information, visit www.lehman.edu/financialaid.

Federal Parent Loans for Undergraduate Students (PLUS)

Parents may borrow up to \$4,000 annually for each dependent student at a variable interest rate with a 10 percent cap. Repayment begins 60 days after disbursement of the loan.

Federal Perkins Loan Program

Application is made by filing a Free Application for Federal Student Aid (FAFSA). Loans are available to matriculated students with exceptional need and who register for at least 6 credits/equated credits. Amounts that may be borrowed are \$3,000 for each year of undergraduate study. Students' total undergraduate debt may not exceed \$15,000. Repayment is at 5 percent interest and begins nine months after graduation or leaving school, and it may extend over a period of ten years. There are also certain cancellation provisions. For more information, visit www.lehman.edu/financialaid.

Federal Work/Study Program

Application is made by filing a FAFSA. The applicant must be matriculated and enrolled in courses totaling at least 6 credits/equated credits per term. Students may work up to 20 hours per week. Jobs are available on and off campus. NOTE: Students may not earn more than their Federal Work/Study award. For more information, visit www.lehman.edu/financialaid.

U.S. Bureau of Indian Affairs Aid to Native Americans

Application forms may be obtained from: U.S. Department of the Interior; Bureau of Indian Affairs; New York Liaison Office; Federal Building, Room 523; 100 South Clinton Street; Syracuse, NY 13260. To be eligible, the applicant must:

- 1. be at least one-fourth American Indian, Eskimo, or Aleut;
- be an enrolled member of a tribe, band, or group recognized by the Bureau of Indian Affairs;
- 3. be enrolled or accepted for enrollment at Lehman College; and
- 4. have financial need.

Veterans Administration (VA) Educational Benefits

Application forms are available at all Veterans Administration (VA) offices, active duty stations, and American embassies. Completed forms are submitted to the nearest VA office. In New York City, the VA is located at 252 Seventh Avenue (at 24th Street), New York, NY 10001. Eligibility requirements, entitlements, time limits, and programs of education vary. Veterans with questions may inquire in the Office of the Registrar (Shuster Hall, Room 114).

Scholarships and Awards

Lehman College supports academic excellence with a growing network of scholarship programs and paid research positions for outstanding students. Inquiries about scholarships are welcomed in the Office of Scholarships, Shuster Hall, Room 205.

New Students

An Academic Achievement Scholarship Program is available for freshmen who are applying to Lehman College. Scholarships from \$1,000 to a maximum of \$4,000 per year are available to new students entering in the Fall semester. All freshmen who are admitted to Lehman are considered for Academic Achievement Awards. No separate application to the Scholarship Program is necessary for freshmen to be considered for the Award.

The selection process is competitive, and awards are made on the basis of an outstanding academic record. Freshman students are evaluated on the strength of their high school record and their score on the SATs.

The award is renewable for up to four years of full-time undergraduate study. With Lehman's full-time annual tuition of \$4,000 a year, this scholarship, in combination with the New York City Merit Scholarship Award, the New York State Tuition Assistance Program (TAP), and the Federal Pell Grant, should provide many students with the opportunity to complete their bachelor's degrees virtually free of charge and permit family education funds to be reserved for graduate and professional studies.

Potential recipients must file a City University Freshman Application and list Lehman as a college choice. The filing deadline for Fall semester consideration is in mid-March. Only those students who have been admitted to Lehman are considered for these awards.

Enrolled Students

As students progress in their studies at Lehman, they may apply to the following programs based on their academic achievement in college:

Minority Access to Research Careers (MARC): The National Institutes of Health have awarded the College funds to provide a limited number of scholarships for students interested in pursuing the Ph.D. in the general area of biomedical research. This scholarship program is for students in their junior and senior

years of study at the College. Students selected for this program work closely with faculty members on designated research projects and receive funds to travel to the national Annual Biomedical Research Conference for Minority Students, where they will present the results of their research projects. The current stipend is \$10,956 per year plus tuition. Interested students should make application for this scholarship program during their sophomore year. Applications are available in the Office of the Dean of Natural and Social Sciences, Shuster Hall, Room 302.

Departmental Awards: offered for excellence in specific academic subjects and varying in amount and criteria for selection.

Tuition and Fees

Tuition and fees are subject to change by action of the Board of Trustees of The City University of New York. Please consult the Bursar's Office, the Director of Admissions, or the Vice President of Student Affairs for a current schedule.

Board of Trustees of the City University of New York Guidelines

All fees and tuition charges listed in this Bulletin and in any registration material issued by the College are subject to change by action of the Trustees of the City University of New York without prior notice.

In the event of any increase in the fees or tuition charges, payments already made to the College will be treated as a partial payment, and notification will be given of the additional amount due and the time and method of payment.

The undergraduate Student Activity Fee or any part thereof is not refundable at any time, except when the student's registration is cancelled because of a withdrawal of a course or courses by the College.

A resident student is a U.S citizen who has had his or 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 for the semester for which the residency determination is made and who states his or her intention permanently to live and maintain his or her principal place of abode in New York State.

A full-time undergraduate student is one who is enrolled for at least 12 credits or equivalent. (See below, under "Full-Time Status," for important exceptions.) A part-time student is one who is enrolled for fewer than 12 credits or equivalent.

For each student, the tuition and fees due depend on whether he/she will attend full- or part-time, whether or not he/she resides in New York State, and whether he/she is or is not matriculated.

All fees, tuition charges, credits, and course hours listed are subject to correction in the event of error. All fees, calculations, and repeat billings are subject to correction in the event of error. Students will be obligated to pay the correct amount.

The schedule of tuition fees applies to all scheduled semesters, regardless of duration, subject to such special tuition fee rates as may be established by the Board of Trustees of the City University of New York. The same policy applies to summer session, except

that there is no maximum tuition. Summer session students must pay for all credits or credit equivalents taken. A child of a member of the permanent staff of the City University of New York, or a child of a deceased or retired member of such staff who had served for more than five years on an annual salary, or a child of an employee of the City of New York or of a City agency who is required to live outside the State of New York in the performance of his or her official duties shall be charged resident rates. The resident rate shall be applicable to a student of another college or university, that grants, in exchange, resident rates to a student of a college within the City University of New York. Evidence of satisfactory educational qualifications must be presented, and the approval of the president of such college within the City University is required.

All recipients of financial aid should be aware that this aid is based on the personal and financial information that the student provides to Lehman College. In the event that a student is determined not to be eligible, in whole or in part, for any expected financial aid for which he or she has applied, he or she will be held fully responsible for payment of any monies that are due the College for registration. If students withdraw, either officially (by filling out a withdrawal form in the Registrar's Office) or unofficially (by no longer attending classes) from any course or courses for which they have registered and a reduction in aid occurs, the student will be held personally responsible for payment of any monies due to the College.

Tuition

Legal Residents of New York State

Matriculated full-time students: \$2,865 per semester, plus \$189.00*

Matriculated part-time students: \$245 per credit, plus \$119.00 **

Non-degree students: \$360 per credit, plus \$189.00* (for 12 or more credits) or \$119.00** (for fewer than 12 credits)

Out-of-State Residents, Including Foreign Students

Matriculated full-time students: \$510 per credit, plus \$189.00* Matriculated part-time students: \$510 per credit, plus \$119.00** Non-degree students: \$760 per credit, plus \$189.00* (for 12 or more credits) or \$119.00** (for fewer than 12 credits).

Material Fees

Some courses impose a fee to cover the costs of special materials, film rental charges, lab materials, art materials, transportation, field trip expenses, or other non-instructional costs. Material fees are subject to change and are nonrefundable.

Course Number	Material Fe
ART 103	\$45.00
ART 106	\$45.00
ART 107	\$45.00
ART 201	\$45.00
ART 203	\$45.00
ART 207	\$45.00
ART 208	\$45.00
ART 301	\$45.00
ART 303	\$45.00
ART 307	\$45.00
ART 308	\$45.00
ART 328	\$45.00
ART 710	\$45.00
ART 730	\$45.00
ART 732	\$45.00
ART 734	\$45.00
ART 736	\$45.00
BIO 166	\$35.00
BIO 167	\$35.00
BIO 181	\$35.00
BIO 182	\$35.00
BIO 183	\$35.00
BIO 228	\$35.00
BIO 230	\$35.00
BIO 238	\$35.00
CHE 115	\$40.00
CHE 121	\$40.00
CHE 136	\$40.00
CHE 167	\$40.00
CHE 169	\$40.00
CHE 233	\$40.00
CHE 235	\$40.00

Full-Time Status

- TAP students who register for 12 or more credits or credit equivalents that count toward the degree, including at least 6 credits exclusive of credit equivalent hours, are considered by the College to be full-time (see "Courses with Credit Equivalent Hours" in this section of the Bulletin). This applies to all students except first-time freshmen. New freshmen must be enrolled for at least 3 credits exclusive of credit equivalent hours.
- Full-time status for Pell Grants is defined as 12 credits or Pell credit equivalents (see "Courses with Credit Equivalent Hours" in this section of the Bulletin).
- Students receiving veterans' benefits must have 12 credits to be considered full-time.

^{*} Includes \$74.00 Student Activity Fee, \$15.00 Consolidated Fee, and \$100.00 Technology Fee per semester.

^{**} Includes \$54.00 Student Activity Fee, \$15.00 Consolidated Fee, and \$50.00 Technology Fee per semester.

^{*} Includes \$74.00 Student Activity Fee, \$15.00 Consolidated Fee, and \$100.00 Technology Fee per semester.

^{**} Includes \$54.00 Student Activity Fee, \$15.00 Consolidated Fee, and \$50.00 Technology Fee per semester.

• Students registering for student teaching courses are considered by the College to be full-time students irrespective of the actual number of credits they attempt.

All students who attend full-time, as defined above, pay tuition at the full-time rate.

Payment Procedures

Students may pay their tuition and fees with the following options: cash, money order, credit card (Visa and MasterCard only), bank check, traveler's check, or personal check (students paying by check should make the check payable to Lehman College). Payment can be made by mail, in person, drop box (do not deposit cash), fax, or submitted via the Web (using eSIMS). The College will not accept second-party checks. The College will not accept a personal check from any student who has previously tendered a check that was returned by his/her bank.

If a student has an outstanding financial obligation that may be owed to Lehman College or any of its affiliated corporations, Lehman College officers or their designees are authorized to act as the student's agent to endorse and negotiate any checks that he/she may be entitled to receive from any source of financial aid: Federal, State, City, public or private, College or other, to the extent that such authorization shall be used to fulfill this obligation. This authorization is effective as long as there is an outstanding balance owed for any semester.

Students who do not make full payment on their tuition and fees and other College bills, and whose accounts are sent to a collection agency, will be responsible for all collection costs, including agency fees, attorney fees, and court costs, in addition to whatever amounts the student owes the College. In addition, non-payment or a default judgment against the account may be reported to a credit bureau and reflected in the student's credit report.

Financial aid: Matriculated students who are recipients of financial aid must present proof of their awards at the time of registration. They will be required to pay any difference if the financial aid does not fully cover the amount due. All recipients of financial aid should be aware that if they fall below full-time enrollment because of withdrawal or cancellation of a course or courses, they may no longer be entitled to their financial aid. Students who use TAP, Pell Grant funds, or any other financial aid toward meeting their financial obligation should consult with the Financial Aid Office about any impact on their current semester entitlement and future semester awards. Students who are not eligible for financial aid must pay tuition and fees in full on the day of registration.

Employer Voucher

Students who anticipate using an employer voucher for payment of their registration should verify with the Bursar's Office the acceptability of the voucher prior to registration. Vouchers must provide for immediate payment when billed and cannot be dependent on grades received for the term in question.

Refunds

Refunds of Fees

The Student Activity Fee, Consolidated Fee, and Technology Fee, or any part thereof, is not refundable at any time except when the student's registration is canceled because of withdrawal of a course or courses by the College or the student totally withdraws prior to the start of classes and is granted a 100 percent refund of tuition. No portion of any special fee, parking fee, and any fine or penalty fee is refundable.

Refunds of Tuition

Withdrawal and refund requests should be made in the Office of the Registrar (Shuster Hall, Room 114). The date on which this form is completed and filed, not the student's LAST day in class, is the official date of withdrawal that serves as the basis for computing a refund.

Non-attendance in classes does not waive the tuition liability a student incurs at registration. Any student who is unable to file for withdrawal from a course in person may do so by mail. The official date of withdrawal will be the date the letter is postmarked.

The interval between a properly executed application for a refund and receipt of a refund check is usually five weeks. Students dropping courses will be refunded according to the dates within this schedule. Students may receive a 100% of tuition refund for voluntarily withdrawing from a class up to, and not including, the first day of classes. The first day of classes is not the first day of THE STUDENT'S class but, rather, the College's opening day of classes for the semester or session.

As a result of the Higher Education Reauthorization Act, students who are recipients of Federal financial aid are subject to one of the following Federal Refund Policies (subject to change):

Title IV Refunds

Federal Title IV Funds Information: Prorata Refund (subject to change): Effective Fall 2000, CUNY is following the new Federal regulations on the return of Title IV funds. Federal Prorata refunds will no longer be applicable for first-time and continuing students. The College will calculate how much Title IV aid has been earned by the student based on the period of attendance. The unearned portion of the Title IV funds must be returned to the Department of Education by the College and the student.

All other students are subject to the following tuition refund schedule approved by the Board of Trustees:

Withdrawal (Fall/Spring)	Refund	Summer
Before the first day of classes	100%	
Withdrawal to register at another CUNY college	100%	
Through first week of classes	75%	50%
Through second week of classes	50%	25%
Through third week of classes	25%	None
After the end of the third week of classes	None	

Special Provisions for Students in the Military

The following policies apply to students who leave CUNY to fulfill military obligations.

- I) Students called up to the reserves or drafted before the end of the semester:
 - a. Grades. In order to obtain a grade, a student must attend 13 weeks (five weeks for summer session).
 - b. Refunds. A student called up to the reserves or drafted who does not attend for a sufficient time to qualify for a grade is entitled to a 100% refund of tuition and all other fees except application fees.
- II) Students who volunteer (enlist) for the military:
 - a. Grades. Same provision as for students called up to the reserves. In order to obtain a grade, a student must attend 13 weeks (five weeks for summer session).
 - b. Refunds. The amount of the refund depends upon whether the withdrawal is before the 5th week of classes.
 - 1. Withdrawal before the beginning of the 5th calendar week (3rd calendar week for summer session): 100% refund of tuition and all other fees except application fees.
 - 2. Withdrawal thereafter: 50% refund.

III) Other provisions for Military Service:

- a. Resident Tuition Rates. These lower rates are applicable to all members of the armed services, their spouses, and their dependent children, on full-time active duty and stationed in the State of New York.
- b. Re-enrollment of Veterans. Veterans who are returning students are given preferred treatment in the following ways:
 - 1. Veterans who were former students with unsatisfactory scholastic records, may be readmitted with a probationary program.
 - 2. Veterans, upon their return, may register even after normal registration periods, without late fees.
 - 3. Granting of college credit for military service and armed forces instructional courses.
 - 4. Veterans returning too late to register may audit classes without charge.
- c. Late Admissions. Veterans with no previous college experience are permitted to file applications up to the date of registration, and are allowed to begin classes pending completion of their application and provision of supporting
- d. Readmission Fee. Upon return from military service, a student will not be charged a Readmission Fee to register at the same college.
- e. Veterans Tuition Deferrals. Veterans are entitled to defer the payment of tuition pending receipt of veterans' benefits.
- f. New York National Guard Tuition Waivers. Active members of the New York National Guard, who are legal residents of New York State and who do not have a baccalaureate degree, are eligible for a tuition waiver for undergraduate study.

Refund of Tuition and Fees to TAP and other Financial Aid Recipients

Students who withdraw during the refund period and have been awarded a full New York State Tuition Assistance Program (TAP) entitlement may elect to use their entitlement as credit toward their current financial liability and, consequently, will forfeit one semester of TAP eligibility; or they may elect to return their TAP award to the Corporation (advantageous only if a small liability is incurred), retain the semester's TAP eligibility, and reimburse the College for any money due.

- Students who withdraw during the refund period with partial TAP entitlements that are not large enough to cover their tuition liability will be required to pay the difference.
- Students awarded financial aid who change their status from full-time to part-time and vice versa must visit the Financial Aid Office, which will adjust their award.
- Students who withdraw after the refund period may relinquish their TAP entitlement and remaining financial aid award for the withdrawn semester.

Courses with Credit Equivalent Hours

Lehman College courses generally carry a credit value equal to the number of weekly contact hours. In certain courses—generally developmental or compensatory in nature—the number of weekly contact hours may exceed the credit value. These additional contact hours are designated "credit equivalents" or "equated credits." For courses with credit equivalents, tuition is charged on the basis of contact hours and not of credits. Even if a course offers no credit, it is nevertheless billed according to contact hours. The maximum semester rate applies to these courses alone or in combination with credit-bearing courses.

Estimated Other Expenses

Lehman College estimates that apart from tuition, fees, and room and board, students should budget for an additional \$4,328 per year, allocated as follows: books and supplies, \$832; personal and incidental items, \$1,660; transportation, \$816; lunches, \$1,020. International matriculated students who are attending Lehman on a student visa must pay for private medical insurance.

Nursing students registering in clinical courses will have the additional expenses of a uniform, health insurance (unless they are covered by their parents' policies), and malpractice liability insurance. Prior to registration in clinical courses, nursing students also are required to undergo a number of medical tests at their own expense. (For further information, consult the Department of Nursing.)

Bursar's Receipt

Bursar Validation is required to complete term registration. All students must submit a signed Bill or Payment Form (zero balance included) to the Bursar's Office by the due date. The Bill or Payment Form can be mailed, faxed, submitted via the Web (using eSIMS), or delivered to the Bursar's Office or drop box. All course

selections that are not validated by the due date will be cancelled.

Non-Instructional Fees

Application Fees

Non-refundable, but payable only once at the time of filing an application for admission to any City University college:

Matriculating freshmen	\$65
Transfer Students	\$70
Non-degree Undergraduate Students	\$65
Non-degree Graduate Students	\$125
Consolidated Fee	\$15

per semester or session (payable by all students, including senior citizens).

Technology Fee	\$50.00 (for fewer than 12 credits)
	\$100.00 (for 12 or more credits)

Change of Program Fee \$1

Fee charged to students who change their schedule of classes after it has been approved and recorded.

ID Card Replacement	\$10
Late Registration Fee	\$25
Nonpayment Service Fee	\$15

Penalty fee charged to students if they are delinquent in making payment of any amount due after the scheduled due date.

Readmission Fee \$10

Students who apply to return to the College after an absence of one semester or more (exclusive of summer session) are required to pay this fee to be readmitted to the same unit. The charge is applicable whether or not a student has taken a formal leave of absence.

Payment Reprocessing Fee \$15

Charge for those students who have previously submitted checks payable to the College that were not honored by their banks: students who do not make a check good by a given date will be required to satisfy their obligations and pay the applicable reprocessing fee plus a non-payment service fee.

Special Examination Fees

When make-up final exam for one course is taken after	\$25
scheduled final class exam	
When make-up final exams for two courses are taken	\$30
When make-up final exams for three courses are taken	\$35

CUNY Accelerated Study Fee (for students taking more than 18 credits.) See the information on policies governing excess credit in the "Academic Services and Policies" chapter in this Bulletin. Fees are charged per contact hour.

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Credits	Fee
Less than or equal to 2	\$100 semester
Greater than 2 but less than or equal to 4	\$230 semester
Greater than 4 but less than or equal to 6	\$460 semester
Greater than 6	\$690 semester
Senior citizens	\$65 semester
Qualifying Examination Fee	\$25
Transcript-of-Record Fee	\$7

NOTE: No fee is charged for transcripts sent between City University units.

Duplicate Bursar Receipt	\$5
Duplicate Record Fee	\$1
Certificate that degree has been granted	\$15

For issuance of a certificate of graduation to students who request a replacement for a lost diploma.

Cooperating Teachers Fee \$25

Cooperating teachers may be granted tuition waivers of up to 6 credits (two valid certificates) per semester, limited to three successive terms. For courses for which tuition is waived, charges for excess contact hours are also waived. Tuition waivers may be granted to residents and non-residents and are applicable to graduate courses and undergraduate courses.

Cooperating teachers who take credits in excess of those waived are required to pay tuition at applicable regular rates for the additional credits. Cooperating teachers enrolled in courses for which tuition is waived (plus any number of courses for which tuition is not waived) are required to pay the Cooperating Teacher Fee of \$25, the \$15 Consolidated Fee, an Application Fee of \$125, and a Technology Fee of \$37.50.

Cars/Motorcycles:

Day or Evening Session: \$55 per semester Purchase permit in Shuster Hall, Room 078.

Breakage: As per damage

Loss of Key: \$1.75 (Shuster Hall, Room 031)

Loss of Equipment/Supplies: List Price

Campus Facilities and Resources

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Academic Facilities

The Leonard Lief Library

The Leonard Lief Library is housed in a modern, four-story building, with an online catalog and circulation system (CUNY+) and access to over 65 networked electronic periodical indexes and full-text databases. More than 150 state-of-the-art computer workstations are available for student use, most with full Internet access. The Library's home page

(www.lehman.edu/provost/library/index.htm) provides links to CUNY+, licensed electronic resources, and websites of interest to researchers. These electronic resources are available to the Lehman community from off-campus as well as on-campus locations.

The open-stacks book collection of 572,000 volumes is supplemented by 713,500 microforms and a growing collection of 5,391 films and videotapes. The Library subscribes to 1,535 print periodicals and over 13,000 electronic journals. It is a designated depository for State and Federal government documents. The Library collection supports course work on undergraduate and graduate levels. Interlibrary loan and electronic document delivery are available to support research by graduate students and faculty.

In addition to general and specialized non-circulating reference collections, the Library has a well-used reserve collection that includes current textbooks. Specialized service areas include a periodicals room, laboratory classrooms equipped with audiovisual and computer equipment, and the Bronx History Archives. The Library's state-of-the-art computer labs are used both as classrooms for research training and as open labs providing students with access to the Internet, word processing, and spreadsheets. The Fine Arts Collection contains an extensive collection of records, music, and multimedia CDs, as well as audiotapes and videotapes that can be studied and enjoyed at individual carrels equipped with headphones and video monitors. The Education Library contains K-12 curriculum materials, the ERIC microfiche collection, a special teaching collection of children's books, and computer workstations. The Assistive Technology Center, located on the second floor, provides a variety of specialized computer services available to all.

Reference librarians and student tutors are available to assist students during Library hours. Librarians offer, by appointment and on a drop-in basis, class orientations and bibliographic instruction covering the most important research tools in all areas of the curriculum. Students may register for free workshops in a variety of computer applications.

The Library can seat 1,200 people; attractive lounge areas are scattered throughout the building. A limited number of private study rooms are available for small groups of students who wish to study together. Admission to the Library requires a currently validated Lehman College ID Library hours may be obtained by calling 718-960-7766.

Computer and Instructional Technology Facilities

The College has recently established a new Division for Information Technology, which oversees the development of IT infrastructure and the coordination of IT operations and services across the campus. IT support for students, staff, and faculty is coordinated through the Technology Coordinators in different schools and a College-wide IT support group in the Department of Information Technology Resources (ITR), and provided by a team of computer and network specialists in specialized department labs, school offices, and the centralized ITR facilities.

The Department of Information Technology Resources provides access to centralized computing and related technologies in support of the College's instructional, research, and administrative activities. Lehman's Information Technology Center (ITC) is located on the plaza level of Carman Hall. The facility houses nine PC and Macintosh computer labs for course instructions, an open lab with over 100 computers for student use, shared printing facilities, multimedia meeting or conference rooms, and a help desk. A dedicated faculty development lab, also managed by ITR, is located in the Library.

The entire ITC facility is networked on a high-speed backbone providing access to the Internet and campus network services, including electronic mail, the World Wide Web, and web-based applications, such as the CUNY Portal and its related resources and services; the Blackboard online teaching and learning environment; online course registration; and remote library and specialized departmental resources. Wireless access to the network is also available throughout the campus. The facility supports two-way interactive video distribution. Access from off-campus is available for many of these resources through an Internet service provider.

Facilities for video conferencing and distance learning include a distance learning satellite broadcast and reception studio/classroom under the auspices of HETS (the Hispanic Educational Telecommunications System, of which Lehman College is a founding member); a high-speed video distance learning classroom connected to EdNet (part of New York City's institutional network and the three public high schools adjacent to Lehman, and a distance-learning classroom with smart whiteboard presentation and video conferencing capabilities (created under the University's Media Distribution System).

Lehman's role as the central hub of the Bronx Information Network also affords Lehman students an opportunity to take advantage of the resources of other educational, medical, and artistic institutions in the Bronx. A systematic effort is also under way to convert many of lecture halls and classrooms into technology-enhanced or smart classrooms.

ITR makes available specialized equipment for disabled students. All rooms are accessible for persons with disabilities, and specialized hardware and software for visually or hearing-impaired persons are provided. Students and staff may also use the facilities of the Assistive Technology Center, located in the Library.

Other specialized services and facilities include graphic and scanning services and a media conversion lab to assist faculty in developing electronic-based course materials. ITR staff members provide consulting, documentation, technical assistance, and educational services to the Lehman community.

The Media Technology Group of ITR, also housed in Carman Hall, provides equipment and technical aids for the production of media presentations using photography, graphics, films, and slides. A multimedia technology center offers video and multimedia facilities designed to augment traditional audiovisual services.

In addition to the centralized facilities, individual academic divisions or departments operate computer labs to support discipline-specific applications, such as a graphics-based computer lab and a 3-D printing facility in the Department of Anthropology; three Computer Graphics and Imaging Labs in the Department of Art; a cutting-edge Laboratory of Geographic Information Technologies in the Department of Earth, Environmental, and Geospatial Sciences; a multimedia language laboratory in the Department of Languages and Literatures; multiple facilities for radio, television, and film productions in the Department of Journalism, Communication, and Theatre; and specialized computer labs in the School of Education, the School of Continuing and Professional Studies, and the Departments of Biological Sciences, Mathematics and Computer Science, Nursing, Sociology, and Social Work. The Library, the Academic Support Center, the Science Learning Center, the CUNY Macaulay Honors College at Lehman, and the Student Leader Computer Center also have significant computer resources available.

Students may request information about IT resources and services, including ITC hours of operation and technical assistance, by phoning 718-960-7333, sending an e-mail to helpdesk@lehman.cuny.edu, or visiting the ITR Open Center (Carman Hall, Room 111) or the ITR website at www.lehman.edu/itr.

The Language Laboratory

The Department of Languages and Literatures has one multimedia language laboratory. The laboratory, which is located in Carman Hall, Room B-37, has twenty-eight networked computers and software programs that correspond to the texts used to study the languages taught at Lehman. The computers in this laboratory have high-speed connection to the Internet, sound cards, headsets, CD/DVD players, and microphones. In addition, a set of special software programs from Tandberg is installed: Imperata, Divace Lehman College Undergraduate Bulletin 2013-2015

Solo, and Library Pilot.

- Imperata is used for classroom management. It can be used to monitor student activities, provide mouse/keyboard control/collaboration between a pair of student computers, and share individual computer screens. Additional features include the creation of special files called electronic portfolios. An electronic portfolio contains all of the elements an instructor requires to conduct class sessions in a computer lab: a view of the classroom; lesson plan objectives; relevant links to the Internet or other shared directories; the ability to upload files/folders; and the operations used for managing a classroom in a computer environment.
- Divace, which stands for Digital Interactive Audio Video Recorder, allows students/instructors to play audio/video and also to record and author their own audio material.
- Library Pilot currently functions as a database for online links to language-related websites.

These computers are also linked to a digital video server; students can study from the language software stored on the server and digitally record their voices for oral and audio practice. Accommodation is provided for visually impaired and disabled students. Zoomtext, used to magnify text, is installed on one computer. The software Jaws, used by blind individuals, is installed on one computer. One computer station is designed to accommodate an individual using a wheelchair.

Advanced Imaging Labs

The Art Department, in conjunction with Lehman's Department of Mathematics and Computer Science, has established three advanced imaging labs in the Fine Arts building. One lab (in Fine Arts, Room 047) contains twenty up-to-date Mac work stations with new Epson Flatbed Scanners, a Nikon Supercool Film/Slide Scanner, and a Xerox 7700 color printer. A second lab (in Fine Arts, Room 006) contains fifteen Mac work stations with Epson flatbed scanners. These teaching labs give students the opportunity to learn digital imaging, desktop publishing, webpage design, computer animation, advanced 3-D modeling, and multimedia interactive programming. In addition, a third lab (in Fine Arts, Room 006), dedicated to advanced student and faculty digital imaging, contains several Macintosh G5 computers and printers and additional high-end digital imaging and large-format printing equipment.

Science Laboratories

Significant research and training facilities are available in the Lehman science departments.

In the **Department of Biological Sciences**, the Phytochemistry Laboratory is a newly renovated facility in Davis Hall (Room 119). It is fully equipped with instruments used for the identification and purification of natural products, including a gas chromatograph, high-performance liquid chromatographs (HPLC), and a liquid chromatograph-mass spectrometer (LC-MS). The Molecular Biology Research Facility contains sophisticated instrumentation for molecular biology, cellular biology, and biochemical research. The equipment includes a

D.N.A. synthesizer, HPLCs, ultracentrifuges, high-speed centrifuges, phosphorim ager, scanning spectrophotometers, electrophoresis systems for a protein and nucleic acid analysis and DNA sequencing, and computers for integration with the instrumentation. Bioimaging facilities include a confocal microscope, fluorescence microscopes, and scanning and transmission microscopes. There is a recently built research greenhouse, as well as an older greenhouse.

A Biological Sciences Computer Center is integrated into the research instruments in the Biological Sciences Department and enables students to learn how to operate state-of-the-art scientific instruments. The Center has real-time videoconferencing capabilities to allow faculty to incorporate research results and access the Internet while teaching courses.

Noteworthy research equipment and facilities in the Department of Chemistry include nuclear, magnetic, and electron paramagnetic resonance spectrometers, uv-visible and Fourier transform infrared spectrophotometers, gas, and high-pressure liquid mass-spectrometer-interfaced chromatographs, teaching and research labs, and a student computing facility.

The Department of Physics and Astronomy is conducting cutting-edge research in nanoscience, quantum optics, and string theory. Undergraduate and graduate students are involved in research that is supported by grants from the National Science Foundation, the U.S. Department of Energy, and the U.S. Department of Defense.

The **Department of Anthropology** houses extensive human and primate osteologic and fossil cast collections. A computer graphics-based student laboratory, established with a National Science Foundation grant, lets students access these collections for virtual study and research. The Department also houses the Metropolitan Forensic Anthropology Team, which advises regional Medical Examiners' offices on cases involving unidentified human remains.

All these departments and researchers have easy access to the academic computing facilities at the College as well as the mainframe computer at the City University Computer Center.

Instructional Support Services Program

The Instructional Support Services Program (ISSP) is dedicated to facilitating the academic development of Lehman students at the graduate level. The program provides tutoring, workshops, and additional resources to support classroom learning. The ISSP provides instructional support through the Academic Center for Excellence (ACE), located in the Old Gym Building, Room 205, and the Science Learning Center (SLC), located in Room 133 of Gillet Hall. See www.lehman.edu/issp.

New York Botanical Garden

Under an agreement with CUNY, a number of staff members of the New York Botanical Garden offer courses in Lehman's Department of Biological Sciences. This arrangement makes specialized material, equipment, and collections available to Lehman students and provides facilities for research under exceptionally favorable conditions. The Museum of the Botanical Garden contains a library of about 65,000 volumes; a herbarium with some three million specimens, which provides excellent opportunities for research in taxonomy, ecology, and phytogeography; and special rooms for the cryptogamic collections. The collection of living plants on the grounds and in the greenhouses provides a wealth of material, with approximately 12,000 species represented.

The Bookstore

The Bookstore, located on campus between Davis and Carman Halls, provides the required faculty-chosen textbooks and related course materials. It also carries a large line of academic software, a comprehensive trade section of general interest books, and school supplies. The College community may shop for compact discs, select remainder books on sale at up to seventy percent off list price, and purchase Lehman apparel and other products, including snacks, candies, sundries, and soda. Items in the Bookstore are also available for purchase online at www.lehmanbookstore.com.

Fine and Performing Arts Facilities Lehman Center for the Performing Arts

Lehman Center for the Performing Arts' 2,310-seat Concert Hall is the borough's premier performance space. Critics have called it "acoustically perfect." With a modern 2,400-square foot stage and a hydraulic orchestra pit, the Center presents outstanding classical, popular, and folk/ethnic dance, music, and theatre companies from around the world. Special, culturally diverse community celebrations enhance the Center's offerings. The Center has also served as the site of numerous public programs and debates of national interest. Lehman students are offered discounted tickets for most events, as well as opportunities to work as ushers and apprentice stagehands. Examples of artists who have recently performed at the Center include El Gran Combo, Virsky Ukrainian National Dance Company, Smokey Robinson, Jimmy Cliff, Trinity Irish Dance Company, Nickelodeon's Blues Clues Live, and the gospel musical "Your Arms Too Short to Box With God."

Lehman Stages

Lehman Stages is a performance and rehearsal facility at Lehman College, comprised of the Lovinger Theatre, the Studio Theatre, the Student Experimental Theatre (or "SET"), and the Dance Lab @ Lehman.

Part of the Bronx for over two decades, the facilities that comprise Lehman Stages have served as an invaluable cultural resource for the Bronx and the larger New York City community. Lehman Stages is dedicated to the creation and presentation of performing arts programming of all disciplines, with a special focus on education and cultural diversity. Lehman Stages aspires to be an artistic touchstone for emerging artists of all backgrounds and a training facility for the College's theatre and dance program. The facilities also provide low-cost rehearsal, performance, and

conference space for arts, civic, and government organizations throughout the metropolitan area.

Recital Hall

The Music Building houses the 150-seat Recital Hall, which is used by music students and music faculty members throughout the academic year. There are also individual practice rooms for music students, as well as larger rehearsal halls for groups such as the Community Band and Lehman College and Community Chorus. Many recitals are given at noontime in the Recital Hall and attended by the public during the lunch hour. The Lehman College Chamber Players, the Lehman College Jazz Ensemble, and the Lehman College Brass Ensemble are among the groups performing noon-time concerts.

Lehman College Art Gallery

The Lehman College Art Gallery is located in the Fine Arts Building designed by renowned architect Marcel Breuer. The Gallery presents innovative contemporary art in two striking exhibition spaces. Education is an integral component of exhibition programming and provides the basis for the Gallery's outreach—from young students to senior citizens. New technologies offer a means of reaching audiences internationally as well as locally and provide creative new venues for artists. The Gallery's website, featuring Bronx Public Art, highlights an extraordinary collection of public art from the WPA to contemporary projects.

Student Life Facilities and Programs / Services

Office of the Vice President for Student Affairs

The Office of the Vice President for Student Affairs (Shuster Hall, Room 206) is concerned with all aspects of student life and provides numerous services for Lehman undergraduates, from orientation for incoming students to arranging the College's annual commencement.

The Office of the Vice President for Student Affairs is available to assist students with academic and personal issues, as well as to advise student organizations and extracurricular groups. Specialized counselors advise students on questions regarding financial aid (Shuster Hall, Room 136, phone 718-960-8545); personal issues (Old Gym Building, Room 114, 718-960-8761); and job placement, part-time work opportunities, and other career-related matters (Shuster Hall, Room 254, phone 718-960-8366). Other services are also provided through the Registrar's Office, the International Students Office, the Center for Special Student Services, the Student Health Center, and the Child Care Center.

The APFX

The APEX is a \$57 million recreation and sports facility that provides 165,000 square feet of multidimensional, multipurpose

space. It houses the College's intercollegiate and intramural athletics program, as well as classrooms and dance studios for the academic program in dance theatre.

The chief attraction of the APEX—a 50-meter, eight-lane swimming pool—has provided a new level of opportunity for the sport of competitive swimming in the metropolitan area. It is used for both national and international athletic competitions, while also supporting Lehman's many academic, recreation, intramural, and community outreach activities.

The APEX has two gymnasiums, one for intercollegiate athletics with a seating capacity of 1,350, and the other for recreational and intramural use. Other key features of the building include: four racquetball courts, free weight room, cardiovascular fitness center, a training room, an equipment room with laundry facilities, saunas, locker rooms, dance and ballet studios, and an indoor running track.

The College also has five outdoor tennis courts and soccer, softball, and baseball fields. Alumni, College staff, and community members as well as Lehman students may use athletic facilities in accordance with College rules and regulations.

Intercollegiate Athletics

Lehman College is a member of the National Collegiate Athletic Association Division III, the City University of New York Athletic Conference, the Northeast Collegiate Volleyball Association, the Metropolitan Collegiate Swimming Association, and the Eastern Collegiate Athletic Conference. Students are encouraged to join athletic teams, many of which participate in local league competition. Standards for participation and rules governing the sports are those of the National Collegiate Athletic Association and various local and district conferences. The eligibility requirements for Lehman College are as follows:

- Athletes must be full-time matriculated students, i.e., carrying twelve (12) credits.
- Athletes must have and maintain a 2.0 index.

Competition is held in the following: baseball, basketball, cheerleading, cross-country, softball, swimming, tennis, indoor and outdoor track and field, and volleyball. In addition there are conference, regional, and national championship competition in all intercollegiate programs. City University championship tournaments are conducted in baseball, basketball, cheerleading, cross country, soccer, softball, swimming, tennis, indoor and outdoor track and field, and volleyball.

Intramural Athletics

The intramural program provides a wide variety of activities of a competitive and recreational nature in which students, staff, and faculty may participate. Organized activities are scheduled throughout the year in men's, women's, and coeducational teams. These are conducted during free hours on Wednesdays from 3 to 5 p.m. and on Fridays from noon to 1 p.m. Supervised recreational facilities are made available as often as possible for informal use by the Lehman College community. The following intramural activities are available: basketball, soccer, softball, swimming,

tennis, and volleyball. The Intramural-Recreation Office is located in Room 253 of the APEX.

Recreation Opportunities

Supervised hours for recreation in the APEX pool, fitness center, auxiliary gym, aerobics room, and racquetball courts are provided as often as possible for informal use by faculty, staff, and students. The schedule for these facilities varies somewhat from semester to semester and may be obtained in Room 251, APEX. The APEX is open Mondays through Fridays during the academic year from 7 a.m. until 10 p.m. On Saturday, the building is open from 8 a.m. until 5 p.m., and on Sunday from 9 a.m. until 2 p.m. Students may use the APEX free of charge; for others, a yearly membership fee is required. Additional information and use schedules are available in Room 251 or by calling 718-960-1117.

The Office of Campus Life

The Office of Campus Life, located in the Student Life Building, implements a comprehensive student development program that complements the academic experience. Programs include an annual Leadership Development Retreat for student officers, a Community Service Fair, and biannual blood drives, as well as special interest seminars and receptions.

The Office of Campus Life also serves as a resource for all student clubs funded through the student activity fee. In association with CASA (Campus Association for Student Activities) and the Programming Board, the office promotes thematic programs such as Black History Month, Women's History Month, and Latino Heritage Month. Activities within these programs range from concerts to poetry readings. Staff of the office are available to all matriculated students who might be interested in existing or new student clubs.

The Student Life Building is a two-story facility that contains thirty-two student club offices, the campus radio station WHLC, and other facilities. Adjacent to the south baseball field, the building is open from 9 a.m. until 9 p.m. Monday through Thursdays and from 9 a.m. until 5 p.m. on Fridays. Matriculating students are welcome to use the game room, TV room, student lounge, or conference rooms. On the upper level, a copying/fax service is available to all members of the Lehman community. Student club members are also free to use the computer resources for creating club posters and announcements. A wireless network and laptop rental program are available to registered students.

The Cafeteria

The Student Cafeteria's contract operator offers food and catering services to the Lehman College community. Hot and cold dishes are available at moderate prices from 7:30 a.m. to 8:45 p.m. Monday through Thursday, and from 7:30 a.m. to 3:30 p.m. on Friday and Saturday. Schedules vary when class is not in session. Current schedules may be obtained by calling 718-960-1175.

The main student cafeteria, in the lower level of the Music Building, has a seating capacity of 800. A café is located in Carman Hall and serves fast food and casual meal items. The hours of operation for the café are the same as those of the student

cafeteria. For the convenience of students, a varied selection of vending machines is also available both in the Carman Hall Café and the Student Cafeteria.

The Office of Career Services

The Career Services Center (Room 254, Shuster Hall, 718-960-8366) assists students in preparing for the realities of the workplace and acquiring employment after graduation. Through its computerized online listings and postings, students have access to full-time positions in private, public, and non-profit organizations. The Center also provides students with expanded services through its state-of-the-art computer lab, which includes interactive career assessment programs and online information systems.

The Career Services Center offers individual career counseling, job readiness workshops (résumé writing, interviewing, job search strategies), job referrals, internship opportunities, and on-campus recruitment activities with various employers.

The Financial Aid Office

Located in Room 136 of Shuster Hall, the Office of Financial Aid assists students with all aspects of financing their education, including planning and meeting the expenses associated with attending the College. Information is available on financial assistance programs and on how to maintain eligibility for Federal, State, and City award programs. Financial Aid professionals will work closely with students and their families to put the cost of a Lehman education within reach.

The Office also provides students with expanding services through a computer lab, located in Shuster Hall, Room 131. Students may use the lab to access and complete various online financial aidrrelated applications. For more detailed information, visit www.lehman.cuny.edu/financialaid.

The Speech and Hearing Center

The Speech and Hearing Center provides diagnostic and therapeutic services to members of the Lehman community and the surrounding region who have hearing or speech-language problems. Services are delivered by graduate-student clinicians under the close supervision of speech language pathologists and audiologists who are certified by ASHA (the American Speech-Language-Hearing Association) and licensed by New York State.

Located in the Speech and Theatre Building, the Center is well equipped to deliver a wide range of diagnostic and therapeutic services. The clinic operates during the academic year. Students test hypotheses on the patient population, as well as develop diagnostic and therapeutic skills. The clinic has units for individual and group therapy, and facilities for student research. Devices for assisting the hearing impaired are available for evaluative purposes.

The Student Health Center

The Student Health Center is located in the T-3 Building, Room 118. The Center offers a wide range of services, including primary and acute care and treatment, urgent care, women's health services, required and elective immunizations, and annual athletic and job physicals. Basic laboratory services and pharmaceuticals are also available. Health awareness outreach is a key focus.

The Student Health Center is supported by the Student Activity Fee and, therefore, most services are free or are offered at a significantly reduced cost.

Office hours during the academic year are 9 a.m.-5 p.m. Monday, Thursday, and Friday and 9 a.m.-6:30 p.m. Tuesday and Wednesday. A mid-level practitioner is available at all times. Students with valid IDs may use the services of the Center on an appointment basis. Sick walk-in patients are accommodated. For additional information and appointments, call 718-960-8900.

The Counseling Center

Individual counseling services and group workshops are available to all undergraduate and graduate students. Trained professionals and peer counselors offer confidential assistance with personal obstacles to growth, including difficulties with academic performance, anxiety, time and stress management, depression, family and relationship problems, disordered eating, substance abuse and alcoholism, and other issues of everyday life. Day or evening appointments may be arranged by contacting the Counseling Center at 718-960-8761 or by visiting the Center (Old Gym Building, Room 114).

The Child Care Center

The Lehman College Child Care Center has relocated to its new home on Goulden Avenue between Davis Hall and Shuster Hall. Designed by Brooklyn-based Garrison Architects, the \$6.3 million structure includes 12,000 sq. ft of space. It now accommodates up to 140 children in its various all-day and after-school programs, double the capacity of the previous center. The new center features six classrooms; a multipurpose room that can function as a playroom, after-school space or additional classroom; and a natural playground incorporating greenery, boulders and garden space, along with traditional playground equipment. A lobby atrium provides an open stairway to the second floor and skylights that offer a natural ventilation system, as air heated by incoming sunlight is exhausted through the atrium ceiling.

Lush, green vertical gardens, visible from the classrooms, line the east and west facades of the structure and offer both shade and greenery during summer months, while large glass sliding doors bring in daylight for classroom spaces. Materials throughout the center have been chosen for durability and recycled content, continuing a College and CUNY commitment to sustainability.

The center is wheelchair-accessible, with a path of travel from Goulden Avenue to Davis Hall constructed in compliance with the Americans with Disabilities Act and enabling easy access to Davis Hall, the Child Care Center and the rest of the campus.

The center is licensed by the New York City Department of Health, Bureau of Day Care, and accredited for over ten years by the National Association for the Education of Young Children. Childcare services during the day are provided for two-to-fiveyear-olds. Evening programs for children aged five to nine are available to parents attending evening classes at Lehman. Students enrolled in Saturday classes may enroll their four- to nine-year-old children in the Center's Saturday program. Enrollment is based on available spaces and dated applications from a waiting list. The Center has also begun a Sunday program for parents taking classes or involved in other campus activities, such as tutoring or study groups.

Students interested in additional information about the Center, including current rates for full-time and part-time childcare, as well as for the after-school and weekend programs, may call 718-960-8746 for more information.

Student Disability Services

The Office of Student Disability Services provides accommodations to Lehman students who provide documentation of a disability. The services include, but are not limited to: advocacy and advisement, assistance during registration, individual test administration, library assistance, tutoring and note-taking, provision of technical equipment, and referrals to outside agencies. In providing these services, the Office arranges for the hiring of trained specialists, such as sign language interpreters, note-takers, tutors, scribes, readers, proctors, and a learning disability specialist.

In addition, specialized technical equipment is available for a wide range of special needs. This equipment includes the following assistive technology: computers, special software such as ZOOM TEXT (enhances print on the computer monitor), JAWS (vocalizes typed material), tape recorders, talking calculators, and reading machines. The Office of Special Student Services is located in Shuster Hall, Room 238, 718-960-8441, TTY 718- 960-8931. For more information, visit www.lehman.edu/vpstud/spstudentserv.

International Student Services

The International Student Adviser's office is located in Shuster Hall, Room 210. The International Student Adviser provides assistance with immigration matters as they apply to students in F and J visa status. The Bureau of Citizenship and Immigration Services' Certificate of Eligibility will be provided to international students upon completion of all admission requirements and receipt of the required financial documents. The Certificate of Eligibility (I-20) is issued only after an international student has been admitted into a full-time degree program and has documented sufficient financial resources to study and live in the United States. For additional information, telephone 718-960-7274 or e-mail ann.o-sullivan@lehman.cuny.edu.

Baccalaureate Programs

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The Undergraduate General Education Curriculum

Coordinator of General Education, Vincent Prohaska (Gillet Hall, Room 107b)

Lehman College offers undergraduates the opportunity to deepen their self-knowledge and their understanding of the world by engaging in a thorough study of the liberal arts and sciences. The Undergraduate General Education Curriculum is a structured program of courses designed to provide training in a range of essential skills as well as a broad understanding of the achievements and methods of the liberal arts and sciences, all of which allow informed inquiry into subjects of both public and personal concern.

The curriculum requires a series of courses in writing, mathematics, foreign language, and natural science. Students must also complete courses from a list of Distribution areas. These Distribution areas are different, depending on whether they belong to the **Pre-2013** or the **CUNY 2013 (Pathways) Programs**.

In addition, students must complete two upper-division interdisciplinary courses, LEH 351-LEH 355, chosen from five areas: Scientific and Applied Perspectives, Literature, the Arts, Historical Studies, and Philosophy, Theory and Abstract Thinking. Of these upper-division courses students receive General Education credit for taking two of the four that are not in their chosen major. To develop writing skills, students must complete four course sections designated as writing-intensive.

Students who have matriculated beginning in fall 2013 must fulfill requirements of the **2013 CUNY General Education Program** (**Pathways**). However, students who have matriculated prior to the fall 2013 semester may elect to follow the **2013 CUNY General Education Program** (**Pathways**).

Detailed information on the requirements of the General Education Curriculum can be found in this section of the Bulletin, under the headings "2013 CUNY General Education Program (Pathways)" and "Pre-2013 General Education Program."

Pre 2013 General Education Program (Required Courses)

Lehman College provides undergraduates with not only a major specialization but also training in a range of basic skills and general subjects on beginning, intermediate, and advanced levels. In this way, a bachelor's degree represents both training in a special field and the skills and knowledge to meet life's varied challenges responsibly, intelligently, and creatively.

General Education includes subjects comprising the shared intellectual heritage of our diverse culture. It teaches critical thinking and encourages accurate and effective communication. General Education supports the integration, synthesis, and application of knowledge, and includes proficiency in information literacy. Undergraduate education offers not only specialized knowledge and professional skills but also the multiple views and general intellectual abilities developed by the study of liberal arts and sciences that provide a foundation for independent, responsible living.

Students who entered Lehman College before the fall 2013 semester must meet the Pre-2013 General Education Requirements. There are four categories of required courses: Foundation, Distribution, Integration, and Writing Intensive. For a list of the Pre-2013 General Education courses in each category, select the links in the navigation panel.

Foundation Courses

The Foundation Courses comprise requirements in English Composition (6 credits), Mathematics (3-4 credits), Natural Science (8-10 credits), and Foreign Language (3-9 credits).

English Composition Requirement (6 Credits)

All students must successfully complete a six-credit sequence in English composition (ENG 111-121). Every student should enroll in an English composition course each semester until ENG 121 is passed. Students who are placed in English as a Second Language courses must complete these courses before taking English Composition. Entering students who have completed equivalent English composition coursework will be placed in the appropriate course by the English Department.

Mathematics Requirement (3-4 Credits)

Unless exempted, all students are required to successfully complete one three- or four-credit college-level mathematics course numbered 125 or higher, or three one-credit mathematics courses numbered between 180 and 199.

Natural Science Requirement (8-10 Credits)

All students are required to successfully complete two courses in laboratory science from a specified list. The list of approved courses is available from the Academic Information and Advisement Center (Shuster Hall, Room 280) and in the Schedule of Classes distributed prior to registration each semester. The following list is approved for the Fall 2013 semester, and may change for subsequent semesters:

ANT 171: Introduction to Human Evolution

ANT 269: Introduction to Human Variation

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AST 117: Astronomy of Stellar Systems

AST 136: Astronomy of the Solar Systems

BIO 166: Introduction to Organismic Biology

BIO 167: Principles of Biology

BIO 181: Anatomy and Physiology I

BIO 182: Anatomy and Physiology II

BIO 183: Human Biology

BIO 184: Plants and People

CHE 114/115: Essentials of General Chemistry

CHE 120/121: Essentials of Organic Chemistry--Lecture and Lab

CHE 136: Elements of Chemistry

CHE 166/167: General Chemistry—Lecture & Lab

GEO 101: Physical Geology

GEO 166: Process of Global Change

GEO 167/168: Evolution of the Earth—Lecture and Lab

GEP (GEO) 228/229: Weather and Climate—Lecture and Lab

PHY 135: Fundamental Concepts of Physics

PHY 140: Physics of Sound

NOTE: Students entering the Biology, Chemistry, Anthropology/Biology/Chemistry, and Physics majors as well as premedical, and other pre-health program students, may use PHY 166,PHY 167, PHY 168, and PHY 169 to fulfill this requirement.

Foreign Language Requirement (3-9 Credits)

Students with no more than one year of high school credit in a foreign language are required to take a sequence of two language courses for nine credits at the 100 level or the equivalent threecourse sequence for nine credits.

Students with more than one year of high school credit in a foreign language may fulfill the requirement with one of the following options:

According to placement by the Languages and Literatures Department, either:

- successfully complete one 200- or 300-level foreign language course;
- successfully complete the final course of a 100-level sequence; or
- successfully complete a sequence of two courses for a total of nine credits at the 100 level in a new language, or the equivalent three-course sequence.

Students for whom English is a second language may fulfill the requirement by:

- successfully completing two courses in ESL at the ESL 103 level or above:
- after placement by the Languages and Literatures Department, successfully completing one course at the 200 or 300 level in the native language; or

• successfully completing two courses for a total of 9 credits in a new language at the 100 level, or the equivalent threecourse sequence.

Transfer students who have completed a year of foreign language study at the college level have satisfied the language requirement.

Distribution Courses (7 Courses, 21 Credits)

Every student must complete successfully one course from a specified list in each of the seven areas listed below. The list of approved courses is available at the Academic Information and Advisement Center (Shuster Hall, Room 280) and in the Schedule of Classes, distributed prior to registration each semester. (The list of Distribution Courses is approved each year. The following list is approved for the Fall 2013 semester and may change for subsequent semesters.) No more than two courses from the same department may be used to satisfy the Distribution Requirement.

Area I: Individuals and Society (3 credits)

AAS(WST) 239: Black Women in American Society

ANT (WST) 206: Anthropological Perspectives on Women and Men

LAC 231/PRS 242: Latinos in the United States

LAC 232: Family & Gender Relations among Latinos

LNG 150: The Phenomena of Language

POL 217: Criminal Justice

POL 230: Immigration and Citizenship

PSY 166: General Psychology

SOC 166: Fundamentals of Sociology

Area II: Socio-Political Structures (3 credits)

AAS 166: Introduction to African and African American Studies

AAS 225: The Contemporary Urban Community

AAS/HIS 248: African History

ANT 211: Cultural Anthropology

ECO 166: Introduction to Macroeconomics

GEH 101: An Introduction to Geography

GEH/ENV 235: Conservation of the Environment

GEP 204: Basic Mapping: Applications and Analysis

GEP 210: Introduction to Environmental Science

POL 150: Contemporary Political Issues

POL 166: American Political System

POL 211: Public Policy

Area III: Literature (3 credits)

AAS/LAC 241: Literature of the English and Francophone Caribbean

AAS 242: African Literature

AAS 267: African American Literature

ENG 222: Literary Genres

ENG 223: English Literature

ENG 226: Shakespeare

ENG 227: American Literature

ENG 229: Contemporary Urban Writers

ENG/WST 234: Women in Literature

ENG 260: American Minority Literature

FRE 232: The Francophone World (in translation)

IDW/CLT 211: Classics of the Western World: Ancient &

Medieval

IDW/CLT 212: Classics of the Western World II: Renaissance & Modern

IDW/CLT 213: Classics of the Asian World

LAC/LPR 214: Literature of the Caribbean

SPA/LAC 233: Latin American Literature in Translation

*ENG 300: English Literature I: fulfills Area III requirement for English majors in the ECCE certification sequence

Area IV: The Arts (3 credits)

AAS 266: Contemporary Black Music

ARH 135: Introduction to the History of Asian Art—Islamic,

Buddhist, and Hindu Cultures

ARH 137: Introduction to the History of Non-Western Art

ARH 141: Introduction to the History of Modern Art of the Nineteenth and Twentieth Centuries in Europe & the U.S.

ARH 167: Tradition & Innovation in the Art of the West

ART 109: Observation and Visual Experience

ART 110: Elements of Visual Communication

MMJ/MMS 217: History of the Cinema

MMS 213: History of the Cinema II

DNC 235: Dance Perspectives

HUM 250: The City & the Theatre

MSH 114: Introduction to Music

THE 241: The Art of the Theatre

THE 243: Queer Theatre

Area V: Comparative Culture (3 credits)

AAS 232: African Civilizations

AAS/LAC 235: Caribbean Societies

AAS (WST) 240: Women in African Society

ANT/WST/LAC 210: Women in Latin America

ANT 230-238: Selected Studies in Society & Culture (230: Africa, 231: Middle East, 232: Europe, 233: India, 234: Oceania, 235: Native North America, 236: Southeast Asia, 237: East Asia, (LAC)

238: Latin America

GEH 240: Urban Geography

HIS 240: East Asian Civilization

HIS 249: Islamic Civilization

IAS 250 (ANT 250) SOC 250: The Italian-American Community

MES/HIS 245: Introduction to Middle Eastern Studies

MMJ 211: Introduction to Multilingual Media

POL 266: Politics & Culture

POL/RUS 220: Russia Today

PRS 213: Puerto Rican Culture

WST 220: Introduction to Women's Studies

Area VI: Historical Studies (3 credits)

AAS/HIS 245: History of African-Americans

ANT 212: Ancient Peoples & Cultures

HIS 241: Early Modern Europe, 1400-1815

HIS 242: Contemporary European History

HIS 243: The Foundation of the United States

HIS 244: Modern United States History

HIS 246: Civilizations of the Ancient World

HIS 247: Medieval Civilization

LAC/HIS 266: Introduction to Latin America & the Caribbean I

LAC/HIS 267: Introduction to Latin America & the Caribbean II

POL 241: Globalization

PRS/HIS 212: History of Puerto Rico

*HIU 348: History of New York: City and State - fulfills Area VI requirement for History majors in the ECCE certification sequence

Area VII: Knowledge, Self, and Values (3 credits)

AAS/PHI 269: Introduction to African Philosophy

ACU 266: Classical Myth & the Human Condition

AMS 111: American Culture: Value & Traditions

AAS/PHI 269: Introduction to African Philosophy

PHI 169: Critical Reasoning

PHI 170: Introduction to Logic

PHI 171: Problems of Philosophy

PHI 172: Contemporary Moral Issues

PHI 173: Justice and Society

PHI 174: Theories of Human Nature

PHI 175: Philosophy of Religion

PHI 177: Philosophy of Contemporary Music

POL 172: Great Political Thinkers

Integration Courses (2 Courses, 6 Credits)

This requirement applies only to students in the upper division, i.e. juniors and seniors. After earning a minimum of 60 credits or earning an Associate's Degree, and officially selecting a major, all upper-division students must complete two different LEH courses in topics outside their major from four of the following five Lehman College Undergraduate Bulletin 2013-2015

courses. The restrictions for each course are provided in Note 2 for each course. (Students who completed LEH 100, LEH 101, or LEH 110 prior to Fall 2008 may substitute this course for one of the LEH 351-355 requirements.) Each semester, a series of topics for these courses will be announced in the Schedule of Classes.

LEH 351. Studies in Scientific and Applied Perspectives. 3 hours, 3 credits (may be repeated for credit with a different topic). Selected topics in the social sciences, life and physical sciences and applied perspectives. PREREQ: official selection of a major and either completion of 60 General Education credits or an Associate's Degree.

NOTE 1: In general, students should expect writing assignments and computer-based work along with research involving the library and the Internet.

NOTE 2: This course grants general education credit towards graduation for students in all major concentrations except Accounting, Anthropology, Anthropology (interdisciplinary concentration), Biology, Business Administration, Chemistry, Computer Graphics and Imaging, Computer Information Systems, Computer Science, Dietetics, Food, and Nutrition, Economics, Exercise Science, Geography, Geology, Health Education and Promotion, Health Education N-12, Health Services Administration, Italian American Studies, Mathematics, Nursing, Physics, Political Science, Psychology, Recreation Education, Social Work, Sociology, Speech Pathology and Audiology.

LEH 352. Studies in Literature. 3 hours, 3 credits (may be repeated for credit with a different topic). Selected topics in literature. PREREQ: official selection of a major and either completion of 60 General Education credits or an Associate's Degree.

NOTE 1: In general, students should expect writing assignments and computer-based work along with research involving the library and the Internet.

NOTE 2: This course grants general education credit towards graduation for students in all major concentrations except Classics, Comparative Literature, English, French, German, Greek, Greek and Latin, Hebraic and Judaic Studies, Italian, Latin, Russian and Spanish.

LEH 353. Studies in the Arts. 3 hours, 3 credits (may be repeated for credit with a different topic). Selected topics in the arts. PREREQ: official selection of a major and either completion of 60 General Education credits or an Associate's Degree.

NOTE 1: In general, students should expect writing assignments and computer-based work along with research involving the library and the Internet.

NOTE 2: This course grants general education credit towards graduation for students in all major concentrations except Art, Dance, Dance-Theatre, Music.

LEH 354. Studies in Historical Studies. 3 hours, 3 credits (may be repeated for credit with a different topic). Selected topics in historical studies. PREREQ: official selection of a major and either completion of 60 General Education credits or an Associate's Degree.

NOTE 1: In general, students should expect writing assignments and computer-based work along with research involving the library and the Internet.

NOTE 2: This course grants general education credit towards graduation for students in all major concentrations except African and African American Studies, American Studies, History, Latin American and Caribbean Studies, Puerto Rican Studies.

LEH 355. Studies in Philosophy, Theory and Abstract Thinking. 3 hours, 3 credits (may be repeated for credit with a different topic). Selected topics in philosophy, theory and abstract thinking. PREREQ: official selection of a major and either completion of 60 General Education credits or an Associate's Degree.

NOTE 1: In general, students should expect writing assignments and computer-based work along with research involving the library and the Internet.

NOTE 2: This course grants general education credit towards graduation for students in all major concentrations except Philosophy.

College Writing Requirement (4 Course Sections)

Students must complete four courses designated as writingintensive, three prior to earning the 60th credit and one following. Individual sections of courses will be designated as writingintensive, and students may take writing-intensive sections of courses in General Education, major, minor, and elective courses.

2013 CUNY General Education Program (Pathways): Required Courses

Lehman College provides undergraduates with not only a major specialization but also training in a range of basic skills and general subjects on beginning, intermediate, and advanced levels. In this way, a bachelor's degree represents both training in a special field and the skills and knowledge to meet life's varied challenges responsibly, intelligently, and creatively.

Beginning in fall 2013, CUNY instituted a common General Education structure (called "Pathways") whose purpose is to improve the ability of students to transfer within the university. Lehman's 2013 CUNY General Education Program (Pathways) conforms to the new CUNY structure. The college's General Education categories remain the same, but the individual course requirements in some cases have changed. Lehman's categories represent the following parts of the CUNY Pathways structure:

- Foundation = CUNY Required Core (plus the College Option in Foreign Language)
- Distribution = CUNY Flexible Core
- Integration = CUNY College Option

Lehman's courses in the 2013 CUNY General Education Curriculum include subjects comprising the shared intellectual heritage of our diverse culture. They teach critical thinking and encourage accurate and effective communication. General Education supports the integration, synthesis, and application of knowledge, and includes proficiency in information literacy. Undergraduate education offers not only specialized knowledge and professional skills but also the multiple views and general intellectual abilities developed by the study of liberal arts and sciences that provide a foundation for independent, responsible living.

Students who enter Lehman College in the fall 2013 semester or later must meet the 2013 CUNY General Education Requirements. There are four categories of required courses: Foundation ("Required Core" plus "College Option,") Distribution ("Flexible Core"), Integration ("College Option"), and Writing Intensive. For a list of the 2013 CUNY General Education courses in each category, select the links in the navigation side panel.

(NOTE: The Foreign Language and Integration Requirements are waived for students in the Lehman Scholars Program and the Macaulay Honors College, which have their own requirements in these areas.)

Foundation Courses (6 Courses, 18-21 Credits)

Foundation courses include CUNY's Required Common Core plus Foreign Language in CUNY's College Option.

The Foundation Courses comprise requirements in English Composition (6 credits), Mathematical and Quantitative Reasoning (3-4 credits), a Lab Science: Life and Physical Science (3 credits), and Foreign Language (6 credits). Students may substitute STEM variants for the mathematics and science courses.

English Composition Requirement (6 Credits)

All students must successfully complete a six-credit sequence in English composition (-121). Every student should enroll in an

English composition course each semester until ENG 121 is passed. Students who are placed in English as a Second Language courses must complete these courses before taking English Composition. Entering students who have completed equivalent English composition coursework will be placed in the appropriate course by the English Department.

Mathematical and Quantitative Reasoning Requirement (3-4 Credits)

All students are required to successfully complete the following course MAT 126: Quantitative Reasoning. Students may substitute for this course one of the mathematics courses in the list of STEM Variants (see the left navigation panel access this list).

Life and Physical Science Requirement (3-5 Credits)

All students are required to successfully complete one course in a laboratory science from the following list of courses (CHE 137** has a Corequisite in Distribution Courses: Scientific World CHE 138**):

BIO 173 Human Biology
 CHE 137** Elements of Chemistry I
 PHY 131 Conceptual Physics
 PHY 141 Sound, Speech and Music

• PHY 151 Energy and the Environment

Students may substitute for any of these courses one of the science courses in the list of STEM Variants (see the left navigation panel access this list).

Foreign Language Requirement (6 Credits)

This is part of the CUNY College Option. Students are required to take two foreign language courses in the same language.

Students who continue in a foreign language previously studied in high school or college must be placed in the proper sequential course by the Languages and Literatures Department. If a student completes one semester of a foreign language at the intermediate level or above (numbered 201 or higher), one Foreign Language Option course may be substituted for the second required language course with the permission of the Languages and Literatures Department. The following courses comprise the Foreign Language Option: ENG 223: English Literature, ENG 226: Shakespeare, ENG 227: American Literature, HIS 240: East Asian Civilization, HIS 246: Civilizations of the Ancient World, HIS 249: Islamic Civilization, PHI 169: Critical Reasoning, PHI 170: Introduction to Logic, PHI 171: Problems of Philosophy, POL 229: Classical Political Economy. (These courses cannot also serve to meet Distribution requirements.)

Distribution Courses (6 Courses, 18-20 Credits)

Distribution courses are the Flexible Common Core in CUNY General Education.

Every student must choose and successfully complete one course from these Distribution courses in each of the five areas listed below, and a sixth course from any of the areas. No more than two

courses from the same discipline may be used to satisfy the Distribution Requirement.

Area I: World Cultures & Global Issues (3 credits)

AAS (LAC) 235: Caribbean Societies

AAS (WST) 240: Women in African Societies AAS 166: African and African American Societies

AAS 225: Contemporary Urban Community

AAS 232: African Civilizations

ANT (LAC, WST) 210: Women in Latin America ANT (LAC) 238: Area Studies in Latin America

GEH 101: Introduction to Geography

GEH 240: Urban Geography

HIS (LAC) 266: Latin America & Caribbean I HIS (LAC) 267: Latin America & Caribbean II

HIS (MES) 249: Islamic Civilization HIS 240: East Asian Civilization

HIS 241: Modern Western Civilization HIS 242: Contemporary European History HIS 246: Civilizations of Ancient World

HIS 247: Medieval Civilization

LPR (HIS) 212: History of Puerto Rico

LPR 213: Puerto Rican Culture

MES 245: Introduction to Middle Eastern Studies

PHI (AAS) 269: African Philosophy POL (RUS) 220: Russia Today POL 240: International Politics

POL 241: Globalization

POL 266: Politics and Culture

POL 268: Introduction to Comparative Politics

SOC 245: Global Interdependencies

WST 220: Introduction to Women's Studies

Area II: U.S. Experience in Its Diversity (3 credits)

AAS (HIS) 245: History of African Americans AAS (WST) 228: African American Family AAS (WST) 239: Black Women in U.S.

AMS 111: American Culture HIS 243: Foundation of U.S. HIS 244: Modern U.S. History LAC 231 (PRS 242): Latinos in U.S. LAC 232: Latino Family and Gender LPR 269: History of U.S. Latinos

MMJ 211: Introduction to Multilingual Media

POL (LPR) 234: Latino Politics

POL 166: American Political System

POL 211: Public Policy POL 217: Criminal Justice

POL 230: Immigration and Citizenship

SOC 234: Urban Sociology

Area III: Creative Expression (3 credits)

AAS (LAC) 241: Literature of English and Francophone

Caribbean

AAS (THE) 238: African American Theatre

AAS 213: African American Art AAS 242: African Literature

AAS 266: Contemporary Black Music AAS 267: African American Literature ARH (LAC) 143: Latin American Art

ARH 135: Asian Art

ARH 137: Non-Western Art

ARH 141: Modern Art in U.S. and Europe

ARH 167: Tradition and Innovation in the Art of the West

ART 109: Observations and Visual Experience

DNC 235: Dance Perspectives

ENG (WST) 234: Women In Literature

ENG 222: Literary Genres ENG 223: English Literature ENG 226: Shakespeare

ENG 227: American Literature

ENG 229: Contemporary Urban Writers ENW 210: Introduction to Creative Writing IDW (CLT) 211: Classics of Western World I IDW (CLT) 212: Classics of Western World II LAC (LPA) 214: Literature of the Caribbean

LAC (SPA) 233: Latin American Literature in Translation

MSH 114: Introduction to Music

MSH 115: World Music

MSH 245: American Musical Tradition

THE 241: The Art of the Theatre

Area IV: Individual & Society (3 credits)

ANT (WST) 206: Women and Men ANT 211: Cultural Anthropology ECO 166: Macro Economics ECO 167: Micro Economics PHI 171: Problems of Philosophy

PHI 172: Contemporary Moral Issues

PHI 173: Justice and Society

PHI 174: Theories of Human Nature:

PHI 175: Philosophy of Religion

PHI 176: Philosophy of Freedom

POL 150: Contemporary Political Issues

POL 172: Great Political Thinkers

POL 229: Classical Political Economy

PSY 166: General Psychology

SOC 227 (WST 237): Sociology of the Family

Area V: Scientific World (3 credits)*

ANT 212: Ancient Peoples and Cultures

LNG 160 (SPV 246): Introduction to Linguistics

CHE 138**: Elements of Chemistry II

PHI 169: Critical Reasoning

ENV 210: Environmental Science

PHI 170: Introduction to Logic

ENV (GEH) 235: Conservation of Environment

PSY 165: Critical Thinking in Psychology

HIS 239: History of Science

*Students may satisfy the Scientific World requirement with a course in science from the STEM Variant Course list, see the navigation panel on the left side.

CHE138 has a Corequisite in Foundation Courses: Life and Physical Science CHE137

Integration Courses (2 Courses, 6 Credits)

Integration Courses are the College Option in CUNY General Education.

This requirement applies only to students in the upper division, i.e. juniors and seniors. After earning a minimum of 60 credits or earning an Associate's Degree, and officially selecting a major, all upper-division students must complete two LEH courses. The two are to be chosen in topics outside their major from four of the following five variable topics courses. Each semester, a series of topics for these courses will be announced in the Schedule of Classes.

LEH 351: Studies in Scientific and Applied Perspectives. 3 hours, 3 credits (may be repeated for credit with a different topic). Selected topics in the social sciences, life and physical sciences and applied perspectives. Prerequisites: official selection of a major and either completion of 60 General Education credits or an Associate's Degree.

NOTE 1: In general, students should expect writing assignments and computer-based work along with research involving the library and the Internet.

NOTE 2: This course grants general education credit towards graduation for students in all major concentrations except Accounting, Anthropology, Anthropology (interdisciplinary concentration), Biology, Business Administration, Chemistry, Computer Graphics and Imaging, Computer Information Systems,

Computer Science, Dietetics, Food, and Nutrition, Economics, Exercise Science, Geography, Geology, Health Education and Promotion, Health Education N-12, Health Services Administration, Italian American Studies, Mathematics, Nursing, Physics, Political Science, Psychology, Recreation Education, Social Work, Sociology, Speech Pathology and Audiology.

LEH 352: Studies in Literature. *3 hours, 3 credits* (may be repeated for credit with a different topic). Selected topics in literature. Prerequisites: official selection of a major and either completion of 60 General Education credits or an Associate's Degree.

NOTE 1: In general, students should expect writing assignments and computer-based work along with research involving the library and the Internet.

NOTE 2: This course grants general education credit towards graduation for students in all major concentrations except Classics, Comparative Literature, English, French, German, Greek, Greek and Latin, Hebraic and Judaic Studies, Italian, Latin, Russian and Spanish.

LEH 353: Studies in the Arts. *3 hours*, *3 credits* (may be repeated for credit with a different topic). Selected topics in the arts. Prerequisites: official selection of a major and either completion of 60 General Education credits or an Associate's Degree.

NOTE 1: In general, students should expect writing assignments and computer-based work along with research involving the library and the Internet.

NOTE 2: This course grants general education credit towards graduation for students in all major concentrations except Art, Dance, Dance-Theatre, Music.

LEH 354: Studies in Historical Studies. *3 hours*, *3 credits* (may be repeated for credit with a different topic). Selected topics in historical studies. PREREQ: Official selection of a major and either completion of 60 General Education credits or an Associate's Degree.

NOTE 1: In general, students should expect writing assignments and computer-based work along with research involving the library and the Internet.

NOTE 2: This course grants general education credit towards graduation for students in all major concentrations except African and African American Studies, American Studies, History, Latin American and Caribbean Studies, Puerto Rican Studies.

LEH 355: Studies in Philosophy, Theory and Abstract Thinking. 3 hours, 3 credits (may be repeated for credit with a different topic). Selected topics in philosophy, theory and abstract thinking. Prerequisites: official selection of a major and either completion of 60 General Education credits or an Associate's Degree.

NOTE 1: In general, students should expect writing assignments and computer-based work along with research involving the library and the Internet.

NOTE 2: This course grants general education credit towards graduation for students in all major concentrations except Philosophy.

College Writing Requirement

Students must complete four courses designated as writingintensive, three prior to earning the 60th credit and one following. Individual sections of courses will be designated as writingintensive, and students may take writing-intensive sections of courses in General Education, major, minor, and elective courses.

STEM Variant Courses

Students may substitute courses from this list of required courses in mathematics and laboratory science for the required courses in Mathematical and Quantitative Reasoning (Foundation), in Life and Physical Sciences (Foundation), or Scientific World (Distribution Courses). These STEM (Science, Technology, Engineering, Mathematics) courses will meet the General Education Requirements in the appropriate areas.

For Quantitative and Mathematical Reasoning

MAT 132: Introduction to Statistics

MAT 171: Problem Solving for Management, Economics and Life

Sciences

MAT 172: Precalculus

MAT 174: Elements of Calculus

MAT 175: Calculus I

MAT 176: Calculus II

For Life and Physical Science or Scientific World:

ANT 171: Introduction to Human Evolution

ANT 269: Introduction to Human Variation

BIO 166: Introduction to Organismic Biology

BIO 167: Principles of Biology: Cells & Genes

BIO 181: Anatomy & Physiology, I

BIO 182: Anatomy & Physiology, II

BIO 183: Human Biology

CHE 114-115: Essentials of General Chemistry

CHE 166-167: General Chemistry I – lecture & lab

CHE 168-169: General Chemistry II - lecture & lab

GEO 101: Dynamic Earth

GEO 167: Evolution of the Earth

GEP 204: Basic Mapping: Applications & Analysis

PHY 135: Fundamental Concepts and Methods of Physics

PHY 166: General Physics I

PHY 167: General Physics II

PHY 168: Introductory Physics I

PHY 169: Introductory Physics II

Special Curriculum Programs

In addition to the Undergraduate General Education Curriculum, Lehman offers several other curricula that satisfy the liberal arts and sciences requirement.

Macaulay Honors College at Lehman

The Macaulay Honors College at Lehman College admitted its first class in September 2002. Member of the Honors College are designated "University Scholars." They receive full tuition, stipends, laptop computers, and an opportunities fund for academic enrichment experiences, such as study abroad. A "Cultural Passport" provides entrée to concerts, the theater, museums, and other cultural institutions in New York City. Passport activities will also put students in contact with people active in many facets of city life, the arts, government, business, and science.

Criteria for selection include the student's high school academic record, SAT/ACT scores, an essay, two letters of recommendation, and an interview.

Students intending to apply for Macaulay must apply directly from high school; Macaulay does not accept transfers from any institution. Students wishing to apply should consult the Macaulay homepage through the CUNY Portal at www.cuny.edu and select "Apply Online." The curriculum of the Honors College is seminar based, and the program offers rich opportunities for academic enhancement and intellectual growth, supplemented by study abroad, internships, preparation for graduate school, and global engagement.

The Lehman Scholars Program

The Lehman Scholars Program, established in 1980, offers capable and highly motivated students the atmosphere of a small, intimate college. The program features small seminars, mentors, and an extra-credit option. It provides an introduction to the liberal arts in the areas of English, foreign languages, natural science, social science, humanities, and the fine and performing arts. Students with a minimum GPA of 3.5 are eligible to apply to the program at any point prior to the completion of sixty-four credits. For further information, see the information contained in the chapter on "Academic Departments and Programs" of this Bulletin.

Teacher Academy

Students in this CUNY program are committed to teaching math or science in New York City's public schools and pursue a rigorous academic program with early participation in the schools. They receive four years of free tuition as well as paid internships and may qualify for an additional Lehman College Foundation scholarship. As Teacher Academy students at Lehman College, they major in mathematics or science, with a minor in middle and high school education, and learn in a "college within a college" environment. They receive special advisement, are placed in small classes, and become part of a supportive community of fellow students and faculty. Students also take part in fieldwork in a local school setting, beginning during the freshman year with observations and culminating with student teaching during the senior year. All fieldwork is linked to courses, providing a bridge between theory and practice. Teacher Academy students also have opportunities to work with nationally and internationally recognized faculty and to pursue undergraduate research with the guidance of faculty mentors. Currently, admission for a new class

of the Teacher Academy students has been temporarily suspended.

Adult Degree Program

The Adult Degree Program offers incoming students twenty-five years of age or older a flexible curriculum under close faculty supervision. Students may earn up to thirty credits through internship, research, and tutorials. Up to fifteen of these credits may be awarded for life experience. For further information on this program, see the information on "Individualized Study Programs" contained later in this Bulletin.

Individualized Bachelor of Arts Program

The Individualized Bachelor of Arts Program offers students who have more than thirty but fewer than ninety credits an opportunity to establish, with the assistance and approval of a faculty committee, their own individualized major. For further information on this program, see the information on "Individualized Study Programs" contained later in this Bulletin.

Bachelor of Arts-Master of Arts (B.A.-M.A.) Program

The Bachelor of Arts-Master of Arts (B.A.-M.A.) Program is an option for entering freshmen with superior academic backgrounds. Students may arrange with departments offering both the B.A. and M.A. a suitable course of study that, at the end of four years, will lead to simultaneous awarding of the degrees. To be eligible, entering freshmen must have high school averages of better than 90 and scores of at least 600 in the verbal and mathematics sections, respectively, of the Scholastic Aptitude Test. Matriculated students who wish to be considered must have achieved a cumulative index of at least 3.4 in no more than fifty-four earned credits. The B.A.-M.A. Program requires attendance in at least one Lehman College summer session, preferably between the junior and senior years or after completion of ninety credits.

Second Undergraduate Degree Program

Lehman College accepts candidates for a second undergraduate degree when specific professional purposes dictate the need and when the second degree represents preparation discrete from the preparation identified by the first bachelor's degree. Candidates must complete a minimum of thirty credits in residence (see the definition of residence credits under the heading of "Credit Requirements" later in this chapter) and must fulfill all the requirements for the new major and/or interdisciplinary program. Students must take the English Transfer Placement Exam and complete the College writing requirement as determined by that examination.

The liberal arts requirements from the first degree may satisfy the requirements for the second degree. In general, candidates will have fulfilled the College requirements with the first degree, but specific requirements may be recommended. Candidates for a second bachelor's degree must have their curricula approved by the Office of Academic Standards and Evaluation (Shuster Hall, Room 280).

CUNY Baccalaureate Program

Lehman participates in the CUNY Baccalaureate Program, which allows students the opportunity to earn up to thirty credits through internship, research, or work experience (fifteen of which may be earned for prior work experience) and to take courses at other senior colleges within CUNY. For further information, consult the Academic Information and Advisement Center (Shuster Hall, Room 280).

Interdisciplinary and Interdepartmental Programs

Lehman offers students the opportunity to earn a bachelor's degree in one of these interdisciplinary or interdepartmental programs: American Studies; Anthropology (Physical), Biology, and Chemistry; Comparative Literature; Computer Information Systems; Computer Graphics & Imaging; Dance Theatre; Italian-American Studies; Latin American & Caribbean Studies; and Linguistics. Interdisciplinary and interdepartmental courses are also offered in the Humanities, the Natural and Social Sciences, Urban Studies, Women's Studies, and World Classics.

Inventory of Undergraduate Program Names and Degree As Registered with the State of New York

(NOTE: The following list contains the names of Lehman College programs that have been registered with the New York State Education Department. The list includes the names of certain programs no longer offered by the College; it will be the responsibility of each student to determine which programs are currently being offered. Students are cautioned that enrollment in other than registered or otherwise approved programs may

HEGIS #	Degree	Program Title
2211	BA	African and African American Studies
0502	BA/BS	Accounting
0313	BA	American Studies
2202	BA	Anthropology
2202	BS	Anthropology (Physical), Biology, and
		Chemistry [interdepartmental
		concentration]
1002	BA	Art
1002	BFA	Art
1003	BA	Art History
0401	BA	Biology
0401	BA	Biology 7-12
0506	BBA	Business Administration
0838	BA	Business Education
1905	BA/BS	Chemistry
1905	BA	Chemistry 7-12
1503	BA	Comparative Literature
		(interdepartmental)
1009	BS	Computer Graphics & Imaging
0702	BS	Computer Information Systems
0701	BA/BS	Computer Science
0899	BA	Corporate Training
1008	BA	Dance
1008	BFA	Dance/Theatre
1306	BS	Dietetics, Foods, & Nutrition
2204	BA	Economics
1501	BA	English
1501	BA	English 7-12
1102	BA	French
1102	BA	French 7-12
1914	BA	Geology
2206	BA	Geography
1103	BA	German
1110	BA	Greek
1101	BA	Greek & Latin
0837	BS	Health Education & Promotion
0837	BS	Health N-12 Teacher

0837	BS	Health B-12
1202	BS	Health Services Administration
0399	BA	Hebraic & Judaic Studies
1111	BA	Hebrew
2205	BA	History
1104	BA	Italian
1104	BA	Italian 7-12
0399	BA	Italian-American Studies
1109	BA	Latin
0308	BA	Latin American & Caribbean Studies
1505	BA	Linguistics
0601	BA	Mass Communication
1701	BA	Mathematics
1701	BA/MA	Mathematics dual
1701	BA	Mathematics 7-12
0699	BA	Multilingual Journalism
1004	BA/BS	Music
1203	BS	Nursing
1509	BA	Philosophy
1902	BA/BS	Physics
2207	BA	Political Science
2001	BA	Psychology
0308	BA	Puerto Rican Studies
0835	BA/BS	Recreation Education
1101	BA	Romance Languages
1106	BA	Russian
4901	BA/BS	Self-Determined Studies
2104	BA	Social Work
2208	BA	Sociology
1105	BA	Spanish
1105	BA	Spanish 7-12
1506.01	BA	Speech
1220	BA	Speech Pathology & Audiology
1007	BA	Theatre
2199	BS	Therapeutic Recreation

Certificate Programs

5399 Cert Geographic Information Systems	
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Professional and Preprofessional Programs

Predental, Premedical, and Preveterinary

Lehman College students preparing for careers in medicine, dentistry, or veterinary medicine may elect a B.A. or B.S. curriculum and may choose any approved major.

Preprofessional students preparing for careers in the health professions should at the time of their first registration consult advisers concerning the choice of science courses for the first semester. Since the requirements of medical schools may vary, students intending to pursue an M.D. degree should consult the bulletins of the medical schools to which they are planning to apply.

In general, medical schools require two years of college chemistry (including organic chemistry) and one year each of college physics, biology, and mathematics. Because some medical schools require more than the minimum, it is important that interested students include first-year biology and chemistry in the first sixty credits earned at Lehman. As much science as possible should be completed by the time ninety credits have been earned (end of junior year) because this is the time when the Medical College Aptitude Tests are taken. After admission to Lehman College, the student preparing for a career in dentistry, medicine, pharmacy, or veterinary medicine should register with the premedical adviser (Davis Hall, Room 113).

Prepharmacy

Lehman College offers students a pre-pharmacy program that articulates with the pharmacy programs at the Arnold and Marie Schwartz College of Pharmacy and Health Sciences of Long Island University and the College of Pharmacy and Allied Health Professions at St. John's University. Students who complete the prescribed prepharmacy curriculum with a cumulative index of at least 3.0 may be eligible to transfer to the first professional year of the pharmacy program at either of these colleges. Interested students should consult with the College's prepharmacy adviser (Davis Hall, Room 113).

Prelaw

Students considering careers in the law have many opportunities at Lehman College. Legal educators recommend that students preparing for law school follow a course of study that develops a critical understanding of the institutions and values with which the law deals, the ability to think analytically, to conduct independent research, and to write and speak effectively. A comprehensive liberal arts education—including a major stressing these essential skills, courses in philosophy, such as critical thinking and the philosophy of law, and courses in English such as advanced expository writing—offers the best foundation for law school. A minor in political science is helpful. Students interested in law school should meet with the College's prelaw adviser for information and counseling. For referral to the prelaw adviser, see the Academic Information and Advisement Center (Shuster Hall, Room 280).

Professional Option

Lehman College offers a professional option that allows students to complete the undergraduate degree at an accredited professional school in their senior year. To apply for this option, students must have fulfilled all general education requirements for the degree, at least half of the major and minor, and ninety or more credits, with at least thirty earned at Lehman. With departmental approval, the major and the minor may be completed at the professional school. This option is open to students in predental, premedical, preveterinary, and prelaw. Information and applications are available in the Office of Academic Standards and Evaluation (Shuster Hall, Room 280).

Pre-Engineering Transfer Program

Lehman College offers a Pre-engineering Transfer Program, administered by the Department of Physics and Astronomy. Students study at Lehman for two years before transferring to the School of Engineering at City College. (For more information, consult the pre-engineering adviser in Gillet Hall, Room 131.)

The only complete engineering program in CUNY is at City College. Students at Lehman College can transfer to the School of Engineering at City College after completing twenty-four credits, including two semesters of calculus and one semester of either physics or chemistry. Although a well-prepared student can complete these requirements in two semesters, it is strongly recommended that a student entering this program should plan to spend three semesters at Lehman College, taking the following courses:

- *English.* Courses required to meet the degree requirements in English composition, as explained under "Degree Requirements" later on in this chapter of the Bulletin.
- Speech. COM 100 (Fundamentals of Oral Communication).
- Mathematics. MAT 175-176 (Calculus I and II) and MAT 226 (Intermediate Calculus I).
- Physics. PHY 168-169 (Introductory Physics I and II).
- *Chemistry*. CHE 166-167 and 168-169 (General Chemistry—Lectures and Labs—I and II).

Teacher Education Programs

Teacher preparation at Lehman is based on a firm foundation in the liberal arts and sciences. Students who plan to teach at the early childhood, childhood, or middle and secondary levels must major in one of the liberal arts, physical or social sciences, or mathematics. Prospective teachers also enroll in an appropriate education sequence in one of the following two departments:

The Department of Early Childhood and Childhood Education prepares candidates for initial New York State certification to teach children at the early childhood (Birth-Grade 2) and childhood (Grades 1-6) levels, including children whose primary languages and cultures are not English.

The Department of Middle and High School Education prepares candidates for initial New York State certification to teach academic and special subjects (English, science, mathematics, social studies, and foreign languages) in secondary schools, grades 7-12.

Lehman College's educator preparation programs have been accredited by the National Council for Accreditation of Teacher Education (NCATE). The Counselor Education program has been accredited by the Council for the Accreditation of Counseling and Related Education Programs (CACREP). NCATE and CACREP accredit only teacher and counselor education programs of the highest quality.

Undergraduate Teacher Certifications

Early Childhood (Birth-Grade 2), with or without Bilingual Extension Childhood (Grades 1-6), with or without Bilingual Extension

Students seeking the initial certificate as either an early childhood or childhood education teacher, in addition to completing the sequence of professional courses, are required to complete a major in one of the liberal arts, physical or social sciences, or mathematics. Thus, the major area of concentration is a requirement both for the college degree and for the teaching certificate. For the purposes of early childhood (Birth-Grade 2) and childhood (Grades 1-6) teacher certification, however, major areas of concentration are restricted to those approved for early childhood and childhood education. The recommended majors for initial certification in early childhood and childhood education are as follows:

Recommended Majors:

African and African American Studies

Art History

Comparative Literature

English

Geography

History

Italian American Studies

Latin American Studies

Puerto Rican Studies

Sociology

Additional recommended majors may be added after the printing of this Bulletin; students need to see an adviser in the Department of Early Childhood and Childhood Education (Carman Hall, Room B-32) to find out which additional recommended majors are available.

Middle and High School

Students seeking the initial certificate as a middle and high school teacher of academic or special subjects will complete the major area of concentration appropriate for the particular certificate, as well as the sequence of professional courses leading to the

certificate. Approved areas of concentration are as follows:

Adolescence EDUC-English Education (English 7-12)

Adolescence EDUC-Language Other Than English (Spanish 7-12)

Adolescence EDUC-Mathematics 5-9 or 7-12

Adolescence EDUC-Biology 7-12 Adolescence EDUC-Chemistry 7-12 Adolescence EDUC-Physics 7-12

Adolescence EDUC-Social Studies 7-12

SPECIAL SUBJECTS:

Art N-12

Health Education N-12

Music Teacher N-12

Additional recommended concentrations may be added after the printing of this Bulletin; students need to see an adviser in the Department of Middle and High School Education (Carman Hall, Room 29-A) to find out which additional recommended majors are

Special Studies

Lehman College is aware of the student's need for educational and individual experience. Although Lehman offers all students the education that occurs in the classroom, lecture hall, and laboratory, the College's faculty is also committed to guiding independent study by students capable of individually defining and exploring problems. Such students are given the opportunity to participate in departmental honors programs; a wide range of independent study courses, including tutorials, research, and special projects offered by each department and the interdisciplinary programs; and independent extradisciplinary studies.

Internship and Field Experience **Opportunities**

Lehman College recognizes the importance of work experience as a significant element of a liberal arts education. Many departments and programs in the College offer such learning experiences, usually off campus. Internships are generally carried out in conjunction with classroom learning, often involving a seminar about the fieldwork. These internships may earn college credit and provide the student with "hands-on" experience, frequently the first step toward successful entry into a career. For specific information on areas of interest, students should apply to individual departments. For general information and a list of all Lehman internships, consult the Office of Career Services, 718-960-8366 (Shuster Hall, Room 254). For general information regarding internships, student teaching, and field experience requirements in teacher education, contact the Professional Development Network Coordinator, 718-960-8004 (Carman Hall, B-33).

Programs of Study Abroad

Lehman students need not be language majors or minors to study abroad, and students from all disciplines are also encouraged to participate. Through a short-term program, students may earn up to 3-8 credits toward their degrees. Short-term programs may be open to students without foreign language training. Year-long programs in countries where instruction is not in English may require some background in the relevant language. Students must visit the Study Abroad Office to begin the online permit process.

Lehman students can finance their study-abroad session in several ways, which may include financial aid, loans, scholarships, and fellowships. Students may be eligible to use TAP, PELL, and Loan awards to help finance their session abroad. In addition to financial aid awards, students interested in a short-term session can apply for the Study/Travel Opportunities for CUNY student scholarships (STOCS) to help defray expenses.

In recent years, a growing number of Lehman students have received Fulbright, Benjamin Gilman, and STOCS scholarships for their studies abroad. Lehman students have earned credit for study in places all over the world, including Argentina, Austria, Australia, Barbados, Brazil, Canada, Chile, China, the Dominican Republic, Ecuador, Egypt, England, France, Germany, Ghana, Guyana, Ireland, Italy, Jamaica, Japan, Korea, Mexico, Nigeria, Puerto Rico, South Africa, South Korea, Spain, Trinidad, and Venezuela. Additional programs are being developed to offer a wider geographical and content choice.

Lehman College encourages all students to participate in studyabroad opportunities. Students may choose to study abroad for a year or a semester. For students who prefer short-term study programs, there are numerous opportunities to study abroad during the summer or winter intersessions.

For further information, consult Assistant Dean Lynne Van Voorhis or the Study Abroad Coordinator in the Office of Undergraduate Studies and Study Abroad, Carman Hall, Room 337; 718-960-8345; fax 718-960-7734.

Lehman Exchange Programs

Students participating in Lehman Exchange Programs must register at the College for a minimum of twelve study-abroad credits STABD). Credits earned abroad will be applied toward students' degrees after evaluation by the appropriate department at Lehman. Students of all departments are invited to apply. To begin the online permit process, students must visit the Study Abroad Office.

The Lehman/Korean Exchange Program is open to all CUNY students. Participants may elect to spend either one semester or one year studying at Sungshin Women's University, a prestigious university in Seoul, South Korea. The University offers international students courses in Korean language and culture, and also teaches more than fifty courses across many disciplines in English. Lehman students may also be able to earn dual degrees from both Sungshin and Lehman. To qualify for this option, students must complete thirty credits at Sungshin, e.g., completing the four-semester Korean Language Program, and then return to Lehman College Undergraduate Bulletin 2013-2015

Lehman to complete the Lehman degree requirements. A minimum 3.0 GPA is required.

The Paris/CUNY Exchange Program offers Lehman students (undergraduate and graduate) the opportunity to study at the University of Paris for either one or two semesters. A minimum proficiency in French (equivalent to three semesters) and a B average in the major are required.

For further information, consult Assistant Dean Lynne VanVoorhis or the Study Abroad Coordinator in the Office of Undergraduate Studies and Study Abroad, Carman Hall, Room 337; 718-960-8345; fax 718-960-7734.

Independent Extradisciplinary Studies

Independent Extradisciplinary Studies permit students to participate in reading tutorials, fieldwork (including work experience), research projects, or special projects in an area for which there is not a course in a department or interdisciplinary program.

The topic for any of these should be submitted to a faculty member likely to share an interest in it. If the faculty member accepts the topic and is convinced of the applicant's ability to pursue the proposal, the faculty member refers the student to the Office of Academic Standards and Evaluation for application. Students must secure final approval of the proposal from the Office of Academic Standards and Evaluation prior to registration for any semester. Students who are approved for Independent Extradisciplinary Studies must register for the study on a pass/fail basis. Credits earned may not exceed fifteen per semester nor total more than thirty.

Experimental Course or Program

A Department may offer as an experiment one or more courses or a program of study that falls outside the bounds of existing courses or programs of study with the approval of the Departmental Curriculum Committee, the College's Curriculum Committee, and the College's Committee on Academic Standards and Evaluation.

Degree Requirements

The requirements for an undergraduate degree at Lehman College are those in effect during the student's first semester of matriculation, with the exception that, as of the 1996 fall semester, the number of credits required to earn a degree is 120 for all students, provided all other requirements have been satisfied.

College Preparatory Initiative

The Board of Trustees in Fall 1993 promulgated new course requirements that students must complete in high school. Requirements apply to all students who graduated from high school in Spring 1993 and thereafter and to all students completing a GED diploma in September 1993 and thereafter. As of Fall 1999, students entering a senior college are expected to have sixteen academic units: four units in English, three units in mathematics, two units in laboratory sciences, four units in social

sciences, two units in languages other than English, and one unit in fine arts. All transfer students who graduated from high school in Spring 1993 and thereafter, or received GED diplomas in September 1993 and after, will need to document completion of the CPI (College Preparatory Initiative) academic requirements by submitting an official copy of the high school transcript and/or GED scores.

All students who have not satisfied these requirements prior to admission will be required to complete them before their graduation from Lehman College. Students should consult with an adviser in the Academic Information and Advisement Center (Shuster Hall, Room 280) for information regarding courses approved for fulfilling CPI deficiencies.

Basic Skills Proficiency

The Board of Trustees of The City University of New York has mandated that every student meet a minimum University-wide level of proficiency in reading, writing, and mathematics before entering the senior college. Lehman College administers the CUNY/ACT Reading and Writing Assessment Tests and the CUNY Mathematics Assessment Test (MAT) to all students after admission to the College, but prior to beginning classes, to determine whether the students meet minimum University and College standards.

Students who fail either the CUNY/ACT Reading and/or Writing Assessment Tests or the CUNY Mathematics Assessment Test may be invited to enter a "Prelude to Success" program offered at Bronx Community College.

CUNY Proficiency Exam

All students are required to pass the CUNY Proficiency Exam in order to graduate. Transfer students with 45 or more credits will be asked to take the test in their first semester. Students are expected to pass the test by the 60th credit.

Program in English as a Second Language

Students whose native language is not English and who have failed the CUNY Reading and/or Writing Assessment Test are administered an ESL Placement Test and placed in the ESL sequence. (For a detailed description of ESL courses, see the information contained under "Academic Departments and Programs" later on in this Bulletin.)

Students in the ESL program will be expected to pass one level of the program for each semester of attendance at the College. Students who receive the grade of NC* in an ESL course the first time will be placed on skills probation. Students who receive a second grade of NC* in the same level will be dropped from the College. Any student who is dropped will be given the opportunity to appeal.

NOTE: City University policy requires that ESL students at the senior colleges pass CUNY/ACT reading and writing assessment tests prior to entering the freshman composition sequence.

*See "Grading Systems." Grades of WU in ESL courses will be handled in the same manner as grades of NC.

Credit Requirements

To earn a bachelor's degree at Lehman College, students must earn a minimum of 120 credits. All students must complete at least thirty credits in residence at Lehman, including at least half of the credits of their chosen major and minor (if required). Credits in residence are defined as credits earned in Lehman College course work.

NOTE: Transfer students should have their transcripts evaluated as soon as possible. First, the Office of Admissions (Shuster Hall, Room 152) will evaluate transfer credits to determine their Lehman equivalents. Second, the Office of Academic Standards and Evaluation (Shuster Hall, Room 280) will determine which Lehman degree requirements have been met. Third, the academic department that houses the student's major (and minor, if needed) will determine which of these requirements have been met. Students who transfer directly from a CUNY or SUNY community college on completion of an A.A., A.S., or an A.A.S. degree will have satisfied the lower-division General Education Requirements of Lehman College. Such students must still satisfy the upper-division General Education Requirements and meet the New York State minimum liberal arts credit requirement as determined by the Office of Academic Standards and Evaluation.

Lower Division General Education Requirements (38-50 Credits)

General Education Courses

Coordinator of General Education, Robert Whittaker (Carman Hall, Room 337)

Lehman College provides undergraduates with not only a major specialization but also training in a range of basic skills and general subjects on beginning, intermediate, and advanced levels. In this way, a bachelor's degree represents both training in a special field and the skills and knowledge to meet life's varied challenges responsibly, intelligently, and creatively.

General Education includes subjects comprising the shared intellectual heritage of our diverse culture. It teaches critical thinking and encourages accurate and effective communication. General Education supports the integration, synthesis, and application of knowledge, and includes proficiency in information literacy. Undergraduate education offers not only specialized knowledge and professional skills but also the multiple views and general intellectual abilities developed by the study of liberal arts and sciences that provide a foundation for independent, responsible living.

For a list of the General Education courses in individual disciplines and departments, see "Distribution Requirement."

College Writing Requirement (3-6 Credits)

Unless exempted, all students must successfully complete a sixcredit sequence in English composition (ENG 110-120). Every student should enroll in the appropriate English composition course each semester until ENG 120 is passed.

All entering freshmen and all transfer students who have not already done so must take the CUNY/A.C.T. Writing and Reading Assessment Tests prior to registering for their first semester at the

College. Students will be placed in the appropriate composition course or English as a Second Language course. A student may be exempted from ENG 110 on the basis of an evaluation made by the English Department.

Students who enter Lehman College with transfer credit in English composition must consult the Department of English regarding their composition requirement. Except for holders of A.A., A.S., and A.A.S. degrees from CUNY or SUNY, transfer students may be required to take a placement exam. Eligible students should take the C.P.E. at special sessions prior to, or at the time of, their first registration at the College. Composition placement or exemption will be determined following the evaluation.

Foreign Language Requirement (3-9 Credits)

Students with no more than one year of high school credit in a foreign language are required to take a sequence of two language courses for nine credits at the 100 level or the equivalent three-course sequence for nine credits.

Students with more than one year of high school credit in a foreign language may fulfill the requirement with one of the following options:

- 1. According to placement by the appropriate language department, either:
 - successfully complete one 200- or 300-level foreign language course.
 - successfully complete the final course of a 100-level sequence; or
 - successfully complete a sequence of two courses for a total of nine credits at the 100 level in a new language, or the equivalent three-course sequence.
- 2. Students for whom English is a second language may fulfill the requirement by:
 - successfully completing two courses in ESL at the ESL 103 level or above;
 - after placement by the appropriate language department, successfully completing one course at the 200 or 300 level in the native language; or
 - successfully completing two courses for a total of 9 credits in a new language at the 100 level, or the equivalent three-course sequence.
- 3. Transfer students who have completed a year of foreign language study at the college level have satisfied the language requirement.

Natural Science Requirement (8-10 Credits)

All students are required to successfully complete two courses in laboratory science from a specified list. The list of approved courses is available from the Academic Information and Advisement Center (Shuster Hall, Room 280) and in the Schedule of Classes distributed prior to registration each semester. The following list is approved for the Fall 2011 semester, and may change for subsequent semesters:

ANT 171: Introduction to Human Evolution

ANT 269: Introduction to Human Variation

AST 117: Astronomy of Stellar Systems

AST 136: Astronomy of the Solar Systems

BIO 166: Introduction to Organismic Biology

BIO 167: Principles of Biology

BIO 183: Human Biology

BIO 184: Plants and People

CHE 114/115: Essentials of General Chemistry

CHE 136: Elements of Chemistry

CHE 166/167: General Chemistry—Lecture & Lab

GEP 228: Weather and Climate

GEO 101: Physical Geology

GEO 166: Process of Global Change

GEO 167: Evolution of the Earth

PHY 135: Fundamental Concepts of Physics

PHY 140: Physics of Sound

NOTE: Students who are required to take BIO 181: Anatomy and Physiology I, BIO 182: Anatomy and Physiology II, CHE 114/115: Essentials of General Chemistry Lecture and Laboratory, or CHE 120/121: Essentials of Organic Chemistry--Lecture and Laboratory as part of their majors (Dietetics, Foods, and Nutrition; Health Education and Promotion; Nursing) may use these courses as substitutes for the Natural Science requirement. Students entering the Biology, Chemistry, Anthropology/Biology/Chemistry, and Physics majors as well as premedical, predental, prepharmacy, and preveterinary program students, may use PHY 166, PHY 167, PHY 168, and PHY 169 to fulfill this requirement.

Mathematics Requirement (3-4 Credits)

Unless exempted, all students are required to successfully complete one three- or four-credit college-level mathematics course numbered 125 or higher, or three one-credit mathematics courses numbered between 180 and 199.

Distribution Requirement (21 Credits)

Every student must choose and complete successfully one course from a specified list in each of the seven areas listed below. The list of approved courses is available at the Academic Information and Advisement Center (Shuster Hall, Room 280) and in the Schedule of Classes, distributed prior to registration each semester. (The list of Distribution Courses is approved each year. The following list is approved for the Fall 2011 semester and may change for subsequent semesters.) No more than two courses from the same department may be used to satisfy the Distribution Requirement.

Area I: Individuals and Society (3 credits)

AAS(WST) 239: Black Women in American Society ANT/WST 206: Anthropological Perspectives on Women and Men

LAC 231/PRS 242: Latinos in the United States

LAC 232: Family & Gender Relations among Latinos

LNG 150: The Phenomena of Language

POL 217: Criminal Justice

POL 230: Immigration and Citizenship

PSY 166: General Psychology

SOC 166: Fundamentals of Sociology

Area II: Socio-Political Structures (3 credits)

AAS 166: Introduction to African and African American Studies

AAS 225: The Contemporary Urban Community

AAS/HIS 248: African History

ANT 211: Cultural Anthropology

ECO 166: Introduction to Macroeconomics

GEH 101: An Introduction to Geography

GEH 235: Conservation of the Environment

GEP 204: Basic Mapping: Applications and Analysis

GEP 210: Introduction to Environmental Science

POL 150: Contemporary Political Issues

POL 166: American Political System

POL 211: Public Policy

Area III: Literature (3 credits)

AAS/LAC 241: Literature of the English and Francophone

Caribbean

AAS 242: African Literature

AAS 267: African American Literature

ENG 222: Literary Genres

ENG 223: English Literature

ENG 226: Shakespeare

ENG 227: American Literature

ENG 229: Contemporary Urban Writers

ENG/WST 234: Women in Literature

ENG 260: American Minority Literature

FRE 232: The Francophone World (in translation)

IDW/CLT 211: Classics of the Western World: Ancient &

Medieval

IDW/CLT 212: Classics of the Western World II: Renaissance &

Modern

IDW/CLT 213: Classics of the Asian World

LAC/PRS 214: Literature of the Caribbean

SPA/LAC 233: Latin American Literature in Translation

*ENG 300: English Literature I, fulfills Area III requirement for

English majors in the ECCE certification sequence

Area IV: The Arts (3 credits)

AAS 266: Contemporary Black Music

ARH 135: Introduction to the History of Asian Art—Islamic,

Buddhist, and Hindu Cultures

ARH 137: Introduction to the History of Non-Western Art

ARH 141: Introduction to the History of Modern Art of the

Nineteenth and Twentieth Centuries in Europe & the U.S.

ARH 167: Tradition & Innovation in the Art of the West

ART 109: Observation and Visual Experience

ART 110: Elements of Visual Communication

COM 212: History of the Cinema I

COM 213: History of the Cinema II

DNC 235: Dance Perspectives

HUM 250: The City & the Theatre

MSH 114: Introduction to Music

THE 241: The Art of the Theatre

THE 243: Queer Theatre

Area V: Comparative Culture (3 credits)

AAS 232: African Civilizations

AAS/LAC 235: Caribbean Societies

AAS (WST) 240: Women in African Society

ANT/WST/LAC 210: Women in Latin America

ANT 230-238: Selected Studies in Society & Culture (230: Africa,

231: Middle East, 232: Europe, 233: India, 234: Oceania, 235:

Native North America, 236: Southeast Asia, 237: East Asia, (LAC)

238: Latin America

GEH 240: Urban Geography

HIS 240: East Asian Civilization

HIS 249: Islamic Civilization

IAS 250 (ANT 250) SOC 250: The Italian-American Community

MES 245: Introduction to Middle Eastern Studies

MMJ 211: Introduction to Multilingual Media

POL 266: Politics & Culture

POL/RUS 220: Russia Today

PRS 213: Puerto Rican Culture

WST 220: Introduction to Women's Studies

Area VI: Historical Studies (3 credits)

AAS/HIS 245: History of African-Americans

ANT 212: Ancient Peoples & Cultures

HIS 241: Early Modern Europe, 1400-1815

HIS 242: Contemporary European History

HIS 243: The Foundation of the United States

HIS 244: Modern United States History

HIS 246: Civilizations of the Ancient World

HIS 247: Medieval Civilization

HIS 250: Understanding History (Selected Topics)

LAC/HIS 266: Introduction to Latin America & the Caribbean I

LAC/HIS 267: Introduction to Latin America & the Caribbean II

POL 241: Globalization

PRS/HIS 212: History of Puerto Rico

*HIU 348: History of New York: City and State, fulfills Area VI requirement for HIS majors in the ECCE certification sequence

Area VII: Knowledge, Self, and Values (3 credits)

AAS/PHI 269: Introduction to African Philosophy

ACU 266: Classical Myth & the Human Condition

AMS 111: American Culture: Value & Traditions

AAS/PHI 269: Introduction to African Philosophy

PHI 169: Critical Reasoning

PHI 170: Introduction to Logic

PHI 171: Problems of Philosophy

PHI 172: Contemporary Moral Issues

PHI 173: Justice and Society

PHI 174: Theories of Human Nature

PHI 175: Philosophy of Religion

PHI 177: Philosophy of Contemporary Music

POL 172: Great Political Thinkers

Writing-Intensive Course Requirements

Students must complete four courses designated as writingintensive, three prior to earning the 60th credit and one following. Individual sections of courses will be designated as writingintensive, and students may take writing-intensive sections of courses in General Education, major, minor, and elective courses.

Upper-Division Interdisciplinary General Education Requirement (6 Credits)

After earning a minimum of 60 credits or an Associate's Degree, and officially selecting a major, all students must complete two LEH courses. The two are to be chosen in topics outside their major from four of the following five variable topics courses: LEH 351: Studies in Scientific and Applied Perspectives; LEH 352: Studies in Literature; LEH 353: Studies in the Arts; LEH 354: Historical Studies; and LEH 355: Studies in Philosophy, Theory, and Abstract Thinking. (Students who took LEH 100, LEH 101, or LEH 110 prior to Fall 2008 may substitute this course for one of the LEH 351-355 requirements.) Each semester, a series of topics for these courses will be announced in the Schedule of Classes.

LEH 100: The Liberal Arts: Freshman Seminar.

3 hours, 3 credits. The nature of the liberal arts, the goals and objectives of General Education at Lehman, and issues of career vs. liberal education. Information literacy, critical thinking, and intellectual integrity.

LEH 300: Studies in the Humanities and the Social Sciences.

3 hours, 3 credits (may be repeated for credit with a different topic). Selected topics in the humanities and the social sciences studied from different disciplinary perspectives. PREREQ: Completion of at least 60 college credits.

NOTE: In general, this course will involve at least three different disciplines, and students should expect writing assignments and computer-based work along with research involving the library and the Internet.

LEH 301: The American Experience. 3 hours, 3 credits (may be repeated for credit with a different topic). An in-depth and interdisciplinary analysis of American society and culture with an emphasis on what it means to be called an American. PREREQ: Completion of at least 60 college credits.

NOTE: In general, this course will involve at least three different disciplines, and students should expect writing assignments and computer-based work along with research involving the library and the Internet.

LEH 351: Studies in Scientific and Applied Perspectives.

3 hours, 3 credits (may be repeated for credit with a different topic). Selected topics in the social sciences, life and physical sciences, and applied perspectives. PREREQ: Official selection of a major and either completion of 60 General Education credits or an Associate's Degree.

NOTE 1: In general, students should expect writing assignments and computer-based work along with research involving the library and the Internet.

NOTE 2: This course grants general education credit toward graduation for students in all major concentrations except Accounting; Anthropology; Anthropology (interdisciplinary concentration; Biology; Business Administration; Chemistry; Computer Graphics and Imaging; Computer Information Systems; Computer Science; Dietetics, Food, and Nutrition; Economics; Exercise Science; Geography; Geology; Health Education and Promotion; Health Education N-12; Health Services Administration; Italian American Studies; Mathematics; Nursing; Lehman College Undergraduate Bulletin 2013-2015

Physics; Political Science; Psychology; Recreation Education; Social Work; Sociology; Speech Pathology; and Audiology.

LEH 352: Studies in Literature. 3 hours, 3 credits (may be repeated for credit with a different topic). Selected topics in literature. PREREQ: Official selection of a major and either completion of 60 General Education credits or an Associate's Degree.

NOTE 1: In general, students should expect writing assignments and computer-based work along with research involving the library and the Internet.

NOTE 2: This course grants general education credit toward graduation for students in all major concentrations except Classics, Comparative Literature, English, French, German, Greek, Greek and Latin, Hebraic and Judaic Studies, Italian, Latin, Russian, and Spanish.

LEH 353: Studies in the Arts. *3 hours, 3 credits (may be repeated for credit with a different topic).* Selected topics in the arts. PREREQ: Official selection of a major and either completion of 60 General Education credits or an Associate's Degree.

NOTE 1: In general, students should expect writing assignments and computer-based work along with research involving the library and the Internet.

NOTE 2: This course grants general education credit toward graduation for students in all major concentrations except Art, Dance, Dance-Theatre, and Music.

LEH 354: Studies in Historical Studies. 3 hours, 3 credits (may be repeated for credit with a different topic). Selected topics in historical studies. PREREQ: Official selection of a major and either completion of 60 General Education credits or an Associate's Degree.

NOTE 1: In general, students should expect writing assignments and computer-based work along with research involving the library and the Internet.

NOTE 2: This course grants general education credit toward graduation for students in all major concentrations except African and African American Studies, American Studies, History, Latin American and Caribbean Studies.

LEH 355: Studies in Philosophy, Theory, and Abstract Thinking. 3 hours, 3 credits (may be repeated for credit with a different topic). Selected topics in philosophy, theory, and abstract thinking. PREREQ: Official selection of a major and either completion of 60 General Education credits or an Associate's Degree

NOTE 1: In general, students should expect writing assignments and computer-based work along with research involving the library and the Internet.

NOTE 2: This course grants general education credit toward graduation for students in all major concentrations except Philosophy.

Majors and Minors

Major Field Requirement

All candidates for a baccalaureate degree must select a major field of study and complete all requirements for that major.

Each department, departmental section, or interdisciplinary program at the College is responsible for determining the content and requirements of the majors it offers. The requirements for each major are listed under the alphabetical listings of departments in this Bulletin. Students must select a major by the time they have earned 60 college credits and must record their choices in the Office of the Registrar (Shuster Hall, Room 106). Students are advised to consult with prospective departments about a major as soon as possible.

Restrictions for the B.A. degree: No more than 42 credits may be required within one department. No more than 64 credits may be required as a major.

Restrictions for the B.S. and B.F.A. degrees: No more than 64 credits may be required within one department. No more than 85 credits may be required as a major.

Note: Students may take no more than 60 credits in any one department.

Double Majors

To graduate with a double major, a student must fulfill the requirements for both majors and must earn at least 24 discrete credits in each major field, i.e., none of the 24 credits applied toward one major shall be applied toward the other major.

Minor Requirement (12 Credits)

A minor, which normally consists of twelve credits of related courses beyond the 100 level in a department or approved program (including professional programs, such as teacher education), is required of most students. Normally, at least six of the twelve credits must be taken in 300- and 400-level courses. Students must select their minor by the time they have earned 80 credits and must record their choices in the Office of the Registrar (Shuster Hall, Room 108).

With the approval of an appropriate adviser, students may construct their own minor from related courses offered by two or more departments. Instructions on how to fulfill the minor requirement are available from the Academic Information and Advisement Center (Shuster Hall, Room 280).

NOTE: The College permits students in a few major programs to waive the minor requirement. Students should consult the Academic Information and Advisement Center (Shuster Hall, Room 280) or the department or interdisciplinary program of their major to ascertain whether the College has waived the minor for them.

Academic Services and Policies

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Academic Services

Academic Information and Advisement Center

The Academic Information and Advisement Center (Shuster Hall, Room 280) is part of the Office of Academic Standards and Evaluation. This Office carries out the academic policies of the College and provides academic information for all undergraduate students on such matters as admission requirements, curriculum, academic standards, grading practices, retention and probation requirements, transfer policies, degree requirements, requirements for academic honors, graduation requirements, and general graduate school information, including special graduate fellowships, scholarships, and examinations. In addition, the Office serves as the coordinating office for academic advisement, the CUNY Baccalaureate, and study-abroad programs.

SEEK Advisement and Counseling Program

Students admitted through the SEEK Program receive academic, personal, and career counseling. The Office is located in Shuster Hall, Room 257.

Tutoring Programs

ACE: The Academic Center for Excellence (ACE), located in the Old Gym Building, Room 205, offers students a range of activities designed to support classroom learning. Students at any skill level can participate in individual, small group, and/or workshop sessions to improve their proficiency in writing, reading, research, and particular academic subject areas. In addition, ACE offers support to students who need to pass the CUNY entrance exams in writing and reading. Computer-assisted writing/language tutorial programs are also available.

ENGLISH AS A SECOND LANGUAGE: Tutoring in writing for all ESL students.

FRESHMAN YEAR INITIATIVE: Tutoring in writing for all Freshman Year Initiative students.

SEEK: SEEK Tutoring and Supplemental Instruction Center: Services include intensive instructional support, including tutoring, computer-assisted instruction, study skills training, and small-group course reviews. The Center is located in the Old Gym Building, Room 212.

THE MATH LABORATORY: Located in Gillet Hall, Room 222, the Math Lab offers tutoring, advisement, and support materials for math and math-related courses.

SLC: The Science Learning Center (SLC), located in Gillet Hall, Room 133, provides tutoring in the natural and computer sciences. Students meet with tutors individually and in group sessions. Software for computer-assisted learning in several subjects, such as organic chemistry and anatomy and physiology, is also available.

LIBRARY TUTORS: Available in the Library, these tutors offer help with Library resources and computers.

Office of the Registrar

NEW YORK STATE RESIDENCY. To be eligible for the tuition rate of a New York State resident, a student must have had his/her principal place of residence in the State of New York for the twelve consecutive months prior to the first day of classes for the semester. Continuing students who think they may be eligible for this rate may apply in Shuster Hall, Room 182. Entering students should report to the Office of Admissions, Shuster Hall, Room 161.

GENERAL REGISTRATION INFORMATION. A "Schedule of Classes" detailing registration-related regulations and information, the class sections, days, hours, and meeting places for each course is published each semester on the web (www.lehman.edu) before the start of registration. General registration information is available in the Registrar's offices (Shuster 105, 106, 108, 114, 175, and 182).

WEB REGISTRATION. All Lehman students, graduate and undergraduate, are eligible to register online.

SEMESTER INFORMATION SERVICES. Students who need information or who have questions about their current semester courses and/or class standing may go to Shuster Hall, Room 114, to determine full/part-time status, withdrawal regulations, tuition refund eligibility, TAP eligibility, and grading policies.

APPLICATIONS FOR TRANSCRIPTS AND OTHER STUDENT RECORDS. Unless the Registrar is notified to the contrary within six months of completion of a course, it will be assumed that all information on the student's record concerning that course is correct.

Applications for transcripts should (1) be addressed to the Transcript Division of the Office of the Registrar (Shuster Hall,

Room 108), (2) give the name and address of the official to whom the information is to be mailed, and (3) include the \$7 Transcript Fee (transcripts to City University schools are free).

Currently enrolled students who need a statement of attendance should request one in Shuster Hall, Room 114. Students who have not met all their financial obligations to the College will not be issued a transcript, certificate, degree, or grade until they have made all outstanding payments. Students will not be allowed to register for a new semester unless they have satisfied all previous financial obligations to the College.

VETERANS. Veterans who wish to request education benefits should bring their Bursar's Receipt and file the appropriate form in Shuster Hall, Room 114. Veterans who wish to apply for credit for military service should file the appropriate form in Shuster Hall, Room 182. A veteran may receive up to eight elective credits for military service.

DECLARATION OF MAJOR/MINOR OR CHANGE OF MAJOR/MINOR. An application form for these purposes may be obtained in the Office of the Registrar. The completed form, signed by the chair of the department or the coordinator of the interdisciplinary program in which the student wishes to major/minor, should be returned to the Office of the Registrar (Shuster Hall, Room 106).

CERTIFICATION. Students who are required to have a statement of attendance for Social Security, bank loans, employers, the Mayor's Scholarship Program, and other purposes should file their forms in Shuster Hall, Room 114.

RECORDING CHANGES OF ADDRESS. All students in attendance at the College must report home address changes by filing the proper form in the Office of the Registrar (Shuster Hall, Rooms 106 or 114).

RECORDING CHANGE OF NAME. A student's change of name can be entered in the official record by filing the proper form in the Office of the Registrar (Shuster Hall, Room 106) accompanied by the appropriate legal document, i.e., court order, marriage certificate, or annulment/divorce papers.

Teacher Education Services

- The Office of Certification (Carman Hall, Room B33) supports Lehman College students in approved education programs in applying for New York State certification.
- The Certification Officer assists in completing teacher, school leader, and school counselor certification online applications when qualified candidates complete one of the College's registered education programs.
- The Certification Officer also maintains files of candidates who apply for New York State certification and provides information on New York State certification requirements and the New York State Teacher Certification Examinations (NYSTCE).

Applying for Student Teaching

Undergraduate students who seek New York State initial certification must successfully meet the student teaching requirement. The Director of Field Experiences and the Professional Development Network (Carman Hall, Room B-33) is responsible for school site placements and providing information and support for prospective student teachers.

Student teachers must be prepared to student-teach every day for the duration of one college semester. Prospective student teachers are urged to plan their course of study so they can devote a semester exclusively to their student teaching. Student teachers should have fulfilled their other education course requirements, including content area methods courses, before applying for student teaching. Further requirements for student teachers are detailed in the respective program's course of study.

Applications must be filed the semester prior to student teaching and requires permission from the program coordinator. Application due dates are April 1 for the fall semester and November 1 for the spring semester. Any candidate found to be in violation of any of the conduct guidelines detailed in the Lehman College Student Handbook and/or the candidate's discipline-specific code of ethics, may not be recommended for the student teaching. The Lehman College Student Handbook can be found on the College website at http://www.lehman.cuny.edu/campus-life/.

Information about student teaching is posted on the School of Education's website at lehman.edu/academics/education/ http://www.lehman.edu/academics/education/.

Teacher Certification

Teacher certification is obtained through the New York State Education Department. All certification requirements are subject to change without notice. It is the responsibility of the student or graduate to consult with the Certification Officer in Carman Hall, Room B-33 to stay informed about the latest certification requirements. In addition, the New York State Education Department maintains a website of current regulations at www.highered.nysed.gov/tcert.

Examination Requirements for Initial Certification

Undergraduate candidates who seek an initial teacher certification are required to pass four tests: (a) the Academic Literacy Skills Test (ALST), (b) Teacher Performance Assessments (TPA), (c) Educating All Students test (EAS), (d) Revised Content Specialty Test (CST). Candidates must also attend two workshops on School Violence Prevention and Child Abuse Identification. These tests and workshops are offered by the New York State Teacher Certification Examination (NYSTCE) program.

Note: Candidates who complete their degrees and apply for an initial certificate on or before April 30, 2014 may choose to take the current teacher certification examinations: (a) the Liberal Arts and

Sciences Test (LAST), (b) the Assessment of Teaching Skills—Written (ATS-W), and (c) the Content Specialty Test (CST).

Note: All initial certificates require completion of New York State workshops. To learn more about these workshops, visit http://eservices.nysed.gov/teach/certhelp/CertRequirementHelp.do http://eservices.nysed.gov/teach/certhelp/CertRequirementHelp.do. Preparation workshops are offered at Lehman College through the School of Continuing and Professional Studies (SCPS). Check in the SCPS Office located in Room 128 of Carman Hall (718-960-8666) for the dates and times of these sessions.

Bilingual Education Assessments (BEA)

The Bilingual Education Assessment (BEA) is required of candidates seeking a bilingual education extension to a certificate. Preparation guides for these examinations can be viewed or downloaded for free at www.nystce.neinc.com. The BEAs consist of both multiple-choice questions and constructed-response assignments; the BEAs include audiotaped listening and speaking components in English and in the target language, and reading and writing components in the target language.

Applying for Teacher Certification

Students who successfully complete a State-approved program in education are eligible for initial certification by the NYS Education Department. The certification process is as follows:

- 1. The candidate completes the State-approved program in which the requirements specified by the NYS Education Department are met.
- The candidate files an application using his or her NYSED TEACH account.
- In collaboration with the appropriate program coordinator, the Certification Officer reviews the transcripts and related documents to determine whether the student can be recommended for certification.
- 4. The Certification Officer enters an institutional recommendation for NYS certification.
- The State Education Department issues electronic certificates online.

Academic Honors

Dean's List*

At the end of each Fall and Spring semester, the Office of Undergraduate Studies publishes a list of matriculated students who meet the qualifications for placement on the Dean's List.

Full-time students will be placed on the Dean's List each fall and spring semester in which they have earned twelve or more credits with a GPA of 3.5 or above. Part-time students will be placed on the Dean's List on each occasion in which they have completed twelve or more new credits in two consecutive semesters with a GPA of 3.5 or above. In either case, no WU or INC grades are allowed even if twelve credits are completed with a 3.5 GPA.

Presidential Scholar*

This designation is bestowed upon students who have met all of the qualifications for Dean's List and have exceeded the GPA requirement for Dean's List by earning a 3.9 GPA or higher. This honor supersedes placement on the Dean's List.

Departmental Honors*

Graduation with departmental honors requires that, in addition to any other departmental specification, a student achieve a cumulative index of 3.2 and an index of 3.5 in the major or in an interdisciplinary program for a minimum of 24 credits.

College Honors*

Students are eligible for College honors at graduation if they have completed at least 60 credits in residence at Lehman College, of which at least 42 are indexable, with a minimum cumulative index of 3.4. (See definition of credits in residence under the heading "Credit Requirements" in the section on "Degree Requirements" in this Bulletin.) The following honors may be awarded:

Cum laude Index of 3.4-3.59

Magna cum laude Index of 3.6-3.79

Summa cum laude Index of 3.8-4.0

Election to Honor Societies

Phi Beta Kappa

Phi Beta Kappa, the nation's oldest liberal arts honor society, founded in 1776, granted a charter that established Chi Chapter of New York at Lehman College in 1970. Membership in Phi Beta Kappa is an honor conferred by invitation in recognition of scholarly achievement in the liberal arts and sciences. Election to the Chapter is based on high scholarship in a broad liberal arts curriculum as distinct from a vocationally oriented course of study. To be eligible for election, a student must have completed a year of college-level study in mathematics or a natural science or a semester of each, have completed two years of foreign language at the college level or its equivalent, and have a minimum 3.6 GPA with 90 credits in liberal arts courses.

Sigma XI

Sigma Xi, the national honor society in scientific research, founded in 1886, granted a charter to establish a chapter at Lehman College on November 2, 1974. The Lehman chapter can elect to membership students who have demonstrated outstanding ability in the field of scientific research. The chapter provides an opportunity for the presentation of undergraduate and graduate student research papers, as well as for attendance at the chapter's annual dinner and scientific lecture.

Golden Key International Honor Society

Golden Key, an international academic honors organization

^{*} Second-degree candidates who meet the qualifications are eligible for the Dean's List, Presidential Scholar designation, Departmental, and College honors.

founded in 1977, granted Lehman College a charter on May 8, 1986, with 175 initial charter members. The society is interdisciplinary, and its members are juniors and seniors who are in the top fifteen percent of their class, scholastically. Part-time as well as full-time students are eligible for membership.

Other Honor Societies

The following societies encourage students to take an active interest in independent and advanced study: Kappa Pi (art), Beta Beta Beta (biology), Iota Sigma Delta Pi (chemistry, for undergraduate and graduate women), The English Honors Society for Scholarship and Creative Writing, Omicron Nu (family and consumer studies), Pi Delta Phi (French), Delta Phi Alpha (German), Eta Beta Rho (Hebrew), Phi Alpha Theta (history), Pi Mu Epsilon (mathematics), Kappa Mu Epsilon (music), Pi Sigma Alpha (political science), Alpha Kappa Delta (sociology), Psi Chi (psychology), Sigma Delta Pi (Spanish), Sigma Theta Tau (nursing), and the Epsilon Eta Chapter of Sigma Alpha Eta (speech and theatre).

Academic Policies

Student Classification

Group	Credits Completed
8 Graduating Senior	106-120
7 Lower Senior	91-105
6 Upper Junior	76-90
5 Lower Junior	61-75
4 Upper Sophomore	46-60
3 Lower Sophomore	31-45
2 Upper Freshman	16-30
1 Lower Freshman	0-15

Credit and Course Loads

In general, one credit represents 15 hours of classroom work or 30 hours of laboratory work, plus supplementary assignments, or the equivalent thereof. One credit of clinical laboratory in the Department of Nursing represents 45 clock hours of work. Unless otherwise stated, the number of credits assigned to a course is the number counted toward a Lehman College baccalaureate degree.

Full-Time Matriculants

Courses and credit loads for full-time matriculants are as follows:

- To be a full-time student, he/she must attempt a minimum of 12 credits or credit equivalents per semester.
- A student may attempt a maximum of 18 credits per semester.
- A student on full-time academic probation may attempt no more than four courses per semester and no more than two courses during a summer session.

Part-Time Matriculants

Courses and credit loads for part-time matriculants are as follows:

• In order to make progress toward the degree, a part-time matriculated student is expected to carry each semester a

- minimum of two courses totaling five to seven credits or one course totaling at least five (5) contact hours.
- For purposes of normal academic progress and continuity, a part-time matriculated student must complete the baccalaureate degree in no more than 20 semesters of attendance (or a number of semesters prorated for students with transfer credits), exclusive of summer sessions, but inclusive of semesters spent as a non-matriculated or nondegree student. Exceptions must be approved by the Office of Academic Standards and Evaluation (Shuster Hall, Room 280).
- Students on part-time academic probation may take no more than two courses each semester.
- Part-time matriculants, other than those on part-time probation, may carry a maximum of eleven credits.

Non-Degree Students

Non-degree students may take no more than the maximum credits allowed matriculated (degree) students.

Summer Session

In summer session, students may earn credit in proportion to the amount of credit they may earn in a regular semester. For example, in one six-week summer session, a student may carry no more than eight credits or two courses, whichever is higher. A student with a minimum cumulative index of 3.0 or a student who is graduating from the summer session may carry an additional three credits.

If a student attends two summer sessions, at Lehman and/or elsewhere, and there is any overlap between the two sessions, credits representing the number of weeks of overlap must be subtracted from the total number of credits allowed. Students should consult with the Office of Academic Standards and Evaluation (Shuster Hall, Room 280).

Excess Credit

A student with a minimum cumulative index of 3.0 who has also completed the College Writing requirement and whose previous semester grades include no INCs, Ws, WUs, Rs, or NCs, or a student who is a graduating senior, may, with the permission of the Office of Academic Standards and Evaluation (Shuster Hall, Room 280), attempt up to 21 credits. Students who meet all the requirements stated above and who have successfully completed 21 credits in a prior semester may request permission in the Office of Academic Standards and Evaluation to attempt up to 24 credits. A student who wishes to request permission to register for more than 24 credits must submit a written appeal to the Committee on Admission, Evaluation, and Academic Standards, detailing the reason for the request and a justification for each course planned in the schedule. This appeal should be submitted to the Committee through the Office of Academic Standards and Evaluation. The Committee will determine whether the appeal should be granted or denied during the late registration and drop/add period.

In no case may a student preregister for more than 18 credits. Students who register for more than 18 credits must pay the CUNY Accelerated Study Fee (see the chapter on "Tuition and Fees" in this Bulletin).

Withdrawal from Courses

Drop/Add Period. Students may adjust their programs during the Drop/Add period at the beginning of each semester, provided there is space in a newly selected course and they maintain the minimum credit load for their status.

Withdrawals after Drop/Add. The grade of W, withdrawal without penalty, is awarded only when it is clear that a student has a good and sufficient reason for withdrawing from a course and is doing so at a time when he or she is doing passing work in the course. Applications for withdrawal are accepted through the tenth week of each semester.

Students desiring to drop a course in their major must obtain a recommendation from the chair or the adviser of the appropriate department program. No faculty member or counselor may withdraw a student from a course.

The following grades govern official and unofficial withdrawals after the Drop/Add period. The deadline dates are published each semester by the Office of Academic Standards and Evaluation.

	Grade
Official withdrawal without penalty	W
Never Attended, with penalty	WN
Unofficial withdrawal with penalty	WU

NOTE: Although W grades carry no index penalty, they are credits attempted for the purpose of measuring satisfactory academic progress.

After the tenth week of each semester, students may appeal for withdrawals to the Committee on Admission and Standing, but only for documented reasons of serious illness or serious personal emergency. Students should submit their appeals to the Office of Academic Standards and Evaluation (Shuster Hall, Room 280).

Students receiving financial aid should discuss in advance with the Office of Financial Aid the consequences of withdrawing from a course.

Total Withdrawals

Students in good standing may apply for a total withdrawal from the College with the intention of applying for readmission at a later date.

Students withdrawing from the College should first consult with the Office of the Vice President of Student Affairs. If withdrawal is indicated, the student should apply in the Office of the Registrar and return all books belonging to the Library and all other materials and property to the appropriate office.

There is no category at the College entitled "leave of absence." After students have withdrawn, they may neither consider nor identify themselves as "students on leave" from the College; they may only describe themselves as "former students." Official discharge for medical reasons provides no exception to this rule.

A student whose cumulative index at the time of official discharge from the College is below the minimum required for continued matriculation shall be considered dropped for poor scholarship.

Lehman College Credit for Attendance at Other Institutions

The following regulations apply to Lehman College matriculants who wish to attend other colleges or universities for Lehman College credit:

- A student must have completed one semester of twelve credits at Lehman. To be assured full transfer credit, a student must (a) apply for an e-permit via the CUNY portal and (b) follow the procedures outlined on the permit, including obtaining departmental approval. No student will be given a permit for more than one semester of full-time study elsewhere, except in specified programs.
- If a student does not obtain permission in advance, including departmental approval, transfer credit may be withheld. Grades of D earned outside the City University of New York are not transferable.
- A student may not be enrolled simultaneously at Lehman College and another institution for more than the maximum number of credits under Lehman College rules.
- A student who has completed half or more of the number of credits required for the Lehman College bachelor's degree may not receive credit for courses taken at a community college.
- Work completed during summer sessions will not be credited beyond the established rate of work at Lehman College summer sessions.
- To earn a Lehman College degree, a student must complete at least 30 credits in residence at Lehman College and at least half of the credits in the major and in the minor or in an interdisciplinary program. (See the definition of credits in residence in the section on "Degree Requirements" in this Bulletin under the heading of "Credit Requirements.")
- A student is responsible for having transmitted to the College a
 record of all courses taken at a non-CUNY institution for
 Lehman credit while a matriculated student at the College.
 (Transcripts for CUNY permit courses will automatically be
 forwarded to the home college.)
- With special permission, a student who has satisfied Lehman
 College residence requirements may attempt the final 21 credits
 at another accredited senior college or university, provided that
 all other requirements for graduation will have been satisfied.
 Students wishing to graduate in absentia must obtain
 permission from the Office of Academic Standards and
 Evaluation (Shuster 280).

Transfer Credit

The following rules govern the evaluation of transfer credit:

 Credit is usually granted for a course from a college or university accredited by one of the following accrediting bodies if the description of that course matches that of a similar course offered by Lehman College: Middle States Association of Colleges and Schools/Commission on Higher Education; New England Association of Schools and Colleges; North Central Association of Colleges and Schools; Northwest Association of Schools and Colleges; Southern Association of Colleges and Schools/Commission on Colleges; Western Association of Schools and Colleges—Accrediting Commission for Senior Colleges; and Accrediting Commission for Community and Junior Colleges.

- Credit for a course at a postsecondary institution not accredited by one of the above-mentioned accrediting bodies, whose description matches that of a similar course offered by Lehman College, is usually granted after a student has completed a minimum of 30 Lehman College credits with a 2.0 cumulative index. The maximum number of credits allowed from such nonaccredited institutions is 32.
- Courses passed outside the City University system with a grade of D (below 70 percent) will not be credited by Lehman College. They will be included, however, in the cumulative index to determine an applicant's eligibility for admission.
- In accordance with the policy of the Board of Trustees, holders
 of associate's degrees from the City University are granted 60
 earned community college credits on transfer to a senior
 college, provided that they have not earned senior college
 credits prior to attending the community college.
- Holders of A.A., A.S., and A.A.S. degrees earned outside the
 City University may be granted up to 60 earned community
 college credits upon transfer, provided that they have not
 earned senior college credits prior to attending the community
 college. A.A.S. degree students' eligibility for admission is based
 on the index in liberal arts courses.
- All community college transfer students who transfer without
 the associate's degree may be granted up to 60 earned
 community college credits upon transfer, provided that they
 have not earned senior college credits prior to attending the
 community college.
- No transfer student may be granted more than 90 credits toward the degree. Students must satisfy the requirement that 30 credits as well as one-half the credits in the major and half in the minor or half the credits in an interdisciplinary program be completed in residence at Lehman. (See the definition of credits in residence in the section on "Degree Requirements" in this Bulletin, under the heading "Credit Requirements.")

Credit by Examination

External Examination Programs (AP, CLEP, CPEP)

Students who have participated in any one of the three external examination programs approved by the College—the Advanced Placement Program (AP), the College Level Examination Program (CLEP), and the College Proficiency Examinations Program (CPEP)—may receive advanced placement depending on the scores achieved and criteria set by the College. Sophomore standing will be awarded to those who have earned four full Advanced Placement course credits.

Credit by Departmental Examination

All departments at Lehman College may offer credits by means of a departmental examination, provided the individual departments are convinced that the student, through previous study and/or work, is qualified to take the examination in a specific course. The department may assign either credit (representing a grade of C or better) or no credit to the examination. Students who fail this examination may not repeat it. Students requesting credit by departmental examination must pay the Qualifying Examination Fee as listed in the section on "Noninstructional Fees" in the chapter on "Tuition and Fees" in this Bulletin.

The maximum number of credits students may earn through external examinations and life-experience credit (awarded through the Adult Degree Program), exclusive of Advanced Placement examinations, is 30. (For further information, consult the Office of Academic Standards and Evaluation, Shuster Hall, Room 280.)

Graduate Courses for Undergraduate Credit

Seniors may take graduate courses for undergraduate credit under the same tuition conditions as those of their undergraduate courses, provided that they have a 3.0 cumulative index and a 3.0 index in the area in which they wish to take the course. They must secure a recommendation from the department and approval of the Office of Academic Standards and Evaluation (Shuster Hall, Room 280). Graduate courses taken for undergraduate credit cannot be used toward a graduate program.

Audited Courses

All students, matriculant and non-degree, may audit any course other than a laboratory, provided attendance in the course does not involve the use of consumable material and/or equipment. Auditors will be charged regular tuition. Audited courses cannot be used to qualify for full-time or part-time status, financial aid, or veteran's benefits. AUD-graded courses carry no credits, but auditors must fulfill the instructor's requirements for auditors. AUD-graded courses should not be confused with courses graded "No Credit." To register as an auditor, prior written permission of the instructor and the appropriate department chair is required. No change from regular registration to auditing, nor from auditing to regular registration, will be permitted after the regular registration period has ended.

Undergraduate Grading Systems and Related Policies

Grading System I

The grading system for remedial and developmental courses consists of A through C and R. The grading system for compensatory courses and courses of the College Requirement in English (ENG 110 and 120) and foreign language courses numbered 101, 103, and 105 consists of A through C and NC.

Grading System II

The grading system for other courses consists of A through F. Other grading symbols may be used when appropriate.

Pass/Fail Option

Students may elect P/F grades for a maximum of 18 credits in their degree program under the following conditions:

- The course for P/F must be outside (a) the College degree requirements and the major, minor, or interdisciplinary program and (b) the courses offered by Lehman's teacher education departments, except for those education courses that may be taken only on a Pass/Fail or Pass/No Credit basis.
- Only one P/F course may be elected in any semester, except for those courses that are always graded P/F.
- The P/F choice may not be changed after the College registration period has ended.
- The credits taken on a P/F basis may not be counted toward the number of credits required in the major and minor when that area represents a change from a previous choice.

Cumulative Index

A student's overall level of scholarship is reflected in the cumulative index. Each student is expected to compute the index from the accompanying instructions and table and to recompute it each subsequent semester for a cumulative total. A cumulative index may not be computed by averaging the semester indices. Students should check their computation against their official transcripts. Grades and Credits in the cumulative index include: (1) all grades earned at the College, including F, FIN, WF, WN, WU, and J (no longer used) and those earned in a Lehman summer session and (2) all grades earned in courses taken at Lehman or City University study-abroad programs, provided that the students have received prior departmental approval. Grades and Credits to be excluded are those grades earned in any previous institution or program not listed in the preceding section and all P, NC, INC, R, PEN, and W.

Grade Appeals

Students dissatisfied with a grade received in a course should first consult the instructor involved. It is the instructor's sole judgment that determines the grade recorded in the Office of the Registrar. The instructor's first judgment is always taken. Second and later judgments resulting from personal appeals and hardship claims are never honored. Occasional errors do occur, and these are always corrected promptly when properly certified by the instructor to the Office of Academic Standards and Evaluation.

Departmental Grade Appeals

When a student considers a grade unjust, he/she should first confer with the instructor. Students are required to initiate grade appeals before the end of the eighth week of a semester following the entry of a permanent grade. Second judgments and additional work are not permitted. If a student is not satisfied that justice has been done, he/she may appeal in writing to the department chair.

If the chair is the instructor in question, the senior member of the department Personnel and Budget Committee will act for the chair

- A. The chair will appoint a review committee of at least two department members who, with the chair, will review the appeal. The committee will examine all materials relevant to the appeal, submitted by both the instructor and the student, and will prepare a written report of its findings, either sustaining the original grade or recommending a change.
- B. The chair will notify the student, the instructor, and the Office of Academic Standards and Evaluation of the committee's decision. If the committee recommends a grade change, the chair will forward that recommendation (A-1) with the decision.
- C. The decision of the review committee will be binding on both parties.

Index Computation Formula

To learn to compute the cumulative index, assume that the accompanying table represents grades earned and proceed as

- 1. Multiply the total number of credits for each grade by the quality points assigned to that grade and total the product obtained.
- 2. Total the number of credits attempted.
- 3. Divide the results obtained in Item One by the result obtained in Item Two. This number becomes the Lehman College cumulative index. The index must be computed to two decimal places. (See the accompanying table.)

Grade		Quality
Symbols		Points
A	Excellent	4.0
A-		3.7
B+	Good	3.3
В		3.0
B-		2.7
C+	Satisfactory	2.3
С		2.0
C-		1.7
D+*	Poor	1.3
D*		1.0
F****	Failure	0.0
P	Pass	-
NC**	No Credit	-
R**	Course must be repeated until minimum level	-
	of proficiency is attained	
INC***	Incomplete	-
FIN	An incomplete that has been turned to an F	0.0
W	Withdrawal without Penalty	-
WN	Never Attended	0.0
WU****	Unofficial Withdrawal	0
WF	Withdrawal with Penalty	0
AUD	Audited Course	
Y	Year Course of Study; grade is indexed, but	
	credit will be withheld if the year course is not	
	completed according to grade A to D	
Z	Registrar's grade when a grade sheet has not	
	been submitted by the instructor	
#	Repeat for better grade, removed from index	
&	Repeat for better grade, remains in index	
*	Repeat/Repeat of transfer credit/No credit	
	when credit earned in XXX999	

^{*} Students, if they wish, may repeat one time only courses in which they have earned D grades. The D grade will stand, and the new grade will be averaged in the cumulative index, but the course will be credited only once. Undergraduate students may remove up to 16 credits worth of F penalty grades from their Grade Point Average by repeating the course in which the penalty grade was received and earning a grade of C- or better as long as the original penalty grade was earned in the Fall 1984 or thereafter and the course was repeated in the Fall 1990 or thereafter. The original F penalty grade remains on the transcript. Students should consult with the Office of Academic Standards and

Evaluation regarding University guidelines affecting the repetition of courses in which a penalty grade has been received. If students repeat courses in which they have received grades, the repeated courses will neither be credited nor counted either in the students' semester or cumulative indices.

- ** The NC and the R are earned academic grades for courses in which the use of NC or R has been approved; the NC or the R is given when a student has completed a course, but has not earned a minimum grade of C; NCs and Rs are counted as credits attempted in determining the rate of satisfactory progress toward the degree. In order to receive credit for a course in which an NC or an R has been earned, a student must retake and satisfactorily complete the course.
- *** An Incomplete grade is turned to an F (FIN) when the work has not been satisfactorily completed within the established deadline.
- **** A WU grade is when a student withdraws unofficially and stops attending class(es). The student never completed the class.
- ***** An F grade is a failure/unsuccessful completion of a course.

Grade	Quality Points		Credits Attempted		Quality Points
A	4.0	x	6	=	24.0
A-	3.7	X	4	=	14.8
B+	3.3	X	3	=	9.9
В	3.0	X	2	=	6.0
B-	2.7	X	5	=	13.5
C+	2.3	X	3	=	6.9
С	2.0	X	2	=	4.0
C-	1.7	X	4	=	6.8
D+	1.3	X	3	=	3.9
D	1.0	X	3	=	3.0
F, WF, or WU	0.0	x	6	=	0.0
			41		92.8

Number of credits taken = 41

Division of 92.8 (sum of quality points) by 41 = 2.26 (index)

Attendance

Students in basic skills courses are required to attend classes. Students in all other courses are expected to attend classes regularly, and instructors are required to record attendance for grading and counseling purposes. Individual instructors, as well as departments or degree programs, may establish specific attendance requirements. Instructors have the right to weigh attendance and class participation in determining grades. It is the student's responsibility to ascertain the effect attendance may have on the grade in a course. Students receiving financial aid must be certified or attending classes regularly for continuing eligibility.

Final Examinations

A written final classroom examination is required in every course and must be held at the same time scheduled by the Registrar's office. A graduating senior may be exempted from a final examination if the policy of the department or program is to exempt graduating seniors from final examinations. Exemptions are never automatic.

A graduating senior who has failed the final examination in only one course required for graduation is entitled to a special examination, provided that the student has a passing grade average in the course.

A student who misses a final examination for valid reasons may, after consultation with his/her instructor, be given a makeup final examination. The instructor must report the student's final grade in the course to the Office of the Registrar no later than the last day of classes of the following semester. Students taking one or more makeup final examinations must pay the special examination fee as scheduled under "Noninstructional Fees" (in the chapter on "Tuition and Fees" in this Bulletin) and present the Bursar's Receipt for the fee to the instructor.

Incomplete Courses

The grade of INC is awarded only when the course requirement has not been completed for good and sufficient reasons and when there is a reasonable expectation that the student can successfully complete the requirements of the course. The INC grade covers any failure to complete all requirements for a course, such as submitting a paper or taking a final examination. For an instructor to grant an INC, the student must have met the instructor's attendance requirements in the course and have a passing semester average. The student must complete the missing work within the first ten weeks of the following semester. If the instructor is not available, the student must consult with the department chair. A grade replacing the INC may not be entered by the instructor or department chair later than the last day of classes of the following semester. INC grades not completed by the deadline will become Fs (FINs) (or the equivalent under Grading System I-R, NC).

WU and F Grades Policy

A grade of 'WU' is a failure grade given to a student who began attending the class (at least one session) and stopped attending. This grade is assigned by the instructor to indicate that the student stopped attending the course before the end of the semester; or as a result of excessive absences for which there is no basis to give a final letter grade of "A to F," and the conditions for a grade of 'INC' do not apply. This grade is calculated in the GPA as zero and gives no credit. If a student wishes to receive credit for the course, it must be repeated with a passing grade; however, the 'WU' grade remains on the transcript. (A "WU" grade should never be given in place of an "F" grade, the "F" grade is an earned grade based on poor performance.)

A grade of "F" is a failure grade given to a student who completed the class and failed. This grade is assigned for work that in the judgment of the instructor does not deserve college credit. This grade is calculated in the GPA as zero and gives no credit. If a student wishes to receive credit for the course, it must be repeated with a passing grade; however, the "F" grade remains on the transcript.

Academic Integrity

While honest scholarship is time-consuming and often requires hard work, it is also the primary process by which students learn to think for themselves. Faculty members must teach respect for methods of inquiry within the various disciplines and make assignments that will encourage honest scholarship; students in turn must uphold a standard of honesty within the College, thereby affirming the value and integrity of their Lehman degree. The following definitions and procedures govern cases involving undergraduate student work.

The most common forms of academic dishonesty are cheating and plagiarism. Cheating is the use or attempt to use unauthorized material, information, notes, study aids, devices, or communication during an academic exercise (for example, using unauthorized books, papers, or notes during an examination; or procuring, distributing, or using unauthorized copies of examinations). Plagiarism means the failure to give credit for the source of another's words or ideas, including but not limited to books, articles, interviews, and multimedia and electronic sites, or—as in the use of borrowed or purchased papers—passing off another person's work as one's own. (Section 213-b of the New York State Education Law prohibits the sale of term papers, essays, and research reports to students enrolled in a college.) Common forms of cheating and plagiarism are highlighted in this Bulletin.

Academic dishonesty is a serious violation of the accepted values of the College. When questions of a breach of academic integrity arise, instructors will inform the students of their suspicions and provide the student with a Faculty Report Form for Incidents of Suspected Academic Dishonesty. The instructor must remember that a student's failure to respond to charges of academic dishonesty is not in and of itself an indication of guilt. The report will include an explanation of the incident, the instructor's intended academic sanction, and an indication whether or not the instructor is recommending that the College undertake disciplinary proceedings pursuant to Article 15 of the Board of Trustees Bylaws.

Academic sanctions may include but are not limited to the following:

- A. a grade of F on the paper or examination; the student may be given the option of submitting a similar but additional project for grading;
- B. a grade of F on the paper or examination, as above, but with no option to submit additional work;
- C. a grade of F for the course.

Disciplinary procedures are governed by Article 15 of the Board of Trustees Bylaws. In the event the student is found guilty of academic dishonesty by a Faculty-Student Disciplinary Committee, penalties that may be imposed include but are not limited to: 1) suspension from the College or 2) expulsion from the College. Although the Office of the Vice President for Student Affairs will be guided by the recommendation of the instructor, it reserves the right to seek disciplinary sanctions under the disciplinary procedures.

Should the instructor become convinced that the suspicions are unfounded, no further action will be taken and the Faculty Report Form will be destroyed. If the suspicions are founded and if both the student and the instructor are willing, they may agree upon a resolution. Subsequently the instructor will present the completed Faculty Report Form, including the charges and resolution, to the department chair who must forward the appropriate copies of the form to the Office of Academic Standards and Evaluation, and the Office of the Vice President for Student Affairs. If no agreement is reached, the instructor must allow a student to complete all coursework until the following appeal process has been completed.

- The first step in the appeals process is for the instructor to file
 the Faculty Report Form with the chair. If the term is
 completed, the instructor may assign a grade that reflects the
 intended sanction but must also provide a final grade that does
 not include the intended sanction if the charges are not upheld.
- If the charges are for cheating, then the chair will submit the charges to the Office of the Vice President for Student Affairs. If the charges are for plagiarism, the chair will appoint a committee of three Lehman College faculty members, which will adjudicate the matter within three weeks by majority vote. If the chair is the instructor in question, the senior member of the department Personnel and Budget Committee will act for the chair. The committee will provide written notification of its decision to the chair, who will forward this recommendation and the Faculty Report Form to the Office of the Vice President for Student Affairs.

The Office of the Vice President for Student Affairs will review the recommendations of the instructor and the committee for possible disciplinary sanctions and provide a written notification of its decision to the department chair, the student, the instructor, and the Office of Academic Standards and Evaluation. Either the instructor or the student has the right, within three weeks of receipt of notification, to appeal the department decision in writing to the Committee on Admissions, Evaluation, and Academic Standards, which will act as adjudicator of last resort. Should any part of the three-week period fall outside the regular semester, the first three weeks of the next regular semester shall apply.

The Office of Academic Standards and Evaluation will keep all records of such proceedings on file until the student's graduation, at which time they will be destroyed.

As a result of a second upheld charge of academic dishonesty, disciplinary procedures will be pursued by the Office of the Vice President for Student Affairs as governed by the procedures under Article 15 of the Board of Trustees' Bylaws.

The following definitions and examples are adapted from the CUNY Policy on Academic Integrity.

Cheating is the unauthorized use or attempted use of material, information, notes, study aids, devices, or communication during an academic exercise. Examples of cheating include, but are not limited to the following:

- Copying from another student during an examination or allowing another student to copy your work.
- Unauthorized collaboration on a take-home assignment or examination.
- Using illegal notes during a closed-book examination.
- Taking an examination for another student, or asking or allowing another student to take an examination for you.
- Changing a graded exam and returning it for more credit.
- Submitting substantial portions of the same paper for more than one course without informing each instructor.
- Preparing answers or writing notes in a blue book (exam booklet) before an examination.
- Allowing others to research and write assigned papers or do assigned projects, including the use of commercial term paper services.
- Giving assistance to acts of academic misconduct or dishonesty.
- Fabricating data (all or in part).
- Submitting someone else's work as your own.
- Unauthorized use during an examination of any electronic devices, such as cell phones, palm pilots, computers, or other technologies to send or retrieve information.

Plagiarism is the act of presenting another person's ideas, research, or writings as your own. Examples of plagiarism include, but are not limited to the following:

- Copying another person's actual words without the use of quotation marks and citations.
- Presenting another person's ideas or theories in your own words without acknowledging the source.
- Using information that is not common knowledge without acknowledging the source.
- Failing to acknowledge collaborators on assignments.
- Purchasing or downloading term papers online.
- Paraphrasing or copying information from the Internet without citing the source.
- "Cutting and pasting" from various sources without proper attribution.

Academic Standards

Students are expected to achieve and maintain a minimum GPA requirement during their enrollment at Lehman College. In order to remain in good academic standing, students must attain a minimum GPA of 1.5 for the first 12 attempted credits, 1.75 for the first 24 attempted credits, and a 2.0 semester index thereafter.

Total number of credits attempted include Lehman College Fs, FINs, Ws, WFs, WUs, Ps, NCs, Rs, or their equivalents, and all transfer credits.

Total Credits Attempted	Minimum Lehman College	
	Cumulative Indices	
0-12	1.5	
(or first four courses)		
12-24	1.75	
(or first eight courses)		
24	2.00	

Students who fail to meet the required cumulative index are automatically placed on probation warning until the end of the following spring semester. During this warning period, students maintain their academic standing with the College. Students who still do not meet the minimum requirements following the probationary warning period will be dismissed from the College. Students may appeal their dismissal to the Committee on Admission and Standing for consideration of readmission.

Dismissed students whose appeals are granted will be placed on either part-time probation (fewer than 12 credits) or full-time probation (maximum of 16 credits) for the following academic year. The designation of part-time or full-time probation, as well as the determination of allowable credit load therein, will be at the discretion of the Committee on Admission and Standing.

Students on probation are expected to regain good academic standing by the end of the academic year. Students who achieve a semester index of at least 2.3 for each semester of probation but who still do not meet the minimum retention standard by the end of the year will be permitted to extend their probationary period for the following academic year.

Students who do not meet either of the conditions stated above will be dismissed once again from the College and may choose to submit another appeal.

Probation Requirements

- 1. Students on full-time probation are expected to have a 2.0 cumulative index at the end of the academic year.
- 2. Students on part-time probation must satisfy the following academic requirements:
 - a. each semester of the academic year, achieve a semester index of at least 2.3 in a maximum of two courses from among the College degree requirements, and
 - b. make satisfactory progress toward a 2.0 cumulative index in all Lehman College work.

Graduation Requirements

To qualify for graduation with a Lehman College baccalaureate degree, students must complete the following requirements:

- 1. completion of at least 120 credits, including all degree requirements;
- completion of at least 30 credits in coursework at Lehman, including at least half the number of credits in the student's major and half in the minor or half of the credits in an interdisciplinary program;
- 3. a minimum Lehman College cumulative index of 2.0; and
- 4. either a minimum grade of C or an overall index of 2.0 in all courses taken in the major and minor departments or in an interdisciplinary program.

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Course Offerings, Levels, and Codes

Alpha Code Subject Matter

Undergraduate Lehman College courses are identified by a threeletter abbreviation (Alpha Code) followed by a three-digit number. The letters indicate the subject area of the course. For example: HIA 111 is a course in ancient history, while ENW 317 is a writing course offered by the Department of English. The meanings of the Alpha Codes are listed at the end of this chapter.

Jointly Offered Courses

Some courses are offered by two or more departments or programs. Before signing up for these courses, students should determine carefully the department or program under which they wish to register. The course code may not be changed after the student has registered for the semester.

Number Code: Course Level and Category

The three-digit number assigned to each course indicates the level and in some instances the type of course. For example: BIO 166 is intended for beginning students in biology, while BIO 490 is an advanced course limited to upper-class majors in biology. The meanings of the numbers are as follows:

Course Levels

Remedial and Developmental Courses (001-089)

Students are directed to these courses as the result of skills assessment examinations. Hours and credits are not assigned in the same way as for other courses. Remedial Courses are noncredit courses with precollege content. Developmental Courses have in part college-level and in part precollege-level (remedial) work. They carry college credits only for the portion of the course that is college-level. The Remedial and Developmental courses are graded A, B, C, R, or NC. Students who receive a second grade of R in any remedial or developmental course may be dropped from the College.

Compensatory Courses (090-110)

All courses numbered 090-099 and some courses numbered 100-110 carry more hours than credits for purposes of skills development. These courses are college-level courses offering credits equivalent to that of regular college courses without extended classroom hours. (Compensatory courses numbered below 100 are graded A, B, C, NC, or R. They may be repeated until a grade of C is achieved. They do not count for distribution credit.)

Introductory Courses (100-199) Intermediate Courses (200-299) Advanced Courses (300-499)

The prerequisite for courses numbered 300-399 is the satisfactory completion of at least 30 college credits, unless otherwise specified.

The prerequisite for courses numbered 400-499 is the satisfactory completion of at least 60 college credits, unless otherwise specified.

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NOTE: These course prerequisites are not repeated with every course description under "Course Offerings, Levels, and Codes;" however, the student is responsible for knowing about them and meeting them. This responsibility holds for all the information on course prerequisites presented in this section.

Course Categories

Skill and Performance Courses (100-110, 200-210)

Basic skills courses include beginning foreign language courses, freshman composition, and basic performance courses, such as chorus, basic design, and keyboarding. In general, these courses may not satisfy Distribution requirements.

Courses for which the Topic May Vary from Semester to Semester (150-165, 250-265, 350-365, 450-465)

Seminars or courses entitled "Topics in" exemplify courses of this type. These courses may be re-elected for a stated maximum number of credits (usually 6) when the topic changes.

Courses numbered 150-165 are intended for beginning students.

Courses numbered 350-365 are open only to students who have satisfactorily completed at least 45 credits, except with permission of the appropriate department chair or program coordinator.

Courses numbered 450-465 are for students majoring in that subject area who have satisfactorily completed a total of 75 credits toward the degree, including at least 12 credits in that discipline or related areas.

Fieldwork, Internship, Work Experience (270-280, 370-380, 470-479)

Fieldwork places a student in an organized work setting outside the college classroom. Examples of such work settings include government agencies, business offices, social agencies, industrial establishments, and educational or health care institutions. The amount of time spent and the amount of credit earned may vary, but no more than 30 credits may be earned in courses for which the last two digits are 70-80. The number 480 is reserved for previous life experience in the Adult Degree Program.

Courses numbered 370-379 are open only to students who have satisfactorily completed at least 45 credits. Courses numbered 470-480 are for majors who have satisfactorily completed a total of 75 credits toward the degree, including at least 12 credits in the discipline or related areas.

List of Alpha Codes

C.1	0.1	Subject	Code
Subject Area	Code	Classical Culture	ACU
Accounting (see Economics)		Chinese	CHI
AFRICAN AND AFRICAN AMERICAN STUDIES	AAS	Classics	CLA
Swahili	SWA	French	FRE
Yoruba	YOR	German	GER
AMERICAN STUDIES (Interdisciplinary)	AMS	Greek	GRK
ANTHROPOLOGY	ANT	Hebrew	HEB
ART		Hebrew Culture	HCU
Art History	ARH	Irish	IRI
Studio Art	ART	Italian	ITA
BIOLOGICAL SCIENCES	BIO	Japanese	JAL
CHEMISTRY	CHE	Japanese Culture	, ICU
CITY AND THE HUMANITIES	HUM	Latin	LAT
Classics (See Languages & Literatures)		Portuguese	POR
Comparative Literature (Interdepartmental)	CLT	Russian	RUS
Computer Science (see Mathematics)		Slavic	SLA
Cooperative Education Program	CED	Spanish	SPA
Dance (see Journalism, Communication & Theatre)		World Classics	IDW
ECONOMICS and BUSINESS		Yiddish	YDH
Accounting	ACC	LATIN AMERICAN & PUERTO RICAN STUDIES	
Business Administration	BBA	Latin American and Caribbean Studies	LAC
Economics	ECO	Puerto Rican Studies	PRS
EDUCATION		LEHMAN SCHOLARS PROGRAM	LSP
Bilingual/Bicultural Education	BBE	LINGUISTICS (Interdisciplinary)	LNG
Childhood Education	DEC	MACAULAY HONORS COLLEGE	MHC
Counseling, Leadership, Literacy, and Special Education	ESS	MASS COMMUNICATION (See Journalism,	
Early Childhood Education	ECE	Communication, Theatre)	
Family and Consumer Studies	FCS	MATHEMATICS & COMPUTER SCIENCE	
Middle and High School Education	ESC	Computer Graphics and Imaging	CGI
Special Education	EDS	Computer Applications	CIS
ENGLISH		Computer Science	CMP
Creative & Professional Writing	ENW	Mathematics	MAT
English as a Second Language	ESL	MULTILINGUAL JOURNALISM	MLJ
EARTH, ENVIRONMENTAL, AND GEOSPATIAL		(See Journalism, Communication, & Theatre)	,
SCIENCES		MUSIC	
Geography-Human	GEH	Music History	MSH
Geography-Physical	GEP	Music Performance	MSP
Geology	GEO	Music Theory	MST
Global Studies	GLS	NURSING	NUR/HIN
ENGLISH AS A SECOND LANGUAGE (see English)		PHILOSOPHY	PHI
FRESHMAN YEAR INITIATIVE	FYI	PHYSICS & ASTRONOMY	
GENERAL EDUCATION	LEH	Astronomy	AST
HEALTH SCIENCES	HSD	Physics	PHY
Dietetics, Foods, & Nutrition	DFN	POLITICAL SCIENCE	POL
Exercise Science	EXS	PSYCHOLOGY	PSY
Health Education and Promotion	HEA	SOCIOLOGY	SOC
Health Services Administration	HAS	SOCIAL WORK	SWK
Recreation Education	REC	SPEECH-LANGUAGE-HEARING SCIENCES	
Rehabilitation	REH	Communication Arts	SPE
HISTORY		Speech Pathology and Audiology	SPV
Asia, Latin America, Russia, and Non-Western Civilizations	HIW	THEATRE (See Journalism, Communication, Theatre)	
Ancient Greece, Rome, Near East, and Ancient and Medieval	HIA	URBAN STUDIES (Interdisciplinary)	URB
Civilizations		WOMEN'S STUDIES (Interdisciplinary)	WST
Modern Europe	HIE	WORLD CLASSICS	
Special & Comparative Historical Topics		(Interdisciplinary & Interdepartmental)	IDW
	HIS	, , , , , , , , , , , , , , , , , , , ,	
United States	HIU		
HUMANITIES	HUM		
INDIVIDUALIZED BACCALAUREATE PROGRAMS (IBAP & ADP) ITALIAN-AMERICAN STUDIES	IBA		
ITALIAN-AMERICAN STUDIES	IAS		
JOURNALISM, COMMUNICATION, THEATRE			
Dance	DNC		
Mass Communication	COM		
Multimedia Journalism	MLJ		
Theatre	THE		
LANGUAGES AND LITERATURES			

Courses that Involve a One-to-One Faculty/Student Relationship

(281-296, 381-396, 481-496)

Tutorials: (281-284, 381-384, 481-484)

Independent Study: (285-288, 385-388, 485-488)

Research: (289-292, 389-392, 489-492)

Special Projects: (293-296, 393-396, 493-496)

These courses provide an opportunity for independent study in every department. Students who wish to undertake independent study should consult an adviser from the department or interdisciplinary program encompassing the student's area of interest. Such consultation is essential before registering for one of these courses because plans have to be developed by the faculty member and the student. The first digit indicates the level of experience that a student should have before taking the course.

Courses numbered 381-396 are open to students who have satisfactorily completed at least 60 credits or have permission of the department chair.

Courses numbered 481-496 are for students majoring in that subject area who have satisfactorily completed a total of 75 credits toward their degree, including at least 12 credits in that discipline or related areas.

Prerequisites

A prerequisite course is one that must be satisfactorily completed before a more advanced course is taken. The following are not satisfactory grades for prerequisite courses: F, NC, INC, PEN, R, W, WU, WF, AUD. Students who receive an INC in a prerequisite must complete it within TWO WEEKS of the following semester if they wish to remain in the more advanced course. For example, PSY 166 is the prerequisite for all 200-level psychology courses.

Corequisites

A corequisite course is one that must be taken in the same semester as its related course. For example, CHE 114 (lecture) and CHE 115 (lab) are corequisite courses.

African and African American Studies

Department Chair: Mark Christian (Carman Hall, Room 287) Department Faculty: Professor: Mark Christian; Associate Professor: James A. Jervis; Assistant Professors: Bertrade B. Ngo-Ngijol Banoum, Anne Rice.

African and African American Studies is a body of knowledge that records, describes, and analyzes the experience of people of African descent in all parts of the world, but especially in Africa, the Caribbean, and the Americas. Africa and African American Studies appraises the past, examines the present, and seeks to shape the future.

Career Preparation: The Department's offerings are designed to prepare students for graduate and professional studies as well as for careers in business; community development and social service agencies; Federal, State, and City government service; research; and teaching at the college, secondary, and elementary levels.

African and African American Studies, B.A. (36 Credit Major)

The required courses and credits are distributed as follows:

Credits (36)

21* In required courses as follows: AAS 166 (3), AAS 232 or 248 (3), AAS 235 (3), AAS 241 or 242 or 267 (3), AAS 245 (3), AAS 330 or 342 (3), and AAS 390 or 470 (3)

15 In elective AAS courses at the 300 or 400 level

*NOTE: Students in the Early Childhood and Childhood teaching certification sequence may substitute the courses in the ECCE certification, ECE 480 and 483, which are student teaching and the accompanying seminar (6 credits) for AAS 470: Fieldwork in the African American Community.

Departmental Honors

Students who wish to qualify for Departmental honors are required to take AAS 481: Honors Project.

Satisfaction of the College Foreign Language Requirement

The College requirement in foreign language may be satisfied by earning 10 credits in either Swahili or Yoruba.

Teacher Certification

Students interested in obtaining New York State teacher certification should consult the Office of the Dean of Education (Carman Hall, Room B-33, 718-960-4972).

Women's Studies Options

See the description of this program contained later in this Bulletin.

Requirements for the Minor in African and African **American Studies**

- 15 Credits distributed as follows:
- 3 A A S 166
- 12 In elective AAS courses: 6 credits in AAS courses at the 200 level or above; and 6 credits in AAS courses at the 300 or 400 level.

Courses in African and African American Studies

AAS 166: Introduction to African and African-American Studies.

3 hours, 3 credits. A thematic and methodological introduction to African and African American Studies from diverse disciplinary perspectives, including the humanities, social sciences, and the arts.

AAS 212: African Art.

3 hours, 3 credits. Historical survey of African art, traditional and contemporary.

AAS 213: African-American Art.

3 hours, 3 credits. Historical survey of works of African American artists.

AAS 225: The Contemporary Urban Community.

3 hours, 3 credits. Survey of the development of urban communities and institutions and of public policy issues facing modern urban populations, such as housing, health care, and education.

AAS 226: Community Organization.

3 hours, 3 credits. The structure of the inner city. Analysis of community needs and resources- health, housing, recreation, and neighborhood projects in urban areas. The organization of community action projects within a theoretical framework for understanding and applying models of community control.

AAS (WST) 228: The African-American Family.

3 hours, 3 credits. A course examining the African-American family from enslavement to the present day. Family organization arising from the social structure of enslavement. Current characteristics of the African-American family and possible suggestions for the improvement of the social structure of African-American families.

AAS 232: African Civilizations.

3 hours, 3 credits. Exploration of the development of African civilizations from the origin of humankind to the present day. Their contributions to the development of the continent and the major world civilizations.

AAS (LAC) 235: Caribbean Societies.

3 hours, 3 credits. A comparative study of Caribbean societies and cultures, with emphasis on the commonality and diversity in their historical, social, political, and economic development.

AAS (THE) 238: African-American Theatre.

3 hours, 3 credits. Contemporary African-American plays and playwrights. The changing image of African-Americans from the stereotypes of early American theatre to contemporary representations.

AAS (WST) 239: Black Women in American Society.

3 hours, 3 credits. The experiences of and contributions made by women of African descent living in the United States. Emphasis on the effects of race, gender, socioeconomic status, sexuality, and spirituality in their lives.

AAS (WST) 240: Women in African Society.

3 hours, *3 credits*. Roles and status of women in traditional, colonial, and contemporary African societies. Impact of international organizations and globalization.

AAS (LAC) 241: Literature of the English and Francophone Caribbean.

3 hours, 3 credits. Analysis of the literary works of Caribbean writers. Poetry, the novel, drama, and other literary forms of major authors.

AAS 242: African Literature.

3 hours, *3 credits*. Analysis of African literary texts, including the epic, folktale, song, poetry, the novel, short story, and memoir.

AAS (HIS) 245: History of African Americans.

3 hours, 3 credits. A study of the major forces shaping the history and culture of African Americans.

AAS (HIS) 248: African History.

3 hours, 3 credits. Introduction to the history of Africa.

AAS 266: Contemporary Black Music.

3 hours, *3 credits*. Development of contemporary Black music from jazz to hip hop.

AAS 267: African-American Literature.

3 hours, 3 credits. Literary expression and historical experience of African-American writers.

AAS 268: The Economics of Poverty.

3 hours, 3 credits. A course offering an objective evaluation and analysis of the nature of poverty in America as it relates to African-Americans. The many economic, as well as social, political, and institutional causes and characteristics of poverty will be explored. Various aspects of antipoverty programs are considered. The course also reviews recent theories of alleviating poverty in Black urban areas.

AAS (PHI) 269: Introduction to African Philosophy.

3 hours, 3 credits. Examination of traditional and contemporary African philosophies. PREREQ: None.

AAS 303: Globalization and Africa.

3 hours, 3 credits. Economic transformation in Africa. The impact of globalization and transnationalism on political movements and the migration of peoples and ideas.

AAS 304: Societies and Cultures of Africa.

3 hours, 3 credits. Comparative study of African societies and cultures. Dynamics of organizations and social institutions, including family, and kinship systems.

AAS (PHI) 305: African Philosophical Thought.

3 hours, 3 credits. Traditional and contemporary African philosophical thought, including world views, ethics, ontology, and religions.

AAS (LAC) 306: The Haitian-Dominican Border: Nation, State, and Race.

3 hours, 3 credits. Major issues in the socio-historical development and dynamics of the Haitian-Dominican border, including physical and psychological divisions, social formations, state formation, migration, bi-national relations, and human rights. PREREQ: LAC 225, 226, AAS 235, or Departmental permission.

AAS 312: African-American Religious Movements in the United States.

3 hours, 3 credits. Development of the Black church and African-American religious movements in the United States.

AAS (HIU) 311: Black Nationalism.

3 hours, 3 credits. Analysis of the social, political, and cultural ideology and practices of Black Nationalist movements.

AAS 313: The African-American Economy.

3 hours, 3 credits. Historical and contemporary analysis of the role Blacks have played in U.S. economic development. The economic status of Blacks in terms of labor unions, job and employment opportunities, purchasing power, investment, and savings.

AAS 316: Introduction to Community Development and Planning.

3 hours, 3 credits. General survey of the city and its problems as they affect urban communities. Effecting neighborhood change through community organization, using problem-defining and solving techniques, and community control to effect social, economic, and institutional development. PREREQ: AAS 226.

AAS 317: African-Americans and The Law.

3 hours, 3 credits. Major constitutional and statutory provisions and judicial rulings affecting African-Americans.

AAS 318: African-American Psychology.

3 hours, 3 credits. Methods for studying the effects of a variety of aspects of African-American culture on the social, cognitive, and linguistic development of African Americans. PREREQ: PSY 166.

AAS 320: Ancient Egypt (KMT).

3 hours, 3 credits. Explorations of the origins and development of Ancient Egypt (KMT). Interaction with the rest of Africa and beyond.

MMS (AAS) 321: African-Americans in Cinema.

3 hours, *3 credits*. Visual images of African-Americans in films, shorts, cartoons, and documentaries.

AAS 322: The City in Africa.

3 hours, 3 credits. The city in contemporary Africa.

AAS (HIW) 323: History of Africa to 1800.

3 hours, 3 credits. Events and forces shaping African history before 1800.

AAS 324: History of African-American Education.

3 hours, *3 credits*. Historical, social, political, and economic factors shaping the education of African-Americans.

AAS (MMS) 326: Africa in Cinema.

3 hours, 3 credits. Study of images of Africa in cinema.

AAS (HIW) 327: History of Africa 1800 to the Present.

3 hours, 3 credits. Events and forces shaping the history of Africa after 1800.

AAS (HIU) 330: The Civil Rights Movement.

3 hours, 3 credits. Study of the modern Civil Rights movement.

AAS (MMJ) 332: The African-American Media.

3 hours, 3 credits. Analysis of the African-American media's role in U.S. history and culture.

AAS (LAC) 334: The Musical Experience of Caribbean Cultures and Societies.

3 hours, 3 credits. Analysis of music and performance in Caribbean cultures and societies.

AAS (LAC) 335: The Caribbean in World Politics.

3 hours, 3 credits. Problems and prospects for Caribbean states in contemporary world politics.

AAS (PHI)(SOC) 338: Race and Ethnicity in Society.

3 hours, 3 credits. Sociological perspectives on race and ethnic relations in the United States and other societies.

AAS (LNG) 339: African Languages.

3 hours, 3 credits. African languages and language families, their characteristics and development, including pidgin and Creole languages. Analysis of relations of language to ethnicity and identity. The contributions of African languages to general linguistic theory.

AAS (HIU)(WST) 340: History of African-American Women.

3 hours, 3 credits. The social, political, and cultural history of African-American women in the United States from an interdisciplinary perspective.

AAS (POL) 342: African-Americans in the Political System.

3 hours, 3 credits. The role, influence, and impact of African-Americans on the political process in the United States.

AAS 343: African-American Women Writers.

3 hours, 3 credits. African-American women's prose, poetry, fiction, and drama.

AAS (WST) 344: African Women Writers.

3 hours, 3 credits. African women's writing, from the rich oral tradition to prose, poetry, fiction, and drama.

AAS 345: African-American Poetry.

3 hours, 3 credits. Development of the African-American poetic tradition. Eighteenth-century poetry, the vernacular, major poetic movements, such as the Harlem Renaissance and Black Arts, feminism, and the spoken word.

AAS 346: African-American Autobiography.

3 hours, 3 credits. Major texts of African-American autobiography.

AAS (WST) 347: Black Feminism.

3 hours, 3 credits. Contemporary Black feminist thought.

AAS 348: Literatures of Africa and the African Diaspora.

3 hours, 3 credits. Contemporary poetry, prose, fiction, and drama of Africa and the African Diaspora.

AAS (HIU) 349: The Harlem Renaissance.

3 hours, 3 credits. Examination of poetry, prose, folklore, history, politics, art, and music of the Harlem Renaissance.

AAS (HIW) 351: Topics in African History, Politics, and Society.

3 hours, 3 credits. Selected aspects of African history, politics, and society. Topics to be announced each semester.

AAS (HIU) 352: Topics in African-American History and Culture.

3 hours, 3 credits. Selected aspects of African-American history and culture. Topics to be announced each semester.

AAS (HIW) 353: Topics in Caribbean History, Politics, and Society.

3 hours, 3 credits. Selected aspects of Caribbean history, politics, and society. Topics to be announced each semester.

AAS 381: Individual Tutorial Project in African and African-American Studies.

3 hours, 3 credits (maximum of 6 credits. May be repeated once with change of topic). Opportunity for students to pursue individual research and reading on a specific topic, under faculty supervision. PREREQ: Departmental permission.

AAS 390: Research Methods.

3 hours, 3 credits. Interdisciplinary research in African and African-American Studies. PREREQ: 60 college credits and Departmental permission.

AAS (LAC) 400: Seminar: Slavery in the New World.

3 hours, 3 credits. Intensive study of the institution of slavery in the New World. PREREQ: Departmental permission.

AAS 451: Seminar in African History, Politics, and Society.

3 hours, 3 credits. Independent reading and research on a selected topic.

AAS 470: Fieldwork in the African-American Community.

10 hours(2, seminar; 8, fieldwork), 3 credits. Supervised placement in community service agencies and institutions. PREREQ: Departmental permission.

AAS 475: Fieldwork in Africa.

3-9 credits. This course provides students with the opportunity to receive academic credit for participation in a summer study program in Africa or supervised independent research in Africa. PREREQ: Departmental permission.

AAS 481: Honors Project.

One semester, 3 credits (maximum 6 credits). Provides students with the opportunity to do supervised individual research and directed reading in the student's major. PREREQ: Departmental permission.

Courses in Swahili Language and Literature

*Courses preceded by an asterisk are not expected to be offered in 2013-2015.

SWA 101: Elementary Swahili I.

5 hours, 5 credits. Fundamentals of the phonology and grammar of Swahili. Reading of simple texts and practice in speaking. *NOTE*: SWA 101 may not be credited without SWA 102.

SWA 102: Elementary Swahili II.

5 hours, 5 credits. Continuation of the study of Swahili grammar and vocabulary. PREREQ: SWA 101.

SWA 201: Intermediate Swahili I.

3 hours, 3 credits. A course in Swahili providing intensive practice in speaking, reading, and writing. The fundamentals of Swahili grammar are reviewed through use of audiolingual techniques. Emphasis on the development of fluency in speaking, reading, and writing. PREREQ: SWA 101 and 102 (or equivalent, as evaluated by the program coordinator).

*SWA 202: Intermediate Swahili II.

3 hours, 3 credits. PREREQ: SWA 201.

*SWA 345: Swahili Literature I.

3 hours, 3 credits. PREREQ: *SWA 202 (or equivalent).

*SWA 346: Swahili Literature II.

3 hours, 3 credits.

Courses in Yoruba Language and Literature

*Courses preceded by an asterisk are not expected to be offered in 2013-2015.

YOR 101: Elementary Yoruba I.

5 hours, 5 credits. This course deals with grammar, syntax, pronunciation, and spelling. NOTE: YOR 101 may not be credited without YOR 102.

YOR 102: Elementary Yoruba II.

5 hours, 5 credits. PREREQ: YOR 101. This course deals with oral work and elementary reading based on YOR 101. Sentence construction and introduction to the customs and culture of the language. PREREQ: YOR 101.

*YOR 201: Intermediate Yoruba.

3 hours, 3 credits. PREREQ: YOR 101 and 102.

*YOR 345: Yoruba Oral Literature.

3 hours, 3 credits. PREREQ: *YOR 201.

*YOR 346: Modern Yoruba Literature.

3 hours, 3 credits. PREREQ: *YOR 345.

African and African American Sequences

Foundation Course

AAS 166: Introduction to African and African American Studies

African Sequence

AAS 232: African Civilizations

AAS(WST)240: Women in African Society

AAS(HIS)248: African History

AAS(PHI)269: Introduction to African Philosophy

AAS 303: Globalization and Africa

AAS 304: Societies and Cultures of Africa

AAS(PHI)305: African Philosophical Thought

AAS 320: Ancient Egypt (KMT)

AAS 322: The City in Africa

AAS(HIW)323: History of Africa to 1800

AAS 326: Africa in Cinema

AAS(HIW)327: History of Africa 1800 to the Present

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AAS(HIW)351: Topics in African History, Politics, and Society

AAS 451: Seminar in African History, Politics, and Society

AAS 475: Fieldwork in Africa

African American Sequence

AAS(WST)228: The African American Family AAS(WST)239: Black Women in American Society

AAS(HIS)245: History of African Americans

AAS 268: The Economics of Poverty AAS(HIU)311: Black Nationalism

AAS 312: African American Religious Movements in the United

States

AAS 313: The African American Economy

AAS 317: African Americans and the Law

AAS 324: History of African American Education

AAS(HIU)330: The Civil Rights Movement

AAS(COM, MMJ) 332: African American Media

AAS(PHI)(SOC)338: Race and Ethnicity in Society

AAS(HIU)(WST)340: History of African American Women

AAS 341: Black Feminisms

AAS(POL)342: African Americans in the Political System

AAS(HIU)352: Topics in African American History and Culture

Caribbean Sequence

AAS(LAC)235: Caribbean Societies

AAS(LAC)335: The Caribbean in World Politics

AAS(HIW)353: Topics in Caribbean History, Politics, and Society

Community and Urban Sequence

AAS 225: The Contemporary Urban Community

AAS 226: Community Organization

AAS 316: Introduction to Community Development and Planning

AAS 470: Fieldwork in the African American Community

Literature and the Arts

AAS 212: African Art

AAS 213: African American Art

AAS(THE)238: African American Theatre

AAS(LAC)241: Literature of the English and Francophone

Caribbean

AAS 242: African Literature

AAS 266: Contemporary Black Music

AAS 267: African American Literature

AAS(LAC)334: Music of the Caribbean

AAS 343: African American Women Writers

AAS(WST) 344: African Women Writers

AAS 345: African American Poetry

AAS 346: African American Autobiography

AAS 348: Literature of Africa and the African Diaspora

AAS(HIU)349: The Harlem Renaissance

Languages

AAS 339: African Languages

Swahili Language and Literature

SWA 101: Elementary Swahili I

SWA 102: Elementary Swahili II SWA 201: Intermediate Swahili I

*SWA 202: Intermediate Swahili II

*SWA 345: Swahili Literature I *SWA 346: Swahili Literature II

Yoruba Language and Literature

YOR 101: Elementary Yoruba I YOR 102: Elementary Yoruba II *YOR 201: Intermediate Yoruba *YOR 345: Yoruba Oral Literature *YOR 346: Modern Yoruba Literature

Aging (Interdisciplinary Minor)

Coordinator: Norma Phillips (Professor and Chair, Social Work) Steering Committee: Luisa Borrell (Associate Professor, Health Sciences), Stephen Cavallo (Associate Professor and Chair, Speech-Language-Hearing Sciences), Juan DeLaCruz (Assistant Professor, Economics & Business), Sharon Freedberg (Associate Professor, Social Work), Alan Kluger (Professor and Chair, Psychology), Patricia Kolb (Associate Professor, Social Work)

The Interdisciplinary Minor in Aging will engage students from all Departments across different Schools within the College in a common goal of scholarship in the area of aging; it will also prepare students interested in working professionally in the field of aging. A range of relevant courses representing the College's broad curricular offerings will be available to students to provide an understanding of aging from various perspectives. The Minor will be of interest to students who are majoring in several departments in the Natural and Social Sciences, including but not limited to Anthropology, Biology, Economics, Health Sciences, Nursing, Psychology, Social Work, and Sociology, as well as to students majoring in such Arts and Sciences disciplines as Art, History, Literature, Music, and Speech-Language-Hearing Sciences.

Degree Requirements

Students will satisfy the College requirement of a minor field by taking four courses (12 credits) at the 200- and 300-level.

At least six credits must be taken in 300-level courses or a higher-level course approved by the Program.

Students will select in consultation with their advisor from the following menu of relevant 3-credit courses offered in various departments in the Schools of Natural and Social Sciences and Arts and Humanities:

200-level courses:

PSY 219: Psychology of Adulthood and Aging SOC 243: The Aged in Modern Society SWK 242: Social Work Practice with Older Adults Any relevant 200-level course approved by the Program

300-level courses or a higher-level course approved by the Program:

ECO 313: Economics of Aging

HEA 310: Health and Aging

HEA 360: Special Topics in Health

SOC 343: Sociological Theories of Aging

SPV 300: Neurolinguistics of Aging

SWK 342: Social Welfare Policies in an Aging Society

Any relevant 300-level or higher course approved by the Program.

American Studies

Committee on American Studies: Martin Burke (Carman Hall, Room 202B) and Earl Fendelman

American Studies is an interdisciplinary major that investigates the content and meaning of American culture. Students selecting this course of study will acquire a broad picture of American experience from colonial times to the present day, together with the methodological techniques required for analysis of primary materials. Students will study widely in history, literature, the arts, and the social sciences, exploring the theoretical constructs and substantive interpretations of the various disciplines that examine American life. They will apply these contributions to specific content areas of the American experience, seeking to develop a systematic method to explain and evaluate American culture. In consultation with a member of the American Studies Committee, each student will formulate an individual program of study, without reference to traditional departmental fields. The program thus offers the opportunity to investigate those features of American culture that match student interests. Special courses emphasizing research and critical thought, such as seminars and tutorials taught by participating faculty, will be provided to synthesize the work of each student in the major. Students completing the American Studies Program will receive a Bachelor of Arts degree in American Studies and will be prepared for graduate study.

Admission Requirements

Students selecting the major in American Studies must meet the following requirements:

- Completion of courses in the following distribution areas: historical studies, comparative cultures, and social sciences.
- Completion of at least 60 credits at the time formal work in the program begins. It is anticipated that students will declare the selection of the American Studies major at the end of the sophomore year. Prior to this point, the Committee on American Studies will be available to advise prospective candidates for the program.
- A cumulative grade index of not less than 2.5 for the first 60 credits.
- Approval of the Committee on American Studies.

The Committee on American Studies shall have at its discretion the option of waiving under unusual circumstances any of these requirements.

Programs

Each semester the Committee on American Studies will advise students in the program of the appropriate courses to be offered in the ensuing semester by departments participating in the program, as well as courses to be offered by the American Studies Program. Each student majoring in American Studies must receive the Committee's approval before registering for any course to be credited toward the major.

American Studies, B.A. (36 Credit Major)

The required credits are drawn from a combination of American Studies courses and courses offered in related disciplines. While AMS 111 and 211 are not technically prerequisites for entering the major, it is highly recommended that students take these courses before they do so.

Credits (36)

- In American Studies, including AMS 360 (may be repeated for a maximum of 6 credits), AMS 361, and either *AMS 460 or 485.
- In courses in related disciplines, approved by the American Studies Committee, that offer substantial background for American Studies. These courses shall be selected from at least three different departments, and include 12 credits in one of those departments.

Honors in American Studies

Honors in American Studies may be conferred upon a student who satisfies the College requirements for interdepartmental honors at the time of graduation and has completed a senior thesis (see course description for AMS 485) that is deemed outstanding by the Committee on American Studies.

Courses in American Studies

*Courses preceded by an asterisk are not expected to be offered in 2013-

AMS 111: American Culture—Value and Traditions.

3 hours, 3 credits. Introduction to the values, traditions, and beliefs central to American culture.

*AMS 211: American Studies Methods and Materials. 3 hours, 3 credits.

AMS 360: Special Topics in American Studies.

3 hours, 3 credits (maximum 6 credits). Examination of selected content areas of American culture. Emphasis on integrating material from various disciplines into a consistent perspective on American culture by applying alternative theories of the meaning of the American experience. PREREQ: *AMS 211 (or equivalent) and adviser's permission.

AMS 361: Contributions to American Studies.

3 hours, 3 credits. Examination of the contribution of various fields to the investigation of American culture. Topics may include myth-symbol analysis, structuralism, functionalism, systems models, aesthetic and evolutionary models, and quantitative inferences. PREREQ: *AMS 211 (or equivalent) and adviser's permission.

*AMS 460: American Studies Seminar.

3 hours, 3 credits. PREREQ: Either AMS 360 or 361 and advisor's permission.

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*AMS 485: Independent Study.

3 hours, 3 credits (maximum 6 credits). Individual research projects on a specific interdisciplinary problem in American culture, directed by a faculty member in the American Studies Program. Normally a research paper is expected, which may serve as a senior thesis. Outstanding papers will be considered for honors awards. PREREQ: Either AMS 360 or 361 and advisor's and instructor's permission.

Anthropology

Department Chair: Vincent H. Stefan (Davis Hall, Room 411/421-A)

Department Faculty and Staff: Professors: Eric Delson, Victoria Sanford; Associate Professors: Louis Flam, Christa Salamandra, Vincent H. Stefan; Assistant Professors: William E.H. Harcourt-Smith, Cameron L. McNeil, Ryan Raaum, Stephanie Rupp; Senior College Laboratory Technician: Salah Noueihed

The discipline of Anthropology utilizes a four-field approach to the study of humans. Physical anthropology studies humans and their primate relatives in terms of evolution, biology, and behavior. Archaeology studies cultural evolution, elucidating past human societies from their beginnings to the development of complex societies. Anthropological linguistics studies languages cross-culturally, including topics such as language structure and sociocultural dimensions of language use. Cultural anthropology focuses on human behavior in diverse societies around the world. Subsumed under cultural anthropology are such fields as economic anthropology, political anthropology, medical anthropology, and anthropology and education. The Department offers a major in anthropology; an interdisciplinary major in anthropology (physical), biology, and chemistry; and a 12-credit minor.

Courses in Anthropology

*Courses preceded by an asterisk are not expected to be offered in 2013-2015.

ANT 120: Human Evolutionary Biology.

3 hours, 3 credits. An introduction to the scientific study of the evolutionary origins of the human species, providing an overview of the scientific method, evolutionary theory, the natural history of primates, the human fossil record, and variation within and between living human populations. NOTE: Students intending to major in Anthropology or Anthropology/Biology/Chemistry should take ANT 171 and/or ANT 269. This course cannot be used by Anthropology or Anthropology/Biology/Chemistry majors to satisfy any requirement for those majors.

*ANT 142: Images of Culture.

3 hours, 3 credits. An introduction through films, lectures, and readings to anthropological perspectives on human culture. Survey focusing on the universal pattern of human culture: modes of adaptation and livelihood, sex roles, religious rituals, and government systems, including peacekeeping and war-making.

ANT 171: Introduction to Human Evolution.

5 hours (3, lecture; 2, lab), 4 credits. The integrated study of human evolutionary history, including a consideration of evolutionary theory, genetics, modern human variation, adaptation and anatomy, the behavior and paleontology of our close primate relatives, and the fossil record of human biological and cultural change.

ANT (WST) 206: Anthropological Perspectives on Women and Men.

3 hours, 3 credits. The roles of females and males in both simple and complex societies. Exploration of some of the factors involved in differential allocation of work, roles, prestige, and power among females and males. Factors to be examined include economic structure, the distribution of power, the process of socialization, and ecological adaptation.

ANT (WST)(LAC) 210: Women in Latin America.

3 hours, 3 credits. The impact of social and cultural differences among women on gender relations, women's sexualities and identities in Latin America.

ANT 211: Cultural Anthropology.

3 hours, 3 credits. An examination of cultural variations in contemporary and historical societies worldwide. Discussion of specific cultural components, such as technology and material products, language, economy, values, ideology, religion, and aesthetics. Consideration of the role of cultural anthropology in addressing contemporary global issues.

ANT 212: Ancient Peoples and Cultures.

3 hours, 3 credits. The use of archaeological and early documentary data to study the origins and development of culture, agriculture, and complex societies.

ANT 228 (LNG 228): Language and Culture.

3 hours, 3 credits. Cultural meanings of language in use and the interrelations between linguistic behaviors and cultural practices.

ANT 230, (MES) 231, 232, 233, 234, 235, 236, 237, and (LAC) 238: Selected Studies in Societies and Cultures.

3 hours, 3 credits. Description and analysis of these areas' distinctive ecological, economic, socio-political, and ideological systems.

*230: Africa

231: Middle East

*232: Europe

233: India

*234: Oceania

235: Native North America

236: Southeast Asia

237: East Asia

ANT 239: Peoples and Cultures of Afghanistan, Pakistan, and India

3 credits, 3 hours. The diverse cultures of Afghanistan, Pakistan, and India in their many aspects: geographical, historical, archaeological, ethnic, religious, linguistic, artistic, culinary, and musical.

ANT 240: Emergence of Ancient Civilizations.

3 hours, 3 credits. Anthropological perspectives on the rise of early civilizations, states, and urbanism in Mesopotamia, Egypt, Pakistan, China, Mesoamerica, and Peru.

ANT 250 (IAS 250): The Italian-American Community.

3 hours, 3 credits. The immigration to America from the 1880s to the present, and the emergence of the Italian-American community, with particular emphasis on the social structure of the community and its changing cultural values. PREREQ: None, if student wishes to count the course toward the Anthropology major. For credit toward a major in Sociology, the prerequisite is SOC 166.

ANT 251: Peoples and Cultures of [geographic area to be determined].

3 hours, 3 credits. (May be repeated for credit as the topic changes up to a maximum of six credits.) Description and comparative analysis of the culture, including economic, socio-political, ecological, and ideological aspects of a selected geographic region or ethnic group.

ANT 269: Introduction to Human Variation.

5 hours (3, lecture; 2, lab), 4 credits. Considers how and why people differ physically within and between groups, the genetic and functional basis for these differences, and their significance for adaptation and survival. Topics range from skin, hair, and eye color differences to variations in body size and proportions, serological and biochemical differences, and growth pattern differences. Theoretical issues discussed include the concepts of race/clines, microevolution, and the continuing evolution of the human species.

ANT 300: Human Variation.

3 hours, 3 credits. The causes and effects of biological variation on human adaptation and evolution. Emphasis is on the explanation and significance of population differences in modern human beings. PREREQ: ANT 269.

ANT 301: Human Origins.

3 hours, 3 credits. The origin and evolutionary history of the human lineage, from primate roots through paleontology of apes and early humans to the biological and cultural evolution of modern humans.

ANT 302: Primate Behavior and Ecology.

3 hours, 3 credits. Adaptations and interactions of free-ranging primates.

ANT 303: Human Osteology.

6 hours (3, lecture; 3, lab), 4.5 credits. Detailed study of the human skeleton, with techniques to determine age, sex, and "race," identify individuals, and recognize markers of trauma and disease. Applications of human osteology in forensic science, skeletal biology, bioarchaeology, and paleoanthropology.

ANT 305: Forensic Anthropology.

3 hours, 3 credits. Survey of the techniques and methods of biological anthropology as applied in the identification of human remains in a medico-legal context: field recovery of human remains, biological profile of deceased, antemortem trauma, cause/manner of death, time since death, and methods of individualization

ANT 306: Survey of Forensic Science.

3 hours, 3 credits. Survey of the study and practice of the application of science to the resolution of social and legal issues, including current research and procedures in criminalistics, jurisprudence, odontology, pathology, physical anthropology, psychiatry, questioned documents, toxicology, and computers. NOTE: Lectures will be given by Lehman faculty and by guest lecturers who hold posts in local crime labs, medical offices, and mass-disaster sauads.

ANT 307: The Anthropology of Growth.

3 hours, 3 credits. Human growth and development, with emphasis on those aspects of the growth process that concern the physical anthropologist: anthropometric techniques, skeletal and dental maturation, secular trends in growth, changing growth rates as a factor in human evolution, and human growth in varying physical and cultural environments.

ANT 309: Human Genetics.

3 hours, 3 credits. Biological inheritance in human beings. Emphasis on the genetic basis of human variation and its significance for evolution, medicine, education, and the law. Topics include twin studies, family pedigrees, mutation, selection, migration, race mixture, and behavioral genetics.

ANT 310: Evolution of the Primates.

3 hours, 3 credits. Anatomy of nonhuman primates, especially skulls and teeth; study of fossil remains and analysis of their phylogeny and historical relationships. Evolutionary methods and philosophies.

*ANT 311: The Archaeology of Europe.

3 hours, 3 credits.

*ANT 312: African Archaeology.

3 hours, 3 credits.

ANT 313: Archaeology of Asia.

3 hours, 3 credits. Introduction to the earliest cultures of South Asia (Pakistan and India), Southeast Asia (Thailand, Indonesia, Vietnam, Laos, Cambodia), and East Asia (China, Japan) from the origins of food production through the rise of civilization.

ANT 314: Archaeology of the Near East.

3 hours, 3 credits. From Ice Age hunters to Hammurabi of Babylon: the major economic, social, and political changes that transformed societies of hunters and farmers into the world's first complex civilization.

*ANT 316: Early Societies and Cultures of North America.

3 hours, 3 credits. Native American cultures from all parts of the continent north of Mexico from the earliest peopling of the New World to the coming of Europeans. Ecology; the economics of subsistence and the politics of interaction; hunting and gathering and agriculture; warfare and cooperation.

ANT (LAC) 317: Early Civilization of South America and the Caribbean.

3 hours, 3 credits. The Incas and their ancestors; the Arawaks and the Caribs. A region-by-region treatment of the prehistory of South America and the Caribbean, the course examines the diversity of ancient life in this area. Special emphasis on the native civilizations of the Andes. Additional material from all other parts of Central America, the Caribbean, and South America.

ANT (LAC) 318: Early Civilizations of Mexico and Central America.

3 hours, 3 credits. The Aztec and Mayan civilizations of Mexico and northern Central America from the earliest peopling of the new world to the civilizations encountered by Cortes and the Spanish. Topics include the origins of agriculture and settled life, the earliest civilizations, Olmec art, Mayan astronomy, and Aztec sacrifice.

- *ANT 319: The Archaeology of Southwestern North America. 3 hours, 3 credits.
- *ANT 320: Anthropological Theory and Method I. 3 hours, 3 credits.
- *ANT 321: Anthropological Theory and Method II. 3 hours, 3 credits.
- *ANT 322: Analyzing Anthropological Data Quantitatively. 3 hours, 3 credits. PREREQ: Two 3-credit ANT courses and completion of the College Requirement in Mathematics.

ANT 323: Methods and Philosophies in Paleoanthropology.

3 hours, 3 credits. Theoretical framework of human evolution, the integrative nature of evolutionary theory, and the relevance and interpretation of fossils. Systematic and taxonomic principles in the context of fossil human and nonhuman primates. Conflicting strategies of interpreting fossil remains and evolutionary hypotheses. PREREQ: ANT 301 or 310 or the instructor's permission.

ANT 324: Anthropology and the Museum.

4 hours (2, lecture; 2, lab), 3 credits. Museums and their roles in modern societies, including the representation of human evolution, our cultures and the cultures of others to the public; the preservation, restoration and display of objects; the organization of museum-based research; and the planning, assembly, installation, and labeling of exhibits. PREREQ: One ANT course or permission of the instructor. *Note: Frequent visits to New York* museums will be arranged.

*ANT 325: Method and Theory in Archaeology.

3 hours, 3 credits. PREREQ: ANT 212.

ANT (LNG) 326: Anthropological Linguistics.

3 hours, 3 credits. Speech and language within the context of anthropology. Language as a cultural resource.

*ANT 327: Field Techniques in Anthropological Linguistics. 3 hours, 3 credits. PREREQ: ANT 326.

ANT 330: Dynamics of Culture Change in a Global Context.

3 hours, 3 credits. Major theoretical explanations of cultural change and continuity in selected historical and contemporary societies.

ANT 331: Prehistoric and Contemporary Subsistence Systems.

3 hours, 3 credits. Theories concerning the origin and spread of animal and plant domestication are surveyed. Emphasis on the role of agricultural ecology and economics in the evolution of social systems, from small-scale village societies practicing longfallow cultivation to states and empires depending on complex irrigation agriculture. Both ethnographic and archaeological examples are drawn upon.

ANT 332: Kinship, Marriage, and the Family.

3 hours, 3 credits. Examination of varieties of marriage practices, forms of family organization, and kin relationships in cultures around the world.

ANT 334: Mind and Culture.

3 hours, 3 credits. Personality differences and similarities within and between several cultures as they are produced by psychological and sociocultural forces.

ANT 335: Folklore and Oral Traditions.

3 hours, 3 credits. Content analysis of folktales, riddles, proverbs, and origin myths, with special reference to their cross-cultural function and meaning in selected societies, rural and urban.

ANT 336: Music and Culture.

3 hours, 3 credits. Introduction to the place of music in human life. Anthropological perspectives on the creation, performance, and role of musical forms in non-Western and Western societies.

*ANT 337: Inequality in Cross-Cultural Perspective.

3 hours, 3 credits. Comparative analysis of class, race, and/or gender inequality in a wide variety of social and cultural contexts. PREREQ: ANT 211 or permission of the instructor.

ANT 338: Religion: An Anthropological Perspective.

3 hours, 3 credits. Patterns of religious belief and behavior, including concepts of the supernatural, divination, visions, and sacrifice, and the relationship of these to other aspects of culture.

ANT 339: Anthropology of Complex Societies.

3 hours, 3 credits. Sociocultural analysis of rural and urban peoples in selected areas of the world. Emphasis on rural-urban relationships and the interaction of the local with the national and global context.

ANT 340: Anthropology and Education.

3 hours, 3 credits. Introduction to anthropological concepts that have special relevance to education. Application of these concepts through analysis of case studies.

ANT 341: Medical Anthropology.

3 hours, 3 credits. Relationship of culture to disease: cross-cultural attitudes toward illness and the ailing, curative practices, and problems in the introduction of Western medical practices into peasant communities. The effects of culture on the state of health of the population.

ANT 342: Anthropology of Cities.

3 hours, 3 credits. Daily life in selected cities of the world from an anthropological perspective. Social and cultural aspects of relevant urban issues: urban growth and decline, migration, relations of cooperation and conflict, class and ethnicity, and city pleasures.

ANT 343: Economic Anthropology.

3 hours, 3 credits. Comparative study of economic systems in tribal and peasant societies. The role of social and cultural factors in production, distribution, consumption, and exchange among hunters and gatherers, herders, and agriculturalists.

ANT 344: The Anthropology of Politics and Law.

3 hours, 3 credits. Analysis of the development of formal and informal political structures, government, and law in tribal and peasant societies. The nature of power, authority, and social control in selected societies.

ANT 345: Seminar in Field Methods.

3 hours, 3 credits. (May be repeated for a maximum of 6 credits.) Methods of data collection and analysis in cultural anthropology. Includes field experience. PREREQ: Instructor's permission.

ANT (ARH) 346: North American Indian Art.

3 hours, 3 credits. Ancient and modern Indian art styles of North America, with special emphases on the tribal art of select regions of the United States and Canada, and relationships with adjacent traditions of pre-Columbian Mexico.

ANT (LAC) 347: Race and Ethnicity in Latin America and the Caribbean.

3 hours, 3 credits. Comparative study of racial and ethnic relations in Latin America.

ANT 348: The Ecology and Politics of Hunger.

7 hours (3, lecture; 4, fieldwork in the community), 4 credits. An ecological, politico-economic, sociocultural, and nutritional analysis of world hunger, drawing on anthropological and historical evidence to investigate the diverse causes of hunger, the contexts in which hunger arises, and the efforts that have been made over the centuries to end hunger. PREREQ: ANT 211 or permission of the instructor.

ANT (MMS) 351: The Anthropology of Media.

3 hours, 3 credits. Anthropological approaches to media production and consumption. The uses of media in the construction of local, national, and transnational identities.

ANT 356: Advanced Ethnology.

3 hours, 3 credits (maximum 9 credits). (May be re-elected with a change in culture area.) Intensive examination of cultures belonging to a specific culture area or culture type. Detailed consideration of both ethnographic data and ethnological problems pertaining to the area or type. (For specific area to be discussed, consult the Department.)

ANT 360: Humans and the Environment.

3 hours, 3 credits. (May be repeated for a maximum of six credits.) Physical and cultural responses of human groups, both past and present, to varying environmental conditions. The topic will vary from semester to semester, concentrating either on physical or cultural approaches to modern human adaptation or on paleoanthropology.

ANT 370: Excavation of the Lehman College Site.

5 hours(3, lecture; 2, lab), 4 credits. Introduction to archaeological field methods through the creation and excavation of a site on the campus of the College. Excavation and recording techniques as well as data processing and analysis will be discussed in the classroom, followed by the scientific excavation of a created site. *NOTE:* This site will be created by the purposeful burial of artifacts, ecofacts, and features in the form of a small, low mound.

*ANT 371: Field and Laboratory Research in Archaeology.

6 hours (3, lecture; 3, lab), 4 credits. Field and laboratory techniques of excavation and data processing in the practice of archeology. Note: Archaeological excavation at actual sites in the vicinity of New York City will be undertaken, including instruction in excavation technique, mapping, and record keeping. Lab work will be conducted at the Lehman College Archaeology Laboratory, including materials analysis, conservation, and interpretation.

ANT 450: Seminar in Selected Problems of Cultural Anthropology.

3 hours, 3 credits (maximum 6 credits). Research-oriented course on selected problems in the field of cultural anthropology. PREREQ: Permission of the instructor.

ANT 451: Seminar in Selected Problems of Archaeology.

3 hours, 3 credits (maximum 6 credits). Research-oriented course on selected problems in the field of archaeology. PREREQ: Permission of the instructor.

ANT 452: Advanced Seminar in Anthropology.

3 hours, 3 credits. Selected topics examined from the perspectives of the four subfields: cultural anthropology, physical anthropology, archaeology, and anthropological linguistics. PREREQ: Permission of the instructor.

ANT 454: Seminar in Selected Problems of Physical Anthropology.

3 hours, 3 credits (maximum 6 credits). Research-oriented course on selected problems in the field of physical anthropology. PREREQ: Permission of the instructor.

ANT 489: Independent Research in Anthropology.

2-3 credits per semester (maximum 6 credits). Research or fieldwork in any field of anthropology, under faculty supervision. PREREQ: Permission of the instructor.

Curriculum at a Glance

*Courses preceded by an asterisk are not expected to be offered in 2013-2015.

Introductory Courses

Foundation Courses for the Major:

ANT 171: Introduction to Human Evolution

ANT 211: Cultural Anthropology

ANT 212: Ancient Peoples and Cultures

ANT 269: Introduction to Human Variation

Other Introductory Courses:

ANT 142: Images of Culture

ANT (WST) 206: Women and Men: Anthropological Perspectives

ANT (WST)(LAC) 210: Women in Latin America

ANT/(LNG) 228: Language & Culture

Ethnography of Selected Areas:

ANT 230, 231, 232, 233, 234, 235, 236, 237, and (LAC) 238:

Selected Studies in Societies and Cultures:

*230: Africa

231: Middle East

*232: Europe

233: India

*234: Oceania

235: Native North America

236: Southeast Asia

237: East Asia

(LAC) 238: Latin America

Field I: Physical Anthropology:

ANT 300: Human Variation

ANT 301: Human Origins

ANT 302: Primate Behavior & Ecology

ANT 303: Human Osteology

ANT 305: Forensic Anthropology

ANT 306: Survey of Forensic Science

ANT 307: The Anthropology of Growth

ANT 309: Human Genetics

ANT 310: Evolution of the Primates

Field II: Archaeology:

ANT 240: Emergence of Ancient Civilizations

ANT 370: Excavation of the Lehman College Site

*ANT 311: The Archaeology of Europe

*ANT 312: African Archaeology

ANT 313: Archaeology of Asia

ANT 314: Archaeology of the Near East

*ANT 316: Early Societies and Cultures of North America

ANT (LAC) 317: Early Civilization of South America and the Caribbean

ANT (LAC) 318: Early Civilizations of Mexico and Central America

*ANT 319: The Archaeology of Southwestern North America

ANT 331: Prehistoric and Contemporary Subsistence Systems

ANT 371: Field and Laboratory Research in Archaeology

Field III: Anthropological Linguistics:

ANT 326 (LNG 326): Anthropological Linguistics

*ANT 327: Field Techniques in Anthropological Linguistics

Field IV: Cultural Anthropology and Ethnology:

ANT 250 (IAS 250): The Italian-American Community

ANT 330: Dynamics of Culture Change in a Global Context

ANT 331: Prehistoric and Contemporary Subsistence Systems

ANT 332: Kinship, Marriage, and the Family

ANT 334: Mind and Culture

ANT 335: Folklore and Oral Traditions

ANT 336: Music and Culture

*ANT 337: Inequality in Cross-Cultural Perspective

ANT 338: Religion: An Anthropological Perspective

ANT 339: Anthropology of Complex Societies

ANT 340: Anthropology and Education

ANT 341: Medical Anthropology

ANT 342: Anthropology of Cities

ANT 343: Economic Anthropology

ANT 344: The Anthropology of Politics and Law

ANT 345: Seminar in Field Methods

ANT (ARH) 346: North American Indian Art

ANT (LAC) 347: Race and Ethnicity in Latin America

ANT 348: The Ecology and Politics of Hunger

ANT 356: Advanced Ethnology

Anthropological Methods and Theory:

*ANT 320: Anthropological Theory and Method I

*ANT 321: Anthropological Theory and Method II

*ANT 322: Analyzing Anthropological Data Quantitatively

ANT 323: Methods and Philosophies in Paleoanthropology

ANT 324: Museum Methodology

*ANT 325: Method and Theory in Archaeology

Anthropology Courses & Seminars with Variable Topics:

ANT 360: Humans and the Environment

ANT 450: Seminar in Selected Problems of Cultural Anthropology

ANT 451: Seminar in Selected Problems of Archaeology

ANT 452: Advanced Seminar in Anthropology

ANT 454: Seminar in Selected Problems of Physical Anthropology

Supervised Independent Study:

ANT 489: Independent Research in Anthropology

Anthropology, B.A. (34-35 Credit Major)

The required courses and credits are distributed as follows:

Credits (34-35)

17 Required of all majors:

ANT 171: Introduction to Human Evolution (4)

ANT 211: Cultural Anthropology (3)

ANT 212: Ancient Peoples and Cultures (3)

ANT 269: Introduction to Human Variation (4)

ANT 228: Language and Culture (3) or ANT (LNG)

326: Anthropological Linguistics (3)

3 One additional course in Cultural Anthropology, Ethnology, or Ethnography

3 One additional course in Archaeology

9 In other courses in Anthropology selected by the student, in at least one of which the student must elect to complete a significant writing component (approximately 15 pages minimum) in consultation with the instructor, and then confirm the details with the Department Adviser or Chair.

2-3 One advanced seminar/research course numbered above 449.

Anthropology (Physical), Biology, and Chemistry, B.S. (60-Credit Major)

For a description of this program, view the Anthropology/ Biology/ Chemistry section of this Bulletin.

Anthropology / Biology / Chemistry

Program Coordinator: Vincent H. Stefan (Davis Hall, Room 411/421-A)

Co-Director: Eric Delson

Cooperating Departments: Anthropology; Biological Sciences; Chemistry; Earth, Environmental, and Geospatial Sciences; History; Mathematics and Computer Science; Philosophy; Physics and Astronomy; and Psychology.

Anthropology (Physical), Biology, and Chemistry is an interdisciplinary major leading to the B.S. degree. The program serves several purposes: (1) to prepare students for specialization at the graduate level in one of several fields: human origins, human genetics, human growth, human adaptation, primatology, forensic anthropology, or criminalistics (forensic anthropology and criminalistic specializations utilize the facilities and staff of the Metropolitan Forensic Anthropology Team [MFAT] at Lehman College; MFAT personnel identify human skeletal and dental remains for law enforcement agencies, and students in these specializations receive practical experience through participation in MFAT investigations); (2) to prepare students for secondary-school teaching in the life sciences, with emphasis on human origins and biological variation in human groups; and (3) to prepare premedical and predental students.

Anthropology (Physical), Biology, and Chemistry, B.S. (60 Credit Major)

The required credits are divided into tracks:

Track I for specializations in Physical Anthropology (such as Human Origins, Human Genetics, Human Growth, Human Adaptation, and Forensic Anthropology).

Track II for specialization in Criminalistics and for premedical, predental, and preveterinary students; preprofessional students may take any three courses from MAT 175-176 (Calculus I and II) and PHY 166-167 (General Physics I and II) as elective credits within the major. (See elective credits below.) Other students may only receive credit for one course in each sequence.

As an alternative to *ANT 322 or MAT 132, PSY 226 may be taken to satisfy the statistics requirement.

Graduating senior or recent graduates in this program who have been accepted to medical or dental school are eligible to receive the Maizie Hirsch Scholarship of \$5,000. Up to two of these scholarships may be awarded annually. For more information, contact the program coordinator or premed adviser.

A. Track I (60 credits)

Credits to be taken by all majors in Track I for specialization in Physical Anthropology:

35-39	In required courses as follows:	Credits	Hour
			S
8	In biology:		
	BIO 166: Introduction to Organismic Biology	4	6
	BIO 167: Principles of Biology	4	6
8	In physical anthropology:		

	ANT 171: Introduction to Human Evolution	4	5
	ANT 269: Introduction to Human Variation	4	5
9	In chemistry:		
	CHE 114: Essentials of General Chemistry	3	3
	(Lecture)		
	CHE 115: Essentials of General Chemistry	1.5	3
	(Laboratory)		
	CHE 120: Essentials of Organic Chemistry	3	3
	(Lecture)		
	CHE 121: Essentials of Organic Chemistry	1.5	3
	(Laboratory)		
3-4	In quantitative methods:		
	ANT 322: Analyzing Anthropological Data	3	3
	Quantitatively		
	Or MAT 132: Basic Concepts of Probability	4	4
	and Statistics		
	Or PSY 226: Statistical Methods in Psychology	4	4
7-10	In physics and scientific thought:		
, 10	Option 1 (10 credits):		
	PHY 166: General Physics I	5	6
	PHY 167: General Physics II	5	6
	Or option 2 (8 credits):		
	PHY 166: General Physics I	5	6
	·	<u> </u>	
	And one Scientific Thought course from Option 4		
	Or option 3 (7 credits):	4	5
	PHY 135: Fundamental Concepts and Methods of Physics	4	3
	·		
	And one Scientific Thought course from		
	Option 4		
	Or option 4 (9 credits):		
	Any three of these Scientific Thought courses:		
	HIS 301: Introduction to the History of	3	3
	Biology		
	HIS 302: Science and Society	3	3
	HIS 304: History of Science in the Twentieth	3	3
	Century		
	HIA 348: Introduction to the History of	3	3
	Science, from Ancient Science to the Scientific		
	Revolution		
	HIE 301: Introduction to the History of	3	3
	Science, from Descartes and Newton to		
	Darwin and Einstein.		
	MAT 135: Concepts and Uses of Mathematics	3	4
	CMP 108: Programming for Non-Computer	3	3
	Science Majors		
	PHI 353: Philosophy of Science	3	3
	SOC 310: Knowledge, Science, and Society	3	3

Elective credits (21-25) to total at least 60 when added to the number of required credits taken. Students interested in Forensic Anthropology should include ANT 303 (Human Osteology, 4.5 credits, 6 hours). Any course in the list that follows may be taken for elective credit.

B. Track II (60 credits)

Credits to be taken by all majors in Track II for specializations in Criminalistics or for premedical, predental, or preveterinary students majoring in Anthropology (Physical), Biology, and Chemistry.

39-40	In required courses as follows:	Credits	Hour
			S
8	In biology:		
	BIO 166: Introduction to Organismic Biology	4	6
	BIO 167: Principles of Biology	4	6
8	In physical anthropology:		
	ANT 171: Introduction to Human Evolution	4	5
	ANT 269: Introduction to Human Variation	4	5
20	In chemistry:		
	CHE 166: General Chemistry I	3	3
	CHE 167: General Chemistry Laboratory I	2	4
	CHE 168: General Chemistry II	3	3
	CHE 169: General Chemistry Laboratory II	2	4
	CHE 232: Organic Chemistry Lecture I	3	3
	CHE 233: Organic Chemistry Laboratory I	2	4
	CHE 234: Organic Chemistry Lecture II	3	3
	CHE 235: Organic Chemistry Laboratory II	2	4
3-4	In quantitative methods:		
	ANT 322: Analyzing Anthropological Data	3	3
	Quantitatively		
	Or MAT 132: Basic Concepts of Probability	4	4
	and Statistics		
	Or PSY 226:Statistical Methods in Psychology	4	4

Elective credits (20-21) to total at least 60 when added to the number of required credits taken. Any course in the list that follows may be taken for elective credit. Those interested in Criminalistics should take CHE 266 (Introduction to Forensic Science) and consider extra Chemistry courses. As noted above, students in this track only may also include MAT 175-176 (Calculus I and II) and PHY 166-167 (General Physics I and II) as elective credits within the major. Pre-professional students may count any three of these courses, while other students may only receive credit for one course in each sequence.

Interdepartmental Concentration in Anthropology: Courses Acceptable for **Elective Credit**

ANT 206: Women and Men in Anthropological Perspective (3 credits, 3 hours)

ANT 211: Introduction to Cultural Anthropology (3 credits, 3

ANT 212: Ancient Peoples and Cultures (3 credits, 3 hours)

ANT 300: Human Variation (3 credits, 3 hours)

ANT 301: Human Origins (3 credits, 3 hours)

ANT 302: Primate Behavior and Ecology (3 credits, 3 hours)

ANT 303: Human Osteology (4.5 credits, 6 hours)

ANT 305: Forensic Anthropology (3 credits, 3 hours)

ANT 306: Survey of Forensic Sciences (3 credits, 3 hours)

ANT 307: Anthropology of Growth (3 credits, 3 hours)

ANT 309: Human Genetics (3 credits, 3 hours)

ANT 310: Evolution of the Primates (3 credits, 3 hours)

ANT 323: Methods and Philosophies in Paleoanthropology (3 credits, 3 hours)

ANT 332: Kinship, Marriage, & the Family (3 credits, 3 hours)

ANT 334: Mind and Culture (3 credits, 3 hours)

ANT 341: Medical Anthropology (3 credits, 3 hours)

ANT 360: Humans and the Environment (3 credits, 3 hours)

ANT 370: Excavation of the Lehman College Site (4 credits, 5 hours)

ANT 371: Field and Laboratory Methods in Archaeology (4) credits, 6 hours)

ANT 489: Independent Research in Anthropology (if relevant topic; up to 6 credits)

BIO 181: Anatomy and Physiology I (4 credits, 5 hours)

BIO 182: Anatomy and Physiology II (4 credits, 5 hours)

BIO 183: Human Biology (4 credits, 5 hours)

BIO 184: Plants and People (4 credits, 5 hours)

BIO 226: Human Physiology (3.5 credits, 5 hours)

BIO 227: Mammalian Histology (4 credits, 6 hours)

BIO 228: Mammalian Physiology (4 credits, 6 hours)

BIO 230: Microbiology (4 credits, 6 hours)

BIO 238: Genetics (4 credits, 6 hours)

BIO 241: Evolution, Species, and Biogeography (3 credits, 3 hours)

BIO 267: Comparative Anatomy of the Vertebrates (4 credits, 6 hours)

BIO 268: Vertebrate Embryology (4 credits, 6 hours)

BIO 302: Biogeography (4 credits, 4 hours)

BIO 331: Experimental Microbiology (4 credits, 6 hours)

BIO 333: Endocrine Physiology (4 credits, 6 hours)

BIO 339: Ecology (4 credits, 6 hours)

BIO 400: Biological Chemistry (4 credits, 6 hours)

BIO 401: Biological Systematics (4 credits, 6 hours)

BIO 432: Biological Fine Structure (3 credits, 3 hours)

BIO 433: Techniques in Electron Microscopy (3 credits, 6 hours)

BIO 434: Radiation Biology (4 credits, 6 hours)

CHE 232: Organic Chemistry Lecture I (3 credits, 3 hours)

CHE 233: Organic Chemistry Lab I (2 credits, 4 hours)

CHE 234: Organic Chemistry Lecture II (3 credits, 3 hours)

CHE 235: Organic Chemistry Lab II (2 credits, 4 hours)

CHE 244-245: Biochemistry (4.5 credits, 6 hours)

CHE 249: Quantitative Analysis (5 credits, 8 hours)

CHE 332: Physical Chemistry I (3 credits, 3 hours)

CHE 334: Physical Chemistry II (3 credits, 3 hours)

CHE 335: Physical Chemistry Lab (3 credits, 6 hours)

CHE 444: Biochemistry I (3 credits, 4 hours)

CHE 446: Biochemistry II (3 credits, 3 hours)

GEH 320: Population Geography (3 credits, 3 hours)

GEH 335: Problems in Human Ecology (3 credits, 3 hours)

GEO 167: Evolution of the Earth (4 credits, 5 hours)

GEO 242: Introductory Paleontology (4 credits, 5 hours)

GEO 303: Stratigraphy and Sedimentology (4 credits, 6 hours)

GEO 342: Micropaleontology (4 credits, 5 hours)

GEP 204: Basic Mapping: Application and Analysis (3 credits, 4

GEP 205: Principles of Geographic Information Science (3 credits, 4 hours)

GEP 210: Introduction to Environmental Sciences (3 credits, 3

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hours)

GEP 321: Introduction to Remote Sensing (4 credits, 5 hours)

PSY 217: Child Psychology (3 credits, 3 hours)

PSY 248: Introduction to Primate Behavior Studies (3 credits, 3

hours)

PSY 305: Experimental Psychology I (4 credits, 6 hours)

PSY 306: Experimental Psychology II (4 credits, 6 hours)

PSY 310: Psychology of Learning (3 credits, 3 hours) PSY 316: Physiological Psychology (3 credits, 3 hours) PSY 318: Comparative Psychology and Ethology (3 credits, 3 hours)

Art

Chair: Flavia Bacarella (Fine Arts, Room 014)

Department Faculty and Staff: Professor: Herbert Broderick, David Gillison; Associate Professors: Flavia Bacarella, Mellisa Brown, Michael Ferraro, Charles Seplowin, Dannielle Tegeder, Terry Towery; Assistant Professors: Sharon Jordan, Sean McCarthy; Lecturers: Paul Carrellas, Janet Skolnik; Senior College Laboratory Technician: John Belardo; College Laboratory Technician: David Schwittek

The Department of Art conducts courses in both Studio Art (code ART) and Art History (code ARH). The Department offers a Bachelor of Arts (B.A.) in Art degree and a Bachelor of Fine Arts (B.F.A.) in Art degree. Students in the B.A. program may major in either Studio Art or Art History. The Department participates in several of the College's interdisciplinary programs and also offers an interdisciplinary B.S. in Computer Graphics and Imaging (CGI) with the Department of Mathematics and Computer Science. Note: All CGI courses are offered jointly by the two departments, Art and Mathematics and Computer Science (ART/CGI).

Career Opportunities: The majors in studio art and art history help students prepare for exciting futures in any number of art-related careers—digital imaging, arts management (galleries and museums), teaching, art law, museum education, and photojournalism, to name only a few. Studio Art and Art History majors are encouraged to explore these areas through internships offered by the College. See, for example, HUM 470 (Humanities Internship, 5 credits) later on in this Bulletin.

Art, B.F.A. (58-60 Credit Major)

The B.F.A. program is open to students who indicate real promise for doing creative work and wish to pursue a more intensive program in studio art. Candidates for the B.F.A. program should file an application with the Art Department before the second semester of their junior year. The application, which includes an essay, faculty recommendations, a listing of ART and ARH courses taken (with grades), and examples of the candidate's work, must be reviewed and approved by a faculty committee before acceptance into the program.

Credits (58-60)

- 14 Foundation requirement consisting of: ART 100 (2), 101 (2), 102 (2), 108 (2), 112 (3), and ARH 167 (3).
- 9 General Art History requirement consisting of three Art History courses, at least one of which must be at the 100 level. ARH 167 cannot be counted toward this requirement.
- 13-14 General Studio work to be selected from 100-, 200-, or 300-level ART courses.
- 14-15 Art specialization, a sequence of 200-, 300-, and 400-level courses (ART 486 may be counted in this category) in one of the following disciplines: ceramics, computer imaging, design, drawing, painting, photography, printmaking, or sculpture. Students should consult the Department for specific courses

that constitute a sequence.

8 ART 494 (4) and ART 496 (4).

Art, B.A., with a Specialization in Studio Art (38-41 Credit Major)

The required credits are distributed as follows:

Credits (38 - 41)

- 12 ART 100 (2), 101 (2), 102 (2), 112 (3), and ARH 167 (3).
- General Art History requirement, selected from 300-level ARH courses, or one ARH 300-level course and one course selected from ARH 135, 137, 139, 141, or 143.
- 12-14 General studio work selected from 100-, 200-, or 300-level ART courses; ART 486 may be counted in this category.
- 8-9 Art specialization, a sequence of 200- and 300-level courses in one of the following disciplines: ceramics, computer imaging (Note: computer courses are three credits), design, drawing, painting, photography, printmaking, and sculpture.

Computer Graphics and Imaging, B.S. (58 Credit Major)

The required credits are distributed as follows:

In ART/CGI (24 credits; may be taken as CGI or ART)

ART/CGI 221: Applied Imaging and Applications to the World Wide Web I. 4 hours (2, lecture; 2, lab), 3 credits

ART/CGI 222: Applied Imaging and Applications to the World Wide Web II. 4 hours (2, lecture; 2, lab), 3 credits

ART/CGI 321: Computer Modeling and Design I. 4 hours (2, lecture; 2, lab), 3 credits

ART/CGI 322: Evolving Techniques in Digital Photography. 4 hours (2, lecture; 2, lab), 3 credits

ART/CGI 325: Digital Multimedia. 4 hours (2, lecture; 2, lab), 3 credits

ART/CGI 421: Computer Animation I. 4 hours. (2, lecture; 2, lab), 3 credits

ART/CGI 422: 3D Interactive Design. 4 hours (2, lecture; 2, lab), 3 credits

ART/CGI 441: Broadcast Design. 4 hours (2, lecture; 2, lab), 3 credits.

In Computer Science (11 credits)

CMP 230: Programming Methods I. 4 hours, 4 credits CMP 326: Programming Methods II. 4 hours, 4 credits CMP 342: Internet Programming. 4 hours (2, lecture; 2, lab), 3 credits

In Mathematics (5 credits)

MAT 155: Calculus Laboratory. 2 hours, 1 credit MAT 175: Calculus I. 4 hours, 4 credits

In Art (18 credits)

ART 100: Basic Drawing. 4 hours, 3 credits

ART 101: Introduction to Two-Dimensional Design. 4 hours, 3 credits

ART 102: Introduction to Three-Dimensional Design. 4 hours, 3

credits

ART 106: Introduction to Sculpture. 4 hours, 3 credits or ART 108: Introduction to Photography. 4 hours, 3 credits ART 112: Introduction to Digital Imaging. 4 hours (2, lecture; 2, lab), 3 credits

ARH 167: Tradition and Innovation in the Art of the West. 3 hours, 3 credits

Or

ARH 141: Introduction to the History of Modern Art of the Nineteenth and Twentieth Centuries in Europe and the United States. 3 hours, 3 credits.

No minor is required.

Art, B.A., with a Specialization in Art History (30 Credit Major)

The required courses and credits are distributed as follows:

Credits (30)

- Foundation requirement selected from ARH 135, 137, 139, 141, and 167.
- 12 General requirement selected from ARH 100- and 300-level courses and related areas, in consultation with ARH advisors: a maximum of 3 credits may be taken in related areas (related areas are determined in consultation with the advisor and are generally, but not exclusively, courses other than Art History).
- 9 300-Level Art History requirement. Selected from 300level ARH courses.
- Advanced Work ARH 451 (Seminar or ARH 489: Research in Art History).

Preparation for Teaching

This major has been approved for students with an education minor seeking to apply for certification as an ECCE (Early Childhood and Childhood Education) teacher.

To apply for certification as an ECCE (Early Childhood and Childhood Education) teacher, all students must: *In the Foundation Requirement*: Choose two from the following three courses: ARH 137, ARH 141, and ARH 167

Preparation for Teaching Art

There is no certification for teaching art at the early childhood/elementary level. Students who wish to teach studio art must select the Art Teacher program offered by the Department of Middle and High School Education, which leads to certification from kindergarten through the twelfth grade. See the section on Program Requirements for Undergraduate Secondary Teacher Education of Middle and High School Education in this Bulletin.

Courses in Studio Art

ART 100: Basic Drawing.

4 hours (2, lecture; 2, lab), 3 credits. Introduction to drawing, with an emphasis on developing perceptual skills. Study of line, value, placement, and perspective using still life and interiors. Blackand-white materials used. Introduction to artists who use drawing as the focus of their artistic practice.

ART 101: Introduction to Two-Dimensional Design.

4 hours (2, lecture; 2, lab), 3 credits. (For students with little or no experience in design for the visual arts.) Practices, concepts, history and aesthetic impact of two-dimensional design. The organization of form on two-dimensional surfaces; history of type and practice of lettering: integration of imagery and type; traditional techniques of illustration using pen and pencil as well as collage and assemblage. Documentation of theoretical and/or historical issues relevant to contemporary practice.

ART 102: Introduction to Three-Dimensional Design.

4 hours (2, lecture; 2, lab), 3 credits. Concept, design-theory, and three-dimensional organization through the functions of space, volume, mass, plane, and line. Use of materials and hands-on projects to emphasize the development of critical skills and how they apply to visual aesthetic issues of the past and present.

ART 103: Introduction to Printmaking.

4 hours (2, lecture; 2, lab), 3 credits. Development of drawing skills through printmaking, with attention to the evolution of printmaking media, evolution of subject matter and technique and the nature of graphic art and its relationship to reproduction. Theoretical and historical issues relevant to contemporary practice. At least two printmaking methods will be covered each semester.

ART 105: Introduction to Painting.

4 hours (2, lecture; 2, lab), 3 credits. Fundamental skills, tools, materials, and techniques. Exploration of color-theory, with analysis and critique of painting styles used by contemporary artists.

ART 106: Introduction to Sculpture.

4 hours (2, lecture; 2, lab), 3 credits. Basic skills, critical thinking, and technique of sculpture, with emphasis on spatial awareness as it relates to principles of art-composition. The sculpture-making process from original aesthetic idea to final realized state.

ART 107: Ceramics I.

4 hours (2, lecture; 2, lab), 3 credits. The nature, history, and unique properties of clay and ceramic arts. Structure, form, design, and decoration. Attention to the functional and sculptural concepts involved in hand-building techniques, including slab, coil, press, and drape-mold. Basic glazes and oxidation firing.

ART 108: Introduction to Photography.

4 hours (2, lecture; 2, lab), 3 credits. Theory and practice of analog and digital creative image-making, using current technology. Practical study of exposure, composition, control of color palette, basic photo-editing skills, and digital storage, with attention to the history of photography as an art form. NOTE: Students must have a camera that allows for manual control of shutter and aperture.

ART 109: Observation and the Visual Experience.

3 hours, 3 credits. Introduction to the techniques, concepts, history and aesthetic elements of observational drawing as a means of recording and reflecting upon experience.

ART 110: Elements of Visual Communication.

3 hours, 3 credits. Introduction to the techniques, concepts, history and aesthetic elements of two-dimensional design as a means of visual communication.

ART 112: Introduction to Digital Imaging.

4 hours (2, lecture; 2, lab), 3 credits. (Students need no previous computer experience.) Introduction to the creation of art and imagery using computers and digital media. Production of a portfolio of images for presentation. COREQ: ART 108.

ART 200: Drawing.

4 hours (2, lecture; 2, lab), 3 credits. Comprehensive study of drawing, its media, and composition through observation and analysis of natural and manufactured forms. PREREQ: ART 100.

ART 201: Life Drawing.

4 hours (2, lecture; 2, lab), 3 credits. Form, structure, volume, movement, and composition pertaining to the human figure. Review of the human form as represented throughout history. PREREQ: ART 100.

ART 202: Design.

4 hours (2, lecture; 2, lab), 3 credits. Practices, concepts, history, and social ramifications of design. Typography, layout, identity, visual/physical structure, graphic iconography, and relationship of form to function. Theoretical and/or historical issues relevant to contemporary practice. PREREQ: ART 101 or ART 102.

ART 203: Printmaking Workshop.

4 hours (2, lecture; 2, lab), 3 credits. Printmaking techniques, with a focus on contemporary developments in printmaking media. Theoretical and/or historical issues relevant to contemporary practice. PREREQ: ART 100 and 103.

ART 204: Watercolor.

4 hours (2, lecture; 2, lab), 3 credits. Materials, tools, and visual resources of watercolor painting. Fundamental techniques, including glazing, wet-on-wet, and wet-on-dry procedures. Color-theory as it applies to the discipline; history of watercolor painting. PREREQ: ART 100.

ART 205: Painting.

4 hours (2, lecture; 2, lab), 3 credits. Technical skills and abstract principles involved in organizing composition, creating spatial illusion, and defining form. Historical and contemporary trends in painting. PREREQ: ART 100 and 105.

ART 206: Sculpture.

4 hours (2, lecture; 2, lab), 3 credits. Formal ideas pertaining to balance, sequence, and visual dynamics. Exploration of principles and communication-, using potent various materials. PREREQ: ART 100 and 106.

ART 207: Ceramics II.

4 hours (2, lecture; 2, lab), 3 credits. Wheel-throwing methods and historical movements redefining the use of the wheel. Structural demands and technical constraints of stoneware and porcelain clay bodies. Creation of simple wheel-thrown forms, including cylinders, bowls, mugs, and plates. Design and decorative techniques, including engobes, wax resist, underglazing and glazing. PREREQ: ART 107.

ART 208: Photography.

4 hours (2, lecture; 2, lab), 3 credits. Camera-use, lighting, developing, printing, and enlarging. Emphasis on creative approaches. History and tradition of analog materials, including development techniques such as photograms and pinhole photography. PREREQ: ART 108.

ART 209: Relativity of Color.

4 hours (2, lecture; 2, lab), 3 credits. Fundamentals of the relativity of color as applied to visual art. Recommended for art majors, particularly in the painting concentration.

ART 212: Two-Dimensional Design for Digital Media.

4 hours (2, lecture; 2, lab), 3 credits. Digital tools for the design and production of two-dimensional graphics and type for the printed page and electronic media. Emphasis on the principles of typography. Overview of the history of graphic design and reproduction. PREREQ: ART 102 and ART 112.

ART (CGI) 221: Applied Imaging and Applications to the World Wide Web I.

4 hours (2, lecture; 2, lab), 3 credits. Concepts and techniques underlying the World Wide Web. Image processing and two-dimensional graphics as methods to produce material for the World Wide Web. Emphasis on the artistic, mathematical, and computer science underpinnings of these topics. PREREQ: An introductory hands-on microcomputer course. COREQ: ART 108.

ART (CGI) 222: Applied Imaging and Applications to the World Wide Web II.

4 hours (2, lecture; 2, lab), 3 credits. Advanced methods of two-dimensional graphics, image processing, and World Wide Web design leading to team projects in the fields of science and art. PREREQ: ART (CGI) 221.

ART 226: Mechanical Drawing.

4 hours, (2, lecture; 2, lab), 3 credits. PREREQ: ART 100. A survey of the practical application and an exploration of the creative possibilities of drawing with mechanical instruments.

ART 300: Advanced Drawing.

4 hours (2, lecture; 2, lab), 3 credits (maximum 12 credits). Practice and experimentation with process, content, and thematic focus. Advanced approaches to drawing as a vehicle of personal expression, thought, and creative discourse. PREREQ: ART 200.

ART 301: Advanced Life Drawing.

4 hours (2, lecture; 2, lab), 3 credits (maximum 12 credits). Historical and contemporary approaches to distortion, foreshortening, multi-figure composition, and value-structures with the human figure. PREREQ: ART 201.

ART 302: Advanced Design.

4 hours (2, lecture; 2, lab), 3 credits (maximum 9 credits). Advanced problems in the practices, concepts, and social ramifications of design with emphasis on contemporary developments in form and function. Theoretical and/or historical issues relevant to contemporary practice. PREREQ: ART 202.

ART 303: Advanced Printmaking Workshop.

4 hours (2, lecture; 2, lab), 3 credits (maximum 12 credits). Development of individual creative vision in printmaking through synthesis of form, concept, technique and awareness of contemporary trends. Theoretical and/or historical issues relevant to contemporary practice. PREREQ: ART 203.

ART 304: Advanced Watercolor.

4 hours, 3 credits (maximum 6 credits). Continuation of ART 204. PREREQ: ART 204.

ART 305: Advanced Painting.

4 hours (2, lecture; 2, lab), 3 credits (maximum 12 credits). Pictorial representation using oil, acrylics, and related material. Development of ideas and objectives relevant to a self-reflective approach to painting. PREREQ: ART 205.

ART 306: Advanced Sculpture.

4 hours (2, lecture; 2, lab), 3 credits (maximum 12 credits). Exploration of context, process, psychology, and the aesthetics of the object. Principles of organization in relation to various forms of art; experimentation and individuality in theory and practice in contemporary art. PREREQ: ART 206.

ART 307: Ceramics III.

4 hours (2, lecture; 2, lab), 3 credits (maximum 12 credits). Comparative analysis of utilitarian and non-functional wheel-thrown objects. Contemporary theorization about the nature, motivations for, and uses of ceramic creation. Development of design and technical skills to produce complex objects; series and production techniques; documentation of various clay and glaze tests. PREREQ: ART 207.

ART 308: Advanced Black-and-White Photography.

4 hours (2, lecture; 2, lab), 3 credits (maximum 12 credits). Application and aesthetic analysis of the silver print. Fine printing techniques, alternate photographic techniques, toning, multiple printing, solarization, and final presentation methods. PREREQ: ART 208.

ART 310: Portraiture in Painting.

4 hours, 3 credits. Conceptual, perceptual and technical processes of portraiture. Advanced approaches to the various media used to create form, structure, likeness and composition. The social and aesthetic impact of the portrait throughout history. PREREQ: ART 105 and ART 201.

ART 312: Advanced Two-Dimensional Design for Digital Media.

4 hours (2, lecture; 2, lab), 3 credits (maximum 6 credits). Emphasis on two-dimensional design projects for production. Completion of a professional portfolio of projects suitable for presentation. PREREQ: ART 212.

ART 317: Advanced Ceramic Techniques.

4 hours (2, lecture; 2, lab), 3 credits. Essential clay and glaze materials. Effects of heavy metals, stains, and metallic lustres on clays and glazes. Experimentation with body stains, Terra Sigilatta, underglazes, and decals, as well as various firing techniques and temperatures. Development of personal color palette and surfaces. PREREQ: ART 107.

ART 318: The Fine Print.

4 hours (2, lecture; 2, lab), 3 credits (maximum of 6 credits). Composing with light and color, understanding color-space and printer profiles; post production, camera-raw editing, archival preparation of prints for storage and display. PREREQ: ART 108.

ART (CGI) 321: Computer Modeling and Design I.

4 hours (2, lecture; 2, lab), 3 credits. An introduction to the theory and practice of two- and three-dimensional modeling and rendering. Mathematical and design concepts will be explored in the lecture room, on the computer, and in the studio. Topics include primitive objects, transformations, curve creation and manipulation, symmetries, surface creation and modification, basic rendering. PREREQ: ART (CGI) 221 or MAT 172 together with any hands-on microcomputer course.

ART (CGI) 322: Evolving Techniques in Digital Photography.

4 hours (2, lecture; 2, lab), 3 credits. Computational algorithms and software to use multiple aspects of an image. Examples include panning in space and stitching the image together and exposure bracketing to manipulate dynamic range. PREREQ: ART (CGI) 321.

ART 323: Drawing For Animation.

4 hours (2 lecture, 2 lab), 3 credits. Fundamentals of drawing in time-measured contexts and media. Gesture, action, and narrative as applied to sequential drawing. Analysis of the mechanics of motion. Examination of works of master animators. PREREQ: ART 100, ART 112, and ART 201.

ART (CGI) 325: Digital Multimedia.

4 hours (2, lecture; 2, lab), 3 credits. Web- and disk-based multimedia projects in the digital realm, including digital audio, digital video, and interactivity. PREREQ: (ART) CGI 221 or (ART) CGI 321.

ART 327: Ceramic Sculpture.

4 hours (2, lecture; 2, lab), 3 credits (maximum 9 credits). Figurative, architectural, site-specific, and conceptual exploration in clay. Historical and contemporary references in conjunction with contemporary technology. Personal, technical, and conceptual development. Critical analysis and peer reviews. PREREQ: ART 107 and ART 207.

ART 328: Studio Photography.

4 hours (2, lecture; 2, lab), 3 credits (maximum 9 credits). Large-format camera handling; processing and printing of 4x5 and 8x10 cut film; art and physics of light in relation to photographic images; contemporary principles and theories of studio photography. Scheimpflug principle, inverse square rule of light, and photographic lighting techniques. Portraiture and still life only. PREREQ: ART 308 and 318.

ART 350: Variable Topics in Studio Art.

4 hours, 3 credits (maximum 9 credits). A variable topics course to be presented in specific areas not currently covered by existing course offerings. Possible topics might include botanical illustration, animal sculpture, architectural rendering, etc. PREREQ: Any 200-level course in a related skills area (e.g., painting, sculpture, computer imaging).

ART 355: Seminar in Contemporary Art.

4 hours (2, lecture; 2, lab), 3 credits. Contemporary art and the primary components of today's art practice through lectures, research, discussion, essays and curatorial exercises. Off-campus visits to galleries, museums, artist studios, and talks with working artists, critics, curators, and other arts professionals. NOTE: Class meets off-campus at various locations in the New York City area.

ART 358: Field Methods in Photography: Variable Topics.

4 hours (2, lecture; 2, lab), 3 credits (maximum of 9 credits). Training in professional documentary image-preparation with digital editing techniques; preparation of texts for publication. PREREQ: ART 108.

ART (CGI) 421: Computer Animation I.

4 hours (2, lecture; 2, lab), 3 credits. Introduction to computer animation. Frames, key frames, hierarchical animation, morphing, expressions, character animation with skeletons. PREREQ: ART (CGI) 321 and MAT 175.

ART (CGI) 422: Three Dimensional Interactive Design.

4 hours (2, lecture; 2, lab), 3 credits. Techniques for designing and building computer-based 3D interactive experiences using current software tools. Exporting projects to the Web and mobile computing devices. Application to game design. PREREQ: ART (CGI) 421.

ART (CGI) 441: Broadcast Design.

4 hours (2, lecture; 2, lab), 3 credits. Creation of sophisticated title sequences, TV show packaging, and on-air promotions to be used as part of DVD, video, and film production. PREREQ: ART (CGI) 325.

ART (CGI) 451: Topics in Computer Imaging.

4 hours (2, lecture; 2, lab), 3 credits (maximum 6 credits). For specific topics and sections, consult the Department.

ART (CGI) 480: Senior Project.

3 hours, 3 credits. Advanced projects in the field of computer imaging under faculty guidance. PREREQ: Departmental permission.

ART (CGI) 481: Independent Study in Computer Imaging.

3 hours, 3 credits. Independent study on a specific topic under faculty supervision. PREREQ: Departmental permission.

ART 486: Independent Study.

1–3 credits (maximum 9 credits). Limit one course (up to 3 credits) per semester. Special projects in art that require work outside the framework of existing classes. To be supervised by a member of the faculty. Students must file applications with the Art Department the semester preceding registration. PREREQ: Declared art major.

ART 487: Internship in Art.

One semester, 3 credits (maximum 6 credits). On-the-job training in a public or private arts institution. PREREQ: Prior approval of the undergraduate studio advisor; declared Art major with a minimum of twenty-four credits in the major (B.A.) or thirty-six credits in the major (B.F.A).

ART 494: Professional Experience in Fine and Applied Arts I.

6 hours, 3 credits. Special projects in or related to the student's major specialization. PREREQ: Acceptance into the B.F.A. program and nine credits in major area of specialization. NOTE: ART 494 is not credited toward the B.A. program.

ART 496: Professional Experience in Fine and Applied Arts II.

6 hours, 3 credits. Special projects in or related to the student's major specialization. PREREQ: ART 494. NOTE: ART 496 is not credited toward the B.A. program.

Courses in Art History

*Courses preceded by an asterisk are not expected to be offered in 2013-2015.

ARH 135: Introduction to the History of Asian Art—Islamic, Buddhist, and Hindu Cultures.

3 hours, *3 credits*. A study of the principles of art applied to visual forms, with emphasis on Asian art— the Islamic, Buddhist, and Hindu cultures.

ARH 137: Introduction to the History of Non-Western Art.

3 hours, 3 credits. A study of the principles of art applied to visual forms, with emphasis on the arts of Africa, the Americas, and the South Pacific.

*ARH 139: Introduction to the History of European Art from Antiquity through the Eighteenth Century.

3 hours, 3 credits. A study of the principles of art applied to visual forms, with emphasis on European art from antiquity through the eighteenth century.

ARH 141: Introduction to the History of Modern Art of the Nineteenth and Twentieth Centuries in Europe and the United States

3 hours, 3 credits. A study of the principles of art applied to visual forms, with emphasis on modern art of the nineteenth and twentieth centuries in Europe and the U.S.

ARH (LAC) 143: Introduction to the History of Latin American Art.

3 hours, 3 credits. A study of the principles of art applied to visual forms, with emphasis on modern art of the nineteenth and twentieth centuries in Central America, South America, and the Caribbean.

ARH 167: Tradition and Innovation in the Art of the West.

3 hours, 3 credits. Major masterpieces in Western painting, sculpture, and architecture from antiquity to the present. Consideration of the individual artist's awareness of previous art traditions and their impact on the artist's personal style and artistic development.

NOTE: All 300-level ARH courses carry the following PREREQ: one 100-level ARH course.

ARH 312: Art in the United States from Colonial Times to the Civil War.

3 hours, 3 credits. Architecture, sculpture, painting, the decorative and folk arts in the United States from Colonial times through the Revolutionary period to the Civil War.

ARH 314: Art in the United States from the Civil War to the Present.

3 hours, 3 credits. Architecture, sculpture, painting, the decorative arts and photography in the United States and the acceptance of modernism, first in architecture and photography, and then in painting and sculpture after World War II.

ARH 320: Art and Revolution in the West; Neo-classicism, Romanticism, and Realism.

3 hours, *3 credits*. Art in Europe and the United States from 1770-1863, encompassing the artistic movements: Neo-Classicism, Romanticism, and Realism. Emphasis on the French artists of the period: David, Ingres, Delacroix, and Courbet.

ARH 325: Art as a Human Value.

2 hours, 2 credits. A study of aesthetics and the significance of art.

ARH 326: Contemporary Art.

3 hours, 3 credits. Discussion, analysis, and criticism of current painting and sculpture.

ARH 327: Modern Painting.

3 hours, 3 credits. A history of twentieth-century European and American painting, from fauvism through abstract expressionism.

ARH 328: Modern Sculpture.

3 hours, *3 credits*. The development of sculpture in Europe and America in the twentieth century.

*ARH 329: Modern Architecture.

3 hours, 3 credits.

ARH 330: Greek and Roman Art.

3 hours, 3 credits. The formation of the classical style in art and architecture.

ARH 331: Art of Medieval Europe.

3 hours, 3 credits. Architecture, sculpture, and painting (including manuscripts and stained glass) from the early Christian period through the Gothic.

ARH 332: Art of the Early Renaissance.

3 hours, 3 credits. Architecture, sculpture, and painting of the fourteenth and fifteenth centuries. Emphasis will be on Italian painting from Giotto through Botticelli and on northern painting from the Gothic illuminators through Hugo van der Goes.

ARH 333: Art of the High Renaissance and the Later Sixteenth Century.

3 hours, 3 credits. Architecture, sculpture, and painting of the sixteenth century. Emphasis on the Italian masters of the period: Leonardo, Raphael, Michelangelo, Bramante, and Titian.

ARH 334: Baroque Art.

3 hours, 3 credits. Architecture, sculpture, and painting of the seventeenth century. Emphasis will be on the development of the baroque style in Rome, the rise of the Dutch school, and the classical tradition in France.

ARH 335: Impressionism and Post-Impressionism.

3 hours, 3 credits. The nineteenth-century French background of Impressionism from David through Courbet: the art of Manet, the Impressionists, and the Post-Impressionists through Cezanne.

ARH 336: Egyptian and Near Eastern Art.

3 hours, 3 credits. The development of art in ancient Egypt, Mesopotamia, and Iran.

*ARH 337: The Splendor of Persia.

3 hours, 3 credits.

ARH (MES) 338: Islamic Art.

3 hours, 3 credits. The art of Islamic peoples from Spain and North Africa to India and Central Asia; its sources and extensions.

ARH 340: Art of China.

3 hours, *3 credits*. Chinese art from the Neolithic period to the Ch'ing Dynasty, with emphasis on painting of the Sung and later periods.

ARH 341: Art of Japan.

3 hours, 3 credits. The history of Buddhist art in Japan and its relationship with the arts of China. The development of indigenous art forms, such as narrative scrolls, decorative screens, and woodblock prints.

ARH 342: Art of India and Southeast Asia.

3 hours, 3 credits. Problems in the history of style and iconography in Buddhist and Hindu art.

ARH (LAC) 343: Pre-Columbian Art.

3 hours, 3 credits. The art and architecture of Mexico, Central America, and South America prior to the Spanish conquest in the sixteenth century.

ARH 344: Art of Africa.

3 hours, 3 credits. Analysis of form and content in the major tribal arts of West, Central, and East Africa. Also, discussion of Afro-American art and the impact of African art on modern art.

ARH 345: Art of the South Pacific.

3 hours, *3 credits*. The art of Australia, Melanesia, Indonesia, Micronesia, and Polynesia. Migrations and the diffusion of Southeast Asian art in the Pacific.

ARH (ANT) 346: North American Indian Art.

3 hours, 3 credits. The Indian art styles of North America, with special emphasis on the tribal art of the U.S. Northwest Coast and the Southwest. Also, relationships with adjacent traditions, such as that of the Eskimo in the north and of pre-Columbian Mexico in the south.

ARH 347: Non-Western Impact on Western Art.

3 hours, 3 credits. Studies in the influence of Oriental and primitive arts on the arts of Western Europe and on modern art.

ARH 348: The History of Photography.

3 hours, 3 credits. The history of photography from its early days in the nineteenth century to the varied photographic art forms of the present day. The interactive role of technical and artistic innovations is studied in an historical context. PREREQ: ART 108 and ARH 167, or permission of the instructor.

ARH 350: Special Topics in Art History.

3 hours, 3 credits (maximum 9 credits). A variable topics lecture course in art history, including American art, the art of Latin America, the history of women artists, African-American art, the intensive study of individual artists, and other course areas outside the traditional discipline sequence. PREREQ: Any ARH 100-level Art History course.

ARH 451: Seminar.

3 hours, 3 credits (maximum 9 credits). (Required of ARH majors.) Group investigation of special problems in Art History. PREREQ: Departmental and instructor's permission.

ARH 477: Internship in Art History.

3 hours, 3 credits (maximum 6 credits). On-the-job training in a public or private arts institution. PREREQ: Prior approval of the undergraduate by Art History advisor; declared Art major (specializing in Art History), with a minimum of eighteen completed credits in the major.

ARH 489: Research in Art History.

One semester, 3 credits (maximum 9 credits). Individual investigation of special problems in Art History. PREREQ: Departmental permission.

Biological Sciences

Department Chair: Liesl B. Jones (Davis Hall, Room 217) Undergraduate Adviser: Maryam Bamshad-Alavi (Davis Hall, Room 134)

Department Faculty and Staff: Professors: Edward Jarroll, Edward J. Kennelly, Dwight T. Kincaid, Martin Muntzel, Joseph W. Rachlin, Eleanore T. Wurtzel; Associate Professors: Hai-Ping Cheng, Liesl B. Jones, Zhi-Liang Zheng; Assistant Professors: Gabriel O. Aisemberg, Maryam Bamshad-Alavi, Stephen Redenti, Renuka Sankaran, Moira Saune; Lecturers: Ayanna Alexander-Street; Judith Fitzgerald; Chief College Laboratory Technician: Michael Baxter; Senior College Laboratory Technicians: James Lee, Katherine Lieberman, Christina West

The undergraduate curricula of the Department of Biological Sciences are designed to provide potential biologists with a solid background based on the substantial new information comprising modern Biology and to meet the needs of students with different career goals and scientific interests. The Department offers students the opportunity to earn the Bachelor of Arts degree with two majors in Biology, one of which is designed for prospective elementary school teachers. In addition, the Department offers students the opportunity to earn the Bachelor of Science degree in the interdisciplinary major in Anthropology (Physical), Biology, and Chemistry, which is offered jointly with the Departments of Anthropology and Chemistry.

Career Preparation: Careers arising from an undergraduate major in Biology include research in one of its areas: medicine, veterinary medicine, dentistry, pharmacy, and work in the paramedical professions, as well as opportunities in public health, forestry, agriculture, fisheries, biotechnology, and conservation. Prospective middle and high school biology teachers should consult the adviser in either the Department of Biological Sciences or the Department of Middle and High School Education. Students preparing for elementary teaching should consult the Department of Early Childhood and Childhood Education.

Graduate Study: Students who plan to attend graduate school should consult the Departmental adviser early in their college careers. They should examine the Lehman College Graduate Bulletin and the bulletins of various graduate schools for specific entrance requirements. A reading knowledge of foreign languages is sometimes required. In special cases, graduating seniors meeting the prerequisites may be permitted to offer credit from graduate courses listed in the College's Graduate Bulletin toward their undergraduate degrees.

Anthropology (Physical), Biology, and Chemistry B.S. (60 Credit Interdisciplinary Major)

See the description for this program in the Anthropology section of this Bulletin.

Minor in Biology

A minor in Biology consists of a minimum of 16 credits in Biology, including one course (4 credits) selected from BIO 166, Lehman College Undergraduate Bulletin 2013-2015 BIO 167, BIO 183, or BIO 184 and three courses (12 credits) selected from the 200, 300, or 400 levels, with at least two of these at the 300- or 400-level. The selected 100-level course will satisfy the distribution requirement in Biology.

Individualized B.A. in Plant Studies

This program, emphasizing the plant sciences, is administered through the School of Continuing and Professional Studies. It is a collaborative program, with students taking some plant studies courses at the New York Botanical Garden and others at Lehman College. Further details may be obtained from the Departmental advisor in Biological Sciences or the School of Continuing and Professional Studies.

Biology I, B.A. (70 Credit Major)

The required courses and credits are distributed as follows:

Credits (70)

- 8 In BIO 166 and 167: one counts as distribution and the other toward the major. Both are prerequisites to all other Biology courses.
- In advanced Biology courses (200, 300, and 400 levels), with at least 12 credits at the 300 level or higher. Course schedules to be approved by the Department's student adviser.
- 10 In general chemistry: CHE 166-167 and 168-169.
- 10 In organic chemistry: CHE 232-233 and 234-235.
- 10 In general physics: PHY 166*-167.*
- 8 In mathematics: Either MAT 175 and 176 or 175 and

*Please note that the Physics Department has increased the credit requirements for this course to 5 credits.

Qualified students may also take BIO 450: Seminar in Biology; BIO 489: Introduction to Experimental Biology; BIO 490: Honors in Biological Sciences. Biology majors MUST consult with Departmental undergraduate advisers on completion of BIO 166 or 167 and when making course selections.

Special Note: Biology majors are not required to select a minor because of the extensive coursework in ancillary sciences required in the course of study.

Biology II, B.A. (53 Credit Major)

This major sequence in Biology is appropriate only for students planning to teach in middle and high school. The required education sequence in middle and high school education must be completed for all students selecting this major in Biology. As part of their overall training students in science, students will be required to take ESC 419.

The required credits are distributed as follows:

- In BIO 166-167
- Advanced Biology Courses (12 of which must be at the 300 level or higher) (Suggested Courses: BIO 238
 Genetics, BIO 241 Evolution, BIO 227 Histology, BIO 228 Physiology, BIO 339 Ecology, BIO 301 Molecular Genetics, BIO 432/433 Fine Structures)

- 5 PHY 166.
- 15 CHE 166-167; CHE 168-169; CHE 232-233.
- 5 MAT 155, MAT 175.

Dual Degree: B.A./M.S. in Biology

The Five-Year Biology B.A./M.S. offers qualified students the opportunity to earn both a Bachelor of Arts degree and a Master of Science in Biology degree, which may be completed in as little as five years. The curriculum is composed of two tracks that allow students to choose between Track One: Tutorial Option and Track Two:Thesis Option.

5-Year Combined B.A./M.S. Biology

TRACK 1: TUTORIAL OPTION

(Year 1-4). 120 credit B.A. in Biological Sciences. Winter and Summer Sessions must be used. In years 1-2, students must take the math, chemistry, and physics prerequisites.

(Year 4). Three 4-credit M.S. courses taken for dual credit in both degrees (12 credits total). Student graduates in June.

(Year 5). Enrolled in M.S. program in tutorial track (34 credits, 12 of which are satisfied in Year four. This includes 4 credits of BIO 792.2). Students may graduate by September 1.

34 M.S. credits in Track 1 to be distributed as follows:

(12 credits). Three M.S. courses in Year 4 (For example: BIO 634: Cell Biology and Electron Microscopy, BIO 618: Problems in Ecology, BIO 644: Biological Chemistry).

(16 credits). Six M.S. courses in Year 5 (For example: BIO 646 Statistics for Biological Research, BIO 642 Molecular Biology, BIO 710 Microbial Physiology, BIO 630 Seminar in Biology, BIO 660 Seminar in Biology).

(6 credits). Two tutorial courses in Year 5 (BIO 792.1, BIO 792.2).

TRACK 2: THESIS OPTION

(Year 1 - 4). 120-credit B.A. in Biological Sciences. Winter and Summer Sessions must be used. BIO 489 must be taken twice and BIO 490 should be taken in the senior year. In Years 1-2, students must take the math, chemistry, and physics prerequisites.

(Year 3). Research advisor chosen in Spring term.

(Year 4). Three M.S. courses taken for credit in both degrees (12 credits total). Must take BIO 489 in the Fall and BIO 489 and BIO 490 in the Spring. Graduation in June with Honors, having completed a research project under faculty sponsor.

(Year 5). Enrolled in M.S. program in thesis track (30 course credits, 12 of which are satisfied in Year 4). BIO 799.1 (1 credit) and 799.2 (2 credits) with possibility of BIO 799.3 (3 credits). Defense of thesis and graduation by September 1.

30-32 M.S. Credits in Track 2 to be distributed as follows:

(12 credits). Students must take three M.S. courses in Year four (For example, BIO 634, BIO 618, BIO 644).

(12-14 credits). Students must take three to four M.S. courses in Year 5 (For example, BIO 646, BIO 642, BIO 710, BIO 660).

(6 credits). Students must take three thesis research courses (BIO 799.1, BIO 799.2, BIO 799.3).

Note 1: This program will allow students to finish 1-2 years earlier than they would if they did a separate B.A. followed by a M.S. Additionally, this program provides students with extensive research experience, which will make them more competitive for jobs and graduate doctoral programs and medical programs.

Note 2: To be eligible for the fifth year program, all students must demonstrate an interest in, demonstrated achievement in, or affinity for biology. This will be determined by having a minimum of 48 semester hours of mathematics and sciences study, including MAT 175 with a GPA of 3.0. Candidates must apply to the program no later than the first semester of their junior year and may apply as early as the second semester of their sophomore year.

The accelerated pace of this program is made possible by offering qualified students the opportunity to take masters level courses during their final year of undergraduate work. Students qualify by demonstrated attainment of a GPA of 3.0 in mathematics and science coursework as well as a GPA of 3.25 in the major through the first three years of study, and by completing all of the necessary prerequisites for those courses, which will ensure that they are prepared for graduate-level work.

Courses in Biological Sciences

*Courses preceded by an asterisk are not expected to be offered in 2013-2015.

BIO 166: Principles of Biology: Cells and Genes.

6 hours (3, lecture; 3, lab), 4 credits. Introduction to the principles of biology governing the unity and diversity of living organisms, with special emphasis on molecular, subcellular, and cellular levels of organization in plants and animals, and on genetics and evolution. Laboratory exercises consist of experimental procedures illustrating basic concepts of biology.

BIO 167: Principles of Biology: Organisms.

6 hours (3, lecture; 3, lab), 4 credits. Introduction to the principles of biology governing the unity and diversity of living organisms, with special emphasis on biological diversity, physiological mechanisms involved in the coordination of activity in plants and animals, and ecology. Laboratory exercises consist of experimental procedures illustrating basic concepts of biology.

BIO 173: Human Biology of Systems.

3 credits, 3 hours. Survey of the structure and function of the human body with emphasis on concepts and current issues in human biology.

Note 1: The one-hour lecture will build on assigned study of online materials such as videotexts /pod casts and similar media over the Internet

Note 2: Cannot be used to satisfy the biology requirement for any major or program that requires a biology course.

BIO 181: Anatomy and Physiology I.

5 hours (3, lecture; 2, lab), 4 credits. (Open only to students majoring in Nursing; Dietetics, Foods, and Nutrition; Health Education; and Physical Education.) Study of human anatomy and physiology. Lecture topics include cell structure and function, tissues, and the study of the skeletal, muscular, nervous, and endocrine systems. Laboratory exercises complement the lecture material with the use of a workbook, models, and animal preparations.

BIO 182: Anatomy and Physiology II.

5 hours (3, lecture; 2, lab), 4 credits. (Open only to students majoring in Nursing; Dietetics, Foods, and Nutrition; Health Education; and Physical Education.) Continuation of BIO 181. Lecture topics include the cardiovascular, respiratory, digestive, urinary, and reproductive systems, and selected topics on metabolism and fluid homeostasis. Emphasis is given to the physiological functioning of these systems. Laboratory experiments illustrate the concepts discussed in the lectures. PREREQ: BIO 181.

BIO 183: Human Biology.

5 hours (3, lecture; 2, lab), 4 credits (closed to students majoring in Biology). Introduction to the structure and function of the human body, with emphasis on the physiological mechanisms in health and disease. Topics include: the molecules of life; cells and tissues; the skeleton; muscles; the heart; blood; skin; the eye; the ear; reproduction theory; the brain; genetics; infectious disease; the immune system; cancer; and nutrition.

BIO 184: Plants and People.

5 hours (3, lecture; 2, lab), 4 credits (closed to students majoring in Biology). Introduction to the world of plants, with emphasis on the interactions and interdependency of plants and people.

Note: All 200-, 300-, and 400-level BIO courses carry the following PREREQ: BIO 166-167 (or equivalents). Additional prerequisites are listed.

BIO 226: Human Physiology.

5 hours (2, lecture; 3, lab), 3.5 credits. (Closed to students majoring in Biology.) Study of human anatomy and physiology, with emphasis on the integration and regulation of physiological processes. Laboratory work illustrates the principles discussed in the lectures.

BIO 227: Mammalian Histology.

6 hours (2, lecture; 4, lab), 4 credits. Microscopic study of cells, tissues, and organs from prepared slides, with emphasis on the correlation between structure and function. Recent advances grounded in electron microscopy and histochemistry are discussed.

BIO 228: Mammalian Physiology.

6 hours (2, lecture; 4, lab), 4 credits. Study of the basic principles of mammalian physiology. Various organ systems will be presented to illustrate their mechanisms of operation, their nervous and hormonal control, and their interrelationships with other organ systems in maintaining homeostasis. Emphasis will be given to the cardiovascular, neuromuscular, renal, and respiratory systems. PREREO: CHE 168-169.

BIO 230: Microbiology.

6 hours (2, lecture; 4, lab), 4 credits. (Open only to students majoring in Nursing; Dietetics, Foods, and Nutrition; Health Education; and Physical Education.) A survey of microbes and their structure, chemical composition, cultivation, ecology, and metabolism; special emphasis on applied aspects (infectious diseases and human resistance, food and industrial microbiology, biotechnology). PREREQ: Two semesters of 100-level biology.

BIO 238: Genetics.

6 hours (2, lecture; 4, lab), 4 credits. Basic principles of genetics and modern developments in the field, with their theoretical and practical implications: the inheritance, structure, and mode of action of the genetic material in microorganisms, plants, and animals, including man. Laboratory work consists of preparation and examination of chromosome material and experiments with segregating characters in a variety of organisms.

BIO 240: Biostatistics.

3 credits, 4 hours (2, lecture; 2, lab). Data analysis and construction of tables, figures, and paragraphs suitable for publication in biological journals. Experimental design informed by power analysis of preliminary data. Introduction to randomization, bootstrap, and Monte Carlo in biological research; and coverage of traditional topics in biostatistics. Computer programming of biological algorithms in JSL (SAS) and R. PREREO: BIO 166 & 167, MAT 175.

BIO 241: Evolution, Species, and Biogeography.

3 hours (lecture), 3 credits. This course will explore the three major themes of Evolution, Species, and Biogeography from their historical antecedents to modern ideas. The course will provide the student with a full understanding of the ideas that shape current thinking in organismic biology and advance the dialogue in systematics, ecology, biodiversity, and conservation. PREREQ: BIO 166 and 167, or equivalents. NOTE: Basic computer skills and familiarity with the Internet are strongly recommended.

BIO 242: Flowering Plants.

6 hours (2, lecture; 4, lab), 4 credits. Identification and classification of flowering plants by the use of manuals. The characteristics and evolutionary position of selected families, including a discussion of economically important plants. Laboratory work is supplemented by field trips.

BIO 244: Growth and Development of Lower Plants.

6 hours (2, lecture; 4, lab), 4 credits. Algae, fungi, liverworts, and mosses are cultured and studied macroscopically and microscopically through all phases of their life cycles. Emphasis is on growth and differentiation, reproductive processes, and the phylogenetic interrelationships among groups. Laboratory work will be supplemented by field trips.

BIO 246: Growth and Development of Higher Plants.

6 hours (2, lecture; 4, lab), 4 credits. Vegetative and reproductive structures of primitive tracheophytes, gymnosperms, and angiosperms are studied in living, cultured, preserved, and fossilized materials in an attempt to trace the growth and phylogenetic development of these groups. Laboratory work will be supplemented by field trips.

BIO 266: Invertebrate Zoology.

6 hours (2, lecture; 4, lab), 4 credits. Survey of the anatomy and natural history of the invertebrates. Emphasis is not only on the evolutionary relationships but also on functional problems presented by the environment and the mechanisms by which they are solved.

BIO 267: Comparative Anatomy of Vertebrates.

6 hours (2, lecture; 4, lab), 4 credits. Evolution of chordates, with emphasis on comparative anatomic, functional, and developmental aspects of vertebrate organ systems. Laboratory dissections of representatives of each of the vertebrate classes will be performed.

BIO 268: Vertebrate Embryology.

6 hours (2, lecture; 4, lab), 4 credits. Experimental studies and modern theories of development. Laboratory study of the frog, chick, and mammal.

BIO 269: The Biology of Insects.

6 hours (2, lecture; 4, lab), 4 credits. Anatomy, behavior, classification, ecology, and physiology of insects. The laboratory will include field trips and projects.

BIO 270: Invertebrate Zoology.

3 hours (lecture), 3 credits. Anatomy and natural history of invertebrates. Evolutionary relationships and functional problems presented by the environment and the mechanisms by which they are solved.

BIO 271: Invertebrate Zoology Laboratory.

4 hours (lab), 2 credits. Techniques used in the study of invertebrates. PRE or COREQ: Invertebrate Zoology, BIO 270.

BIO (GEP) 302: Biogeography.

5 hours (3, lecture; 2, lab), 4 credits. Analysis of the origin, distribution, adaptation, and association of plants and animals. Development of living communities considered particularly in space but also in time. Stress placed on broad distributional relationships. PREREQ: GEP 226.

BIO 303: Molecular Genetics.

5 hours (3, lecture; 2, lab), 4 credits. Gene structure, organization, and expression. Experimental methods used for studying genes and their products. PREREQ: One 200-level BIO course.

BIO 310: Parasitology.

5 hours (2, lecture; 3, lab), 3.5 credits. PREREQ: One 200-level BIO course, BIO 266 recommended.

BIO 312: Parasitology Laboratory.

4 hours, 2 credits. Microscopic identification of life cycle stages of parasites. Diagnostic testing of animal parasites covered in BIO 311. PRE- or COREQ: BIO 311.

BIO 330: Plant Physiology.

6 hours (2, lecture; 4, lab), 4 credits. Consideration of the major physiological processes of plants, with special emphasis on water relations, inorganic nutrition, photosynthesis, metabolism, and hormonal relationships. Laboratory studies consist of physiological experiments with living plants. PREREQ: CHE 234-235.

BIO 331: Experimental Microbiology.

6 hours (2, lecture; 4, lab), 4 credits. Basic analyses of the life of microorganisms, with emphasis on microbial cellular structure, metabolic pathways, and microbial growth and control of growth; microbial genetics and gene expression; and microbial diversity. The impact of microbial growth on humans and the environment will be discussed in detail. PREREO: CHE 168-169.

BIO (GEO) 332: Advanced Oceanography.

5 hours (2, lecture; 3, lab or seminar; several day-long research exercises), 3.5 credits. Interaction between the geologic and biotic elements of the oceans and their basins. Emphasis is on correlating the broad spectrum of approaches in modern oceanography. CUNY oceanographic facilities will be used. Field experience. PREREQ (BIO major): BIO 166-167, either GEO 166 or 168, and either CHE 114 or 166-167. PREREQ (GEO major): Either GEO 166 or GEO 168, GEO 167, either BIO 166 or BIO 167, and either CHE 114 or CHE 166-167. NOTE: BIO (GEO) 332 is accepted toward fulfillment of either the BIO or the GEO major requirements.

BIO 333: Endocrine Physiology.

6 hours (3, lecture; 4, lab), 4 credits. Endocrine regulation of growth, development, metabolism, and reproduction. Laboratory experiments on endocrine regulation of physiological processes with the use of small animals (rats, frogs, and fishes) include experience with surgical techniques and radioisotopes. PREREQ: CHE 234-235.

BIO 335: Marine Biology.

6 hours (2, lecture; 4, lab; and field trips), 4 credits. Current concepts in marine and littoral ecology will be discussed. Students will gain an understanding of how organisms deal with the unique physical and chemical characteristics imposed by this environment. PREREQ: One 200-level BIO course (BIO 238 or BIO 266 recommended).

BIO 336: Marine Biology Lectures.

3 hours, 3 credits. Current concepts in estuarine, marine, and littoral ecology, including how organisms deal with the unique physical and chemical characteristics imposed by these environments. PREREQ: One 200-level BIO course (BIO 238, BIO 268, BIO 266, or BIO 267 recommended).

BIO 337: Marine Biology Laboratory.

4 hours (lab and field trips), 2 credits. Laboratory and field work stressing techniques useful in basic environmental analysis, community analysis, and population dynamics of marine and estuarine organisms. PRE or COREQ: Marine Biology (Lectures), BIO 336.

BIO 338: Genetics of Man.

6 hours (2, lecture; 4, lab), 4 credits. Principles of human genetics and their significance in the health sciences. The relationship between genetics and human diseases. Lecture topics include: chromosomal and genetic abnormalities in humans, metabolic variation and disease, patterns of human heredity, immunogenetics, population genetics, genetic counseling. Laboratory work includes karyotype analysis, study of biochemical and morphologic variation, probability and statistical testing, immunogenetics. Open to biology majors only. PREREQ: BIO 238.

BIO 339: Ecology.

6 hours (2, lecture; 4, lab; and field trips), 4 credits. Introduction to the factors comprising biotic communities, with special emphasis on the properties of populations and communities. Laboratory and fieldwork stress techniques useful in basic environmental and community analyses. PREREQ: One 200-level BIO course (BIO 242 or 266 recommended).

BIO 340: Human Body and Brain.

3 hours, 3 credits. Human anatomy and physiology with emphasis on the brain's role in regulating body functions. PREREQ: BIO 166, BIO 167.

BIO 341: Human Body and Brain Laboratory.

4 hours (Lab), 2 credits. Laboratory focused on anatomical structures of the body organs and the brain. PRE- or COREQ: BIO 340: Human Body and Brain.

BIO 400: Biological Chemistry.

6 hours (2, lecture; 4, lab), 4 credits. Stress on the central role of biomolecules in living cells: biological oxidation and intermediary metabolism of carbohydrates, lipids, and proteins, and the general properties of enzymes and enzyme-catalyzed reactions in the intact cell and cell-free systems. Laboratory work stresses use of modern techniques used in biochemical analysis and in enzyme assays. PREREQ: Two additional BIO courses and CHE 234-235.

BIO 401: Biological Systematics.

6 hours (2, lecture; 4, lab), 4 credits. A study of the theoretical basis and methodologies of each of the current schools of systematics, and the arguments used by each school in uncovering the phylogenetic relationships among organisms. Topics to be covered will include Aristotelian essentialism, evolutionary systematics, phenetics, cladistics (phylogenetic systematics), transformed (pattern) cladistics, monophyly, paraphyly, polyphyly, parsimony, homology, homoplasy, character state analysis, and polarity. PREREQ: Two additional BIO courses.

BIO 404: Plant Biochemistry.

6 hours (2, lecture; 4, lab), 4 credits. Biochemical activities of plants, including photosynthesis, respiratory pathways, sulfate and nitrate reduction, and cell-wall metabolism will be discussed. The biosynthesis by plants of drugs of pharmacological significance such as alkaloids and vitamins will also be considered. Laboratory work will include techniques for fractionating plant cells and isolating intermediates and products' metabolic pathways. PREREQ: Two additional BIO courses and CHE 234-235.

BIO 406: Biochemistry of Differentiation.

3 hours, 3 credits. The regulatory mechanisms controlling the changing of cells from a pre-existing condition to one of increased complexity and specialization will be considered. Evidence for biochemical interaction between the nucleus and cytoplasm in normal, hybrid, and cancer cells will be presented, and hypotheses suggested by specific experiments discussed. PREREQ: BIO 238, one other BIO course, and CHE 234-235.

BIO 410: Cell Physiology and Biochemistry.

6 hours (2, lecture; 4, lab), 4 credits. Consideration of structure in relation to function in the intact cell system. Metabolic regulation and the properties of cell membranes, the cytoplasm, the nucleus, and the genes are discussed in terms of some of the integrated activities of the living cell, including permeability, active transport, excitation, conduction, contraction, differentiation, and aging. PREREQ: Either two additional BIO courses or one BIO course plus one semester of physical chemistry, and CHE 234-235.

BIO 420: Molecular Biology.

6 hours (2, lecture; 4, lab), 4 credits. Discussion of structure and function of nucleic acids and proteins and their synthesis in vivo and in vitro. Basic concepts in molecular genetics are studied, with special emphasis on the molecular architecture of the gene, its action, and regulations in bacteria and bacteriophages. Laboratory experiments include techniques for isolation and quantitation of nucleic acids from cells, use of the cell-free synthesizing systems, and basic procedures in microbial genetics. PREREQ: CHE 234-235, BIO 238, and either BIO 400 or CHE 444.

BIO 424: Ichthyology.

6 hours (2, lecture; 4, seminar, lab, or fieldwork), 4 credits. In-depth consideration of the life histories of fishes. Emphasis on the general and specific physiological adaptations of these organisms to the functional problems presented by the aquatic environment. PREREQ: Two additional BIO courses.

BIO 425: Ichthyology.

3 hours, *3 credits*. Life histories of fishes, including a study of the mathematical and statistical methods for the treatment and evaluation of data relevant to the field of fisheries science. PREREQ: Two Biology courses at the 200 level or above.

BIO 426: Ichthyology Laboratory.

4 hours (lab and field trips), 2 credits. Laboratory and field work stressing techniques useful in basic fish anatomy, community analysis, population dynamics, and statistical modeling of data relevant to fisheries science. PRE or COREQ: BIO 425.

BIO 431: Comparative Animal Physiology.

6 hours (2, lecture; 4, lab) 4 credits. Comparative aspects of cellular and organ physiology, the evolutionary basis for development of homeostatic mechanisms, and structure-function correlation within the animal kingdom. Laboratory work includes the use of modern techniques to elucidate and illustrate the principles discussed in the lectures. PREREQ: Two additional BIO courses and CHE 234-235.

BIO 432: Biological Fine Structure.

3 hours, 3 credits. Detailed description of cell structure at the macromolecular level as revealed by modern methods of fine-structure analysis, especially by electron microscopy. Emphasis on structure-function relationships in cell components. Demonstration of the various methods used in fine-structure analysis. PREREQ: Two additional BIO courses. COREQ: BIO 433.

BIO 433: Techniques in Electron Microscopy.

6 hours, 3 credits. Fundamental training in techniques used in obtaining structural cellular information at the macromolecular level. Emphasis is on methods and applications of electron microscopy to the study of biological materials. PREREQ: Two additional BIO courses. COREQ: BIO 432.

BIO 435: Neurophysiology.

3 hours, 3 credits. A general consideration of nervous systems, excitable membrane physiology, synapses, sensory receptors, trophic function, regeneration of nervous tissue, and behavior. PREREQ: Two additional BIO courses, including at least one course in animal physiology, and CHE 234-235. COREQ: BIO

BIO 436: Neurophysiology Laboratory.

4 hours, 2 credits. The laboratory will introduce students to instrumentation and neurophysiological techniques. The experiments will examine bioelectricity, receptor processes, central processes, behavior, and regeneration. COREQ: BIO 435.

BIO 450: Biology Seminar.

One semester, 1 credit (maximum 2 credits). The seminar provides an opportunity for reading current literature in selected areas of interest for the study of reports and for discussions. PREREQ: 15 credits in BIO and CHE 168-169.

BIO 465: Microbial Physiology and Genetics.

6 hours (2, lecture; 4, lab), 4 credits. The organization of physiological processes in microorganisms, including structure, energy-yielding mechanisms, macromolecular biosynthesis, growth, and regulation. The genetics of microorganisms, including the organization, maintenance, and expression of genetic information, cell growth, and differentiation and genetic engineering. PREREQ: Experimental Microbiology (BIO 331).

*BIO (GEO) 470: Oceanographic Research Cruise.

90 hours (fieldwork and lab), 3 credits. (Between spring and summer sessions.) PREREQ: Either BIO (GEO) 332 or BIO 335. NOTE: Please consult the Department chair before registering for this course.

BIO 489: Introduction to Experimental Biology.

One semester, 1 credit (maximum 3 credits). Individual laboratory investigation for advanced students, under the guidance of a faculty member. PREREQ: Sponsorship of a faculty member, Departmental permission prior to preliminary registration, and 15 BIO credits.

BIO 490: Honors in Biological Sciences.

One semester, 3 credits (maximum 3 credits). Independent laboratory investigation for advanced students, under the guidance of a faculty member (minimum of 90 hours). A GPA of 3.0 or better at the time of registration, satisfactory completion of 18 credits in BIO or related fields, including either PHY 167 or 169, plus CHE 234-235, and endorsement by a faculty member to be submitted to the Chair prior to preliminary registration.

Special Program in Plant Sciences in Conjunction with the New York Botanical Garden

The purpose of the New York Botanical Garden's Continuing

Education Program is to interest and instruct the general public in the various facets of plant life. Several major programs of study are offered: Botany, Genetics and Evolution, Field Botany, Plant Morphology and Taxonomy, and Home Landscaping. Among the offerings at the Garden, the courses listed below may be counted for elective credit at Lehman College. These courses are not open to students in the Biology major except in special circumstances to be decided in consultation with the Biological Sciences Department. They are taught by members of the New York Botanical Garden staff, all specialists and experienced teachers in their specific areas. In general, they involve lectures, discussions, demonstrations, and films. Laboratory activity is indicated as part of the course description.

Courses in Botany

BBG 111: Basic Botany.

15 hours, 1 credit. Among the topics covered are: plant cells and tissues, cell division, reproduction, genetics, anatomy, plant diversity and systematics, evolution, water relationships, respiration, photosynthesis, and ecology.

BBG 112: Plant Form and Function.

12 hours, 1 credit. An introduction to the anatomy and physiology of plant cells and organs. The difference between physiology and anatomy (or morphology) is that physiology is dynamic concerned with the functions and vital function of organisms while the morphologist's concern is primarily geared toward form and structure. Includes laboratory work. PREREQ: BBG 111.

BBG 113: Physiology of Plants.

12 hours, 1 credit. Plant growth and development, hormones, tropisms, phytochrome, dormancy, responses to low temperature, flowering, senescence and abscission, with emphasis on the physiological variations that occur from season to season. PREREQ: BBG 112.

BBG 114: Ecology.

12 hours, 1 credit. The relationship of vegetation study to ecology; the classification and description of forest and wetland communities; the influence of climate, soil, topography, geology, and man on the vegetation. Local flora will be compared with that in other parts of the United States.

BBG 115: Field Botany.

12 hours, 1 credit. The cryptogams are seedless plants: algae, fungi, mosses, hepatics, lichens, ferns, and fern allies. The recognition and collection of cryptogams for observation in herbariums. Weather permitting, some classes will be field trips in or near the New York Botanical Garden. PREREQ: BBG 114.

BBG 116: Field Botany.

12 hours, 1 credit. Identification of common trees, shrubs, and flowers in the area; naming and basic plant structure; practice in using taxonomic keys of identification. Students are required to make their own personal plant collections. PREREQ: BBG 114.

BBG 117: Evolutionary Biology.

12 hours, 1 credit. Learning to read the fossil record: an introduction to such disciplines as paleoecology, geochemistry, and paleochemotaxonomy. Computer analysis applied to historical biology. PREREQ: BBG 111.

BBG 118: General Genetics.

12 hours, 1 credit. Specific patterns of gene inheritance by Mendelian and non-Mendelian mechanisms; the use of probability and statistics; the role of DNA-RNA as the "code of life." PREREQ: BBG 111.

BBG 119: Paleobotany.

12 hours, 1 credit. A history of the large fossil plant groups and their characters, with emphasis on evolution, ecology, dispersal, paleoclimates, and practical applications. PREREQ: BBG 111.

BBG 120: Morphology of Flowering Plants.

20 hours, 1 credit. The basic structure of flowering plants as viewed with a dissecting microscope for the examination of living flowers of highly specialized structure and with the compound microscope for the observation of anatomical slides. The student will have the opportunity to make botanical illustrations of the dissection specimen.

BBG 121: Systematic Botany.

12 hours, 1 credit. The principles of classifying plants into species, genus, family, etc. Typical flower structure and modifications that affect classification. PREREQ: BBG 111.

Business and Liberal Arts

Program Director: Terrence Cheng, Department of English Administrative Director: Michelle Carr, Division of Institutional Advancement

Steering Committee: Timothy Alborn, Dean of Arts and Humanities; Michael Buckley, Philosophy; Michelle Carr; Terrence Cheng, English; Michael Ferraro, Art; Elhum Haghighat, Political Science and Sociology; Lisa Hirschfeld, Institutional Advancement; William Hoffman, Journalism, Communication, and Theatre; Edward Jarroll, Dean of Natural and Social Sciences; Liesl Jones, Biology; Orhan Kayaalp, Economics and Business; Marie Marianetti, History; Janet Skolnik, Adult Degree Program.

The Business and Liberal Arts

http://www.lehman.edu/academics/arts-humanities Program enables students to combine a traditional liberal arts education (including the natural and social sciences) with effective training in the business and/or not-for-profit sectors. Many liberal arts colleges around the nation have taken the initiative to prepare their students for business and non-profit careers without compromising the traditional characteristic of their educational mission. The administrators and educators of these institutions have noted that employers look for potential managers, who in addition to having excelled in critical thinking, effective communication, and analytical ability honed in liberal arts curriculums, also possess a general knowledge of business environments. This program both reaffirms the fundamental importance of liberal arts in college graduates' overall development and provides the necessary theoretical and practical exposure to the global business world through appropriate courses, workshops, mentorship, and/or internships.

Minor in Business for Liberal Arts Majors

This minor, under the supervision of the Business and Liberal Arts Program, is designed to provide students majoring in the traditional fields of liberal arts with basic knowledge and skills useful for a career in business. Students may also apply for admission to the Internship Sequence, which includes an additional 4- or 5-credit course requirement and is supplemented by internships, workshops, seminars, mentoring opportunities, and advising.

Requirements

Students may declare the minor in Business for Liberal Arts Majors upon successful completion of two semesters of a declared Liberal Arts major* (i.e., 24 credits). Acceptance into the Internship Sequence is by written application to the Director of the Business and Liberal Arts Program.

The required courses are distributed as follows:

Credits (12-17)

- 3 in accounting (ACC 171)
- 6 in management (BBA 204; BBA 328 or 332)
- 3 in communication (MMS 300** or PHI 330)

To continue in the Internship Sequence, candidates must complete an additional 4-5 credits in HUM 470 or POL/SOC 470 or NSS 470. To register for one of these courses, students must earn an overall G.P.A. of 3.0 or better in the minor.

- * See the list of approved Liberal Arts majors below.
- ** This course has prerequisites that may be satisfied by recommendation of the relevant Department.

NOTE: The same courses may not be used to satisfy the requirements for both the major and the minor in Business for Liberal Arts Majors.

List of Approved Liberal Arts Majors

African and African American Studies

American Studies

Anthropology

Art and Art History

Biological Sciences

Chemistry

Comparative Literature

English

Languages and Literatures

Geography

Geology

History

Italian American Studies

Multimedia Journalism

Latin American and Puerto Rican Studies

Linguistics

Mathematics

Music

Philosophy

Physics

Political Science

Psychology

Sociology

Theatre and Dance

Students in the Adult Degree Program are also encouraged to apply.

Chemistry

Department Chair: Gustavo Lopez (Davis Hall, Room 315).
Faculty Adviser: Marc Lazarus (Davis Hall, Room 336)
Department Faculty and Staff: Professors: Iraj Ganjian, Marc S.
Lazarus, Gustavo Lopez, Anny Morrobel-Sosa, Manfred Philipp,
Robert Troy; Associate Professor: John L. Richards; Assistant
Professors: Andrei Jitianu, Prabodhika Mallikaratchy, Naphtali
O'Connor, Thomas Young; Chief College Laboratory Technician:
Sharif Elhakem; Senior College Lab Technicians: Bibi N. Gafur;
College Laboratory Technician: Habib Girgis

The Department of Chemistry offers degree programs designed to prepare students for advanced study and careers in chemistry, biochemistry, and related fields, including medicine and dentistry. For students majoring in other science or science-related fields, the Department offers courses needed to pursue careers in science teaching, medicine, dentistry, nursing, and nutrition. For non-science majors, courses are offered that present the concepts and facts of chemistry useful in understanding and appreciating present-day scientific knowledge and its application to everyday life. The B.S. in Chemistry and Chemistry with a specialization in Biochemistry are accredited by the American Chemical Society (ACS).

Departmental Honors

In order for students to receive departmental honors they must satisfy the College requirements for departmental honors and must complete CHE 491 with a grade of B+ or greater.

Chemistry, B.A. (54-59 Credit Major)

This major is recommended for those students in chemistry who are preparing for (1) admission to medical, veterinary, or dental school; (2) certification as secondary school teachers of chemistry; or (3) positions in the chemical industry. The required courses and credits are distributed as follows:

Credits (54-59)

- 34-37 In chemistry: CHE 166-167 (or equivalent), 168-169, 232-233, 234-235, 249, 342, 344, and 345, and either CHE 347 or 449.
- 20-22 In mathematics and physics: MAT 175-176, MAT 226, and either PHY 166-167 or 168-169.

Anthropology (Physical), Biology and Chemistry B.S. (60 Credit Interdisciplinary Major)

See the description for this program in the Anthropology section of this Bulletin.

Chemistry, B.S. (76-77 Credit Major)

This major is recommended for students preparing for graduate school in chemistry or for careers in chemical research. The B.S. program is accredited by the Committee on Professional Training of the American Chemical Society (A.C.S.). The required courses and credits are distributed as follows:

Credits (76-77)

- 54-55 *In chemistry:* CHE 166-167 (or equivalent), 168-169, 232-233, 234-235, 249, 327, 342, 344, 345, 347, 442, 443, and 449, and two additional advanced CHE courses
- 22 In mathematics and physics: MAT 175, 176, MAT 226, and either PHY 166-167 or 168-169

Chemistry, B.S., with a Specialization in Biochemistry (81 Credit Major)

This major prepares students for (1) graduate study in biochemistry, molecular biology, immunochemistry, pharmacology, or clinical chemistry; (2) professional training in medicine, dentistry, and other health-related sciences; and (3) careers in biochemistry or biomedicine in hospitals, medical schools, or the chemical industry. The B.S. program in Biochemistry is accredited by the Committee on Professional Training of the American Chemical Society (A.C.S.). The distribution of required courses and credits is as follows:

Credits (81)

- 47 In chemistry: CHE 166-167, 168-169, 232-233, 234-235, 249, 332, 334, 335, 442, 443, 444, and 446-447.
- 16 In biological sciences: BIO 166, 167, 238, and 420.
- 18 In mathematics and physics: MAT 175, 176, and either PHY 166-167 or 168-169.

Preparation for Teaching

Students planning to teach should consult their advisers as well as the Office of the Dean of Education (Carman Hall, Room B-33).

Requirements for a Chemistry Minor

Students must complete 10 credits in organic chemistry—CHE 232-233 *and* 234-235—and also choose either CHE 249 (quantitative analysis, 5 credits) *or* CHE 332 (physical chemistry, 3 credits).

Courses in Chemistry

Information for co-requisite courses CHE 104-235.

**If it is necessary to repeat either a lecture course or a laboratory course and a passing grade has already been obtained in both courses, the co-requisite course is not to be repeated. However, note that credit will be withheld, and the student will not be admitted to further chemistry courses until both the lecture and laboratory have been completed satisfactorily.

CHE 001: Preparation for General Chemistry.

3 hours, 0 credits. Practice in handling mathematical problems in physical science and an introduction to certain fundamental topics in chemistry, for students who have had insufficient high school training in the physical sciences.

**CHE 104: Introductory Chemistry I.

3 hours, 1.5 credits. (CHE 104 and 106 together are equivalent to CHE 166. Either CHE 104 and 106 or CHE 166 is required of students taking more than one year of chemistry—except students majoring in nutrition—and of pre-engineering students. Either 104 and 106 or 166 is recommended to premedical, preveterinary, and predental students.) A course presenting the fundamental laws and theories of chemistry. Considerable emphasis will be placed on the application of the mathematical and reasoning skills necessary to solve chemical problems. PREREQ: Completion of the College's Requirement in Mathematics. NOTE: CHE 104 is not credited without CHE 106. A student may receive credit for only one of the following: CHE 104 and 106, 114, 136, and 166. (See information for corequisite courses.)

**CHE 105: Introductory Chemistry Laboratory I.

4 hours (3, lab; 1, problem lab), 1 credit. Introduction to the methods of scientific investigation, including basic physical and chemical laboratory techniques. Applications will include the synthesis and analysis of simple chemical systems. COREQ: CHE 104. (See information for corequisite courses.)

**CHE 106: Introductory Chemistry II.

3 hours, 1.5 credits. Continuation of CHE 104: a course presenting the fundamental laws and theories of chemistry. Considerable emphasis will be placed on the application of the mathematical and reasoning skills necessary to solve chemical problems. PREREQ: CHE 104. COREQ: CHE 107. (See information for corequisite courses.)

**CHE 107: Introductory Chemistry Laboratory II.

4 hours (3, lab; 1, problem lab), 1 credit. Continuation of CHE 105: introduction to the methods of scientific investigation, including basic physical and chemical laboratory techniques. Applications will include synthesis and analysis of simple chemical systems. PREREQ: CHE 105. COREQ: CHE 106. (See information for corequisite courses.)

**CHE 114: Essentials of General Chemistry—Lecture.

3 hours, 3 credits. Essentials of chemistry and their applications to inorganic chemistry. PREREQ: Completion of the College's Requirement in Mathematics. A student may not receive credit for CHE 114 until they have completed CHE 115.

**CHE 115: Essentials of General Chemistry—Laboratory.

3 hours, 1.5 credits. Introduction to laboratory experimentation to familiarize students with scientific measurements and practical chemical reactions. PREREQ or COREQ: CHE 114.

**CHE 120: Essentials of Organic Chemistry Lecture I.

3 hours, 3 credits. Essentials of organic chemistry and their application to biochemistry. PREREQ: CHE 114 and CHE 115.

**CHE 121: Essentials of Organic Chemistry Laboratory II.

3 hours, 1.5 credits. Practical organic laboratory techniques and preparations to illustrate the lectures in CHE 120. PREREQ or COREQ: CHE 120.

CHE 136: Elements of Chemistry.

5 hours (3, lecture; 2, lab), 4 credits. Basic principles of chemistry through laboratory and other discovery experiences together with lectures and workshops.

The course covers basic topics such as combustion, chemical reactions, atoms and molecules, ions, acids and bases, and the periodic table. NOTE: Cannot be used to satisfy the chemistry requirement for any major or program that requires a chemistry course.

CHE 137: Elements of Chemistry I.

3 hours, 3 credits. Basic principles of chemistry centering on laboratory and other discovery experiences together with lectures and workshops. Topics include combustion, chemical reactions, atoms and molecules, and the development of the Periodic Table. COREQ: CHE 138. NOTE: Cannot be used to satisfy the chemistry requirement for any major or program that requires a chemistry course.

CHE 138: Elements of Chemistry II.

3 hours, 3 credits. Basic principles of chemistry centering on laboratory and other discovery experiences together with lectures and workshops. Topics include. the relationship of chemistry to electricity, ions, acids and bases, acid rain, electronic structure of atoms and rules of chemical bonding. COREQ CHE 137. NOTE: Cannot be used to satisfy the chemistry requirement for any major or program that requires a chemistry course.

**CHE 166: General Chemistry I.

3 hours, 3 credits. Fundamental laws and theories of chemistry. PREREQ: MAT 172 or MAT 175 or more advanced calculus course. COREQ: CHE 167.

NOTE 1: Either CHE 166 or CHE 104 and 106 are required of students planning to take more than one year of chemistry (except students majoring in nutrition) and of pre-engineering students. NOTE 2: CHE 104 and 106 or CHE 166 is recommended to premedical, preveterinary, and predental students.

**CHE 167: General Chemistry Laboratory I.

4 hours (3, lab; 1, problem lab), 2 credits. Introduction to the practical aspects of chemical principles, with emphasis on quantitative measurements and analytical technique. COREQ: CHE 166. (See information for corequisite courses.)

**CHE 168: General Chemistry II.

3 hours, 3 credits. Continuation of CHE 166 or 106: the presentation of the fundamental laws and theories of chemistry in considerable depth. PREREQ: CHE 166 or 104 and 106 (or equivalent, as approved by the Chair). COREQ: CHE 169. (See information for corequisite courses.)

**CHE 169: General Chemistry Laboratory II.

4 hours (3, lab; 1, problem lab), 2 credits. Continuation of CHE 167 or 107. Emphasis will be on inorganic preparation, ionic separation, and qualitative analysis. PREREQ: CHE 167 or 107. COREQ: CHE 168. (See information for corequisite courses.)

CHE 209: Clinical Chemistry.

8 hours (2, lecture; 6, lab), 4 credits. PREREQ: Either CHE 120-121 or 168-169. Study of the fundamentals of analytical methods used in the clinical laboratory, including standard clinical procedures and their application to the analysis of body fluids. Metabolic pathways and their relation to normal and pathological conditions will be discussed. PREREQ: Either CHE 120-121 or 168-169.

**CHE 232: Organic Chemistry Lecture I.

3 hours, 3 credits. Study of the structure and properties of the fundamental classes of organic compounds, with emphasis on reactivity, reaction mechanisms, synthesis, and stereochemistry. PREREQ: CHE 168-169. COREQ: CHE 233. Note: No student may receive credit for both CHE 232 and 120. (See information for corequisite courses.)

**CHE 233: Organic Chemistry Laboratory I.

4 hours, 2 credits. Study of organic synthesis and laboratory techniques, including the use of modern instrumentation and organic qualitative analysis. PREREQ: CHE 168-169. COREQ: CHE 232. (See information for corequisite courses.)

**CHE 234: Organic Chemistry Lecture II.

3 hours, 3 credits. Continuation of CHE 232. PREREQ: CHE 232. COREQ: CHE 235. (See information for corequisite courses.)

**CHE 235: Organic Chemistry Laboratory II.

4 hours, 2 credits. Continuation of CHE 233. PREREQ: CHE 233. COREQ: CHE 234. (See information for corequisite courses.)

CHE 244: Introduction to Biochemistry.

3 hours, 3 credits. (Closed to students majoring in Chemistry.) Fall semester only. Introductory course emphasizing the study of the structure, reactions, and syntheses of biological compounds; mechanism of enzyme-catalyzed reactions; and biochemical genetics. PREREQ: CHE 120. Note: No student may receive credit for both CHE 244 and 444 or 446.

CHE 245: Biochemistry Laboratory.

3 hours, 1.5 credits. (Closed to students majoring in Chemistry.) Fall semester only. Laboratory exercises designed to illustrate the biochemical aspects of nutrition. Properties and metabolic roles of carbohydrates, lipids, proteins, enzymes, hormones, vitamins, and minerals will be emphasized. PREREQ: CHE 120-121. COREQ: CHE 244. NOTE: Credit may not be received for both CHE 245 and 447.

CHE 249: Quantitative Analysis.

8 hours (2, lecture; 6, lab), 5 credits. Fall term only. Principles of gravimetric, volumetric, and spectrophotometric analysis. Methods involving acidimetry, precipitation, chelation, oxidation, and iodometry. Analytical separations. PREREQ: CHE 168-169.

CHE 266: Introduction to Forensic Science.

5 hours (1, lecture; 4, lab), 3 credits. The application of the natural sciences to matters of law. Recognizing, preserving, analyzing, and interpreting physical evidence to provide information to the courts and law enforcement agencies.

CHE 320: Medicinal Chemistry.

3 hours, 3 credits. An examination of the relationship between molecular structure and biological activity for some of the more important classes of therapeutic agents. Relevant nomenclature, functional group chemistry, and stereochemistry of the major classes of organic compounds; mechanism of action; structure-activity relationships, and other factors that influence drug action will be discussed. PREREQ: CHE 234 and BIO 167.

CHE 327: Structure Determination and Organic Analysis.

8 hours (2, lecture; 6, lab), 5 credits. Qualitative identification of organic compounds and characteristic groups, including the use of instrumentation, the preparation of derivatives, and the consultation of chemical literature. PREREQ: CHE 234-235.

CHE 332: Introductory Physical Chemistry I.

3 hours, 3 credits. Fall term only. (Intended for students majoring in Biochemistry or Biology.) An introduction to the principles of thermodynamics, kinetics, and molecular structure fundamental to the understanding of living systems. Applications of principles will include such topics as physical properties of proteins and nucleic acids, membrane transport, diffusion, enzyme kinetics, x-ray diffraction, and molecular spectroscopy. PREREQ: CHE 168-169, MAT 175, and PHY 166. PRE- or COREQ: MAT 176 and PHY 167.

CHE 334: Introductory Physical Chemistry II.

3 hours, 3 credits. Spring term only. Continuation of CHE 332. PREREQ: CHE 332.

CHE 335: Introductory Physical Chemistry of Biosystems Laboratory.

6 hours, 3 credits. Spring term only. Experimental work employing physico-chemical techniques in the investigation of biochemical processes. PREREQ: CHE 249 and 332. PRE- or COREQ: CHE 334.

CHE 342: Physical Chemistry Lecture I.

3 hours, 3 credits. Fall term only. An in-depth study of thermodynamics, states of matter, statistical thermodynamics, kinetics, and an introduction to quantum mechanics. The relation between experiment and theory will be emphasized. PREREQ: CHE 168-169, either PHY 167 or 169, and MAT 176. PRE- or COREQ: MAT 226. Note: This course meets the requirements of the A.C.S.-certified B.S. in chemistry.

CHE 344: Physical Chemistry Lecture II.

3 hours, 3 credits. Spring term only. Continuation of CHE 342. PREREQ: CHE 342 and MAT 226.

CHE 345: Physical Chemistry Laboratory I.

4 hours, 2 credits. Experimental work employing important physicochemical techniques. PREREQ: CHE 249 and 342. COREQ: CHE 342, with Departmental permission.

CHE 347: Physical Chemistry Laboratory II.

4 hours, 2 credits. Continuation of CHE 345. PREREQ: CHE 344 and 345. COREQ: CHE 344, with Departmental permission.

CHE 391: Chemical Investigations.

9 hours (1, conference; 8, lab), 3 credits (maximum 6 credits). (Limited to students majoring in Chemistry and Biochemistry.) A course designed to allow qualified students to participate in original chemical investigation under the supervision of a faculty member. A written report is required each semester. PREREQ: CHE 234-235 and Departmental permission. Note: The total credits received for CHE 391 and 491 may not exceed 9.

CHE 440: Quantum Chemistry.

3 hours, 3 credits. PREREQ: CHE 344 or 334. RECOMMENDED: MAT 323.

CHE 442: Inorganic Chemistry.

3 hours, 3 credits. Developments in modern chemical theories in the interpretation and explanation of the properties of, and relationships existing between, the elements and their compounds. PREREQ: CHE 234. PRE-or COREQ: CHE 334 or 344.

CHE 443: Inorganic Chemistry Laboratory.

2 hours, 1 credit. Inorganic synthesis and characterization of compounds by instrumental and other modern techniques. PREREQ: CHE 234-235. PRE- or COREQ: CHE 344 and 442.

CHE 444: Biochemistry I.

4 hours (3, lecture; 1, problem session), 3 credits. (Closed to students who have taken CHE 244.) Fall term only. Study of amino acids, protein structure and conformation, kinetic and molecular basis of enzyme action, lipids, and membrane structure, carbohydrates and intermediary metabolism, regulatory mechanisms, elementary thermodynamics in biochemical equilibria, and relationships between structure and function of biological macromolecules. PREREQ: CHE 234. PRE- or COREQ: CHE 334 or 344.

CHE 446: Biochemistry II.

3 hours, 3 credits. Spring term only. A continuation of CHE 444. Study of photosynthesis, biosynthetic pathways, structure and reactivity of nucleic acids, regulation of gene expression, active transport, mechanism of muscle contraction, and immunochemistry. PREREQ: CHE 444.

CHE 447: Biochemistry Laboratory.

6 hours, 3 credits. Spring term only. Techniques for the study of large molecules of biological importance; physical and chemical methods of isolation, characterization, structure determination, sequence, and biosynthesis of macromolecules; and kinetics and mechanism of enzyme-catalyzed reactions. Laboratory work will include the application of the following methods to the study of biological molecules: spectrophotometry, chromatography (thin layer, ion exchange, and column), gradient centrifugation, electrophoresis, and radiochemical assays. PRE- or COREQ: CHE 335 and 446. Note: Credit may not be received for both CHE 447 and CHE 245.

CHE 448: Advanced Organic Chemistry: Lecture.

2 hours, 2 credits. Detailed examination of heterocyclic and homocyclic compounds, polynuclear condensed ring systems, and natural products. Special emphasis on synthetic methods and structure determination, including kinetics and mechanisms of organic reactions. PREREQ: CHE 234 and 344.

CHE 449: Instrumental Analysis.

8 hours (2, lecture; 6, lab), 5 credits. Electroanalytical, spectrophotometric, chromatographic, and other instrumental methods as applied to analytical chemistry. PREREQ: CHE 344 and 345.

CHE 450: Chemistry Seminar.

1 credit, 1 hour. Topics of interest in chemistry and biochemistry are presented by members of the scientific community. (May be repeated for a total of four credits.) PREREQ: CHE 168. PRE- or COREQ: CHE 232.

CHE 451: Advanced Laboratory Techniques.

4 hours, 2 credits; 6 hours, 3 credits; or 8 hours, 4 credits. PREREQ: CHE 234 and 344. PRE- or COREQ: CHE 442.

CHE 454, 456, 458, 460, 462, and 464: Advanced Topics in Chemistry.

3 hours, 3 credits. Opportunity for in-depth study of topics in chemistry. (Topics will be announced in advance.) PREREQ: CHE 344, one 300- or 400-level CHE course in the area(s) of interest, and Departmental permission.

454: Studies in Analytical Chemistry

456: Studies in Biochemistry

458: Studies in Inorganic Chemistry

460: Studies in Organic Chemistry

462: Studies in Physical Chemistry

464: Intradisciplinary Studies

CHE 491: Chemical Research.

9 hours (1, conference; 8, lab), 3 credits (maximum 6 credits). (Limited to students majoring in Chemistry or Biochemistry.) This course is designed to enable the advanced student to pursue an investigation of some topic of common interest to the student and a faculty member of the Department. A written research report is required each semester. PREREQ: CHE 234-235, or 344, or 334, and Departmental permission. Note: Satisfactory completion of 3 credits of CHE 491 is one of the requirements for Departmental honors. The total credits received for CHE 491 and 391 may not exceed 9.

The City and the Humanities

Director: Earl Fendelman (Carman Hall, Room 352) Assistant Director: Joseph McElligott (Carman Hall, Room 352)

The City and the Humanities offers a program of courses that explore the relations between an urban environment, the humanities, and the arts. Students in this program attend weekly lectures, screenings, and performances on campus, visit a variety of cultural institutions in New York City, and engage in supervised, humanities-related internships.

Minor in the Humanities

Students may satisfy the College Requirement of a Minor Field with the following 12-credit option: Six credits from HUM 250 and/or 255 (multiple-section, variable-topic courses); plus both HUM 355 and 450 (3 credits each).

Courses in The City and the Humanities

HUM 135: Introduction to the Performing Arts.

3 hours, 3 credits. Appreciation of the performing arts by attending theatre, music, dance, and opera at Lehman Center for the Performing Arts, as well as lectures, demonstrations, and a weekly two-hour seminar devoted to research of art forms and backgrounds, evaluation of performances, and development of critical standards that will lead to life enrichment through continuing enjoyment of the performing arts.

HUM 150: The City and the Humanities I.

1 hour, 1 credit. A series of lectures, films, and live performances of music, theatre, and dance, designed to introduce students to the role of the arts in an urban setting. The lectures present a chronological study of the city and the humanities from classical Athens to New York City today.

HUM 155: The City and the Humanities II.

3 hours, 3 credits. (May be repeated for a total of 6 credits.) A city and its culture as seen through literature, theatre, music, history, art, and architecture. An interdepartmental team-taught course. Intended primarily for students who have completed fewer than 60 credits. PRE- or COREQ: HUM 150.

HUM 211: The Humanities: An Introduction.

3 hours, 3 credits. The study of a small number of important works of literature, philosophy, and the arts that have contributed to the development of civilization.

HUM 235: Opera as Literature.

3 hours, 3 credits. Analysis of the different components of opera and the relationship between literary themes and their operatic versions.

HUM 250: The City and the Theatre.

3 hours, 3 credits. Drama as theatre and as a mirror of the city from the Greeks to the present. Readings of classical, Renaissance, and modern plays in the context of the history of the development of Western theatre, with special emphasis on critical vocabulary and dramatic techniques. Students will attend live performances at Lehman as well as at Broadway and Off-Broadway theatres.

HUM 255: Foundations in The City and the Humanities.

3 hours, 3 credits. (May be repeated for a total of 6 credits.) An intensive study of selected subjects in the humanities and performing arts that will draw on the cultural resources of New York City, including the arts complex on Lehman's campus. PREor COREQ: HUM 150 and COR 100.

HUM 355: Selected Topics in The City and the Humanities.

2 hours plus field experience, 3 credits. (May be repeated for a total of 6 credits.) PREREQ: Permission of the instructor.

HUM 356: Interdisciplinary Topics in The City and the Humanities.

3 or 4 hours plus field experience, 5 or 6 credits. (May be repeated for a total of 12 credits.) PREREQ: Permission of the instructor.

HUM 450: Selected Problems in the Humanities.

3 hours, 3 credits (maximum 6 credits).

HUM 470: Humanities Internship.

2 days per week, plus bi-weekly conferences, 5 credits. Supervised work in both public agencies and private businesses that requires the skills derived from the fine and liberal arts. The program offers students practical experience in a wide range of business and nonprofit sector careers to which a humanities and liberal arts education may lead. It may be repeated once under special circumstances and with approval of the Internships Screening and Evaluation Committee. Grading will be on a Pass/Fail basis. PREREQ: Satisfactory completion of 75 college credits and approval of the Internships Screening and Evaluation Committee.

HUM 481: Advanced Individual Tutorial Project in The City and the Humanities.

3 hours, 3 credits. (May be repeated for a total of 6 credits.) Advanced research culminating in a research paper or in a visual or performing arts project in The City and the Humanities Program, under faculty direction. PREREO: Satisfactory completion of a 300-level course in The City and the Humanities or permission of the Program Director.

Classical Civilization and the Classical Tradition (Interdisciplinary Minor)

The Minor in Classical Civilization and the Classical Tradition provides students with an interdisciplinary approach to the literature, culture, history, politics, philosophy, mythology, and archaeology of the ancient Greek and Roman civilizations. The program is offered as a minor field that complements a wide variety of majors. It is particularly valuable for students whose major field of study is in the Arts and Humanities, including English, History, Languages and Literatures, and Philosophy, as well as for certain majors in the Social Sciences, including Anthropology, Political Science, and Psychology. Ancient Greek and Latin languages are not required for the minor.

Degree Requirements

Students who minor in Classical Civilization and the Classical Tradition conduct their course of study in consultation with the Minor's Coordinator. They satisfy the College requirement of a minor field by taking four courses (12 credits), at least two of which must be at the 300-level.

All students take a single introductory three-credit course, either HIS 246: Civilizations of the Ancient World or ACU 266: Classical Myth and Human Condition. Electives are divided into two broad categories of courses: Category I (Classical Literature and Classical Culture) and Category II (Classical History and Classical Archaeology). Students choose one course from Category I, one course from Category II, and a third course from either category. Students may replace an elective with ACU 350 and/or HIA 350 (Special Topics) or ACU 381 and/or HIA 381 (Individual Tutorial), but only if their chosen course is not offered in a given semester.

Introduction to Classical Civilization and the Classical Tradition (3 credits):

HIS 246: Civilizations of the Ancient World or ACU 266: Classical Myth and the Human Condition

Electives (9 credits): Students choose one course from Category I, one course from category II, and a third course from either category.

I. Classical Literature and Classical Culture

ACU 305: Greek Literature in Translation

ACU 307: The Greek and Roman Epic in English Translation

ACU 308: Greek and Roman Tragedy in English Translation

HIA (ACU)(WST) 311: Women in Antiquity

HIA 314: Classical Myth and Society

(Students who have completed ACU 266 will not receive credit for

HIA 314)

II. Classical History and Classical Archaeology

HIA 306: History of Religions in the Ancient World

HIA (ACU) 316: Greek Archaeology of the Classical Period

HIA (ACU) 318: Roman Archaeology and Topography

HIA 320: History of Ancient Greece

HIA 321: History of Rome

Comparative Literature (Interdepartmental)

Director: Associate Professor Carmen Esteves (Languages & Literatures)

Advisory Council: Professor Maria DiPaolo (Languages and Literatures), Professor Oscar Montero (Languages and Literatures), Professor Thomas Spear (Languages and Literatures), and Associate Professor Scott Westrem (English).

Participating Departments: Anthropology; English; History; Languages and Literatures; Latin American and Puerto Rican Studies; and Philosophy.

Participating Programs: Italian-American Studies, Latin American and Puerto Rican Studies, and Women's Studies.

The interdepartmental major in Comparative Literature leads to the Bachelor of Arts degree. Comparative Literature investigates literary works from the perspective of more than one national literature; works are often studied in conjunction with other intellectual disciplines, such as anthropology, the arts, history, and philosophy. Traditionally, comparatists have focused on literary movements, genres, and historical periods, and on the history of literary themes and ideas, primarily within the context of Western literatures. More recently, comparatists have become interested in emergent and non-Western literatures, in minor genres like biography, in the history of education and the theory of reading, in women's studies, and in literary theory. The major in Comparative Literature is approved for students minoring in Early Childhood and Childhood Education.

Curricular Program and Design

The Comparative Literature major begins with a pair of foundation courses in world classics, studied either historically or by genre. An introductory course in the methods of literary study and criticism is provided by the department of the student's principal language specialization. In addition to a selection of electives chosen from participating departments and programs, the student must take at least four literature courses above the 200 level in which works are read in the original language, with no more than two of these courses in any language.

Courses should be selected to provide a coherent program of study focused around a particular historical period, literary genre, or geographical area. Students have a great deal of flexibility in selecting coherent courses from participating departments and programs. Each student will be assigned an adviser from one of the participating departments or programs who will help define and coordinate the student's program of study. A Comparative Literature seminar completes the program.

Comparative Literature, B.A. (30-31 Credit Major)

The required credits are distributed as follows: Credits (30-31)

In foundation courses: In order to gain a shared

background in Western and non-Western literary classics, all

students must select one of two linked pairs of foundation courses, and IDW 213. The first pair is organized by historical periods and consists of IDW (CLT) 211 and 212. The alternate pair is organized by literary genre and consists of ENG 347 and 348. For course descriptions, see the descriptions later in this Bulletin under English and World Classics.

Introduction to Literary Studies: The student must take one of the following courses on the methods of literary study: ENG 300, SPA 300, FRE 300, IRI 300, or ITA 300. Students should select a course directly relevant to the advanced literature courses chosen in the 9-credit section below. For example, students planning to take 300- or 400-level courses in English Literature and Spanish Literature should take either ENG 300 or SPA 300 to satisfy this requirement.

6 In language courses: The two courses may be chosen from:

- SPV 246: Introduction to Linguistics
- ENG 304: The Structure of Modern English Comparative Grammar
- English-French FRE 310
- English-Italian ITA 310
- English-Portuguese POR 310
- English-Spanish SPA 310
- English-German GER 310
- English-Russian RUS 310
- English-Japanese JAL 310
- English-Irish IRI 3100

Elective Courses: The three courses must be chosen from advanced 300-400-level literature courses read in the original language. These courses must be in no more than two languages. Students should select courses that enable them to concentrate on a particular historical period (e.g., the nineteenth century), a literary genre (e.g., the novel), or a geographical area (the Caribbean, Latin America, etc.). Honors students must take CLT 481 as one of their three elective courses. For students minoring in Early Childhood and Childhood Education, one of these elective courses must deal with children's literature.

Seminar: CLT 360

Requirements for the Minor in Comparative Literature (12 Credits)

The minor in Comparative Literature allows a student to build an interdisciplinary concentration of courses focused on a specific historical period, literary genre, or geographical area. Literature majors may use the minor to study works in a second language read in the original language or in translation, or to enrich their study of literature in their major by adding relevant courses from participating departments and programs, such as African and African American Studies, Anthropology, History, Philosophy, Theatre, or Women's Studies. Literature majors are encouraged to take ENG 306: Literary Criticism. Non-literature majors may use the minor as a way of studying literature, read in the original language or in translation, from both literary and interdisciplinary perspectives. Non-literature majors are encouraged to take IDW (CLT) 211 and 212, or ENG 347 and 348. To satisfy requirements

for the Comparative Literature minor, students must complete four courses (12 credits) selected from the participating departments and programs, two at the 200 level or above, and two at the 300 level or above. At least two of these courses (including one course above the 200 level) must be literature courses. The minor must include works from more than one national literature. Courses should be selected to allow concentration on a specific historical period, literary genre, or geographical area. One course may be from the student's major department, but the credits must be separate from credits counted for the major. Each student's plan of study must be approved by a Comparative Literature adviser.

Honors in Comparative Literature

Honors in Comparative Literature may be conferred on a student who has satisfied the College's requirement for departmental honors at the time of graduation and has completed CLT 481: Honors Tutorial.

Requirements for the Minor in Comparative Literature (12 Credits)

The minor in Comparative Literature allows a student to build an interdisciplinary concentration of courses focused on a specific historical period, literary genre, or geographical area. *Literature majors* may use the minor to study works in a second language read in the original language or in translation, or to enrich their study of literature in their major by adding relevant courses from participating departments and programs, such as African and African American Studies, Anthropology, History, Philosophy, Theatre, or Women's Studies. Literature majors are encouraged to take ENG 306: Literary Criticism. *Non-literature majors* may use the minor as a way of studying literature, read in the original language or in translation, from both literary and interdisciplinary perspectives. Non-literature majors are encouraged to take IDW

(CLT) 211 and 212, or ENG 347 and 348. To satisfy requirements for the Comparative Literature minor, students must complete four courses (12 credits) selected from the participating departments and programs, two at the 200 level or above, and two at the 300 level or above. At least two of these courses (including one course above the 200 level) must be literature courses. The minor must include works from more than one national literature. Courses should be selected to allow concentration on a specific historical period, literary genre, or geographical area. One course may be from the student's major department, but the credits must be separate from credits counted for the major. Each student's plan of study must be approved by a Comparative Literature adviser.

Honors in Comparative Literature

Honors in Comparative Literature may be conferred on a student who has satisfied the College's requirement for departmental honors at the time of graduation and has completed CLT 481: Honors Tutorial.

Courses in Comparative Literature

CLT 360: Variable Topics in Comparative Literature.

3 hours, 3 credits. Various topics in Comparative Literature. PREREQ: IDW (CLT) 211 and 212 or ENG 347 and 348, IDW 213, and one of the following introductions to literary study: ENG 303, SPA 300, FRE 300, or ITA 300.

CLT 481: Honors Tutorial.

One semester, 3 credits (limited to students in the Comparative Literature Honors Program). Individual research and completion of an honors paper on a Comparative Literature topic, under supervision of the director of the Comparative Literature program or a member of the Advisory Council. PREREQ: IDW (CLT) 211 and 212 or ENG 347 and 348, and one of the following introductions to literary study: ENG 303, SPA 300, FRE 300, or ITA 300; permission of the program director.

Cooperative Education

Director: Nancy Cintron (Shuster Hall, Room 254)

Cooperative education is an educational process in which students, employers, and Lehman College cooperate in relating a liberal arts education to the world of work. The program is based upon the concept that preparation for a student's future career is most effective when academic courses are closely integrated with relevant work experiences through internships. Students in the Lehman College Cooperative Education Program benefit from career exploration, work experience, financial earnings, and reassurance that a continued pursuit of a liberal arts program may enhance future employment prospects. For students with clearly defined professional goals, the internship experience may be a series of assignments with increasing responsibility within their chosen career field. For students in the liberal arts, the work experience will provide an opportunity to explore different career options and to discover for themselves that skills associated with a liberal arts education, such as analytical thinking, good spoken and written communication, and effective human relations, have practical value in the world of work.

Cooperative Education Program

The Cooperative Education Program provides students with academic and career advisement from the time of the student's initial enrollment in the program until graduation. Students enrolled in the Lehman College Cooperative Education Program take the following three courses for elective credit: CED 105: Introduction to Cooperative Education

CED 270: Social Process and Career Development in the Work Environment

CED 355: Academic Perspectives on the World of Work

There are two types of internship placements available:

• Alternate Placement. A student is employed full time during an entire semester and returns to full-time study the following semester. While employed, the student must register for a part-

- time program of courses, including either *CED 270 or *CED 355
- Parallel Placement. A student is employed part time (for a minimum of 15 hours per week), while continuing in a full academic program that includes either *CED 270 or *CED 355.

Admission Requirements

Students must have completed 15 credits, have a minimum cumulative index of 2.5, and have passed all the skills-assessment examinations. For further information about the program, contact Career Services at 718-960-8366.

Courses in Cooperative Education

*Courses preceded by an asterisk are not expected to be offered in 2013-2015

*CED 105: Introduction to Cooperative Education and Career Development.

2 hours, 2 credits. An introductory course for students interested in cooperative education, internships, and career development. The course will examine individual and societal attitudes toward work, introduce concepts of the work ethic, and explore career options. A goal of the course is successful job placement as part of the Cooperative Education Program or in other Lehman internship programs.

*CED 270: Social Processes in the Work Environment.

4 hours, 4 credits. Required of all Cooperative Education students concurrent with their first job placement. Topics include individual and group dynamics in work organizations and their application, evaluation of the current work experience and its connection to the academic program, and assessment and analysis of relations between the employee and the employer. Individual conferences. PREREQ: *CED 105 or permission of the instructor.

*CED 355: Academic Perspectives on the World of Work. 3 hours, 3 credits. (May be taken for a total of 6 credits.) PREREQ: *CED 270 or permission of the instructor.

Counseling, Leadership, Literacy, and Special Education

Chair: Faith Deveaux (Carman Hall, Room B20)

Department Faculty: Professors: Harriet Fayne, Barbara Gottlieb, Gaoyin Qian; Associate Professors: Stuart Chen-Hayes, Janet DeSimone, Faith Deveaux, Limor Pinhasi-Vittorio, Mark Zuss; Assistant Professors: Jessica Bacon, Tamisha Bouknight, Danielle Magaldi-Dopman, Rosa Rivera-McCutcheon, Laura Roberts

The Department of Counseling, Leadership, Literacy, and Special Education offers specialized course work in education services (Alpha Code ESS), including counselor education (school counseling), special education, and literacy studies. Students interested in incorporating such coursework into their preparation for New York State certification and New York City licensure should see an adviser in the Department. Students enrolled in sequences in other departments should consult their advisers in order to take ESS courses as electives in their programs. The Department also offers courses in the interdisciplinary program in Women's Studies (see the description of this program contained later in this Bulletin).

Teacher Certification

Teacher certification and licensure is carried out by the New York State Education Department. The public schools of the City of New York have separate licensure procedures and requirements. At both the State and City levels, certification requirements are subject to change without notice. The information about certification contained in this Bulletin is the most up-to-date available at press time, but may become obsolete after publication. It is the responsibility of the student or graduate to consult periodically with a Departmental advisor to keep informed about the latest certification requirements.

Courses in Counseling, Leadership, Literacy, and Special Education

*Courses preceded by an asterisk are not expected to be offered in 2013-

*EDS 390: Introduction to Special Education.

3 hours, 3 credits. Overview of the field of special education, with emphasis on the developmentally disabled individual. Examination of attitudinal factors contributing to present-day treatment of handicapped individuals. Field trips under supervision. PREREQ: Completion of 60 credits (6 in psychology), the College Writing Examination, and a cumulative index of 3.0.

*ESS 314: Fundamentals of Classroom Group Dynamics. 3 hours, 2 credits.

*ESS 350: Curriculum and Methods in Special Education.

3 hours, 3 credits. Introduction to the selection, use, evaluation, and development of curricula for special education. Discussion of basic concepts underlying the development of curriculum based on the learning characteristics of exceptional children, with emphasis on individualization in mainstream settings. PRE- or COREQ: *ESS 401, 402, and 403, which provide orientation to the field of special education.

*ESS 376-377: Fieldwork in Special Education Services I and II. Each semester, 2 credits (two-semester sequence).

*ESS 401: Learning Disorders: A Developmental View.

1 hour, 1 credit. Concepts of developing an underlying commonality of basic processing in exceptional children.

*ESS 402: Diagnosis of Learning Disorders.

1 hour, 1 credit. Theoretical bases and techniques fundamental to the developmental evaluation of learning-handicapped children. Emphasis on diagnosis for purposes of remediation.

*ESS 403: Behavioral Approaches to Children's Emotional Problems.

1 hour, 1 credit. Systematic application of principles of learning to effect behavioral changes in the special child.

*ESS 424: Principles and Practices of Educational Guidance. 2 hours, 2 credits.

*ESS 425: Principles and Practices of Vocational Guidance in the Elementary and Secondary Schools.

2 hours, 2 credits

*ESS 429: Education and Mass Media.

3 hours, 2 credits.

*ESS 433: Workshop in Instructional Materials and Equipment. 2 hours, 1 credit. COREQ: ECE 400, 402, 403, or 404, or the appropriate course from ESC 414 through 440.

*ESS 485-486: Independent Study in Special Education Services I and II.

Each semester, 2 credits. (One- or two-semester sequence.) Note: No student may receive credit for both ESC 485-486 and ECE 485-486 or ESC 485-486.

*ESS 490: Honors Course in Research in Special Educational Services.

One semester, 3 credits (maximum 6 credits). PREREQ: Satisfactory completion of 12 credits in ESS or related fields, including ECE 301 or ESC 301. NOTE: No student may receive credit for both ESS 490 and ECE 490 or ESC 490.

NOTE: Changes in program requirements designated by the New York State Education Department for Teacher, Counselor, and/or Administrator certifications occur from time to time. As such, students are advised to consult the Office of the School of Education, Room B-33 of Carman Hall, to determine the most current program requirements for certification. Students not seeking an institutional recommendation but who intend to apply independently for certification should consult with a departmental advisor prior to registration so that a course of study fulfilling State requirements may be planned. New York State may at some point end the independent transcript review route to certification. Students should consult the New York State Education Department website for updates or may check with the School of Education's Certification Office to determine if a change in this policy has been adopted.

Courses in General Family and Consumer Studies Education

*Courses preceded by an asterisk are not expected to be offered in 2013-2015.

*FCS 102: Clothing I.

4 hours (2, lecture; 2, lab), 3 credits.

*FCS 120: Historic Costume.

2 hours, 2 credits.

*FCS 121: Clothing in Twentieth-Century Society.

2 hours, 2 credits.

*FCS 124: Family Clothing.

4 hours (2, lecture; 2, lab), 3 credits.

*FCS 125: Textiles I.

3 hours (1, lecture; 2, lab), 2 credits.

*FCS 126: Interior Decoration and Design.

3 hours (1, lecture; 2, lab), 2 credits.

*FCS 161: Orientation to Family and Consumer Studies.

2 hours (1, lecture; 1, conference; and field trips), 2 credits.

*FCS (WST) 180: Modern Housing.

3 hours, 3 credits. Analysis of modern housing needs of families. Consideration of home ownership, cooperatives, condominiums, and public and other rental housing in terms of cost, location, construction, and value to individual family members. Principles of organization of space for individual and family living during the family life cycle.

*FCS 202: Clothing II.

4 hours (2, lecture; 2, lab), 3 credits. PREREQ: Either *FCS 102 or Departmental permission.

*FCS 219: Consumer Problems in Housing.

3 hours, 3 credits.

*FCS 227: Textiles II.

4 hours (2, lecture; 2, lab), 3 credits. PREREQ: *FCS 125.

*FCS 228: Textile Design.

3 hours (1, lecture; 2, lab), 2 credits. PREREQ: Either 4 credits in ART or Departmental permission.

*FCS 229: Weaving I.

3 hours, 2 credits. PREREQ: Either 4 credits in ART or instructor's permission.

*FCS 271: Child Development.

4 hours (2, lecture; 2, lab), 3 credits.

*FCS 301: Demonstration Materials and Techniques.

3 hours (lab), 3 credits.

*FCS 302: Special Problems in Clothing Design.

4 hours (lab), 2 credits. PREREQ: Either ECS 202 or Departmental permission.

FCS 307 (WST 317): Family Relationships.

3 hours, 3 credits. The place of the family in American life: essential conditions for effective family living, factors that seem to be important in achieving and maintaining successful marriage, roles of family members, problems in family relationships and parenthood, and interdependence of family and community.

*FCS 314: Household Equipment.

3 hours, 3 credits.

*FCS 315: Home and Cooperative Ownership and Tenancy.

3 hours, 3 credits. PREREQ: FCS 180 or 219 or Departmental permission.

*FCS 316: Home Management.

3 hours, 3 credits.

*FCS 317: Consumption Behavior.

3 hours, 3 credits. PREREQ: Either FCS 307 or Departmental permission.

*FCS 318: Management of Housing for the Elderly.

3 hours, 3 credits. PREREQ: FCS 180 and Departmental permission.

*FCS 370: Field Study in Clothing and Textiles.

3 hours, 2 credits. PREREQ: Departmental permission.

*FCS (WST) 372: Family Relationships: Field Study and Seminar.

2 hours, *2 credits*. Field study of private and public agencies; introduction to the services available to families, including problems inherent in the use of these services.

*FCS 374: Consumer Advocacy.

3 hours, 3 credits. PREREQ: Satisfactory completion of 45 college credits.

*FCS 403: Introduction to Counseling for Family Living.

3 hours, 3 credits. PREREQ: Adviser's written permission.

*FCS 449: Housing Management and Maintenance.

3 hours, *3 credits*. PREREQ: Either FCS 180 and 219 or Departmental permission.

*FCS 452: Current Problems in Family and Consumer Studies.

2 hours, 2 credits. PREREQ: Departmental permission.

*FCS 453: Trends in Family and Consumer Studies.

3 hours, 3 credits. PREREQ: Departmental permission.

*FCS 472: Field Study in Housing Management.

4 hours, plus seminar, 2 credits. PREREQ: *FCS 449.

*FCS 473: Problems in Home Management.

6 hours (lab), 3 credits.

*FCS 485: Independent Study in Family and Consumer Studies.

One semester, 2-3 credits (maximum 6 credits). Independent study in an appropriate field, under faculty supervision. PREREQ: Departmental permission.

*FCS 489: Seminar in Housing Management.

2 hours, 2 credits. PREREQ: FCS 180, 219, 315, 318, and 449, and Departmental permission.

*FCS 492: Honors in Family and Consumer Studies.

One semester, 2-3 credits (maximum 4-6 credits). PREREQ: Departmental permission.

*FCS 493: Special Projects in Family and Consumer Studies.

PREREQ: Departmental permission.

General Family and Consumer Studies **Education: Areas of Study**

*Courses preceded by an asterisk are not expected to be offered in 2013-

*FCS 161: Orientation to Family and Consumer Studies

*FCS 301: Demonstration Materials and Techniques

*FCS 374: Consumer Advocacy

*FCS 452: Current Problems in Family and Consumer Studies

*FCS 453: Trends in Family and Consumer Studies

Housing, Family Economics, and Consumer **Studies**

*FCS (WST) 180: Modern Housing

*FCS 219: Consumer Problems in Housing

*FCS 314: Household Equipment

*FCS 315: Home and Cooperative Ownership and Tenancy

*FCS 316: Home Management

*FCS 317: Consumption Behavior

*FCS 318: Management of Housing for the Elderly

*FCS 449: Housing Management and Maintenance

*FCS 472: Field Study in Housing Management

*FCS 473: Problems in Home Management

*FCS 489: Seminar in Housing Management

Clothing, Textiles, and Related Arts

*FCS 102: Clothing I

*FCE 120: Historic Costume

*FCS 121: Clothing in Twentieth-Century Society

*FCS 124: Family Clothing

*FCS 125: Textiles I

*FCS 126: Interior Decoration & Design

*FCS 202: Clothing II

*FCS 227: Textiles II

*FCS 228: Textile Design

*FCS 229: Weaving I

*FCS 302: Special Problems in Clothing Design

*FCS 370: Field Study in Clothing and Textiles

Family Relations and Child Development

*FCS 271: Child Development

FCS 307 (WST 317): Family Relationships

*FCS 317: Consumption Behavior

*FCS (WST) 372: Family Relationships: Field Study and Seminar

*FCS 403: Introduction to Counseling for Family Living

*FCS 485: Independent Study in Family and Consumer Studies

*FCS 492: Honors in Family and Consumer Studies

*FCS 493: Special Projects in Family and Consumer Studies

Disability Studies (Interdisciplinary Minor)

Coordinator: Julie Maybee (Associate Professor, Philosophy)
Steering Committee: Deena Bernstein (Professor, Speech-Language-Hearing Sciences), Robin Kunstler (Professor, Recreation Program and Health Sciences), Julie Maybee, Esther Wilder (Associate Professor, Sociology)

The minor in Disability Studies will provide students with a holistic and interdisciplinary approach to disability issues that is focused on the experiences of people with disabilities as they work toward full participation in society. The minor will be particularly valuable for those students who are majoring in fields that may lead to employment in service professions such as Health Education and Promotion, Health Services Administration, Nursing, Recreation Education (especially Therapeutic Recreation), Social Work, Sociology, Speech, Language, and Hearing Sciences, and Psychology.

Degree Requirements

Students will satisfy the College requirement of a minor field by taking four courses (12 credits), at least two of which must be at the 300-level or higher.

9 credits in Disability Studies, chosen from the following list of courses:

DST 200: Introduction to Disability Studies DST/SOC 333: Sociology of Disability DST/PHI 336: Disability, Ethics, and the Body DST 365: Special Topics in Disability Studies 3 credits. An elective chosen from the following list of courses:

REC 321: Introduction to Therapeutic Recreation Service

REH 220: Introduction to Developmental Disabilities

REH 240: Psychiatric Rehabilitation

POL 318: The Politics of Health

SOC 302: Sociology of Health Care

SPV 230: Survey of Speech and Hearing Problems

Courses in Disability Studies

DST 200: Introduction to Disability Studies

3 hours, 3 credits. Introductory study of the experience of disability through a variety of lenses and disciplinary tools.

DST (SOC) 333: Sociology of Disability

3 hours, 3 credits. The role of social, political, economic, and historical factors that have produced the condition of disability. Ways in which disability parallels and often overlaps with other minority statuses.

DST (PHI) 336: Disability, Ethics, and the Body

3 hours, 3 credits. Examination of how disability is defined and of moral issues surrounding the treatment of people with disabilities. Topics may include the role of the body in the definition and experience of disability, privacy issues, disability identity, and the moral issues involved in eugenics, prenatal screening, rehabilitation, and social services for disabled people.

DST 365: Special Topics in Disability Studies

3 hours, 3 credits. Variable topics in Disability Studies. (*May be repeated up to 6 credits.*)

Early Childhood and Childhood Education

Department Chair: Abigail S. McNamee (Carman Hall, Room CB 07)

Department Faculty: Professors: Abigail McNamee, Anne Rothstein; Associate Professors: Nancy Dubetz, Cecilia Espinosa, Christy Folsom, Nancy Maldonado, Maria Victoria Rodriguez, Alexandria Lawrence Ross, Marietta Saravia-Shore; Assistant Professors: Cecilia Espinosa, Carol Gross, Janet Pickard Kremenitzer, Anne Marie Marshall, Jeanne Peloso, Frances Rofrano, Andrea Zakin; Undergraduate Program Coordinators: Nancy Dubetz and Frances Rofrano (Carman Hall B-45 and B-47)

The Department of Early Childhood and Childhood Education (ECCE) offers a 12-credit minor for any student who is interested in learning about the field of urban education, as well as teaching certification programs for the student who plans to seek a Lehman endorsement for an initial teaching certificate. Four programs offer initial teaching certificates: Early Childhood; Early Childhood-Integration of Bilingual Extension; Childhood; and Childhood-Integration of Bilingual Extension.

The Lehman Urban Transformative Education (LUTE) Conceptual Framework that guides these teacher education programs was developed by faculty to provide a philosophical base for the faculty's work as teacher educators. It delineates what is valued by the Department as well as how teaching practices within the Department reflect those values. The Department's mission is to prepare competent, qualified, ethical, and reflective professionals for service to diverse communities. Within CUNY's tradition of access and excellence and Lehman's mission of service to the urban community, it is expected that teachers who study in these programs will bring respect for knowledge, diversity, caring, and justice to their work with children, families, colleagues, and local organizations that comprise the Lehman community.

Teacher Certification

New undergraduate programs, designed to meet New York State teacher certification requirements, went into effect for students entering undergraduate teacher education programs as of September 1, 2001. Upon completion of one of the following programs, and after achieving passing scores in required New York State teacher certification examinations, the student will have satisfied State requirements for Initial Certification in one of the following programs: Early Childhood; Early Childhood with a Bilingual Extension; Childhood; or Childhood with a Bilingual Extension.

A student can acquire a New York State initial teaching certificate when he or she has successfully completed the following:

- all core and distribution requirements and an approved liberal arts major;
- a 12-credit Early Childhood and Childhood Education (ECCE) minor;
- a certification sequence of professional coursework;
- professional practice (student teaching and student teaching seminar);

- passing scores on required NYS teacher certification examinations: NYS LAST examination, NYS CST-Multiple Subjects examination, and NYS ATS-W examination; and
- mandatory training in child abuse identification and reporting and violence prevention.

NOTE: Changes in program requirements designated by the New York State Education Department for Teacher, Counselor, and/or Administrator certifications occur from time to time. As such, students are advised to consult the School of the Division of Education, Room B-33 of Carman Hall, to determine the most current program requirements for certification. Students not seeking an institutional recommendation but who intend to apply independently for certification should consult with a departmental adviser prior to registration so that a course of study fulfilling State requirements may be planned. New York State may at some point end the independent transcript review route to certification. Students should consult the New York State Education Department website for updates or may check with the School of Education's Certification Office to determine if a change in this policy has been adopted.

Examination Requirements for Initial Certification

Students who seek the New York State initial teacher certification in Early Childhood or Childhood Education must pass three certification tests: the Literacy Arts and Sciences Test (LAST), the Assessment of Teaching Skills-Written (ATS-W), and the Content Specialty Test-Multiple Subjects (CST-Multiple Subjects).

Students who wish to register for the 12-credit ECCE minor must have successfully completed College entrance requirements as well as English and math requirements and completed a declaration of major/minor form signed by an ECCE advisor.

The Department Minor

The required courses and credits in the ECCE minor are as follows:

ECE 300: Education in Historical, Political, and Sociocultural Contexts—Birth to Grade 6 (3 credits);

ECE 301: The Child in Context: Child Study and Development—Birth to Grade 6 (3 credits);

ECE 302: Child, Family, Community, and Schools in Sociocultural Contexts—Birth to Grade 6 (3 credits); and

ECE 311: The Teaching Profession—Birth to Grade 6 (3 credits).

The Certification Sequences

Each certification sequence begins with professional coursework that is followed by professional practice. To begin professional coursework or professional practice, students must meet specific prerequisite requirements.

Requirements for Professional Coursework

Professional coursework includes courses focusing on teaching a variety of content areas at the early-childhood level (Birth to Grade 2) or at the childhood level (Grades 1 to 6). Additionally, students can elect a program at either level with an integrated bilingual extension.

Students who plan to enter a teacher certification program in the Department must see an undergraduate adviser to obtain information regarding both the recommended general education

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sequence and approved liberal arts majors prior to their first Lehman registration. Students who wish to register for professional coursework in one of the four teacher certification sequences must meet the following requirements:

Completion of the College's general core and distribution requirements, with the following specifications and additions:

Candidates must receive a C or better grade in each of the following course requirements:

Arts Requirement: One course in the Arts (Art history or music appreciation is recommended.);

Math Requirement: MAT 123 and 132, or math course approved by ECCE and math advisers;

Science Requirement: Eight credits of natural science with lab. (CHE 136, PHY 135, and/or GEO 166 are recommended.)

- Declaration of an approved major for ECCE teacher education;
- Completion of the 12-credit ECCE minor;
- A minimum 2.75 overall index;
- Completion of a written Departmental application for the certification sequence of choice

Requirements for Professional Practice

Students who successfully complete the minor and the professional coursework in the certification sequences are eligible to register for professional practice (supervised student teaching) if the following requirements are met:

- Completion of the ECCE minor and professional coursework with a combined minimum 3.0 GPA;
- Completion of a recommended liberal arts and sciences major with a minimum 3.0 GPA; and
- Completion of a student teaching application.

The Early Childhood Certification Sequences (Birth to Grade 2)

The Department of Early Childhood and Childhood Education offers an undergraduate program in Early Childhood Education that leads to Initial Certification. It is intended for students who wish to teach young children in nursery schools, day-care centers, or public schools through Grade 2.

The major objective of the program in Early Childhood is to provide preservice teachers with a beginning focus on early childhood philosophy, trends, curriculum, methods, materials, and research in the field of early childhood education (Birth to Grade 2).

The course of study reflects an integrated curriculum that provides an educational model based on child development and child study principles, New York State Education Department standards and core curriculum in each academic area, and National Council for the Accreditation of Teacher Education standards as described by the National Association for the Education of Young Children.

The required courses and credits are as follows: Lehman College Undergraduate Bulletin 2013-2015

- Professional Coursework (15 credits): ECE 431 (4), ECE 432 (4), ECE 433 (4), ECE 434 (3)
- Professional Practice (6 credits): ECE 481 (4), ECE 483 (2)

Early Childhood Certification Sequence-Integrated Bilingual Extension (Birth to Grade 2)

The program in Early Childhood—Integration of Bilingual Extension adds an extension to the Initial Certificate for teaching young children in bilingual settings. The required courses and credits are the same as the above program with the following exceptions:

The required courses and credits are as follows:

- Professional Coursework (21 credits): ECE 430 (4), ECE 432
 (4), ECE 433 (4), ECE 434 (3), ECE 427 (3) and ECE 3030 (3)
- Professional Practice (6 credits): ECE 482 (4) and ECE 483 (2)

Early Childhood Certification Sequence— Integrated Bilingual Extension (Birth to Grade 2)

The program in Early Childhood—Integration of Bilingual Extension adds an extension to the Initial Certificate for teaching young children in bilingual settings. The required courses and credits are the same as the above program with the following exceptions:

The following courses are replaced:

ECE 430 (4) replaces ECE 431 (4)

ECE 482 (4) replaces ECE 481 (4)

The following courses are added:

ECE 427 (3)

SPV (LNG) 312 (3)

Childhood Certification Sequence (Grades 1 to 6)

Childhood Certification Sequence (Grades 1 to 6)

The Department of Early Childhood and Childhood Education offers undergraduate programs in Childhood Education that lead to Initial Certification in Childhood Education and Initial Certification in Childhood Education with a Bilingual Extension. Both are intended for students who wish to teach children in grades 1 to 6.

The major objective of the programs in Childhood Education are to provide preservice teachers with a focus on childhood philosophy, trends, curriculum, methods, materials, and research in the field of childhood education (Grades 1 to 6). The course of study reflects an integrated curriculum that provides an educational model based on child development and child study principles, New York State Education Department standards and core curriculum in each academic area, and National Council for the Accreditation of Teacher Education standards as described by the Association for Childhood Education International.

Childhood—Integrated Bilingual Extension (Grades 1 to 6)

The program in Childhood with a Bilingual Extension adds an extension to the Initial Certificate for teaching in bilingual classroom settings. The required courses and credits are as follows:

Professional Coursework (21 credits): DEC 430 (4), DEC 432 (4), DEC 433 (4), ECE 434 (3), ECE 427 (3) and ECE 3030 (3)

Professional Practice (6 credits): ECE 482 (4) and ECE 483 (2)

Childhood-Integrated Bilingual Extension (Grades 1 to 6)

The program in Childhood with a Bilingual Extension adds an extension to the Initial Certificate for teaching in bilingual classroom settings. The required courses and credits are the same as the above program with the following exceptions:

The following courses are replaced:

DEC 430 (4) replaces DEC 431 (4)

DEC 482 (4) replaces DEC 481 (4)

The following courses are added:

ECE 427 (3)

SPV (LNG) 312 (3)

Courses in Early Childhood Education

*Courses preceded by an asterisk are not expected to be offered in 2013-2015.

ECE 300: Education in Historical, Political, and Sociocultural Contexts—Birth to Grade 6.

3 hours, 3 credits. Study of the historical, political, and sociocultural contexts of urban education and the relationship between social change and change in schools. Emphasis on bilingual/bicultural, multicultural, and special education at early childhood and childhood levels. Use of media and technology as appropriate. Note: Requires visits to early childhood and childhood settings with diverse populations and contrasting social and economic environments and the development of an academic portfolio.

ECE 301: The Child in Context: Child Study and Development—Birth to Grade 6.

3 hours, 3 credits. Study of theories of development and learning from birth through childhood and their application to early childhood, childhood, bilingual, and inclusive settings. Emphasis on child observation and study in multicultural, multilingual settings, and language acquisition in first and second languages. Use of media and technology as appropriate. *Note: Requires visits* to early childhood and childhood settings with diverse populations and contrasting social and economic environments and the development of an academic portfolio.

ECE 302: Children, Families, Communities, and Schools in Sociocultural Contexts—Birth to Grade 6.

3 hours, 3 credits. Study of the sociocultural contexts of urban communities, schools, and community-based organizations and the impact of these contexts on children. Emphasis on how schooling is perceived by children, families, and communities. Use of media and technology as appropriate. Note: Requires visits to early childhood and childhood settings with diverse populations and contrasting social and economic environments and the development of an academic portfolio.

ECE 311: The Teaching Profession—Birth to Grade 6.

3 hours, 3 credits. Study of the professional lives of teachers and the diverse roles they assume in urban schools. Work with teachers in developing children's multiple literacies, including linguistic, mathematical, technological, artistic, and musical, with an emphasis on how children use oral and written language to communicate and construct meaning; emphasis on how communities of learners are created. Use of media and technology as appropriate. PREREQ: Successful completion of at least six credits in the ECCE minor. Note: Requires visits to early childhood and childhood settings with diverse populations and contrasting social and economic environments and the development of an academic portfolio.

ECE 350: Special Studies in Elementary Education.

1-3 hours, 1-3 credits. (May be reelected for credit with permission of Departmental chair; topics to appear on transcript.) Investigation of theories, issues, methods, materials, and curriculum practices in N-VI educational settings; topics and credits to vary and be announced each semester. PREREQ: Departmental permission. Note: Credits earned in this course will apply to New York State certification only upon individual evaluation.

*ECE 402: Teaching History and Social Studies in the Elementary School (N-VI).

4 hours (2, lecture; 2, fieldwork), 3 credits. The selection, guidance, and evaluation of learning experiences in relation to the objectives of the program in nursery school through Grade VI, with specific emphasis on methods and materials in the areas of history and the social sciences: classroom organization, planning, and evaluation; guided observations. Opportunity for students to tutor in public schools. Students will participate in supervised field experiences. PREREQ: BBE 301 or ECE 301 and successful completion of the Requirement in Oral English. Note: No student may receive credit for both ECE 442 and 402.

*ECE 403: Teaching Science in the Elementary School (N-VI).

4 hours, 3 credits. A course designed to acquaint students with the content and objectives of the early childhood and elementary school science curricula and the methods, materials, and resources appropriate for teaching N-VI. PREREQ: Either ECE 301 or 321 and successful completion of the Requirement in Oral English. NOTE: No student may receive credit for both ECE 403 and 441.

*ECE 404: Teaching Mathematics in the Elementary School (N-VI).

4 hours (2, lecture; 2, fieldwork), 3 credits. Contemporary approaches to the organization and teaching of mathematics in the elementary school. Teaching for understanding, lesson planning, and evaluation of mathematics learning, and appropriate remedial and enrichment experiences. References to curriculum material, syllabi, sources, and research reports. Students will participate in supervised field experiences. PREREQ: Either ECE 301 or BBE 301, ECE 416, or equivalents; a passing grade on the Departmental Mathematics Competency Examination; and completion of the Requirement in Oral English. Note: No student may receive credit for both ECE 404 and 322.

*ECE 405: Art in Elementary School (N-VI).

4 hours (2, lecture; 2, fieldwork), 3 credits. Exploration of a variety of art media. Development of individual competencies in these media. Principles, methods, and classroom organization and planning for effective instruction. Students will participate in supervised field experiences. PREREQ: Either BBE 301, ECE 301, or 321. Note: No student may receive credit for both ECE 405 and

ECE 414: Methods and Materials in Early Childhood I.

3 hours, 3 credits. (Constitutes a two-semester sequence with ECE 415.) Study of the mental, social, emotional, and cognitive needs, interests, and experiences of children (three through five years of age) as the basis for developing suitable programs and for formulation of criteria for the selection and evaluation of materials, as well as for the creation of an appropriate environment. The course will develop specific methods and content in the teaching of social studies, science, arithmetic, and language arts. Health, nutrition, sexuality, and safety in early childhood will be included. Students will spend time in laboratory, directed observation, or other supervised field experiences.

ECE 415: Methods and Materials in Early Childhood II.

3 hours, 3 credits. Continuation of ECE 414. Emphasis will be on primary grades.

*ECE 416: Methods of Teaching Reading in the Primary Grades (N-III).

4 hours (2, lecture; 2, fieldwork), 3 credits. A study of research in reading and reading methodology, including reading readiness, development of meaning and sight vocabularies, structural and phonetic analysis, formal and informal techniques and measures for assessing pupil needs, organizational patterns for group and/or individual instruction, and beginning reading experiences and/or materials. Integration of research with classroom experience. Students will participate in supervised field experiences. PREREQ: ECE 301 or BBE 301 or the equivalent; and completion of the Requirement in Oral English. Note: No student may receive credit for both ECE 416 and 321.

*ECE 419: Planning Pre-Kindergarten Programs and Kindergarten.

2 hours, 2 credits. (Recommended for Early Childhood students.) Child development experiences and activities that serve as the basic framework for planning consistent and continuous programs in nursery school and kindergarten. References are made to public and private schools, day-care centers, Head Start, child-development centers, and current program trends in early childhood education. PREREQ: ECE 414.

*ECE 420: Methods of Teaching Reading in the Middle Grades (IV-VI).

4 hours (2, lecture; 2, fieldwork), 3 credits. A study of research in reading and reading methodology, including primary grade skills development for middle-grade pupils; enlargement of meaning and recognition vocabularies; development of study skills, critical reading, and content reading; formal and informal techniques and measures for assessing pupil needs; organizational patterns for group and/or individual instruction; and middle-grade reading experiences and/or materials. Integration of research with classroom experience. Students will participate in supervised field experiences. PREREQ: ECE 301 and 416 and completion of the Requirement in Oral English. Note: No student may receive credit for both ECE 420 and 322.

ECE 427: Teaching of English as a Second Language (N-VI).

3 hours, 3 credits. Methods and materials of teaching English to children (N-VI) whose native language is not English. Attention will be directed to problems of language, cultural orientation, and the various techniques for teaching children of different age levels and lifestyles. PREREQ: ECE 301, ECE 321, or BBE 301. Note: No student may receive credit for both ECE 427 and ESC 405.

*ECE 429: Introduction to Parent/Teacher/Child Relationships in Early Childhood Settings.

3 hours, 3 credits. Study of parent/teacher/child relationships in the early childhood program. The development of constructive relationships among parent, teacher, and child. PREREQ: ECE

ECE 430: Literacy and Social Studies in Early Childhood Bilingual Education—Birth to Grade 2.

7 hours (4 hours, fieldwork; 3 hours, lecture), 4 credits. Exploration of the diverse ways that infants, toddlers, and young bilingual, bicultural children develop language and literacy and an understanding of basic human needs and human interdependence in family, early care, and school settings. Assessment and instruction in the native and second languages within an integrated curriculum. Use of technology and media as appropriate. PREREQ: Successful completion of Requirements for Professional Coursework (see the preceding information). Note: Requires visits to early childhood and childhood settings with diverse populations and contrasting social and economic environments and the development of an academic portfolio.

ECE 431: Literacy and Social Studies in Early Childhood Education—Birth to Grade 2.

7 hours (4 hours, fieldwork; 3 hours, lecture), 4 credits. Exploration of the ways in which young children develop language and literacy and an understanding of basic human needs and interdependence in family, early care, and school settings. Assessment and instructional strategies within an integrated curriculum. Use of technology as appropriate. PREREQ: Successful completion of Requirements for Professional Coursework (see the preceding information). Note: Requires visits to early childhood and childhood settings with diverse populations and contrasting social and economic environments and the development of an academic portfolio. No student can receive credit for both ECE 431 and DEC 431.

ECE 432: Mathematics and Art in Early Childhood Education— Birth to Grade 2.

7 hours (4 hours, fieldwork; 3 hours, lecture), 4 credits. Exploration of the ways in which young children develop an understanding of mathematical concepts and art in family, early care, and school settings. Approaches to formal and informal assessment of children's development in mathematics and art in an integrated curriculum. Use of media and technology as appropriate. PREREQ: Successful completion of Requirements for Professional Coursework (see the preceding information). Note: Requires visits to early childhood and childhood settings with diverse populations and contrasting social and economic environments and the development of an academic portfolio. No student can receive credit for both ECE 432 and DEC 432.

ECE 433 Science and Music in Early Childhood Education— Birth to Grade 2.

7 hours (4 hours, fieldwork; 3 hours, lecture), 4 credits. Exploration of the ways young children develop science and music literacies in family, early care, and school settings. Application of assessment and instructional strategies, media, and technology in an integrated curriculum. PREREQ: Successful completion of Requirements for Professional Coursework (see the preceding information). Note: Requires visits to early childhood and childhood settings with diverse populations and contrasting social and economic environments and the development of an academic portfolio. No student can receive credit for both ECE 433 and DEC 433.

ECE 434: (3 credits, 3 hours).

3 hours, 3 credits. Policies and practices that classroom teachers in Childhood and Early Childhood need to know to effectively meet the needs of children with disabilities. PREREQ: Successful completion of requirements for Professional Coursework. *Note:* This course requires 15 hours of fieldwork in settings that include children with special needs.

*ECE 444: Music in the Elementary School (N-VI).

4 hours (2, lecture; 2, fieldwork), 3 credits. Exploration of the musical literature appropriate for children in this age group. Development of the ability to learn new songs independently and to transcribe simple original melodies. Methods and materials of instruction in a program, including singing, playing, dancing, listening, music reading, creating, and the use of instruments. Students will participate in supervised field experiences. PREREQ: Either BBE 301, ECE 301, or 321. Note: No student may receive credit for both ECE 444 and ECE 443.

*ECE 445: Physical Education in the Elementary School (N-VI).

3 hours, 2 credits. The development of competencies, together with the methods and materials of instruction in physical education, which include health, safety procedures, creative rhythmic activities, games, folk and square dancing, and athletics. PREREQ: One semester of physical education and current physical-activity card.

ECE 481: Supervised Student Teaching—Pre-K to Grade 2.

300 clock hours, 4 credits. Student teaching in varied settings that include culturally diverse populations, students with disabilities, and students of different age/grade levels (pre-K, K, and grades 1-2). Requires five full days each week in a school or early childhood setting. PREREQ: Successful completion of Departmental minor, ECE 431, ECE 432, and Requirements for Professional Practice (see the preceding information). COREQ: ECE 483: Student Teaching Seminar.

ECE 482: Supervised Student Teaching in Bilingual Settings— Pre K-Grade 2.

300 clock hours, 4 credits. Student teaching in varied settings that include culturally diverse populations, students with disabilities, and students of different age/grade levels (pre-K, K, and grades 1-2) in bilingual settings. Requires five full days each week in a school or early childhood setting. PREREQ: Successful completion of Departmental minor, ECE 430, ECE 432, and Requirements for Professional Practice (see the preceding information). COREQ: ECE 483: Student Teaching Seminar.

ECE 483: Student Teaching Seminar.

2 hours, 2 credits. Examination of the complexities of teaching. Emphases on developing reflective practice, promoting good health and safety, implementing strategies for conflict resolution and violence prevention, and identifying child abuse or substance abuse. PREREQ: Successful completion of Requirements for Professional Practice (see the preceding information). COREQ: Supervised Student Teaching.

ECE 3030: Bilingualism for Classroom Teachers, Birth to Grade

3 hours, 3 credits. Sociolinguistic and psycholinguistic foundations and theories of first and second language acquisition in bilingual early childhood and childhood educational contexts. Includes the study of assessments of oral language and literacy proficiency of bilingual children in educational contexts. PREREQ: Admission to an ECCE undergraduate certification sequence.

Courses in Childhood Education

DEC 430: Social Studies and Literacy in Bilingual Childhood Settings—Grades 1-6.

7 hours (4 hours, fieldwork; 3 hours, lecture), 4 credits. Exploration of the diverse ways that bilingual, bicultural children develop language and literacy and an understanding of basic human needs and human interdependence in grades 1-6. Assessment and instruction within an integrated curriculum in the native and second languages. Use of media and technology within an integrated curriculum as appropriate. Prerequisites: Successful completion of Requirements for Professional Coursework (see the preceding information). Note: Requires visits to early childhood and childhood settings with diverse populations and contrasting social and economic environments and the development of an academic portfolio. Students cannot receive credit for both DEC 431 and DEC 430.

DEC 431: Literacy and the Social Studies in Childhood Settings-Grades 1-6.

7 hours (4 hours, fieldwork; 3 hours, lecture), 4 credits. Exploration of the ways in which children develop language and literacy and an understanding of basic human needs and human interdependence in grades 1-6. Approaches to literacy and the social studies assessment and instructional strategies within an integrated curriculum. Use of technology as appropriate. PREREQ: Successful completion of Requirements for Professional Coursework (see the preceding information). Note: Requires visits to early childhood and childhood settings with diverse populations and contrasting social and economic environments and the development of an academic portfolio. No student can receive credit for both ECE 431 and DEC 431.

DEC 432: Mathematics and Art in Childhood Settings—Grades

7 hours (4 hours, fieldwork; 3 hours, lecture), 4 credits. Exploration of the ways in which children develop an understanding of mathematical concepts and art in grades 1-6. Approaches to formal and informal assessment of children's development in mathematics and art to insure continuous development of problem-solving processes and expression of ideas in both mathematics and art. Use of technology as appropriate. PREREQ: Successful completion of Requirements for Professional Coursework (see the preceding information). Note: Requires visits to early childhood and childhood settings with diverse populations and contrasting social and economic environments and the development of an academic portfolio. No student can receive credit for both ECE 432 and DEC 432.

DEC 433: Science and Music in Childhood Settings—Grades 1-

7 hours (4 hours, fieldwork; 3 hours, lecture), 4 credits. Exploration of the ways young children develop science and music literacy in grades 1-6. Application of assessment and instructional strategies, and media and technology in an integrated curriculum. PREREQ: Successful completion of Requirements for Professional Coursework (see the preceding information). Note: Requires visits to early childhood and childhood settings with diverse populations and contrasting social and economic environments and the development of an academic portfolio. No student can receive credit for both ECE 433 and DEC 433.

DEC 481: Supervised Student Teaching—Grades 1-6.

300 clock hours, 4 credits. Student teaching in varied settings that include culturally diverse populations, students with disabilities, and students of different age/grade levels (1-6). Requires five full days each week in a school setting. PREREQ: Successful completion of Departmental minor, ECE 431, ECE 432, and Requirements for Professional Practice (see the preceding information). COREQ: ECE 483: Student Teaching Seminar.

DEC 482: Supervised Student Teaching in Bilingual Settings— Grades 1-6.

300 clock hours, 4 credits. Clinical experience in bilingual settings that include students with disabilities and students of different age/grade levels (Grades 1-6). Requires five full days each week in the school placement. PREREQ: Successful completion of Requirements for Professional Practice (see the preceding information). COREQ: ECE 483: Student Teaching Seminar.

DEC 483: Student Teaching Seminar for Childhood Education.

2 hours, 2 credits. An examination of teaching practice. Emphasis on meeting the needs of all children, including children with special needs and English language learners. Course requires development of a program portfolio. PREREO: Successful completion of Requirements for Professional Practice. COREQ: DEC 481 or DEC 482.

Earth, Environmental, and **Geospatial Sciences**

Department Chair (Acting): Hari Pant (Gillet Hall, Room 309A) Department Faculty: Professors: Stefan Becker, Irene Leung, Juliana Maantay; Associate Professor: Heather Sloan; Assistant Professors: Yuri Gorokhovich, Marzie Jafari, Elia Machado, Hari K. Pant; College Laboratory Technician: Brian Morgan

Departmental offerings cover a broad spectrum of the social and natural sciences. These offerings integrate the earth sciences and studies of the human environment over a wide range, from urban geography to ocean sediments. Environmental issues, such as garbage disposal and recycling options, earthquake and volcanic hazards, coastal erosion, past extinction of life, and global warming, are important parts of various courses listed below.

Earth Science, B.A. (28-29 Credit Major)

This program is recommended for teacher education students. The required credits are distributed as follows:

16 credits in required courses:

GEO 101: Dynamic Earth (3 hours, 3 credits)

GEO 102: Dynamic Earth Laboratory (2 hours, 1 credit)

GEO 167: Earth Evolution (3 hours, 3 credits)

GEO 168: Earth Evolution Laboratory (2 hours, 1 credit)

GEO 228: Weather and Climate (3 hours, 3 credits)

GEO 229: Weather and Climate Laboratory (2 hours, 1 credits)

GEO 245: Earth Materials (5 hours, 4 credits)

8 credits to be chosen from the following courses:

GEO 236: Environmental Geology (4 credits)

GEO 340: Natural Hazards and Disasters (3 hours, 3 credits) and GEO 341 Natural Hazards and Disasters (2 hours, 1 credit)

GEO 345: Environmental Hydrology (4 credits)

GEO 350: Topics in Regional Geology and Mapping Techniques (4 credits)

GEO 448: Plate Tectonics (4 credits)

AST 136: Astronomy of the Solar System (5 hours, 4 credits)

(Other courses may be substituted for elective requirements with Departmental permission.)

4-5 credits in a related science or mathematics to be chosen from the following:

BIO 167: Principals of Biology (4 credits)

CHE 166: General Chemistry I (3 credits) and CHE 167: General Chemistry Laboratory I (2 credits)

MAT 123: A Problem-Solving Approach to Mathematics (4 credits) or MAT 132: Introduction to Statistics (4 credits)

PHY 166: General Physics I (5 credits)

(Other courses may be substituted for related science or mathematics requirements with department permission.)

Minor in Earth Science (16 credits)

A Minor in Earth Science consists of the following:

- GEO 101 Dynamic Earth (3 hours, 3 credits)
- GEO 102 Dynamic Earth Laboratory (2 hours, 1 credit)
- GEO 245 Earth Materials (5 hours, 4 credits)
- And two additional courses in Earth Sciences at the 300 or 400 level

Geography, B.A. (28 Credit Major)

The required credits are distributed as follows:

Credits

- In required courses: GEH 101 or GEH 102; plus GEP 204 6
- 4 In either GEP 470 or GEH 490
- 3 In a regional Geography course, chosen from among GEH 267, 281, 283, 285, 287, 289, and 291
- 15 Selected from other Geography courses and to be determined by the student's objectives in consultation with a Geography adviser.

Certificate Program in Geographic Information Science (GISc)

Geographic Information Science (GISc) is a fast-growing computer technology field involving mapping and analysis of spatial data. Geographic Information Systems (GIS) enable us to assess and manage existing conditions, and also help predict future conditions, ranging from monitoring disease occurrences to endangered species preservation, managing water supplies, tracking real estate values, and crime solving.

GIS is used today in fields as diverse as law enforcement, marketing, economic development, public health administration, environmental analysis, ecology, urban planning, real estate, government, education, geology, anthropology, and archaeology. GISc is an expanding field with good career opportunities, and GIS professionals are in high demand in many fields. People with GIS skills can also be more marketable as managers and analysts in their own fields. A certificate in GISc can be advantageous by itself or in augmenting a bachelor's or associate's degree.

The certificate in GISc consists of a sequence of four courses, equaling 14 credits, plus one 3-credit Geography elective course, for a total of 17 credits:

GEP 204: Basic Mapping: Applications and Analysis (3 credits);

GEP 205: Principles of Geographic Information Science (GISc) (3 credits):

GEP 350: Special Topics in GISc (4 credits);

GEH 490: Honors in Geography (4 credits); and

A Geography elective (3 credits).

Geography Elective (3 credits), to be selected from among:

GEH 101 / GEH 501: Introduction to Geography

GEH 230 / GEH 530: Human Geography

GEP 230 / GEP 530: Urban Environmental Management

GEH 235 / GEH 613: Conservation of the Environment

GEH 240 / GEH 540: Urban Geography or

GEH 266 / GEH 566: Geography of Development.

(Other courses may be substituted for the elective requirement with the Department's permission.)

Interdisciplinary Program in Environmental Science, B.S.

The Interdisciplinary Program in Environmental Science, B.S. is a 46-credit major.

The core of the interdisciplinary undergraduate program in Environmental Science is a sequence of basic and advanced science courses from four participating science departments. Students select a specialization area in Ecology, Urban Environmental Management, Environmental Geology, or Environmental Analysis.

The Interdisciplinary Program in Environmental Science offers courses to prepare students (1) for environmental science careers, and to become active proponents for their communities in the scientific and policy processes surrounding environmental issues, (2) to meet the environmental science employment demands of local, state, and federal governmental agencies, private consulting, and industry, and (3) to pursue advanced degrees in environmental/physical sciences.

CURRICULUM

Required courses (16-17 credits)

Students are required to take the following courses:

ENV 210: Introduction to Environmental Science (3 credits)

ENV 211: Introduction to Environmental Science Laboratory (1 credit)

GEH 245: Introduction to Quantitative Methods of Geography or

MAT 132: Introduction to Statistics* or

BIO 240: Biostatistics*** or equivalent (3-4 credits)

PHY 150: Energy and the Environment (4 credits)

ENV 330: Environmental Impact Assessment** (3 credits)

ENV 420: Natural Resource Management: Senior Seminar** (2 credits)

Required courses (15-17 credits)

Students are required to choose one course from each of the following four areas in consultation with a Departmental advisor:

Biological Sciences

BIO 166: Principles of Biology, Cells and Genes (4 credits)

BIO 167: Principles of Biology, Organisms (4 credits)

GEOSciences

GEO 101: Dynamic Earth in combination with (3 credits)

GEO 102: Dynamic Earth Laboratory (1 credit)

GEP 228: Weather and Climate in combination with (3 credits)

GEP 229: Weather and Climate Laboratory (1 credit)

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ENV 270: Environmental Pollution (4 credits)

GEOSpatial Analysis

GEP 205: Principles of GISc (3 credits)

GEP 321: Introduction to Remote Sensing (4 credits)

Chemistry

CHE 136: Elements of Chemistry (4 credits)

CHE 166: General Chemistry I* in combination with (3 credits)

CHE 167: General Chemistry Laboratory I * (2 credits)

Elective courses (12-15 credits)

Students choose 12-15 credits in electives to meet the 46 credit requirement in consultation with a departmental advisor. It is recommended that students choose courses that are grouped in one of the following specialization areas:

Ecology

BIO 167: Principles of Biology, Organisms (4 credits)

BIO 184: Plants and People (4 credits)

BIO 242: Flowering Plants (4 credits)

BIO (GEP) 302: Biogeography*** (4 credits)

BIO 330: Plant Physiology *** (4 credits)

BIO 336: Marine Biology*** (4 credits)

BIO 339: Ecology*** (4 credits)

ENV 235: Conservation of the Environment (3 credits)

ENV 255: Regional Topics and Field Methods in Environmental Sciences (1-6 credits)

CHE 168: General Chemistry II ** (3 credits)

CHE 169: General Chemistry Laboratory II ** (2 credits)

CHE 244: Introduction to Biochemistry*** (3 credits)

Urban Environmental Management

GEP 205: Principles of GISc (3 credits)

GEP 230: Urban Environmental Management (3 credits)

GEP 310: Geography of Urban Health (3 credits)

GEP 350: Special Projects in Geographic Information Systems** (4 credits)

GEP 360: Geovisualization and Analytic Cartography (3 credits)

GEP 375: Data Integration (4 credits)

GEH 240: Urban Geography and GIS (3 credits)

ENV 235: Conservation of the Environment (3 credits)

ENV 255: Regional Topics and Field Methods in Environmental Sciences (1-4 credits)

ENV 270: Environmental Pollution (4 credits)

ENV 326: Environmental Policy (3 credits)

HEA 301: Environmental Health** (3 credits)

Environmental Geology

GEO 101: Dynamic Earth in combination with (3 credits)

GEO 102: Dynamic Earth Laboratory (1 credit)

- GEO 236: Environmental Geology** (4 credits)
- GEO 245: Earth Materials** (4 credits)
- GEO 345: Environmental Hydrology (4 credits)
- GEO 340: Natural Hazards and Disasters in combination with (3 credits)
- GEO 341: Natural Hazards and Disasters Lab (1 credits)
- GEO 350: Topics in regional geology and mapping techniques -Field Course (4 credits)
- GEO 375: Field Problems in Geology** (3 credits)
- GEO 410: Environmental Biogeochemistry** (4 credits)
- GEP 228: Weather and Climate in combination with (3 credits)
- GEP 229: Weather and Climate Laboratory (1 credit)
- GEP 321: Introduction to Remote Sensing (4 credits)
- ENV 255: Regional Topics and Field Methods in Environmental Sciences (1-6 credits)

Environmental Analysis

- GEP 205: Principles of GISc (3 credits)
- GEP 228: Weather and Climate in combination with (3 credits)
- GEP 229: Weather and Climate Laboratory (1 credit)
- GEP 302: Biogeography and GIS** (4 credits)
- GEP 310: Geography of Urban Health (3 credits)
- GEP 321: Introduction to Remote Sensing (4 credits)
- GEO 340: Natural Hazards and Disasters in combination with (3
- GEO 341: Natural Hazards and Disasters Lab (1 credit)
- GEP 350: Special Projects in Geographic Information Systems** (4 credits)
- GEP 360: Geovisualization and Analytic Cartography** (4 credits)
- GEP 375: Data Integration (4 credits)
- ENV 235: Conservation of the Environment (3 credits)
- ENV 255: Regional Topics and Field Methods in Environmental Sciences (1-6 credits)
- ENV 270: Environmental Pollution (4 credits)
- CHE 168: General Chemistry II (*)(**) in combination with (3 credits)
- CHE 169: General Chemistry Laboratory II (*)(**) (2 credits)
- CHE 232: Organic Chemistry Lecture I (**) in combination with (3 credits)
- CHE 233: Organic Chemistry Laboratory I (**) (2 credits)
- CHE 249: Quantitative Analysis (*)(**) (5 credits)

Other elective courses

- GEP 204: Basic Mapping: Application and Analysis (3 credits)
- GEP 470: Seminar and Internship program in Geography -Independent Study (4 credits)
- PHY 166: General Physics I (*) or PHY 168: Introductory Physics I (*) (5 credits)
- PHY 167: General Physics II (*) or PHY 169: Introductory Physics II (*) (5 credits)

- (*) This course requires the completion of the College's requirement in mathematics.
- (**) This course has prerequisites that are a part of the major.
- (***) This course has prerequisites that are not a part of the major.

Minor in Environmental Science

The requirements for the minor in Environmental Science are GEO 101 or GEO 166, GEH 235, GEO 236, and one additional Geology or Geography course at the 300 or 400 level. NOTE: GEP 205 is also recommended.

Minor in Geographic Information Science

The minor in Geographic Information Science consists of GEP 204, GEP 205, GEP 350, and either GEP 470 or GEH 490. (14 credits.)

Career Preparation

The majors in Geology and Geography prepare students for graduate study and professional careers in geology, geography, earth sciences, oceanography, photogrammetry, regional and environmental studies, international relations, cartography, and urban and regional planning.

Courses in Environmental Science

ENV 210: Introduction to Environmental Science.

3 hours, 3 credits. Overview of environmental systems and issues. Topics include ecosystems, species and biodiversity, soil conservation, water and waste management, and environmental pollution.

ENV 211: Introduction to Environmental Sciences Laboratory.

2 hours, 1 credit. Basic laboratory skills in environmental analysis/science such as water quality analysis and field observations of ecosystems. PRE-or CORREQ: ENV 210.

ENV (GEH) 235: Conservation of the Environment.

3 hours, 3 credits. The impact of human activities on natural resources and environmental quality. Topics will include soil, forests, water, wildlife, outdoor recreation, and energy resources.

ENV 255: Regional Topics and Field Methods in **Environmental Sciences.**

1, 2, 3, or 4 credits (may be repeated for a maximum of 6 credits). In-depth field study of environmental problems and field methods.

ENV 270: Environmental Pollution.

5 hours, 4 credits (3 hours, lecture; 2 hours, lab). In-depth study of the science, impacts, and mitigation strategies regarding air, water, and noise pollution. Hands-on experience with pollution monitoring, analysis, and evaluation.

ENV 326: Environmental Policy.

3 hours, 3 credits. Background, development, application, implications, and evaluation of environmental policies in the United States.

ENV 330: Environmental Impact Assessment.

3 hours, 3 credits. Assessment of possible impacts of actual or proposed projects or activities on the environment. PREREO: ENV 210 or Departmental permission.

ENV 420: Natural Resource Management: Senior Seminar.

2 hours, 2 credits. Capstone experience for students majoring in Environmental Sciences. Integration of concepts and use of skills, methodology, and knowledge from relevant undergraduate courses. PREREQ: ENV 210, ENV 211, and ENV 330; or Departmental permission.

Courses in Geology

*Courses preceded by an asterisk are not expected to be offered in 2013-2015.

GEO 100: Marine Science.

5 hours (3, lecture; 2, lab), 4 credits. A survey of the geological, physical, chemical, and biological processes that shape the oceans.

GEO 101: Dynamic Earth.

3 hours, 3 credits. An Earth system science approach to the geosphere, hydrosphere, biosphere, atmosphere and the chemical and physical processes that connect them, including the rock, water, and tectonic cycles. Optional field observations. PREREQ: Completion of the College requirement in mathematics. *NOTE*: GEO 102 is required for majors.

GEO 102: Dynamic Earth Laboratory.

2 hours, 1 credit. Introduction to Earth materials; geologic time and dating techniques, analysis and interpretation of geologic features and processes, including earthquakes, coastal process and plate tectonics. The scientific method in Earth systems science. PREREQ OR COREQ: GEO 101.

GEO 166: Processes of Global Change.

5 hours (3, lecture; 2, lab), 4 credits. Evolution of the planet Earth; global composition and circulation of earth's air, water, and rock systems, and their interaction with the biosphere. Earth sciencebased analysis of transnational and global environmental problems. Management of our energy, mineral, and material resources. PREREQ: Completion of the College Requirement in Mathematics.

GEO 167: Earth Evolution.

3 hours, 3 credits. Stages in the history of the Earth system. Fundamental geologic concepts, origin of the Earth, the ancient seas and their changing shorelines, the continents and mountains and the evolution of life on Earth as seen in the fossil record. PREREQ: Completion of the College requirement in mathematics. NOTE: GEO 168 is required for majors.

GEO 168: Earth Evolution Laboratory.

2 hours, 1 credit. Study of important rocks and fossils, correlation and dating methods, interpretation of stratigraphic sections, case study reconstruction of geologic history. PREREQ OR COREQ: GEO 167.

GEO (GEP) 229: Weather and Climate Laboratory.

2 hours, 1 credit. Study of atmospheric processes and phenomena. Training in the use of weather instruments and interpretation of weather data. Exercises in weather forecasting. COREQ: GEP 228.

GEO 231: Principles of Geomorphology.

4 hours (2, lecture; 2, lab), 3 credits. Systematic study of the face of the earth; the characteristics, distribution, classification, origin, and evolution of the earth's surface features. Laboratory work includes the study of topographic maps, models, slides, and photographs. Field experience. PREREQ: GEO 100, GEO 101, GEO 166, or GEP 226.

GEO 236: Environmental Geology.

5 hours (3, lecture; 2, lab), 4 credits. The geologic aspects of land and ocean use. Geological nature and control of water, sand, gravel, building sites, and recreational areas. Geological factors in both exploitation and conservation of the environment. PREREQ: GEO 100, GEO 101, GEO 166, or GEP 226.

GEO 242: Introductory Paleontology.

5 hours (3, lecture; 2, lab), 4 credits. The history of animals and plants over geologic time. Paleontology evolution and extinction of organisms as seen in the fossil record. Laboratory work, supplemented by field trips. PREREQ: GEO 167 or BIO 167, or instructor's permission.

GEO 244: Mineralogy.

6 hours (2, lecture; 4, lab), 4 credits. Introduction to crystallography, determinative mineralogy of rock-forming minerals. Mineral identification of hand specimens in the laboratory. Field experience. PREREQ: GEO 100, 101, or 166.

GEO 245: Earth Materials.

5 hours (3, lecture; 2, lab), 4 credits. Presentation of the fundamentals of mineralogy and petrology (igneous, metamorphic, and sedimentary) with a focus on common rockforming minerals, crystal structure, mineral and rock identification, soil, and water within the context of biogeochemical cycles. PREREQ: GEO 167, 166, or 101.

GEO 301: Earth Science for Educators.

5 hours (3 lecture, 2 fieldwork), 4 credits. A hands- on, analytical approach to pedagogy-linked content of Earth system science. Topics include the origin, evolution, structure, and composition of biogeochemical processes.

GEO 303: Stratigraphy and Sedimentology.

6 hours (3, lecture; 3, lab), 4 credits. Techniques of physical and paleontologic correlation of rock sequences. Application of these techniques to basin analysis and construction of the geologic time scale. Modern classic and carbonate sedimentary environments, physical and chemical principles of sedimentation and paleoenvironmental analysis. Emphasis on the evolution of, and search for, water and hydrocarbon resources. PREREQ: GEO 167 and GEO 244.

*GEO (BIO) 332: Advanced Oceanography.

5 hours, (2, lecture; 3, lab or seminar; several day-long research exercises), 3.5 credits. PREREQ: GEO Major: GEO 100, either BIO 166 or BIO 167, and either CHE 114 or CHE 166-167. PREREQ: BIO major: BIO 166-167, GEO 166, and either CHE 114 or 166-167. Note: GEO (BIO) 332 may be credited toward either the GEO or the BIO major.

*GEO 333: Petrology.

5 hours (3, lecture; 2, lab), 4 credits. PREREQ: GEO 244.

GEO 340 Natural Hazards and Disasters: A Multidisciplinary Approach.

3 hours (3, lecture), 3 credits. Natural hazards and disasters: origin, physical and social implications. Elements of geographic, geological, social and political analysis applied to risk estimation and mitigation and management. PREREQ: GEO 166 or GEO 101, plus the college mathematics requirement.

GEO 341: Natural Hazards and Disasters Laboratory.

2 hours, lab, 1 credit. Lab supplements GEO 340 with designed exercises, simulations and critical review and analysis of current and historic disasters. Students will use statistical methods. interactive mapping software and case studies to learn technical skills and gain insight into complexity of disaster modeling, management and mitigation. COREQ: GEO 340.

*GEO 342: Micropaleontology.

5 hours (3, lecture; 2, lab), 4 credits. PREREQ: Either GEO 167 or BIO 266.

*GEO 344: Optical Mineralogy.

5 hours (2, lecture; 3, lab), 4 credits. PREREQ: GEO 100 or 101, and GEO 244.

GEO 345: Environmental Hydrology.

5 hours, 4 credits. Study of water dynamics below and above the Earth surface, ranging from large river systems to single drainage areas; global and local factors controlling water flow and storage, main hydrologic laws, equations and their solutions; application of hydrologic methods for environmental monitoring and protection, hydrologic design and planning.

GEO 348: Structural Geology.

5 hours (3, lecture; 2, lab), 4 credits. The deformation of the earth's crust: mechanics of rock deformation. Concepts of stress and strain: behavior of rocks under stress. Results of experimental rock deformation, and their application to naturally deformed rocks. Description and analysis of large- and small-scale structures and the mechanisms that produce them. Selected regional examples. Laboratory studies include orthographic and stereographic projection techniques of problem-solving and work with maps and cross-sections. Field experience. PREREQ: GEO 167 and plane geometry. Recommended: PHY 168.

GEO 375: Field Problems in Geology.

90 hours (fieldwork and lab), 3 credits. (Between spring and summer sessions.) One day of laboratory work and ten days of selected field problems in New York State, New England, New Jersey, or Pennsylvania. Areas will vary from year to year. Geologic maps will be made from topographic or air photo bases and will be supplemented by written reports on the individual areas. PREREQ: Either GEO 167 or GEO 244. Note: For estimated costs and dates of registration and fieldwork, consult the Department Chair.

*GEO 401: X-ray Crystallography.

5 hours (3, lecture; 2, lab), 4 credits. PREREQ: Either GEO or CHE majors.

GEO 410: Environmental Biogeochemistry.

5 hours (3 hours, lecture; 2 hours, lab), 4 credits. In-depth study of environmental biogeochemical processes and issues, ranging from aquatic to terrestrial systems. Laboratory exercises designed to provide experience in national and transnational environmental analysis. PREREQ: BIO 167, CHE 166, GEO 166, GEP 210, or Departmental permission.

*GEO 426: Advanced Sedimentology.

3 hours, 3 credits. PREREQ: GEO 100 or 101, GEO 244, and MAT 141 and 176.

ENV 330: Environmental Impact Assessment.

3 hours, 3 credits. Assessment of possible impacts of actual or proposed projects or activities on the environment. PREREQ: ENV 210 or Departmental permission.

GEO 448: Plate Tectonics.

5 hours (3, lecture; 2, lab), 4 credits. Plate Tectonics as a unifying theory: the driving mechanisms of crustal deformation. Evidence supporting sea-floor spreading and plate motions: geophysical and geologic data. Description and comparison of active and ancient tectonic belts. Implications of plate tectonics, continental drift, and mountain building, the role of plate tectonic cycle in renewal of Earth's surface, and relation with other biogeochemical cycles. Readings from original papers. Laboratories include geologic map study of older tectonic belts and techniques of measuring, plotting, and interpreting structural data of deformed rocks. PREREQ: GEO 166 OR 101 AND 167.

GEO 450: Seminar.

2 hours, 2 credits; maximum 4 credits. Major topics of current interest in geology. Topic and instructor will change each semester. PREREQ: GEO 244 and one 300-level GEO course.

*GEO (BIO) 470: Summer Oceanographic Research Cruise.

90 hours (fieldwork and lab), 3 credits. (Between spring and summer sessions.) PREREQ: Either GEO (BIO) 332 or BIO 335. NOTE: Students should consult either Department before registering for this course.

GEO 490: Honors in Geology.

One semester; 2, 3, or 4 credits (may be repeated for a maximum of 6 credits). Individual research, including reading and—in some cases—laboratory or field investigations, to be carried out under the individual guidance of a staff member. The results must be embodied in an honors essay or other suitable presentation. PREREQ: Departmental permission.

Courses in Physical Geography

*Courses preceded by an asterisk are not expected to be offered in 2013-2015.

GEP 199: Cartography and Graphic Presentation I.

6 hours (2, lecture; 4, lab), 4 credits. Use of drawing instruments; free-hand and mechanical lettering in the construction of maps, diagrams, graphs, and charts. Elements of distance, direction, and position. Study of map projections and their use; construction of some simpler projections. Methods of enlarging and reducing maps; drawing of profiles and traverse made by students in the field. Practice in the transformation of data of various kinds into effective types of charts and graphs.

GEP 204: Basic Mapping: Applications and Analysis.

4 hours (2, lecture; 2, lab), 3 credits. An introduction to the world of maps—how to use, interpret, and analyze maps. History of cartography, map projections, scales, measurements, contour interpretations, thematic maps, charts and graphs, remote sensing, aerial photos, and geographic information systems.

GEP 205: Principles of Geographic Information Science.

4 hours (2, lecture; 2, lab), 3 credits. The use of Geographic Information Systems for conducting research and spatial analysis in the natural and social sciences. The use of computer mapping and spatial analysis technologies for studying the physical and human components of the earth's environment. PREREQ: GEO 101, or GEH 101, or Departmental permission.

GEP 226: Physical Geography.

5 hours (3, lecture; 2, lab), 4 credits. Introduction to physical geography, including basic earth-sun relationships, weather and climate, land forms, vegetation, soils, and water resources. Laboratory exercises stress the use and interpretation of maps and other graphic materials. PREREQ: 3 credits in Geography or Geology.

*GEP 227: Interpretation of Aerial Photography.

4 hours (2, lecture; 2, lab), 3 credits. PREREQ: 3 credits in Geography or Geology.

GEP (GEO) 228: Weather and Climate.

3 hours, 3 credits. Introductory study of atmospheric processes and phenomena and the elements of weather and climate such as radiation, temperature, precipitation and humidity, air pressure, and winds. A study of the world's climates, atmospheric circulation patterns, severe weather events (such as thunderstorms, tornadoes, and hurricanes), weather forecast, and climate change.

GEP (GEO) 229: Weather and Climate Laboratory.

2 hours, 1 credit. Study of atmospheric processes and phenomena. Training in the use of weather instruments and interpretation of weather data. Exercises in weather forecasting. COREQ: GEP 228.

GEP 230: Urban Environmental Management.

3 hours, 3 credits. Basic issues and possible solutions to problems of the urban environment, including solid waste management, air and water quality, noise pollution, and open-space beautification. Course includes strategies for citizen participation and organization related to local environmental projects.

*GEP 299: Cartography and Graphic Presentation II.

6 hours (2, lecture; 4, lab), 4 credits. PREREQ: GEP 199.

GEP (BIO) 302: Biogeography.

5 hours (3, lecture; 2, lab), 4 credits. PREREQ: GEP 226 and BIO 166-167.

GEP 310: Geography of Urban Health.

4 hours (2, lecture; 2, lab), 3 credits. A geographical examination of urban health. Topics include the historical perspective of health, place, and society; mapping and measuring health and health impacts; the social and spatial patterning of health; the geography of health inequalities and disparities; health and social/spatial mobility; and the effects of urban segregation, overcrowding, and poverty on disease. Geographic Information Science will be used in the laboratory exercises to illustrate the theoretical concepts and to produce worked examples of health geography.

GEP 321: Introduction to Remote Sensing.

(3, lecture; 2, lab), 4 credits. Fundamentals of remote sensing: energy interactions between the sun, atmosphere, and features on the earth surface. Structure of raster data, cell size, and both passive and active remote sensing. Spatial, spectral, radiometric and temporal resolution characteristics of different multi-spectral remotely sensed data using specialized image analysis software.

GEP 350: Special Projects in Geographic Information Systems.

6 hours (2, lecture; 4, lab), 4 credits. May be reelected when topic changes, for a maximum of 8 credits. Special topics in the use of Geographic Information Systems for conducting research and spatial analysis in the natural and social sciences. The advanced use of computer mapping and spatial analysis for studying the physical and human components of the earth's environment. PREREQ: GEP 199, GEP 205, or Departmental permission.

GEP 360: Geovisualization and Analytic Cartography.

6 hours (2, lecture; 4, lab), 4 credits. Creating maps using advanced Geographic Information Science (GISc) techniques. Focus on understanding cartographic conventions and principles of good cartographic design, and analysis of complex spatial data through geovisualization methods. PREREQ: GEP 204, or GEP 205, or Departmental permission.

GEP 3060: Raster Applications.

4 hours (2 lecture, 2 lab), 3 credits. Raster based operations including the creation, modification, analysis and integration with vector data, using a Geographic Information System (GIS). Topics include surface analysis, multi-criteria/multi-objective evaluation, and map algebra. PREREQ: GEP 205 or instructor's permission.

GEP 470: Seminar and Internship Program in Geography.

4 hours, 4 credits (may be requested for a total of 8 credits). Review of current professional issues in the practice of Geography, especially in the fields of Geographic Information Systems (GIS), Environmental Geography, and Urban Geography, with weekly work as an intern in various organizations. PREREQ: Departmental permission.

Courses in Human Geography

*Courses preceded by an asterisk are not expected to be offered in 2013-2015.

GEH 101: An Introduction to Geography.

3 hours, 3 credits. A study of world physical/environmental and cultural patterns and the factors producing them. Maps and atlases are used to recognize and analyze these patterns.

GEH 102: World Regional Geography.

3 hours, 3 credits. A study of the basic features of each of the world's regions.

GEH 111: Geography of Business and Marketing.

3 hours, 3 credits. Analysis of location factors in business decisionmaking, including geographic techniques to locate and define potential markets and marketing campaigns. Evaluation of the market characteristics of neighborhoods, communities, and populations.

GEH 230: Human Geography.

3 hours, 3 credits. Study of the approach, key concepts, and methods of human geography. Emphasis will be given to the cultural landscape and location analysis within a systematic framework. The contribution of these concepts to an understanding of societal problems. PREREQ: Either GEH 166, 167, or Departmental permission.

GEH 232: Medical Geography.

3 hours, 3 credits. Introduction to medical geography via a study of the way in which environments affect health and disease. Effect of the distribution of health facilities on community health and access to health services. PREREQ: GEH 101, or instructor's permission.

GEH (ENV) 235: Conservation of the Environment.

3 hours, 3 credits. The impact of human activities on natural resources and environmental quality. Topics will include soil, forests, water, wildlife, outdoor recreation, and energy resources.

GEH 240: Urban Geography.

3 hours, 3 credits. The contribution of geographical concepts and methods to an understanding of contemporary and future urban problems. Emphasis placed on the ghetto and the urbanized region in post-industrial societies.

*GEH 242: Economic Geography.

3 hours, 3 credits.

GEH 245: Introduction to Quantitative Methods of Geography. 3 hours, 3 credits.

GEH 266: Geography of Development.

3 hours, 3 credits. An introduction to the spatial aspects of economic development. The course provides a basis for understanding the cultural, physical, and economic differences between the world's developed and underdeveloped regions. PREREQ: GEH 101, GEH 102, or Departmental permission.

GEH 267: The New York Metropolitan Region.

3 hours, 3 credits. An introduction to the way a geographer looks at the New York metropolitan region and its problems. Topics include the physical environment, population growth and distribution, housing and employment patterns, and transportation systems. PREREQ: GEH 101, GEH 102, or Departmental permission.

*GEH 270: Field Geography.

90 hours (fieldwork and lab), 3 credits. PREREQ: Either GEH 166, GEH 167, or Departmental permission. Note: For estimated costs and dates for registration and fieldwork, consult the Chair.

*GEH 275: Field Geography of New York City and Vicinity. 90 hours (fieldwork and lab), 3 credits. (Spring semester, Saturdays only.) PREREQ: GEH 166, GEH 167, or Departmental permission.

GEH 281: Geography of the United States and Canada.

3 hours, 3 credits. The major features of the natural and human environments of the United States and Canada. Selected regions such as the East coast Megalopolis and the Great Plains. PREREQ: GEH 101, GEH 102, or Departmental permission.

*GEH 283: Geography of Western Europe.

3 hours, 3 credits. PREREQ: GEH 101, GEH 102, or Departmental permission.

GEH 285, 287, 289, and 291: Regional Geography of Selected Areas.

Each 3 hours, 3 credits. The geography of continents or major areas outside Anglo-American and Western Europe. Special emphasis on the basic principles of economic and cultural geography of regionalization as illustrated in the area under consideration. PREREQ: GEH 101, GEH 102, or Departmental permission.

285: Asia

287: Africa

289: Latin America (LAC 289)

291: Eastern Europe and the Former Soviet Republics

*GEH 293: Geography of New York State.

3 hours, 3 credits. PREREQ: GEH 101, GEH 102, or Departmental permission.

GEH (MES) 295: Middle East: A Regional Geographic Perspective.

3 hours, 3 credits. Physical, cultural, and human geography and environmental issues of the Middle East from antiquity to present.

*GEH 315: Historical Geography.

3 hours, 3 credits. PREREQ: Either GEH 166 or 167 and either GEH 181 or 183, or Departmental permission.

GEH 320: Population Geography.

3 hours, 3 credits. PREREQ: Either one year's work in GEH or Departmental permission.

*GEH 325: Political Geography.

3 hours, 3 credits. PREREQ: Either GEH 166, GEH 167, or one semester of POL.

*GEH 330: The History of Geographic Thought.

3 hours, 3 credits.

*GEH 335: Problems in Human Ecology.

3 hours, 3 credits. PREREQ: GEH 235 or GEP 230.

*GEH 340: Advanced Urban Geography.

3 hours, 3 credits. PREREQ: Either GEH 240 or Departmental permission.

GEH 490: Honors in Geography.

One semester, 2, 3, or 4 credits (may be repeated for a maximum of 6 credits). Individual research, including reading and—in some areas—laboratory or field investigations, to be carried out under the individual guidance of a staff member. The results must be embodied in an honors essay or other suitable presentation. PREREQ: Departmental permission.

Economics and Business

Chair: Dene Hurley (Carman Hall, Room 377)

Coordinator of Accounting Programs: Linda Tauber (Carman Hall, Room 370)

Department Advisor: Diedre Constant

Department Faculty: Professors: John Cirace, Oscar Fisch, Chanoch Shreiber; Associate Professors: Juan DelaCruz, Vassilios Gargalas, Mario Gonzalez-Corzo, Dene Hurley; Assistant Professors: Jaspal Chatha, Amod Choudhary, Mine Doyran, Judith Fields, Susan Honig, Michelle Kamen-Friedman, Angela Lebbon, Rossen Petkov; Lecturers: Peter Alexanderson, Emine Kayaalp, Anthony Murrell, Nikolaos Papanikolaou, Ada Rodriguez, Marshall Ross, Deborah Sanders, Linda Tauber

The Department offers four undergraduate majors: B.A. in Economics; B.A. in Accounting; B.S. in Accounting; and Bachelor of Business Administration (B.B.A.).

Career Opportunities: The degree programs offered by the Department are designed to equip students with necessary competencies for successful careers in business enterprises, government or non-profit organizations, education, and research.

Preparation for Graduate Study: Students planning graduate study in economics, accounting, business administration, law, or any relevant academic or professional field should contact Departmental advisers.

Economics, B.A. (34 Credit Major)

This major provides an understanding of the structures, processes, and trends in the private and public economy and offers academic and technical training in the analysis and handling of economic problems in five different settings:

Credits (22 credits)

12 in economic analysis: ECO 166-167 and 300-301

 $10\,$ in quantitative methods: ECO 302-402 and either MAT 174 or $175\,$

Concentration Requirements (12 credits in one of the five fields below):

Urban Economics:

BBA 305: Consumer Economics

ECO 314: Urban Economics

ECO 316: Economics of Inequality

POL 310: Urban Politics and Government

Managerial Economics:

BBA 204: Principles of Management

BBA 324: International Economics

BBA 326: Labor Economics

BBA 431: Managerial Economics

Financial Economics:

BBA 204: Principles of Management

BBA 207: Principles of Finance

BBA 308: Corporation Finance

BBA 310: Security and Investment Analysis

Political Economy:

ECO 311: Public Economics

ECO 321: History of Economic Thought

ECO 338: Law and Economics

POL 211: Public Policy

Economic History:

ECO 320: History of Economic Thought

ECO 321: History of American Economic and Social Development

ECO 322: Economic History of Developing Countries

ECO (LAC) 323: Economic Development in Latin America

Multiple concentrations are not permitted.

Minor in Economics

This minor consists of ECO 300, 301, 302, and one additional 300-and 400-level elective course with ECO prefix. Not open to students majoring in Business Administration or Accounting.

Accounting, B.A. (42 Credit Major)

Completion of this major qualifies students for positions in private and public accounting. Students enrolled in this major must complete the following credit requirements:

Credits (42)

6 in business economics: BBA 168, BBA 169;

30 in accounting: ACC 171-272, 334-335, 342, 348, 439-440, 441, and 442:

6 in law: BBA 336-337 or BBA 339-340

Accounting, B.S. (63 Credit Major)

To earn the B.S. in Accounting, a student must complete a total of 120 credits, 60 of which must be in liberal arts.

Effective Fall 2009, college CPA programs registered with the New York State Education Department must offer a curriculum consisting of a minimum of 150 credit hours. In line with this change, as of Fall 2009, the Department of Economics and Business offers, in addition to the B.S. in Accounting, an M.S. in Accounting program for those students who choose to take the additional 30 credits toward this graduate degree. However, specific admission requirements are in place to gain admittance to the M.S. in Accounting program. Contact the Department for details.

Professional Credits (60)

- 6 in business economics: BBA 168-169
- 33 in accounting: ACC 171, 272, 334-335, 342, 348, 439-440, 441, 442, 444
- 3 in one ACC elective to be chosen from ACC 445, 446, or 449
- 6 in law: BBA 336-337 or BBA 339-340
- 6 in finance: BBA 207 and either BBA 308 or BBA 310

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Credits in Other Departments (3)

3 in business writing: ENW 300

NOTE: All students are admitted to this major on a provisional basis. To maintain matriculation, the enrollees must attain a minimum cumulative index of 2.7 (B-) in the first four ACC-prefixed courses they will have taken at Lehman College at first trial. Students who fail to fulfill this condition will be removed from the B.S. in Accounting program. These students cannot switch to B.B.A.; however, they may switch to B.A. in Economics or B.A. in Accounting. These students may also count the previously taken ACC-prefixed courses toward a minor in Accounting.

Minor in Accounting

The minor in Accounting consists of ACC 272, 334, 335, and one additional 300- or 400-level ACC course. Not open to students majoring in Business Administration.

Bachelor of Business Administration B.B.A. (46 Credits)

The B.B.A. program equips students with the necessary managerial skills to function in today's rapidly changing business environment. The program, stressing the place of business organizations in the larger community, prepares its enrollees to meet this challenge by helping them develop appropriate technical, conceptual, and interpersonal competencies. The curriculum also emphasizes the role of non-profit and governmental organizations in societal life. As such, students majoring in this program are introduced to the art and science of planning, organizing, controlling, and leading the physical, financial, human, and informational resources of any and all organizations—private or public, for-profit or not-for-profit, corporate or entrepreneurial.

Departmental Credits (36):

6 in business economics: BBA 168, BBA 169

6 in accounting: ACC 171, ACC 272

6 in quantitative methods for business: BBA 303, BBA 403

9 in management: BBA 204, BBA 405, BBA 407

Nine in one area of concentration:

Finance: BBA 207, BBA 308, BBA 310 Marketing: BBA 332, BBA 367, BBA 467 Accounting: ACC 334, ACC 335, ACC 348

Human Resource Management: BBA 327, BBA 328, BBA 329 Business Law: BBA 336, BBA 337, and either BBA 339 or BBA 340

International Business: BBA 324, BBA 432, BBA 433 Business Economics: BBA 305, BBA 326, BBA 431

E-Business: BBA 333, BBA 340, BBA 433

Hospitality Management: BBA 345, BBA 346, BBA 347

Students who wish to elect a second concentration should consult with a Departmental advisor.

Students concentrating in both Business Law and E-Business must take both BBA 339 and BBA 340.

Students concentrating in both International Business and E-Business, which have BBA 433 in common, must take BBA 367 as the required sixth course.

Credits in Other Departments (10)

3 in Ethical and Legal Responsibilities: PHI 330

3 in Business Writing: ENW 300

4 in Business Computing: CIS 211

NOTE 1: A minor field is also required. This minor should be attained in a department outside the Department of Economics and Business.

NOTE 2: All students are admitted to this major on a provisional basis. To maintain matriculation, the enrollees must attain a minimum cumulative index of 2.7 (B-) in the first four B.B.A.-prefixed courses they will have taken at Lehman College at first trial. Students who fail to maintain this minimum index will be removed from the B.B.A. program. These students cannot switch to B.S. in Accounting; however, they may switch to B.A. in Economics or B.A. in Accounting. Students removed from B.B.A. program may also switch to and count previously taken BBC-prefixed courses toward a minor in Management, Business Practice, or Accounting.

Minor in Business Practice

This minor consists of any four courses with a BBA prefix at the 200 level of higher. Not open to students majoring in Accounting or Business Administration. Students majoring in Economics cannot elect BBA 303 under this minor.

Minor in Management

This minor consists of BBA 204, 303, 405, and 407. Not open to students majoring in Accounting or Business Administration. Economics majors who wish to take this minor must substitute another 300- or 400-level BBA course for BBA 303.

Courses in Economics

ECO 166: Introduction to Macroeconomics.

3 hours, 3 credits. A study of macroeconomics—how the economy, as a whole, works. NOTE: Students may not receive credit for both ECO 166 and BBA 168.

ECO 167: Introduction to Microeconomics.

3 hours, 3 credits. Microeconomics and price determination: market structures, resource allocation, distribution of income, and partial equilibrium analysis. NOTE: Students may not receive credit for both ECO 167 and BBA 169.

ECO 300: Intermediate Macroeconomics.

3 hours, 3 credits. The components, measurement, and dynamics of the level of national income and employment; empirical and analytical approaches to the problems of controlling economic fluctuations. PREREQ: ECO 166.

ECO 301: Intermediate Microeconomics.

3 hours, 3 credits. Theory of consumer demand and the firm. Price determination and market structure. Topics covered include utility analysis, production function, and income distribution. Some selected materials on welfare economics are included. PREREO: ECO 167.

ECO 302: Economic Statistics.

3 hours, 3 credits. Descriptive statistical methods used in economic analysis: probability distributions; sampling and estimation; confidence intervals; hypothesis testing; correlation and linear regression. PREREQ: ECO 166 and 3 credits of college mathematics. NOTE: Students may not receive credit for both ECO 302 and BBA 303.

ECO 306: Money and Banking.

3 hours, 3 credits. Monetary and banking principles and practices: credit, commercial banks, the Federal Reserve System; monetary policy and its impact on the economy; and current issues and theories. PREREQ: Either ECO 166 and 167 and one additional 3credit ECO course or Departmental permission.

ECO 311: Public Economics.

3 hours, 3 credits. Types of market failures and rationales for government intervention in economic activity; theory of public goods; collective choice; cost-benefit analysis; positive and normative aspects of expenditure and taxation policies; the U.S. tax structure. PREREQ: ECO 301 and 306.

ECO 313: Economics of Aging.

3 hours, 3 credits. Aging in the context of health and economic environments, with attention to concomitant social, legal, and political issues, including saving for old age, retirement, design and viability of social security systems, elder care, inheritance, and the role of institutions within the micro- and macroeconomic environment.

ECO 314: Urban Economics.

3 hours, 3 credits. Theories of urban location and space allocation; analysis of urban problems, such as neighborhood decay, poverty, substandard housing, fiscal imbalance, housing segregation, and traffic congestion. PREREO: ECO 166 and 167.

ECO 316: Economics of Inequality.

3 hours, 3 credits. Economic status of minorities and women in the U.S.; statistical and demographic analysis of inequality. PREREQ: ECO 166 and 167, and ECO 302.

ECO 320: History of Economic Thought.

3 hours, 3 credits. Development of key ideas of the major schools of economic thought with special reference to the sociophilosophic contexts within which these ideas are embedded.

ECO 321: History of American Economic and Social Development.

3 hours, 3 credits. Economic, social, and political interaction among different sectors; effects of public policy on urban/rural, commercial/industrial, public/private processes.

ECO 322: Economic History of Developing Countries.

3 hours, 3 credits. The role of social institutions and human resources; the effects of rural development, urbanization, and globalization.

ECO (LAC) 323: Economic Development in Latin America.

3 hours, 3 credits. Examination of major economic trends in Latin American economic development and the impact of North American policy. Special emphasis is placed on Latin American views of economic growth and on foreign intervention in particular areas, such as Brazil, Mexico, Puerto Rico, Cuba, and Chile. PREREQ: Either ECO 166 and 167 and one additional 3credit ECO course or Departmental permission.

ECO 331: Industrial Organization.

3 hours, 3 credits. Market structure and organizational performance in theory and practice; discussions of entry conditions and their relation to productivity; analysis of the main antitrust regulations; theories of managerial behavior as a consequence of the separation of ownership and management. PREREQ: ECO 166 and 167.

ECO 338: Law and Economics.

3 hours, 3 credits. Applications of price theoretic reasoning to legal institutions and the legal perspective to economic phenomena. PREREQ: ECO 166 and 167 and either BBA 336 or a POL course chosen from POL 226, 227, 228, 319, 321, or 322.

ECO 385: Independent Study in Economics.

3 credits (may be repeated for a maximum of 6 credits). Individual study and research of a specific topic under the direction of a faculty member. PREREQ: Instructor's permission and ECO 166, 167, and 302.

ECO 401: Introduction to Mathematical Economics.

3 hours, 3 credits. Mathematical models used in economic science, such as constrained and unconstrained optimization; Lagrangean and Kuhn-Tucker multipliers; linear programming. PREREQ: ECO 301 and 402, and MAT 174.

ECO 402: Econometrics.

3 hours, 3 credits. Methods and problems of simple and multivariable linear regression with emphasis on problems arising in the analysis of economic data; time-series models; problems of multicollinearity, heteroscedasticity and autocorrelation; and functional forms and use of dummy variables. PREREQ: ECO 302 or BBA 303.

ECO 450: Economics Seminar.

One semester, 3 credits. Selected readings and research. PREREQ: Permission of the Department.

ECO 490: Honors Project in Economics.

3 credits. Supervised individual research and directed reading in selected areas of economics. An honors essay or some other suitable presentation is required. PREREQ: A minimum of 3.2 GPA, permission of the instructor, and ECO 402.

Courses in Accounting

ACC 171: Principles of Accounting I.

4 hours, 3 credits. Balance sheets and income statements; the theory of debit and credit; controlling accounts and mercantile transactions.

ACC 185: Introduction to Accounting for Non-Accounting Maiors.

3 hours, 3 credits. Study of accounting principles, their application and use in the preparation and interpretation of financial statements; the uses of accounting for management and control. Note: ACC 185 may not be counted for Distribution credit in Study Area III. A student may not receive credit for both ACC 185 and 171

ACC 272: Principles of Accounting II.

4 hours, 3 credits. Partnership and corporation accounting, the voucher records, and uses of accounting in management. PREREQ: ACC 171.

ACC 334: Intermediate Accounting I.

3 hours, 3 credits. Overview of the accounting process and the theory underlying financial accounting; a detailed study of the balance sheet: assets and liabilities. PREREQ: ACC 272.

ACC 335: Intermediate Accounting II.

3 hours, 3 credits. A study of stockholders' equity, dilutive securities and investments, and a review of special problems: revenue recognition, financial statements analysis, accounting changes, accounting for income taxes, pension plans, leases, and price level changes. PREREQ: ACC 334.

ACC 342: Advanced Accounting.

3 hours, 3 credits. Problems relating to income, fiduciaries, liquidation, branch houses, consolidations, and other special topics. PREREQ: ACC 335.

ACC 343: Analysis of Financial Statements.

3 hours, 3 credits. Types of financial reports and methods of interpretation; evaluation of specific companies and industries; price-level changes, "cash flow" analysis, and funds statements. PREREQ: ACC 342.

ACC 348: Computer-Based Accounting.

4 hours, 3 credits. Acquisition and implementation of information systems for accountants. PREREQ: ACC 272.

ACC 385: Independent Study in Accounting.

3 credits (may be repeated for a maximum of 6 credits). Individual study and research of a specific topic under the direction of a faculty member. PREREQ: Instructor's permission and ACC 334.

ACC 439: Cost Accounting I.

3 hours, 3 credits. Cost accounting, a managerial tool in planning and control; cost systems and methods; process and job order; direct and full costing; the application of standard costs to historical statements and projection of budgets; special costing problems; joint by-products and marketing analysis. PREREQ: ACC 272.

ACC 440: Cost Accounting II.

2 hours, 2 credits. The use of advanced tools in the managerial decision-making process; inventory planning and control, transfer pricing, determinants of profit, capital budgeting; behavioral implications of accounting and budgeting. PREREQ: ACC 439.

ACC 441: Auditing.

4 hours, 4 credits. Auditing theory and practice; the ethics of the accounting profession; procedures for auditing the balance sheet and income statement; special investigations and reports. PREREQ: ACC 342.

ACC 442: Introduction to Federal Taxation.

3 hours, *3 credits*. The Internal Revenue Code: regulations, rules, and court decisions as they affect individual and corporate taxpayers. Emphasis on basic tax principles. PREREQ: ACC 335 or Departmental permission.

ACC 444: Advanced Accounting Problems.

3 hours, 3 credits. Application of accounting principles to the solution of advanced problems taken from professional examinations and actual business situations. PREREQ: ACC 342 or Departmental permission.

ACC 445: Forensic Accounting.

3 hours, 3 credits. Financial fraud in historical perspective, the psychology of the fraudster, the role of the auditor and the forensic accounting investigator, potential red flags, and fraud detection techniques. PREREQ: ACC 342.

ACC 446: Nonprofit and International Accounting.

3 hours, 3 credits. Theory and practice of accounting in nonprofit and international setting. PREREQ: ACC 342.

ACC 447: Financial Accounting Theory.

3 hours, 3 credits. Generally Accepted Accounting Principles (GAAP) as practiced in the U.S., with emphasis on revenue recognition, asset valuation, financial statement presentation, and disclosure. PREREQ: ACC 335.

ACC 449: Advanced Tax Problems.

3 hours, 3 credits. Internal Revenue Code and various regulations affecting property transactions, corporations, and partnerships. PREREQ: ACC 442.

ACC 490: Honors Project in Accounting.

3 credits. Supervised individual research and directed reading in selected areas of accounting. An honors essay or some other suitable presentation is required. PREREQ: A minimum of 3.2 GPA, permission of the instructor, and ACC 348 and 444.

Courses in Business Administration

BBA 168: Macroeconomic Foundations of Business.

3 hours, 3 credits. Application of macroeconomics concepts to managerial performance: gross domestic product; consumption and saving; investment and production; economic policy in face of inflation and unemployment; business cycles; money supply; interest rates; globalization; and macroeconomic forecasting. NOTE: Students may not receive credit for both BBA 168 and ECO 166.

BBA 169: Microeconomic Foundations of Business.

3 hours, 3 credits. Application of microeconomic concepts to managerial problems: scarcity; choice; supply; demand; production; cost; competition; monopoly; present value; decisionmaking under risk; game theory; market failures; asymmetric information; and moral hazard. NOTE: Students may not receive credit for both BBA 169 and ECO 167.

BBA 204: Principles of Management.

3 hours, 3 credits. An introduction to the theory and practice of planning, organizing, and controlling the physical, financial, and informational resources of an organization, with a special emphasis on motivating and leading the human resource component.

BBA 207: Principles of Finance.

3 hours, 3 credits. Basic concepts of finance. Includes financial environment of the U.S. economy. Basic tools of financial analysis and managerial finance topics.

BBA 303: Business Statistics I.

4 hours, 3 credits. Graphical methods and exploratory business data analysis; the normal distribution and sampling distribution of the mean estimation for means and proportions; and introduction to hypothesis testing for one and two groups. PREREQ: Three credits of college mathematics. NOTE: Students may not receive credit for both BBA 303 and ECO 302.

BBA 305: Consumer Economics.

3 hours, 3 credits. Financial decision-making strategies in education, health, careers, housing, credit, insurance, and investment from the point of view of the consumer and family. PREREQ: BBA 168 and 169 or ECO 166 and 167.

BBA 308: Corporation Finance.

3 hours, 3 credits. The economic significance of the corporate unit in present-day enterprise; its financial organization and practices; the purpose and procedures of financial reorganization. PREREQ: ACC 171.

BBA 310: Security and Investment Analysis.

3 hours, 3 credits. A perspective on the fields of investments; types of securities, market procedures, security analysis, and the influence of changing economic conditions on security values. PREREQ: BBA 207.

BBA 324: International Economics.

3 hours, 3 credits. Theory of international relations: trade, investment, growth, balance of payments, currency values, and policy issues; trade restrictions, common markets, multinational firms, imperialism, and international monetary reform. PREREQ: BBA 168 and 169 or ECO 166 and 167.

BBA 326: Labor Economics.

3 hours, 3 credits. History and present status of organized labor force and trade unions; collective bargaining; unemployment and labor income; hours, wage rates, and working conditions; and government regulations of industrial relations. PREREQ: BBA 168 and 169 or ECO 166 and 167.

BBA 327: Organizational Behavior and Development.

3 hours, 3 credits. Human behavior in the organizational setting; the interface between human behavior and organizational performance; structures and processes characteristic of organizations themselves; ethical issues emerging in the management of human resources; development of human resources toward the attainment of organizational as well as individual goals. PREREQ: BBA 204.

BBA 328: Human Resource Management.

3 hours, 3 credits. Emphasis of the managerial approach to the employment of human resources; large scale enterprise and managerial goals; economic and social matrix for hiring and developing human resource inputs; and collective bargaining. PREREQ: BBA 204.

BBA 329: Union-Employer Relations.

3 hours, 3 credits. Legal requirements for employers and labor organizations; negotiation and implementation of collective bargaining agreements; relationship between labor law and practice. PREREQ: BBA 204.

BBA 332: Marketing Management.

3 hours, 3 credits. Nature and functions of marketing; consumer motivation and behavior; marketing institutions at the wholesale and retail levels; market research, product planning, pricing policies, sales management, and promotion; and government regulation. PREREQ: BBA 204.

BBA 333: E-Business.

3 hours, 3 credits. External and internal factors affecting E-Business, designing a database and creating a value chain, quality and safety issues, impacts on E-Business design on enterprise risks and opportunities, impacts of E-business on industrial, social, legal, and cultural environments; the global nature of E-Business.

BBA 336: Business Law I.

3 hours, 3 credits. Fundamentals of legal liability; Federal and New York State court systems; the attorney-client relationship; principles of the law of contracts, sales, product liability, and agency.

BBA 337: Business Law II.

3 hours, 3 credits. The law of partnership, corporations, and other business organizations; personal property, secured transactions, and commercial paper as treated under the Uniform Commercial Code; landlord-tenant relationship. PREREQ: BBA 336.

BBA 339: Commercial Transactions.

3 hours, 3 credits. Key topics from the Uniform Commercial Code concerning mercantile transactions: sales and leases; commercial paper; bank deposits, collections, and funds transfers; letters of credit; secured transactions.

BBA 340: Internet Law.

3 hours, 3 credits. Effect of laws on the content provided by E-Business platforms and on consumers' access to the Internet; impact of E-Business on contract laws and agreements; the determination of what information is public and what is private; current laws concerning copyright, privacy, advertising, and censorship and their relation to the materials on the E-Business platform; the effect of trademark law on choice of domain name.

BBA 345: Introduction to Hospitality Management.

3 hours, 3 credits. Theory and practice of hospitality management in global setting and general characteristics of the lodging, food, travel, and recreation industries; special services provided by each segment; relevant principles for planning, organizing, controlling, leading, and motivating the physical, financial, and human resources of hospitality service providers; means of achieving total quality and team performance. PREREQ: BBA 204.

BBA 346: Strategic Hospitality Management.

3 hours, 3 credits. Issues impinging on the long-range development of hospitality industry in face of the individual enterprise's strengths and weaknesses versus industry- and worldwide opportunities and threats. Course content is delivered through case studies, group discussion, and research projects. PREREQ: BBA 345.

BBA 367: Consumer Behavior.

3 hours, 3 credits. Global, regional, and local dimensions of consumer decision-making; impact of motivation, perception, knowledge, attitudes, and information-processing abilities upon the behavior of consumers. PREREQ: BBA 332 or 433.

BBA 385: Independent Study in Business Administration.

3 credits (may be repeated for a maximum of 6 credits). Individual study and research of a specific topic under the supervision of a faculty member. PREREQ: Instructor's permission and BBA 405.

BBA 403: Business Statistics II.

4 hours, 3 credits. Full analysis of confidence intervals and hypothesis testing; linear regression and correlation; testing in paired samples; one- and two-way analysis of variance; analysis of regression models; and nonparametric statistics applied to business data. PREREQ: BBA 303 or ECO 302.

BBA 405: Management Decision Making.

3 hours, 3 credits. Individual and organizational factors influencing managerial decision making; optimal rules of choice under different decisional environments; heuristic decision making; and selected topics of management science. PREREQ: BBA 204 and either ECO 302 or BBA 303.

BBA 407: Strategic Management.

3 hours, 3 credits. Corporate-level decision-making under different economic conditions, legal institutions, government policies, technological progress, environmental concerns, ethical considerations, and demographic variables. Emphasis on case studies. PREREQ: BBA 204 and ACC 171.

BBA 431: Managerial Economics.

3 hours, 3 credits. The use of economic tools and concepts in making managerial decisions in such areas as allocation of physical and human resources, project development, and organizational restructuring. PREREQ: BBA 168 and 169, or ECO 166 and 167, and BBA 204.

BBA 432: International Business Management.

3 hours, 3 credits. Critical issues in managing multinational organizations: international management skills, cross-cultural negotiations, ethical problems, global human resource management, and the structuring of multinational organizations. PREREQ: BBA 204.

BBA 433: Global Marketing.

3 hours, 3 credits. Theory and practice of global marketing and discussion of the specific factors in that environment affecting organizational performance in terms of strategic planning and organizing for global marketing, as well as managerial decisions on global market segmentation, product planning, pricing, distribution, promotion, and operations. Global market research and data analysis are also covered. PREREQ: BBA 204.

BBA 467: Marketing Research.

3 hours, 3 credits. A practical approach to the study of research principles and procedures as an important tool of consumer and industrial marketing decisions. Qualitative as well as quantitative techniques are stressed, and these methods are aligned with the planning, operation, and controlling aspects of marketing management. PREREQ: BBA 303 and BBA 332.

BBA 490: Honors Project in Business Administration.

3 credits. Supervised individual research and directed reading in selected areas of business administration. An honors essay or some other suitable presentation is required. PREREQ: A minimum of 3.2 GPA, permission of the instructor, and ECO 402 and BBA 405.

English

Chair: Walter Blanco (Carman Hall, Room 302B)

Department Faculty: Distinguished Professor: William Collins; Professors: Walter Blanco, Grace Russo Bullaro, Mario DiGangi, Gerhard Joseph, Sondra Perl, Deirdre Pettipiece; Mardi Valgemae; Associate Professors: Siraj Ahmed, James Anderson, William G. Fisher, Paula Loscocco, Janis Massa, Margot Mifflin, Jessica Yood; Assistant Professors: Allison Amend, Salita Bryant, Tyler Schmidt; Lecturers: Jane Cleland, Joseph McElligott, Deirdre O'Boy

The Department of English offers students the opportunity to gain a thorough knowledge of literature written in English; to develop expertise in literary exposition and criticism; to learn the fundamentals of linguistics; and to acquire basic professional skills in writing, editing, and proofreading. The specializations that students in the Department may choose are Literature, Professional Writing, Creative Writing, and English/Early Childhood and Childhood Education. The Department also participates in the interdisciplinary programs in Women's Studies and Comparative Literature.

College Writing Requirement

All students, including transfer students, must take ENG 110 and ENG 120 (Principles of Effective Writing I and II), or ENG 111 and ENG 121 (English Composition I and II), unless exempted. (Students transferring to Lehman from a CUNY Community College with an A.A., A.S., or A.A.S. degree are deemed to have met this requirement.) Entry into ENG 110, 111 and 120 or 121 is based on placement determined by the English Department. Every student should enroll in the appropriate English composition course each semester until English 120 or 121 is passed.

English, B.A. (31-41 Credit Major)

The English major consists of 31-41 credits taken in one of four specializations: Literature, Professional Writing, Creative Writing, or the Early Childhood and Childhood Education/English certification sequence (see "Teacher of English" below). The total number of credits depends on students' specializations and on whether or not they participate in the English Honors Program. English courses numbered below the 300-level do not qualify toward the major. Except for students in the ECCE/English sequence, students who wish to take 300- or 400-level courses must have completed the Literature distribution requirement (Area III) or obtained permission from the Department.

Required courses and credits are distributed as follows:

Literature Specialization (40 credits)

Core requirements (22 credits)

- ENG 300 (4), ENG 301 (3), ENG 302 (3), ENG 303 (3),
- ENG 307 (3), ENG 308 (3), and ENG 350 (3)

Electives (18 credits)

Choose courses from each of the following four groups of electives; total credits must add up to 18.

One course (3 credits): ENG 312

One or two courses (3-6 credits) chosen from:

• ENG 338, ENG 339, ENG 340, or ENG 341

One or two courses (3-6 credits) chosen from:

- ENG 304, ENG 305, ENW 306, ENW 301, ENW 302,
- ENW (THE) 308, ENW 303, ENW 304, or ENW 305

Two or three courses (6-9 credits) chosen from:

- ENG 328, ENG 330, ENG 334, ENG 335, ENG 336, ENG 337,
- ENG 346, ENG 347, ENG 348, ENG 349, ENG 342,
- ENG 343, ENG (WST) 344, ENG (WST) 345, ENG 355,
- ENG 356, ENG 381, ENG 460, ENG 463, HUM 470,

or one 300-400-level literature course in the School of Arts and Humanities (with Department permission).

Professional Writing Specialization (40 credits)

Core (22 credits)

- ENG 300 (4), ENG 301 (3), ENG 302 (3), ENG 303 (3),
- ENG 307 (3), ENG 308 (3), and ENG 350 (3)

Electives (18 credits)

Choose courses from each of the following four groups of electives; total credits must add up to 18.

Two courses (6 credits) chosen from:

ENW 303, ENW 304, or ENW 305

One course (3 credits) chosen from:

- ENG 304, ENG 305, ENW 306, ENW 301,
- ENW 302, ENW (THE) 308, ENG 312,
- ENG 338, ENG 339, ENG 340, or ENG 341

One or two courses (3-6 credits) chosen from:

• ENW 333, ENW 334, or ENW 335

One or two courses (3-6 credits) chosen from:

- ENW 323, ENW 324, ENW 325, ENW 365,
- ENW 381, ENW 462, or HUM 470

Creative Writing Specialization (40 credits)

Core requirements (22 credits)

- ENG 300 (4), ENG 301 (3), ENG 302 (3), ENG 303 (3),
- ENG 307 (3), ENG 308 (3), and ENG 350 (3)

Electives (18 credits)

Choose courses from each of the following five groups of electives; total credits must add up to 18.

Two courses (6 credits) chosen from:

• ENW 301, ENW 302, or ENW (THE) 308

One course (3 credits) chosen from:

• ENW (MMS/THE) 309, ENW 311, or ENW 312

One course (3 credits) chosen from:

- ENG 304, ENG 305, ENW 306, ENG 312,
- ENG 338, ENG 339, ENG 340, ENG 341,
- ENW 303, ENW 304, or ENW 305

One course (3 credits) chosen from:

 ENW 328, ENW 329, ENW 330 (THE 408), or ENW (MMS/THE) 409

One course (3 credits) chosen from:

• ENW 364, ENW 381, ENW 461, or HUM 470

Early Childhood and Childhood Education Specialization/English Certification Sequence (31 credits)

Core requirements (16 credits)

• ENG 300 (4), ENG 303 (3), ENG 308 (3), ENG 312 (3), and ENG 350 (3)

Electives (15 credits)

Choose courses from each of the following four groups of electives; total credits must add up to 15.

Two courses (6 credits) chosen from:

• ENG 328, ENG 330, or ENG 334

One course (3 credits) chosen from:

• ENG 304, ENG 305, or ENW 306

One course (3 credits) chosen from:

• ENG 335 or ENG 336

One course (3 credits) chosen from:

- ENG 346, ENG 347, ENG 348, or ENG 349,
- ENG 338, ENG 339, ENG 340, ENG 341, ENG 355, or ENG 356

English Honors Program (EHP)

The English Honors Program offers capable students an opportunity to push their critical and creative boundaries. EHP students in literature, creative writing, professional writing, and education have access to the Department's Honors Room, participate in academic and cultural events on and off campus, enjoy English Honors advisement, work individually with a faculty mentor on an independent English Honors project in the fall term prior to graduation, and collaborate in colloquia and mini-conferences. Interested students who maintain a 3.2 College GPA and a 3.5 English GPA in at least two 300-level English courses may contact the EHP director for admission.

The requirements for English Honors specializations are the same as for regular English specializations, with the following exceptions:

Literature (41 credits)

ENG 463 is required (not optional)

ENG 481 (3) is required and replaces a regular Literature elective (3)

ENG / ENW 482 (1) is required at the same time as ENG 481

Total elective credits add up to 19 (not 18)

Professional writing (41 credits)

HUM 470 is required (not optional)

ENW 481 (3) is required and replaces a regular Professional Writing elective (3)

ENG / ENW 482 (1) is required at the same time as ENW 481

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Total elective credits add up to 19 (not 18)

Creative Writing (41 credits)

HUM 470 is required (not optional)

ENW 481 (3) is required and replaces a regular Creative Writing elective (3)

ENG / ENW 482 (1) is required at the same time as ENW 481 Total elective credits add up to 19 (not 18)

Early Childhood and Childhood Education / English (32 credits)

ENW 481 (3) is required and replaces a regular E.C.C.E. / English elective (3)

ENG / ENW 482 (1) is required at the same time as ENW 481

Total elective credits add up to 16 (not 15)

The Minor in English consists of four courses totaling 12 credits, planned as one of three options listed below. ENG 110 and ENG 120 do not count toward the Minor in English in any capacity.

Literature Minor (12 credits)

Students must take four literature courses, comprised of one 200-level ENG course and three 300- or 400-level ENG courses. One 300- or 400-level ENW course in Writing may be substituted for a 300- or 400-level ENG course in Literature.

Professional Writing Minor (12 credits)

Students must take ENW 217 (Editing and Proofreading), plus two of the following ENW courses: ENW 303, ENW 304, ENW 305. The fourth course may be any 300- or 400-level elective in Professional Writing, Creative Writing, or Literature.

Creative Writing Minor (12 credits)

Students must take ENW 210 (Introduction to Creative Writing), plus two of the following ENW courses: ENW 301, ENW 302, ENW(THE)308. The fourth course may be any 300- or 400-level elective in Creative Writing, Professional Writing, or Literature.

Teacher of English

English is an approved major for students wishing to become elementary school teachers or middle / high school English teachers.

Middle and High School Education minors must fulfill the requirements of a 40/41-credit English major in Literature, Professional Writing, or Creative Writing, regardless of whether or not they are pursuing certification.

Early Child and Childhood Education minors not pursuing certification must fulfill the requirements of a 40/41-credit English major in Literature, Professional Writing, or Creative Writing.

Early Child and Childhood Education minors pursuing certification must fulfill the requirements of the 31/32-credit E.C.C.E. / English certification sequence. Students must complete the Education Department's certification requirements to graduate as a 31/32-credit English major.

Education students who receive certification as undergraduates may pursue an M.A. in English. Education students who do not receive certification as undergraduates may pursue an M.A. in Education. Students interested in becoming teachers should meet with English Department advisors to plan their program early in their academic careers, especially if they are seeking certification. They should also consult with the Office of the Dean of Education (Carman Hall, Rm. B33 or 718-960-4972) for the latest information on New York State requirements for teacher certification.

Basic and Intermediate Courses in English Language and Literature

ENG 110: Principles of Effective Writing I.

ENG 111: English Composition I.

ENG 120: Principles of Effective Writing II.

ENG 121: English Composition II.

ENG 135: The Experience of Literature.

ENG 222: Literary Genres.

ENG 223: English Literature.

ENG 226: Shakespeare.

ENG 227: American Literature.

ENG 229: Contemporary Urban Writers.

ENG (WST) 234: Women in Literature.

ENG 260: Multicultural American Literatures.

ENG 264-265: Special Topics in Literature.

Advanced Courses in English Language and Literature

ENG 300: Introduction to Literary Study.

ENG 301: English Literature I—Origins through Early Modern.

ENG 302: English Literature II—Restoration through Revolutions.

ENG 303: English Literature III—Romantic through Modern.

ENG 304: The Structure of Modern English.

ENG 305: History of the English Language.

ENG 307: The Novel.

ENG 308: American Literature.

ENG 311: Chaucer.

ENG 312: Shakespeare.

ENG 314: Milton.

ENG 319: The Romantic Era.

ENG 321: Early American Literature.

ENG 322: Modernism.

ENG 328: Poetry.

ENG 330: Fiction.

ENG 334: Drama.

ENG 335: Critical Approaches to Children's Literature.

ENG 336: Critical Approaches to Adolescent Literature.

ENG 337: Irish Literature.

ENG 338: Postcolonial Literatures.

ENG 339: Latino/Latina Literatures in English.

ENG 340: African and African-American Literature.

ENG 341: Asian and Asian-American Literature.

ENG 342: Film Studies.

ENG 343: Urban Literature.

ENG (WST) 344: Women Writers in English.

ENG (WST) 345: Topics in Gender and Sexuality.

ENG 346: The Bible as Literature.

ENG 347: Western Traditions—Narrative.

ENG 348: Western Traditions—Drama.

ENG 349: Eastern Traditions.

ENG 355: Special Topics in Literature I.

ENG 356: Special Topics.

Seminars, Tutorials, and Colloquia in English Language and Literature

ENG 350: Senior Seminar.

ENG 381: Individual Tutorial in Literature.

ENG 460: Honors Seminar—Special Topics.

ENG 463: Seminar in Literature—Theory and Criticism.

ENG (ENW) 481: Honors Tutorial in Literature.

ENG (ENW) 482: Honors Colloquium.

Intermediate Courses in Creative and Professional Writing

ENW 201: Advanced Expository Writing.

ENW 210: Introduction to Creative Writing—Fiction, Poetry, and

Playwriting.

ENW 217: Editing and Proofreading.

Advanced Courses in Creative and Professional Writing

ENW 300: Business Writing.

ENW 301: Poetry Writing.

ENW 302: Fiction Writing.

ENW 303: Creative Nonfiction Writing.

ENW 304: Writing for the Humanities Workplace.

ENW 305: Professional Writing.

ENW 306: Peer Tutoring.

ENW (THE) 308: Playwriting.

ENW (THE) (MMS) 309: Screenwriting.

ENW 311: Advanced Poetry Writing I.

ENW 312: Advanced Fiction Writing I.

ENW 323: Biography and Memoir Writing.

ENW 324: The Literary Essay.

ENW 325: Culture, Criticism, and Publication.

ENW 328: Advanced Poetry Writing II.

ENW 329: Advanced Fiction Writing II.

ENW 330 (THE) 408: Advanced Playwriting Workshop.

ENW (MMS) 333: Public Relations and Marketing.

ENW 334: Grant and Proposal Writing.

ENW 335: Technical Writing.

ENW 364: Special Topics in Creative Writing.

ENW 365: Special Topics in Professional Writing.

ENW (THE) (MMS) 409: Advanced Screenwriting.

Seminars, Tutorials, and Colloquia in Creative and Professional Writing

ENW 381: Individual Tutorial in Writing.

ENW 461: Seminar in Creative Writing.

ENW 462: Seminar in Professional Writing.

ENW 481: Honors Tutorial in Writing.

ENW (ENG) 482: Honors Colloquium.

Early Childhood and Childhood Education Specialization/English Certification Sequence (31 credits)

Core requirements (16 credits):

ENG 300 (4)*, ENG 303 (3), ENG 308 (3), ENG 312 (3), and ENG 350 (3)

Electives (15 credits):

Choose courses from each of the following four groups of electives; total credits must add up to 15.

Two courses (6 credits) chosen from:

ENG 328, ENG 330, or ENG 334

One course (3 credits) chosen from:

ENG 304, ENG 305, or ENW 306

One course (3 credits) chosen from:

ENG 335 or ENG 336

One course (3 credits) chosen from:

ENG 346, ENG 347, ENG 348, or ENG 349,

ENG 338, ENG 339, ENG 340, ENG 341, ENG 355, ENG 356, or any other 300-level literature course in the School of Arts and Humanities (with English Department permission)

*ENG 300 (4) fulfills the Area III Distribution Requirement for this sequence.

English Honors Program (EHP)

The English Honors Program offers capable students an opportunity to push their critical and creative boundaries. EHP students in literature, creative writing, professional writing, and education have access to the Department's Honors Room, participate in academic and cultural events on and off campus, enjoy English Honors advisement, work individually with a faculty mentor on an independent English Honors project in the fall term prior to graduation, and collaborate in colloquia and mini-conferences. Interested students who maintain a 3.2 College GPA and a 3.5 English GPA in at least two 300-level English courses may contact the EHP director for admission.

The requirements for English Honors specializations are the same as for regular English specializations, with the following exceptions:

Literature (41 credits)

ENG 463 is required (not optional)

ENG 481 (3) is required and replaces a regular Literature elective (3)

ENG / ENW 482 (1) is required at the same time as ENG 481

Total elective credits add up to 19 (not 18)

Professional Writing (41 credits)

HUM 470 is required (not optional)

ENW 481 (3) is required and replaces a regular Professional Writing elective (3)

ENG / ENW 482 (1) is required at the same time as ENW 481

Total elective credits add up to 19 (not 18)

Creative Writing (41 credits)

HUM 470 is required (not optional)

ENW 481 (3) is required and replaces a regular Creative Writing elective (3)

ENG / ENW 482 (1) is required at the same time as ENW 481

Total elective credits add up to 19 (not 18)

Early Childhood and Childhood Education / English (32 credits)

ENW 481 (3) is required and replaces a regular ECCE/ English elective (3)

ENG / ENW 482 (1) is required at the same time as ENW 481

Total elective credits add up to 16 (not 15)

Minor in English

The Minor in English consists of four courses totaling 12 credits, planned as one of three options listed below. ENG 110 and ENG 120 do not count toward the Minor in English in any capacity.

Literature Minor (12 credits)

Students must take four literature courses, comprised of one 200-level ENG course and three 300- or 400-level ENG courses. One

300- or 400-level ENW course in Writing may be substituted for a 300- or 400-level ENG course in Literature.

Professional Writing Minor (12 credits)

Students must take ENW 217 (Editing and Proofreading), plus two of the following ENW courses: ENW 303, ENW 304, ENW 305. The fourth course may be any 300- or 400-level elective in Professional Writing, Creative Writing, or Literature.

Creative Writing Minor (12 credits)

Students must take ENW 210 (Introduction to Creative Writing), plus at two of the following ENW courses: ENW 301, ENW 302, ENW(THE)308. The fourth course may be any 300- or 400-level elective in Creative Writing, Professional Writing, or Literature.

Basic and Intermediate Courses in English Language and Literature

*Courses preceded by an asterisk are not expected to be offered in 2013-

ENG 110: Principles of Effective Writing I.

4 hours (3, lecture; 1, conference), 3 credits. Focus on paragraph and essay development, summary, and critical response to short texts. Emphasis on organization, language accuracy, grammar, and mechanics. Individual conferences. Note: All students, unless exempted, must pass this course in fulfillment of the College Requirement in English. Students who take but do not pass this course should repeat it the following semester. Students who pass ENG 110 proceed to ENG 120 the following semester.

ENG 111: English Composition I.

3 hours, 3 credits. Focus on all aspects of reading and writing, with particular attention to summary, critical responses to short texts, argumentative development in paragraphs and essays, and the rewriting process. Emphasis on organization, language, accuracy, grammar, and mechanics. Classroom instruction supplemented by individual conferences on drafts with instructor, library resources sessions, and appropriate use of available technology. Note: All students, unless exempted, must pass this course in fulfillment of the Common Core Requirement in English Composition. Students who take but do not pass this course should repeat it the following semester. Students who pass ENG 111 proceed to ENG 121 the following semester.

ENG 120: Principles of Effective Writing II.

4 hours (3, lecture; 1, conference), 3 credits. Continues the work of ENG 110, advancing critical reading skills and essay development. Emphasis on writing analytical essays and papers based on research in various academic disciplines. Individual conferences. Note: All students, unless exempted, must pass this course in fulfillment of the College Requirement in English. Students who take but do not pass this course should repeat it the following semester.

ENG 121: English Composition II.

3 hours, 3 credits. Continues the work of ENG 111, advancing critical reading skills and essay development. Emphasis on writing analytical essays and papers based on research in various academic disciplines. Classroom instruction supplemented by

individual conferences on drafts with instructor, library resources sessions, and appropriate use of available technology. Note: All students, unless exempted, must pass this course in fulfillment of the Common Core Requirement in English Composition. Students who take but do not pass this course should repeat it the following semester.

ENG 135: The Experience of Literature.

3 hours, 3 credits. Ways of understanding and enjoying different kinds of literature, including prose, poetry, and drama. Not recommended for students who have passed ENG 120 and closed to those who have satisfactorily completed a 200-level ENG Literature course.

Note: ENG 222, 223, 226, 227, 229, 234, 260, and 264-265 are distribution courses in the 1984 curriculum.

ENG 222: Literary Genres.

3 hours, 3 credits. Literary forms and genres and the critical methods appropriate to their study. Analysis of major representative texts and exploration of central themes.

ENG 223: English Literature.

3 hours, 3 credits. Masterworks that form the basis of the literary heritage of the English language. Authors may include Chaucer, Shakespeare, Milton, Swift or Pope, Wordsworth or Keats, Yeats, and a nineteenth- or twentieth-century novel.

ENG 226: Shakespeare.

3 hours, 3 credits. Understanding Shakespeare: analysis of representative plays with attention to language, structure, and thematic unity.

ENG 227: American Literature.

3 hours, 3 credits. Representative prose, verse, and drama from the Colonial period to the present.

ENG 229: Contemporary Urban Writers.

3 hours, 3 credits. Fiction, poetry, drama, essays, and other writings by authors examining the personal, cultural, and political dimensions of urban experience past and present.

ENG (WST) 234: Women in Literature.

3 hours, 3 credits. Images of women and constructions of gender in myths, legends, biblical writings, and major literary texts by both male and female writers.

ENG 260: Multicultural American Literatures.

3 hours, 3 credits. Cultural, ethnic, and social groups as reflected in American literature. Topics vary from semester to semester.

ENG 264-265: Special Topics in Literature.

3 hours, 3 credits. (Each course may be taken twice for credit.) Studies in the works of various authors or periods. Topics vary from semester to semester.

ENG 300: Introduction to Literary Study.

4 hours, 4 credits. Intensive reading and writing about works of literature in the several genres of poetry, fiction, drama, and creative nonfiction. Focused study of major issues in criticism and interpretation. Advanced exposition, with emphasis on the development of the reading, writing, and research skills essential to literary studies. Individual conferences. PREREQ: ENG 120 (unless exempted); Departmental permission.

ENG 301: English Literature I—Origins through Early Modern.

3 hours, 3 credits. English literature to 1660, emphasizing major writers in poetry, drama, and prose. PREREQ: Departmental permission.

ENG 302: English Literature II—Restoration through Revolutions.

3 hours, *3 credits*. English literature from 1660 to 1815, emphasizing major writers in poetry, drama, and prose. PREREQ: Departmental permission.

ENG 303: English Literature III—Romantic through Modern.

3 hours, 3 credits. English literature from 1815 to 1940, emphasizing major writers in poetry, drama, and prose. PREREQ: Departmental permission.

ENG 304: The Structure of Modern English.

3 hours, 3 credits. Grammatical theory and linguistic descriptions of modern English (such as traditional, descriptive, and transformational grammars), with emphasis on the formal properties of grammar and the formal characterization of language. Samples of modern English to be studied will be drawn from literary works from the early modern English period to the present.

ENG 305: History of the English Language.

3 hours, 3 credits. Historical linguistics and the study of English, including analysis of selected texts from Old English through early modern English to illustrate the development of the English language. Attention will be paid to the phonology and grammar of the English language and to ways language is used for expressive ends in the selected literary examples.

ENG 307: The Novel.

3 hours, 3 credits. Study of one major novel of the eighteenth century, one of the nineteenth century, and one of the twentieth century. Readings will include at least five novels, with special attention to the evolution of the genre from the eighteenth century to the present.

ENG 308: American Literature.

3 hours, 3 credits. American literature to the modern era, emphasizing major writers. The course will deal with such ideas as the frontier, the "promised" land, the rise from rags to riches, the importance of self-reliance, and the love-hate relationship of the races. Readings may include such authors as Franklin, Hawthorne, Melville, Emerson, Thoreau, Whitman, Dickinson, Twain, James, Frost, Hemingway, Fitzgerald, Faulkner, O'Neill, and Ellison.

NOTE: Courses numbered 309-348 offer study of a historical period,

genre, author, or literary field that is more intensive than the comparable area in ENG 300-302, 307, and 308, yet broader in scope than courses like ENG 350, 381, 450-460, 463, and 481.

ENG 311: Chaucer.

3 hours, 3 credits. Reading of Chaucer in Middle English, with emphasis on *The Canterbury Tales.*

ENG 312: Shakespeare.

3 hours, *3 credits*. The dramatist's representative comedies, histories, and tragedies.

ENG 314: Milton.

3 hours, 3 credits. The poetry and selected prose of Milton, with special emphasis on a critical reading of *Paradise Lost.*

ENG 319: The Romantic Era.

3 hours, 3 credits. Readings in major Romantic writers from England, Europe, and the Transatlantic world, with attention to social, cultural, and political contexts, and to enduring legacies in literature and other realms. PREREQ: Departmental permission.

ENG 321: Early American Literature.

3 hours, 3 credits. Topics in American literature before 1900. PREREQ: Departmental permission.

ENG 322: Modernism.

3 hours, 3 credits. Readings in major Modernist writers from Britain, the U.S., Ireland, and Europe, with attention to social, cultural, and political contexts, and to enduring legacies in literature and other realms. PREREQ: Departmental permission.

ENG 328: Poetry.

3 hours, 3 credits. Critical study of representative poems.

ENG 330: Fiction.

3 hours, 3 credits. Critical study of representative short fiction and novels.

ENG 334: Drama.

3 hours, 3 credits. Critical study of representative plays.

ENG 335: Critical Approaches to Children's Literature.

3 hours, 3 credits. Critical examination of selected works written for children and enjoyed by children and adults. Consideration of fantastic and realistic fiction and analysis of appropriate literary forms, such as fairy tale, animal fable, adventure story, and the novel of development.

ENG 336: Critical Approaches to Adolescent Literature.

3 hours, 3 credits. Critical study of literature of special interest to adolescents. Readings will include fiction, drama, and memoirs that focus on such themes as coming-of-age, knowing good and evil, confronting mortality, leaving home, discovering love and sexuality, and defining one's identity.

ENG 337: Irish Literature.

3 hours, 3 credits. Poetry and prose by writers closely identified with Ireland. Beginning with Irish texts (read in English translation) such as the medieval Tain and lyrics of the sixteenth, seventeenth, and eighteenth centuries, the reading will emphasize works originally written in English by such authors as Swift, Wilde, Shaw, Yeats, and Joyce.

ENG 338: Postcolonial Literatures

3 hours, 3 credits. Twentieth- and twenty-first-century literatures of Africa, Asia, and the Caribbean, primarily in English, with consideration of these writings' cultural and historical origins and engagements. PREREQ: Departmental permission.

ENG 339: Latino/Latina Literatures in English.

3 hours, 3 credits. English-language literature developed by Puerto Ricans, Chicanos, Cubans, Dominicans, and other Latino groups in the U.S. Emphasis on the similarities in the development of themes, structures, and genres, and relationships with mainstream American literature.

ENG 355: Special Topics in Literature I.

3 hours, 3 credits. Topics vary from semester to semester. Course may be taken twice for credit.

ENG 356: Special Topics in Literature II.

3 hours, 3 credits. (Course may be taken twice for credit.) Topics vary from semester to semester.

Advanced Courses in World Literature

ENG 340: African and African-American Literature.

3 hours, 3 credits. Traditions in African and African-American literature with an eye to underlying historical experiences, cultural values, and modes of literary expression. PREREQ: Departmental permission.

ENG 341: Asian and Asian-American Literature.

3 hours, 3 credits. Traditions in Asian and Asian-American literature with an eye to underlying historical experiences, cultural values, and modes of literary expression. PREREQ: Departmental permission.

ENG 342: Film Studies.

3 hours, 3 credits. Study of film, with attention to stylistic and narrative strategies, historical and contemporary genres, and theoretical approaches. Emphasis on films with particular literary, cultural, or social resonance or impact. PREREQ: Departmental permission.

ENG 343: Urban Literature.

3 hours, 3 credits. Fiction, poetry, drama, essays, and other writings by authors examining the personal, cultural, and political dimensions of urban experience past and present. PREREQ: Departmental permission.

ENG (WST) 344: Women Writers in English.

3 hours, 3 credits. Fiction, poetry, drama, and essays by women writing in English. Focus on particular times, places, and writers may vary by semester. PREREQ: Departmental permission.

ENG (WST) 345: Topics in Gender and Sexuality.

3 hours, 3 credits. Constructions of gender and sexuality in literature, film, arts, and the media. Emphasis on theoretical literature and its interrogation of feminism, queerness, masculinities, and related forms of social identity. PREREQ: Departmental permission.

ENG 346: The Bible as Literature.

3 hours, 3 credits. Selections from the King James translation of the Old and New Testaments and the Apocrypha, read with emphasis on historical background, the history of ideas, and literary genres. The perspectives of the course are those of modern literary and historical criticism in a secular context. Instructors may choose to focus on the Old or the New Testament.

ENG 347: Western Traditions—Narrative.

3 hours, 3 credits. Western literature in translation, with attention to selected classical, medieval, neoclassic, romantic, and modern narratives and their influence on English and American literature. PREREQ: Departmental permission.

ENG 348: Western Traditions—Drama.

3 hours, 3 credits. Western literature in translation, with attention to selected classical, medieval, neoclassic, romantic, and modern plays and their influence on English and American literature. PREREQ: Departmental permission.

ENG 349: Eastern Traditions.

3 hours, 3 credits. Traditions of literature from Asia, India, and the Middle East, with an eye to underlying historical experiences, cultural values, and modes of literary expression. PREREQ: Departmental permission.

ENG (ENW) 482: Honors Colloquium.

1 hour, 1 credit. Weekly gathering of seniors doing independent tutorial work with a faculty mentor on their English Honors projects. Students meet with Colloquium instructor to discuss critical and creative ideas, modes of research, deadlines and progress, and editing and revising. Written work submitted regularly for review. PREREQ: Departmental permission; English Honors Program students only; 90 college credits. COREQ: ENG 481 or ENW 481. NOTE: To be taken in the fall term prior to graduation.

English Tutorials, Seminars, and Honors Work

ENG 350: Senior Seminar.

3 hours, 3 credits. (May not be taken before 25 credits of the major have been completed.) Focus on a literary topic, which will be explored in a group of interrelated works, usually from several genres and periods. Topics vary from semester to semester. Students will present reports to the seminar and will prepare at least one major paper. PREREQ: ENG 300, 301, 302, 303, 307, 308.

ENG 381: Individual Tutorial in Literature.

3 hours, 3 credits (maximum 6 credits). Individual research and reading on a specific topic under close faculty supervision. PREREQ: 75 college credits; Departmental permission. NOTE: Students must also receive written permission from the faculty member who will supervise the tutorial in the semester preceding that in which it will be taken.

ENG 460: Honors Seminar—Special Topics.

3 hours, 3 credits (maximum 6 credits). Special topics to be announced. PREREQ: English Honors students only; 75 college credits; Departmental permission.

ENG 463: Seminar in Literature—Theory and Criticism.

3 hours, 3 credits. Exploration of traditional and contemporary ways of theorizing about literature and literary or cultural study. A selective survey of structuralist, postmodernist, psychoanalytic, feminist, lesbian/gay, Marxist, new historical and cultural materialist, and/or postcolonial approaches. PREREQ: 75 credits; Departmental permission.

ENG (ENW) 481: Honors Tutorial in Literature.

3 hours, 3 credits. Exclusively for English honors majors working on their senior Honors Project in the fall term prior to graduation. Tutorial involves individual research, reading, and writing on a specific topic while working one-on-one with a faculty mentor. PREREQ: 90 college credits; Departmental permission. COREQ: ENG / ENW 482. NOTE: During spring registration, each student must work with his or her individual faculty mentor to obtain written permission for fall tutorial work and to develop a summer reading list.

Intermediate Courses in Creative and Professional Writing

ENW 201: Advanced Expository Writing.

4 hours (3, lecture; 1, conference), 4 credits. An advanced course in the techniques of formal exposition that develops the students' understanding of English expository style and of mechanics and grammar. A substantial portion of the course is devoted to researching materials and organizing them in the form of summaries of facts, position papers, and research papers. An effort will be made to relate the subject matter of much of the writing to the students' interests. Individual conferences. PREREQ: Successful completion of ENG 120 (or equivalent) or instructor's permission.

ENW 210: Introduction to Creative Writing—Fiction, Poetry, and Playwriting.

3 hours, 3 credits. Reading, writing, and analyzing contemporary short fiction, poetry, and play writing, focusing on elements pertinent to each form. PREREQ: ENG 120, or Departmental permission.

Advanced Courses in Creative and Professional Writing

ENW 210: Introduction to Creative Writing - Fiction, Poetry, and Playwriting.

3 hours, *3 credits*. Reading, writing, and analyzing contemporary short fiction, poetry, and play-writing, focusing on elements pertinent to each form.

ENW 217: Editing and Proofreading.

3 hours, 3 credits. Study of the editing skills needed for writing in the workplace. Emphasis on grammar, punctuation, sentence-structure, proofreading, and editing, plus review of official proofreader's marks, techniques, and styles. PREREQ: ENG 120; Departmental permission.

ENW 300: Business Writing.

3 hours, 3 credits. Workplace-related writing for B.B.A. and B.S. in Accounting majors. Focus on rhetorical issues and strategies for persuasion in business memoranda, documents, and presentations. Students prepare shorter writings, as well as a substantial formal report that incorporates data analysis and support for its conclusions and recommendations. PREREQ: ENG 120; Departmental permission.

ENW 301: Poetry Writing.

3 hours, 3 credits. The theory and practice of writing poetry. PREREQ: Departmental permission.

ENW 302: Fiction Writing.

3 hours, 3 credits. The theory and practice of prose-fiction writing. PREREQ: Departmental permission.

ENW 303: Creative Nonfiction Writing.

3 hours, 3 credits. Foundations in the craft of writing substantial imaginative manuscripts, including books, essays, reports, critiques, profiles, and other works. Techniques, formats, and styles, in addition to the research skills needed in the nonfiction marketplace. PREREQ: Departmental permission.

ENW 304: Writing for the Humanities Workplace.

3 hours, 3 credits. Writing skills for English, arts, and humanities majors and minors preparing to enter the workplace in such humanities-based industries as publishing, arts and entertainment, foundations, and multimedia management. PREREQ: Departmental permission.

ENW 305: Professional Writing.

3 hours, 3 credits. Writing and research skills required for professional writers working in public relations, marketing, technical, and promotional-writing industries. PREREQ: Departmental permission.

ENW 306: Peer Tutoring.

4 hours, 3 credits. Intensive writing in a variety of modes paired with training in effective techniques for tutoring others in writing. Course is divided between the classroom and the Writing Center. PREREQ: A minimum grade of A minus in ENG 120 (unless exempted); Departmental permission.

ENW (THE) 308: Playwriting.

3 hours, 3 credits. The theory and practice of writing one-act plays. PREREQ: Departmental permission.

ENW (THE) (MMS) 309: Screenwriting.

3 hours, 3 credits. A practical approach to screenwriting for theatre, film, and television, from conception to finished script of the screenplay. PREREQ: Departmental permission.

ENW 311: Advanced Poetry Writing I.

3 hours, 3 credits. Writing, reading, and analyzing poetry. Discussions of both student and published work, emphasizing basic tenets of the craft, such as rhythm, rhyme, meter, pace, language, metaphor, imagery, voice, and tone. PREREQ: ENW 301 or Departmental permission.

ENW 312: Advanced Fiction Writing I.

3 hours, 3 credits. Writing, reading, and analyzing fiction. Discussions of both student and published work, emphasizing basic tenets of the craft, such as plot, setting, character development, theme, imagery, symbolism, language, dramatic arc, and epiphany. PREREQ: ENW 302 or Departmental permission.

ENW 323: Biography and Memoir Writing.

3 hours, 3 credits. Composition of biographical and autobiographical texts through readings and a variety of writing exercises. Exploration of narrative structure and sequence, dialogue, point of view, description and post-facto reporting contributions to character-driven nonfiction storytelling. PREREQ: Departmental permission.

ENW 324: The Literary Essay.

3 hours, 3 credits. History and craft of the literary essay from its birth in the seventeenth century to its rebirth on editorial pages and blogs today. Composition and expository techniques for writing sound arguments and compelling subjective narratives. PREREQ: Departmental permission.

ENW 325: Culture, Criticism, and Publication.

3 hours, 3 credits. Genres of writing that comment on culture and society, including books, music, theatre and art reviews, social and political op-eds and blogs, and reviews or prizes by readers, publishers, or others. The effect of changes in the publishing industry on cultural production and commentary also considered. PREREQ: Departmental permission.

ENW 328: Advanced Poetry Writing II.

3 hours, 3 credits. Continuation of ENW 311: Advanced Poetry Writing I. PREREQ: ENW 311, or Departmental permission.

ENW 329: Advanced Fiction Writing II.

3 hours, 3 credits. Continuation of ENW 312. PREREQ: ENW 312 and Departmental permission.

ENW 330 (THE) 408: Advanced Playwriting Workshop.

3 hours, 3 credits. The goal of this course is the writing of a full-length play. PREREQ: ENW 308 and Departmental permission.

ENW (MMS) 333: Public Relations and Marketing.

3 hours, 3 credits. Mastering the appropriate formats needed to write the releases, reports, and advertising media generated by forand non-profit organizations. PREREQ: Departmental permission.

ENW 334: Grant and Proposal Writing.

3 hours, 3 credits. Conception, research, and composition of grant and other types of professional proposals, examining the scope and structure of longer speculative works and techniques used to make professional presentations. PREREQ: Departmental permission.

ENW 335: Technical Writing.

3 hours, 3 credits. Developing skills to generate texts that explain complex technological, scientific, economic, and other matters to experts and consumers clearly and with authority. PREREQ: Departmental permission.

ENW 364: Special Topics in Creative Writing.

3 hours, 3 credits (maximum 6 credits). Topics vary from semester to semester. PREREQ: Departmental permission.

ENW 365: Special Topics in Professional Writing.

3 hours, 3 credits (maximum 6 credits). Topics vary from semester to semester. PREREQ: Departmental permission.

ENW 381: Individual Tutorial in Writing.

One semester, 3 credits (maximum 6 credits). Opportunity for a student to pursue a specific project in creative or professional writing under close faculty supervision. PREREQ: 90 college credits; Departmental permission. NOTE: Students must also receive written permission from the faculty member who will supervise the tutorial in the semester preceding that in which it will be taken.

ENW (THE) (MMS) 409: Advanced Screenwriting.

3 hours, 3 credits. Completion of one full-length screenplay or two shorter films; analysis of one's own and others' written work; experimentation with new genres and technologies; and work with a director to shoot one's own scenes. PREREQ: THE (MMS) (ENW) 309.

ENW 461: Seminar in Creative Writing.

3 hours, 3 credits. For the proficient writer of fiction, poetry, or drama. Children's literature, historical fiction, young adult fiction, and other forms of genre-writing. PREREQ: 90 college credits; Departmental permission.

ENW 462: Seminar in Professional Writing.

3 hours, 3 credits. For the proficient writer of nonfiction. Practice in designing, discussing, and completing individual and group projects in multiple fields of professional writing. PREREQ: 90 college credits; Departmental permission.

ENW (ENG) 481: Honors Tutorial in Writing.

3 hours, 3 credits. Exclusively for English honors majors working on their senior Honors Project in the fall term prior to graduation. Tutorial involves developing an individual project in creative or professional writing, working one-on-one with a faculty mentor. PREREQ: 90 college credits; Departmental permission. COREQ: ENG / ENW 482. NOTE: During spring registration, each student must work with his or her faculty mentor to obtain written permission for fall tutorial work and to develop a summer reading-list.

ENW (ENG) 482: Honors Colloquium.

1 hour, 1 credit. Weekly gathering of seniors doing independent tutorial work with a faculty mentor on their English Honors projects. Students meet with Colloquium instructor to discuss critical and creative ideas, modes of research, deadlines and progress, editing and revising. Written work submitted regularly for review. PREREQ: Departmental permission; English Honors Program students only; 90 college credits. COREQ: ENG 481 or ENW 481. NOTE: To be taken in the fall term prior to graduation.

English as a Second Language

Director: Steve Wyckoff (Carman Hall, 339)

The program in English as a Second Language (ESL) offers courses to nonnative speakers who want to follow a regular course of study leading to the bachelor's degree. ESL courses provide practice in all language skills areas: speaking, listening, reading, and writing. Students may enter the ESL sequence at the intermediate or advanced levels of English proficiency. Upon completion of the ESL sequence, students progress to the two-course sequence in English Composition (ENG 110 and ENG 120). Students who successfully complete two ESL courses may use them to satisfy the College Requirement in Foreign Language.

Courses in English as a Second Language

No beginning-level ESL courses are offered by the College ESL Program at Lehman. The first course in the following sequence is taught at the high-intermediate level.

ESL 103: English as a Second Language, Intermediate.

6 hours, 2 credits. Introduction to college-level academic English. Grammar topics include a review of the English tense and modal system, clause patterns, hypothetical and conditional statements, and common trouble spots. Expository and academic discourse patterns covered include summary and analysis, comparison, cause and effect, the argument, short answer response, and the research paper.

ESL 104: English as a Second Language, Advanced.

6 hours, 2 credits. Focuses on syntactic and discourse structures at an advanced level. Grammar topics include consistency in tense usage, time frame shifts in discourse, difficult lexical and clause patterns, and advanced grammar troublespots, particularly those used for focus, emphasis, or stylistic purposes in academic texts. Other topics include editing and revising written work, reading analytically and critically, and citing an author's ideas informally or formally.

Freshman Seminar

Freshman Programs (Carman Hall, Room 339)

The Freshman Seminar is a one-semester orientation course that introduces full-time freshmen to the college experience. The course examines the goals of a liberal arts education and reinforces effective study habits. Emphasis is placed on the students' development of their commitment to academic success. The Seminar, offered in the Freshman Year Initiative Program, provides an opportunity for freshmen to:

• Enhance academic performance in the first year;

- Become aware of the College's facilities and support services;
- Understand the College's academic procedures and policies; and
- Explore educational goals and career plans.

LEH 100: The Liberal Arts: Freshman Seminar.

3 hours, 3 credits. The nature of the liberal arts, the goals and objectives of General Education at Lehman, and issues of career vs. liberal education. Information literacy, critical thinking, and intellectual integrity.

Health Sciences

Department Chair: Luisa N. Borrell (Gillet Hall, Room 336)
Department Faculty: Professors: Marilyn Aguirre-Molina, Luisa N. Borrell, Craig Demmer, Robin Kunstler; Associate Professors: Andrea Boyar, Cynthia K. Hosay, Glen Johnson, Jane Levitt, Barbara Menéndez, Chol-young Roh, Raziye Gul Tiryaki-Sonmez; Assistant Professors: Orazio Caroleo, Danna Ethan, Mary Huynh, Andrew Maroko, Lalitha Samuel, Emma Tsui; Lecturer: Sue Tree

The Department of Health Sciences offers students the opportunity to study health education, nutrition, recreation, and health services administration; to learn to provide technical assistance in the analysis of health problems, policy formation, and management; and to acquire professional skill in the delivery of services in health, nutrition, and health services administration. The Department offers six programs of study: (1) Dietetics, Foods, and Nutrition, B.S.; (2) Exercise Science, B.S.; (3) Health Education and Promotion, B.S.; (4) Health N-12 Teacher, B.S.; (5) Health Services Administration, B.S.; (6) Recreation Education, B.S., and (7) Therapeutic Recreation, B.S. Some of these programs offer optional specializations. The Department offers an interdisciplinary minor in developmental disabilities and participates in the interdisciplinary Women's Studies Program. (See the information on this program contained later in this Bulletin.)

Requirement of a Minor

The College's requirement of a minor field of study is waived for students majoring in any of the Department's programs except Recreation Education and Therapeutic Recreation.

Departmental Grading Policy

In each of the Department's major programs, a minimum grade of C- is required in all courses that are required as part of the major and minor. Majors and minors who do not meet that minimum grade in a course must repeat it.

Dietetics, Foods, and Nutrition Program

The program in Dietetics, Foods, and Nutrition is designed to prepare students for entry-level positions as dietitians or nutritionists in healthcare facilities, community agencies, cooperative extension, food service operations, and/or the food industry. Students are also prepared for graduate study in dietetics and nutrition. The curriculum for the Dietetics, Foods, and Nutrition major complies with the requirements for a Didactic Program in Dietetics (DPD) and is accredited by the Council on Accreditation for Dietetics Education (CADE). Students successfully graduating from a CADE-accredited D.P.D. with a GPA of 2.5 or better are eligible to take the examination to become a Registered Dietetic Technician (DTR), or apply for an ADA-accredited dietetic internship (DI), which enables the student to become eligible to take the examination in dietetics to become a registered dietitian (RD). Fieldwork and laboratory experiences are important components of the curriculum and are planned to integrate didactic instruction with supervised practice.

Honors in Dietetics, Foods, and Nutrition

Departmental honors in Dietetics, Foods, and Nutrition may be awarded to a student who has maintained an index of 3.5 in a minimum of 45 credits in all courses required for the major.

Dietetics, Foods, and Nutrition, B.S. (54-61.5 Credit Major)

The distribution of courses and credits to be earned by all majors is as follows (38 credits):

- 3 In Health Sciences: HSD 240 (3)
- 19 In Dietetics, Foods, and Nutrition: DFN 120 (3), DFN 220 (4), DFN 330 (3), DFN 341 (3), DFN 348 (3), and DFN 430 (3)
- 3 In Nutrition Education and Counseling: DFN 437 (3)
- 4 In Biological Sciences: BIO 230 (4)
- 9 In Chemistry: CHE 114 (3),*CHE 115 (1.5), CHE 120 (3), and CHE 121 (1.5)

Option I: Dietetics, Foods, and Nutrition, CADE-Accredited (61.5 credits)

Additional courses to be taken (23.5 credits):

- 6 In Health Sciences: HSD 266 (3) and HSD 269 (3)
- 9 In Dietetics, Foods, and Nutrition: DFN 445 (4), DFN 448 (3), and DFN 470 (2), or DFN 471 (2), or DFN 472 (2)
- 4 In Biology: BIO 228 (4)*
- 4.5 In Chemistry: CHE 244 (3) and CHE 245 (1.5)

*BIO 181-182 (8) may be substituted.

To receive a statement verifying completion of the Didactic Program in Dietetics (DPD), which is accredited by the Commission on Accreditation for Dietetics Education (CADE), students must successfully complete all courses required for Option I, plus CIS 106, or demonstrate adequate computer literacy. Students must also successfully complete PSY 166, which satisfies the Distribution Requirement in Social Sciences. More information on the Didactic Program in Dietetics can be found in the DPD Handbook.

Option II: Food Service and Nutrition (54 Credits)

This option within the major reflects the need for a concentration in foods, foodservice, and nutrition for those students who, while seeking a degree in Dietetics, Foods, and Nutrition, are particularly interested in serving the needs of the foodservice industry as professionals involved in restaurants, catering, community food service, and corporate food service.

Additional courses to be taken (16 credits):

- 2 In Dietetics, Foods, and Nutrition: DFN 470 (2)
- 8 In Biological Sciences: BIO 181-182 (8)*
- 3 In Computer Science: CIS 106 (3)**
- 3 In Economics: ECO 185

^{*}This course satisfies the Core Requirement in the natural sciences.

- * This course satisfies the Distribution Requirement in the Natural Sciences.
- **Students who demonstrate adequate computer literacy may substitute another course after consultation with an adviser.

Minor in Dietetics, Foods, and Nutrition

The minor in Dietetics, Foods, and Nutrition requires 12 credits*. Courses must include HSD 240 and DFN 120, and two additional courses according to the following options:

- I. Foods: HSD 240, DFN 120, 220, and 330
- II. Life Cycle Nutrition: HSD 240, DFN 120, 220, and 341**
- III. Medical Nutrition Therapy: HSD 240, DFN 120, 220, and 348^{**}
- *Students planning to minor in DFN should select CHE114-115 as a distribution course.
- **Students planning to choose option II or III should also take BIO 181-182.

Exercise Science B.S. (61.5-62 Credit Major)

Option 1: Exercise and Movement Science

Major Requirements (61.5 credits). The major field requirements include the completion of 36 credits in Exercise Science core courses; 4 credits in MAT 132; 12.5 credits in science courses; 6 credits in Health Sciences; and 3 credits in a Major Elective course. A total of 120 credits are required for this degree. a. Exercise Science Courses (36 credits):

EXS 264: Introduction to Exercise Science (3 credits)

EXS 265: Behavioral Aspects of Exercise and Physical Activity (3 credits)

EXS 315: Kinesiology/Biomechanics (3 credits)

EXS 316: Motor Learning and Performance (3 credits)

EXS 323: Exercise Physiology I (3 credits)

EXS 326: Exercise Testing and Prescription (3 credits)

EXS 423: Exercise Physiology II (3 credits)

EXS 424: Principles and Practices of Fitness and Wellness Programming (3 credits)

EXS 425: Theory and Methods of Strength and Conditioning (3 credits)

EXS 430: Research Methods in Exercise Science (3 credits)

EXS 470: Internship in Exercise Science I (3 credits)

EXS 471: Internship in Exercise Science II (3 credits)

b. MAT 132 (4 credits)

c. Science Courses (12.5 credits)

BIO 181 Anatomy & Physiology I (4 credits)

BIO 182 Anatomy & Physiology II (4 credits)

CHE 114 Essentials of General Chemistry - Lecture (3 credits)

CHE 115 Essentials of General Chemistry - Laboratory (1.5 credits)

d. Health Sciences Courses (6 credits)

HSD 269 Fundamentals of Biostatistics for Health Professionals (3 credits)

HSD 240 Nutrition and Health (3 credits)

e. Major Electives (3 credits)

Select from EXS, REC, REH, DFN, HEA, HSA and/or HSD courses with approval of the adviser

GENERAL ELECTIVES: Sufficient credits to reach a total of 120 credits required for graduation.

Option 2: Pre-Physical Therapy

Major Requirements (62 credits). The major field requirements include the completion of 30 credits in Exercise Science core courses; 4 credits in MAT 132; 28 credits in science courses. A total of 120 credits are required for this degree.

a. Exercise Science Courses (30 credits):

EXS 264: Introduction to Exercise Science (3 credits)

EXS 265: Behavioral Aspects of Exercise and Physical Activity (3 credits)

EXS 315: Kinesiology/Biomechanics (3 credits)

EXS 316: Motor Learning and Performance (3 credits)

EXS 323: Exercise Physiology I (3 credits)

EXS 326: Exercise Testing and Prescription (3 credits)

EXS 423: Exercise Physiology II (3 credits)

EXS 425: Theory and Methods of Strength and Conditioning (3 credits)

EXS 470: Internship in Exercise Science I (3 credits)

EXS 471: Internship in Exercise Science II (3 credits)

b. MAT 132 (4 credits)

c. Science Courses (28 credits)

BIO 181: Anatomy & Physiology I (4 credits)

BIO 182: Anatomy & Physiology II (4 credits)

CHE 166: General Chemistry I - Lecture (3 credits)

CHE 167: General Chemistry - Laboratory (2 credits)

CHE 168: General Chemistry II- Lecture (3 credits)

CHE 169: General Chemistry - Laboratory II (2 credits)

PHY 166: General Physics I (5 credits)

PHY 167: General Physics II (.5 credits)

GENERAL ELECTIVES: Sufficient credits to reach a total of 120 credits required for graduation. BIO 166 and 167 (8 credits), MAT 172 (4 credits), PSY 166 (3 credits) and PSY 217 (3 credits) are recommended electives.

Minor in Exercise Science (12 Credits)

12 credits in EXS courses, including EXS 323: Exercise Physiology; BIO 181 and BIO 182 are prerequisites for EXS 323.

Option 2: Fitness and Wellness

12 credits, including 9 credits in EXS courses, plus 3 credits in HSD 240.

Health N-12 Teacher

The Health N-12 Teacher Program is designed to prepare students as health educators in public and private schools. Students who complete the Health N-12 Teacher Degree Program and who pass the New York State Teacher Certification Examination will be provisionally certified as licensed teachers by the New York State Education Department.

Health N-12 Teacher, B.S. (66 Credit Requirement)

The required courses and credits are distributed as follows:

- 6 In Department courses: HSD 240 (3), 266 (3)
- 27 In Health Education: HEA 211 (3), 249 (3), 267 (3), 300 (3), 303 (2), 304 (1), 307 (3), 309 (3), and 400 (3) plus 3 credits in health electives chosen in consultation with the advisor.
- 8 In Biological Sciences: BIO 181 (4) and 182 (4).
- 25 In Education: ESC 301 (3), 302 (3), 429 (3), 409 (3), 437 (4), 463 (3), 470 (3), and 471.

Honors in Health N-12 Teacher

Departmental honors in Health N-12 Teacher may be awarded to a student who has met the general requirements for Departmental honors, including maintaining a 3.5 index in a minimum of 24 HEA credits, which must include HEA 485.

Health Education and Promotion

Health education aims primarily to motivate individuals and groups in various settings to assume greater responsibility for their health by learning and adopting behaviors that promote health and prevent disease. This is a rapidly expanding field that has received added impetus from recent Federal legislation emphasizing disease prevention and health promotion as major priorities of national social policy.

The program is designed to prepare students for careers in community health education. Students will be able to develop, manage, and evaluate health education and promotion programs in a variety of settings where such programs are implemented. These include public and community agencies, business and industry, hospitals, and other types of clinical facilities.

The program includes two options, one in community health and the other in community health and nutrition. Satisfactory completion of all program requirements in community health

enables students to apply for certification as a Health Education Specialist, awarded by the National Commission for Health Education Credentialing.

Honors in Health Education and Promotion

Departmental honors in Health Education and Promotion may be awarded to a student who has met the general requirements for Departmental honors, including maintaining a 3.5 index in a minimum of 24 HEA credits, which must include HEA 485.

Health Education and Promotion, B.S. (52-57.5 Credit Major)

Courses to be taken by all program majors (38

12 In Department courses: HSD 240, 266, 269, 306

18 In Health Education and Promotion: HEA 249, 267, 300, 320, 400, and 437

8 In Biological Sciences: BIO 181, 182

Option 1: Community Health (52-53 credits)

Additional courses to be taken (14-15 credits)

In Health Education and Promotion: HEA 440, 470, plus 8-9 in HEA electives chosen in consultation with the adviser

Option 2: Community Health and Nutrition (57.5 credits)

Additional courses to be taken (19.5 credits)

15 In Dietetics, Foods, and Nutrition: DFN 120, 220, 341, 348, and 472

4.5 In Chemistry: CHE 114-115

NOTE: All students majoring in Health Education and Promotion should take PSY 166 to fulfill the Distribution Requirement in the Social Sciences.

Minor in Health Education and Promotion

The minor in Health Education and Promotion requires 12 credits. Courses must include: HEA 249, 267, plus 6 credits of HEA courses at the 300 level or above.

Health Services Administration

The program in Health Services Administration aims to provide individuals with the knowledge and skills needed by administrators in hospitals, community health facilities, nursing homes, extended care facilities, financing and insurance agencies, health maintenance organizations, managed care organizations, and other health services programs. Career opportunities involving hospital administration, the management of long-term care, managed care, and ambulatory care facilities, and the planning and implementing of many different kinds of health services were all considered in designing this program. The curriculum also prepares students for graduate study in Health Services Administration.

The Health Services Administration Program offers a course of study leading to a B.S. degree. The curriculum includes basic study in the social, economic, behavioral, and natural sciences to provide a broad liberal arts background for the professional course sequence. Students who major or minor in Health Services Administration can become eligible for admission to the New York State Licensing Examination for Nursing Home Administrators. For information about this examination, consult the Department of Health Sciences.

Health Services Administration, B.S. (55 Credit Major)

Admission Requirements

An application for admission to the program in Health Services Administration requires a cumulative index of 2.5 for admission to the program.

The distribution of courses and credits to be earned by majors pursuing the general program in Health Services Administration is as follows (55 credits):

- 9 In Departmental courses: HSD 266 (3), 269 (3), 306 (3)
- 20 In Health Services Administration: HSA 267 (3), 312 (3), 301 (3), 304 (3), 402 (3), 403 (3), 440 (2)
- 6 In recommended electives chosen in conjunction with the adviser
- 8 In Health Services Administration internship: HSA 470 (4), 471 (4)
- 6 *In Psychology*: PSY 166 (3) and one 200- or 300-level PSY course chosen with advisement (3)
- 6 In Economics and Accounting: ECO 166 (3) or ECO 167 (3), and ACC 171 (3)

Honors in Health Services Administration

Departmental honors in Health Services Administration may be awarded to a student who has met the general requirements for Departmental honors, including maintaining a 3.5 index in a minimum of 24 HSA credits.

Health Services Internship

Senior students in Health Services Administration must complete an 8-credit administration internship during which they spend 28 hours a week working at a healthcare facility. If necessary, students may complete the internship over the course of two semesters.

Minor in Health Services Administration

The minor in Health Services Administration consists of 12 credits. These must include HSD 266 and HSA 267, plus 6 credits from HSA or HSD courses at the 300 level or, with the instructor's permission, at the 400 level (excluding HSA 440, 441, 470, and 471).

Minor in Public Health (15 Credits)

Students may satisfy the College requirement of a minor field with the following five courses in the Department of Health Sciences: HSD 266: The U.S. Health Care Delivery System. *3 hours*, *3 credits*.

*HSD 269: Fundamentals of Biostatistics for Health Professionals. *3 hours, 3 credits.*

HSD 306: Epidemiology. 3 hours, 3 credits.

HEA 300: Introduction to Public Health. *3 hours*, *3 credits*. One 3-credit elective: DFN, EXS, HEA, HSA, HSD, REC, or REH course.

*Note: MAT 132 and CIS 106 or their equivalents are prerequisites for HSD 269.

Recreation Education

The program in Recreation Education leads to the B.S. degree and is designed to prepare students for entry into the recreation and leisure services profession. Recreation and leisure services are provided in a variety of settings serving people of all ages in carefully planned and organized recreation programs. Students may specialize in therapeutic recreation, administration, or exercise and sport. Therapeutic recreation specialists are employed in health and human service settings, such as hospitals, nursing homes, adult day care, youth agencies, drug treatment centers, and homeless shelters; they work with people with a variety of disabilities and health conditions. Students are eligible to sit for the national certification examination for certified therapeutic Recreation Specialist (CTRS), administered by the National Council for Therapeutic Recreation Certification.

Students in the administration option are employed in public park and recreation agencies, not-for-profit organizations, such as PAL and the YMCA, health and fitness centers, camps, and sports associations. Students in this specialization have met the academic requirements, upon graduation, to sit for the national certifying examination for Certified Park and Recreation Professional (CPRP), administered by the National Recreation and Park Association. Students in the Exercise and Sport option can work as programmers, fitness trainers, group exercise leaders or coaches, in sports and fitness programs in a variety of settings. Students are prepared to obtain various fitness certifications from several national organizations. Fieldwork and internship experiences are important components of the major, which give students the opportunity to apply theory to practice in an actual work setting under the supervision of a qualified professional.

Recreation Education, B.S. (40 Credit Major)

The required courses and credits are distributed as follows (40 credits):

- 15 *In Recreation Education:* REC 300 (3), 320 (3), 321 (3), 387 (3), and 401 (3)
- 9 In one of three options: either Therapeutic Recreation: REC 325 (3), 421 (3), and 425 (3); or Administration: REC 360 (3), 361 (3), and 422 (3); or Exercise and

Sport: EXS 265 (3), 264 (3), and 304 (3)

- 8 Selected from: REC, REH, EXS, DNC, DFN, HEA, HSA, and/or HSD courses with Departmental approval
- *In Recreation Internship:* REC 370 (4) and REC 470 (4)

Recommended Electives for Recreation Education

ART 107 (2); DNC 101 (1), 106 (1), and 201(1); ECE 301 (4); ESC (ECE) 300 (3); *EDS 390 (3); SOC 229 (3), 231 (3), and SOC (NUR) 240 (3); PSY 232 (3), 234 (3), 335 (3), and 339 (3).

Therapeutic Recreation, B.S. (52 Credit Major)

The required courses and credits are distributed as follows (52 credits):

- 12 In Recreation Education: REC 300 (3), 320 (3), 387 (3), 401 (3)
- 12 In Therapeutic Recreation: REC 321 (3), 324 (3), 325 (3), 421 (3), 425 (3)
- Selected from REC, REH, EXS, DFN, HEA, HSA and/or 6 HSD courses
- 9 In Recreation Internship: REC 370 (4), 471 (5)

13 Credits in Supportive coursework:

- 3 HIN 268 (3) 4 BIO 181 (4)
- PSY 166 (3) and PSY 234 (3)

Interdisciplinary Geriatric Team Option, B.S. (40 Credits)

Note: Students are not being admitted to this specialization in 2013-2015.

Students majoring in Recreation Education may elect this option.

The required courses and credits are as follows:

- REC 300, 320, 321, 370, 387, 401, 470 23
- 6 REC 421 and 425
- 11 HPI 305, 342, 343, and 442-443 (the recreation internship will constitute the HPI field placement)

Recreation Minor

Students may satisfy the College requirement of a minor field with one of the following options:

- A. Recreation: REC 300 and 320; and two of the following: REC 360, 401, or 422
- B. Therapeutic Recreation: REC 300 and 321; and two of the following: 320, 421, or 425
- C. Special Topics: This option is available to students who have an interest in a particular area not covered by the above options. Option C must be approved by the Recreation Major Adviser or the coordinator of the Recreation Program.

Developmental Disabilities Minor

REC 321, PSY 232, *EDS 390, and either *FCS 449 or SPV 321. Course substitutions may be permitted with approval of the

coordinator of the Recreation Program.

Minor in Geriatric Health

*DFN 242, HEA 310, HSA 320, and REC 325.

Minor in Youth Services

The minor in Youth Services requires 12 credits, including:

REH 230: Introduction to Youth Studies, 3 hours, 3 credits.

REC 320: Recreation Leadership, 3 hours, 3 credits.

REH 370: Practicum in Youth Services, 4 hours, field; 1, lecture; 3 credits.

And one of the following:

REC 324: Therapeutic Recreation for Children and Youth, 3 hours, 3 credits.

EXS 304: Coaching Youth and Team Sports, 3 hours, 3 credits. REH 330: Management of Youth-Serving Organizations, 3 hours, 3 credits.

Appropriate substitutions may be approved with the permission of the Coordinator of the Recreation Program.

Courses in Health Sciences

HSD (HPI) 200: Applied Medical and Health Care Terminology.

3 hours, 3 credits. Concepts and vocabulary of health, disease, disability, causation, prevention, diagnosis, treatment, and classification. PREREQ: Completion of 30 college credits.

HSD 240: Nutrition and Health.

3 hours, 3 credits. Fundamental principles of normal nutrition, with an emphasis on health maintenance and disease prevention. Discussion of nutritional concerns through the life cycle and nutrition programs in health services. PREREQ: Distribution course in the natural sciences. No credit will be given for *DFN 140 if it is taken after HSD 240.

HSD 266: The U.S. Healthcare Delivery System.

3 hours, 3 credits. Examination of the major issues in the organization and delivery of health and nutrition services. An overview of healthcare institutions, financing, management, and human resources.

HSD 269: Fundamentals of Biostatistics for Health Professionals.

3 hours, 3 credits. An introduction to biostatistics as used in health research. Emphasis on the application and interpretation of statistics in the context of health services, health education, and nutrition studies. PREREQ: MAT 132 or its equivalent, or demonstrated competence in database manipulation, spreadsheet calculations, and word processing.

HSD 306: Epidemiology.

3 hours, 3 credits. Basic principles and methods in epidemiology and their use in prevention and control of health problems in populations at risk. Impact of community health activities on individual and community responses to health and nutrition problems. Epidemiological approaches to health and nutritional care and their relationship to multicultural community health activities. PREREQ: HSD 266 and 269.

HSD 308: Legal Issues in Health Care.

3 hours, 3 credits. An examination of the legal issues related to providers and consumers of health services. Application of legal doctrines to healthcare settings. Some topics include: negligence liability, malpractice, risk management, abortion, and other contemporary legal issues.

HSD 416: Mental Health in America: Issues and Services.

3 hours, 3 credits. Current mental health issues and their relevance to health promotion and the management and delivery of healthcare services. Examination of mental healthcare services within the public and private sectors; identification of emerging service needs, particularly within a multicultural context. PREREQ: PSY 166 and a minimum of 12 credits in the major

Courses in Dietetics, Foods, and Nutrition

*Courses preceded by an asterisk are not expected to be offered in 2013-

DFN 120: The Nature and Science of Food.

4 hours (2, lecture; 2, lab), 3 credits. Overview of the preparation and characteristics of food, including nutritional profiles, food selection, and storage. Particular emphasis on the chemical changes and interaction of foods. PREREQ: CHE 114-115.

*DFN 140: Current Food and Nutrition Concerns.

2 hours, 2 credits. Fundamentals of the science of nutrition as they relate to current issues facing consumers. Application of nutrition principles to individual philosophies and lifestyles.

*DFN 215: Nutrition in Health Promotion.

3 hours, 3 credits. (Closed to DFN concentrators.) Introduction to the principles of nutrition and their application to health maintenance, disease prevention, and treatment. COREQ: CHE 120 and BIO 182. NOTE: Credit will not be granted for both DFN 215 and DFN. 240.

DFN 220: Foods, Society, and Health.

5 hours (3, lecture; 2, lab), 4 credits. An in-depth exploration of techniques of food selection and preparation, with emphasis on sociocultural, ecological, and health issues. PREREQ: DFN 120.

*DFN 221: Food, Culture, and Society.

4 hours (2, lecture; 2, lab), credits. PREREQ: DFN 120, 215, or 240, or completion of 30 credits.

*DFN 242: Geriatric Nutrition.

4 hours (2, lecture; 2, lab), 3 credits. Administration of nutritional programs serving the aged. Legislation, surveillance, and cost accountability. Assessment of nutritional status and delivery of nutrition services. Nutrient requirements of the aged. Fieldwork in agencies providing services to the elderly. PREREQ: *DFN 215 or HSD 240.

*DFN 320: Meal Management.

3 hours (1, lecture; 2, lab), 2 credits. PREREQ: DFN 220 and 240.

*DFN 321: Experimental Foods.

5 hours (2, lecture; 3, lab), 3.5 credits. The effects on foods of varying ingredients and types of processing. Introduction to experimental food laboratory techniques. Class and individual problems designed to orient students to procedures used in developing new food products. PREREQ: DFN 220 and CHE 120-

DFN 330: Quantity Food Procurement, Production, and Service.

3 hours, 3 credits. Principles of volume food procurement, production, and service for complex food service organizations. Emphasis on quality standards, sanitation, cost control, food service delivery systems, and food service equipment. PREREQ: DFN 220 and HSD 240. COREQ: DFN 370.

DFN 341: Nutrition Throughout the Life Cycle.

3 hours, 3 credits. Current concepts and principles in human nutrition with application to the needs of individuals based upon age group and gender throughout the life cycle. Special attention on assisting normal- and high-risk clients at various stages of the life cycle in meeting nutritional needs, preventing and overcoming nutritional problems, and maintaining health. Programs in the community will be discussed that provide nutrition education to the public. PREREQ: HSD 240, BIO 181, 182, or 228, and DFN 120 and 220.

DFN (EXS) 342: Sports Nutrition.

3 hours, 3 credits. Nutritional and metabolic requirements of physical activity. The health and well-being benefits of an optimal diet-exercise regime for physical activity, exercise, and sport participation will be emphasized. PREREQ: HSD 240, BIO 181-182, CHE 114-115, EXS 323; PREREQ or COREQ: CHE 120-121.

DFN 348: Nutrition in the Management of Disease I.

3 hours, 3 credits. Introduction to the methods used in the identification of nutritional needs and the planning of nutritional care in disease. Emphasis on the scientific concepts used in calculating modified diets and in planning menus that are consistent with the diet prescription. Application of the principles of nutrition to case studies and responsibilities within the managed healthcare system. Discussion of the rationale of diet therapy. PREREQ: HSD 240, BIO 181-182 or 228, and DFN 120 and 220.

*DFN 350: Trends in Dietetics, Foods, and Nutrition.

3 hours, 3 credits. Topics will be announced in advance each semester. PREREQ: DFN 120, 220, 240, and 330.

DFN 370: Practicum in Quantity Foods.

One semester, 1 credit. Field placement in dietary and food service departments within healthcare institutions. Includes experience in volume feeding and clinical applications. PREREQ: DFN 220 and HSD 240. COREQ: DFN 330.

DFN 430: Management of Dietetic Services.

3 hours, 3 credits. Principles of organization and administration, and their application to food service departments within complex organizations, especially productivity standards, budgets, and facilities design. PREREQ: DFN 330 and ECO 304 or HSD 266.

DFN 437: Nutrition Education and Counseling.

3 hours, 3 credits. An examination of the means of assessing the nutritional needs of individuals and groups and of the oral, written, and technical skills that are needed for successful nutrition education and counseling of individuals and groups. Discussion of public and private nutrition education organizations, agencies, professional resources, tools, and professional ethics. PREREQ: HSD 240, DFN 341, DFN 348.

*DFN 440: Seminar in Dietetics, Foods, and Nutrition.

1 hour, 1 credit. Analysis of field experience. COREQ: DFN 470 and 430.

DFN 445: Advanced Nutrition.

4 hours, 4 credits. An in-depth study of the digestion, absorption, transport, and metabolism of the energy nutrients, and of the metabolic functions of water and selected vitamins and minerals. Dietary calculations based on current nutrient standards and analysis of topical nutrition research. PREREQ: HSD 240, CHE 244-245, and BIO 181-182 or 228, and DFN 220.

DFN 448: Nutrition in the Management of Disease II.

3 hours, 3 credits. A case-study approach to the nutritional assessment and management of patients with medical and surgical problems. Emphasis on the analysis of anthropometric, laboratory, clinical, and dietary data in determining nutritional needs and on planning compensatory nutritional therapy based on these needs. PREREQ: DFN 348.

DFN 470: Dietetic Services Field Experience.

Field placement, 2 credits. A minimum of 100 hours of supervised field experience in a foodservice operation. Periodic meetings with the instructor. A paper is required. PREREQ: DFN 330 and permission of the instructor.

DFN 471: Field Experience in Clinical Nutrition.

Field placement, 3 credits. A minimum of 100 hours of supervised field experience in a healthcare facility that offers clinical nutritional services. Periodic meetings with the instructor. A paper is required. PREREQ: DFN 348 and permission of instructor.

DFN 472: Field Experience in Community Nutrition.

Field placement, 2 credits. A minimum of 100 hours of supervised field experience in a healthcare facility that offers community nutritional services. Periodic meetings with the instructor. A paper is required. PREREQ: DFN 341 and HEA 437.

DFN 485: Independent Study in Dietetics, Foods, and

One semester, 2-3 credits (maximum 6 credits). Independent study in an appropriate field under the direction of a faculty adviser. PREREQ: DFN 120 and 220, HSD 240, and permission of the faculty adviser.

DFN 490: Honors in Dietetics, Foods, and Nutrition.

One semester, 2-3 credits (maximum 6 credits). Independent research under the supervision of a faculty member, leading to completion of an honors paper. PREREQ: Departmental permission.

DFN 491: Selected Topics in Dietetics, Foods, and Nutrition.

3 hours, 3 credits. Analysis of current issues in dietetics, foods, and nutrition. PREREQ: HSD 240 plus 9 additional credits in DFN.

Courses in Health Education and Promotion

*Courses preceded by an asterisk are not expected to be offered in 2013-

*HEA (WST) 136: Family and Community Health.

2 hours, 2 credits. Study of the relationship of the home and community in developing optimal health.

*HEA 167: School and Community Health.

3 hours, 3 credits. Health services, healthful school environment, and health instruction as school and community responsibilities. Relationship between school and community health programs.

HEA 211: Perspectives on AIDS.

3 hours, 3 credits. Examination of HIV/AIDS in the United States and the world, including biomedical aspects of HIV/AIDS, history of the epidemic, epidemiology, prevention, treatment, and policy

HEA 249: Foundations of Health.

3 hours, 3 credits. Critical appraisal of present practices in health. Analysis of historical and philosophical developments as they relate to health services and education.

HEA 265: Contemporary Health Problems.

3 hours, 3 credits. Scientific study of healthful living. Emphasis on identification and analysis of contemporary health issues and problems and review of related research.

HEA 266: Research Techniques in Health Education.

3 hours, 3 credits. Basic concepts of research and evaluation applied to school and community health. Exploration of the tools of measurement and methods of analyzing and interpreting data.

HEA 267: Human Behavior and Health.

3 hours, 3 credits. Psychological, social, and cultural determinants of health behavior, implications for educators in school and community settings, and conditions and phenomena that affect acceptance of health information. PREREQ: PSY 166, SOC 166, or Departmental permission.

HEA 300: Introduction to Public Health.

3 hours, 3 credits. Science of community health. Prevention and control of disease, vital statistics, and current health problems.

HEA 301: Environmental Health.

3 hours, 3 credits. Description and analysis of causative agents of the major pollutants and their effects on man and society. PREREQ: Two courses in the natural sciences.

HEA (WST) 302: Women and Health.

3 hours, 3 credits. Physiological, psychological, political, and social determinants of the health and healthcare of women. PREREQ: Two courses in the behavioral sciences.

HEA 303: Safety Education, Accident Prevention, and First Aid.

2 hours, 2 credits. Principles of safe living; theory and practice of first aid procedures. Satisfactory completion of this course will result in the awarding of the American Red Cross First Aid Certificate.

HEA 304: Cardiopulmonary Resuscitation (CPR) Basic Life Support.

1 hour, 1 credit. Instruction in the principles and skills of emergency first aid for respiratory failure and cardiac arrest in victims of all ages. Mouth-to-mouth breathing, CPR, and care for an obstructed airway. Upon satisfactory completion of this course, students will receive American Red Cross certification in basic life support.

HEA 305: Health Appraisal.

3 hours, 3 credits. Techniques of health appraisal, recording, and interpreting health data, referral, and follow-up procedures, with emphasis on health counseling and peer group consultation. PREREQ: Two courses in the behavioral sciences.

HEA (WST) 307: Human Sexuality.

3 hours, 3 credits. Physiological, psychological, and social aspects of human sexual development and function. PREREQ: Either one course in each of the biological and behavioral sciences or Departmental permission.

HEA (WST) 308: Parenting and Child Health.

3 hours, 3 credits. The development of the child as a growing personality; factors influencing physical, emotional, and social development. Care of the premature baby; infant and maternal mortality; habit formation; parenting skills and training; signs of health, disease, and abuse; boarding out of children; adoption; day care and nursery school. PREREQ: HEA (WST) 307 or Departmental permission.

HEA 309: Alcohol, Tobacco, and Other Drugs.

3 hours, 3 credits. The use and abuse of alcohol, tobacco, and drugs. Emphasis on the physiological, psychological, and social effects.

HEA 310: Health and Aging.

3 hours, 3 credits. The middle and later years of life. Physiological, psychological, and social aspects of the aging process. Examination of agencies and programs established to meet the health needs of the aged. PREREQ: Two courses in the behavioral sciences.

HEA 320: Health Counseling.

3 hours, 3 credits. Overview of the counseling process, including theoretical approaches and strategies and techniques for health behavior change. Applications to such health problems as obesity, drug and alcohol use, smoking, STDs, HIV disease, and heart disease. PREREQ: Either HEA 267, HEA 300, or Departmental permission.

HEA 360: Selected Topics in Health.

3 hours, 3 credits (maximum 6 credits). Consideration of recent developments in the field of health. PREREQ: 60 college credits.

HEA 400: Program Planning and Evaluation.

3 hours, 3 credits. Identification and analysis of the processes of planning and evaluating health education and promotion programs. Examination of programs in schools, community health agencies, clinical facilities, and worksite/industrial settings. PREREQ: HEA 249, 267, plus 2 HEA courses at 300 level. COREQ: HEA 437 or ESC 437.

HEA 437: Strategies in Community Health and Nutrition Education.

3 hours, 3 credits. Assessment of health and nutritional needs within a multicultural context. Identification, selection, and implementation of strategies for dissemination of health and nutrition information in the community, focusing on individuals with special needs. PREREQ: HEA 400 or satisfactory completion of 18 credits in Health Education and Promotion or Dietetics, Foods, and Nutrition, or permission of the instructor.

HEA 440: Seminar in Community Health.

2 hours, 2 credits. A study of the factors involved in the development, organization, administration, and supervision of health education programs within the various types of community health agencies. COREQ: HEA 470; PREREQ: HEA 400.

HEA 470: Internship in Community Health I.

Two-day-per-week field placement, 4 credits. Supervised placement and conferences in community health agencies. Onthe-job training in a public, private, voluntary, or professional health agency. PREREQ: HEA 400 and Departmental permission. COREQ: HEA 400. With Program Director's approval, students currently employed or with related experience in the field of health education may take HEA 493: Special Projects as a replacement for HEA 470. PREREQ: HEA 400 and Departmental permission. COREQ: HEA 440.

HEA 485: Honors.

One semester, 3 credits (maximum 6 credits). Individual study, under faculty guidance, leading to completion of an honors essay. PREREQ: Departmental permission.

HEA 493: Special Projects.

One semester, 1-4 credits (maximum of four credits). Individual projects or research of a selected topic under the direction of a faculty member. PREREQ: Departmental permission.

Courses in Health Services Administration

*Courses preceded by an asterisk are not expected to be offered in 2013-2015.

*HSA 250: ICD-9-CM Coding I.

2 hours, 2 credits. Introduction to the ICD-9-CM medical records coding system, focusing on the coding of uncomplicated diseases and surgical procedures within hospitals and other inpatient health service organizations. PREREQ: BIO 181 or 183, HSD 200, and CIS 106.

*HSA 251: ICD-9-CM Coding II.

2 hours, 2 credits. Continuation of *HSA 250, covering advanced areas of medical records coding. Emphasis on sequencing of multiple diagnoses and procedures to assure correct reimbursement. Review of data collection systems used by hospitals and other inpatient health services organizations. PREREQ: *HSA 250.

*HSA 252: Coding for Ambulatory Care.

2 hours, 2 credits. Coding of medical procedures performed in outpatient settings, including physicians' offices, ambulatory surgery centers, and hospital outpatient departments. Overview of the requirements for reporting professional services for the government, insurance companies, and other third-party payers. PREREQ: BIO 181 or 183, HSD 200, and CIS 106.

HSA 267: Management of Health Organizations.

3 hours, 3 credits. Fundamental concepts of management theory. Examination of the structure of health organizations and administrative processes, such as planning, problem solving and decision making, and quality, and productivity improvement. Emphasis on the major issues and problem areas confronting health administrators.

HSA 312: Managed Health Care.

3 hours, 3 credits. Comprehensive overview of basic concepts of managed health care, including types of managed care organizations, use of data and reports in utilization and quality management, Medicaid and Medicare managed care, and other critical issues. PREREQ: HSD 266 and HSA 267.

HSA 301: Human Resources Management and Labor Relations in Health Services.

3 hours, 3 credits. Analysis of the challenges and conflicts inherent in managing human resources in health services organizations. Examination of policy formulation, recruitment, selection, training and development, wage and salary administration, motivation, and labor relations. PREREQ: HSA 267 or faculty permission.

HSA 302: Computer Applications in Health Services Administration.

3 hours, 3 credits. An introduction to the use of the computer by health care administrators. An overview of software programs useful for administrative tasks, including medical information management, medical records processing, budget preparation, and report writing. PREREQ: HSA 267, HSD 269, and CIS 106.

*HSA 303: Operations Analysis of the Health Delivery System. 3 hours, 3 credits. PREREO: HSA 267, 268, ECO 166 or 167, 171, or 185.

HSA 304: Financial Aspects of Health Care Administration.

3 hours, 3 credits. Examination of the major issues related to the financing of health services, including budgeting, cost containment, reimbursement policies, and financial strategies. Overview of the major trends affecting financial management of health institutions. PREREQ: HSA 267, 268, and ACC 171.

HSA 312: Managed Health Care.

3 hours, 3 credits. Comprehensive overview of basic concepts of managed health care, including types of managed care organizations, use of data and reports in utilization and quality management, Medicaid and Medicare managed care, and other critical issues. PREREQ: HSD 266 and HSA 267.

HSA 320: Long-Term Care Administration.

3 hours, 3 credits. An examination of the structure and operations of long-term care organizations and institutions, focusing on issues affecting the management, financing, and implementation of long-term care. Topics covered include policies and regulations related to the administration of long-term care facilities; human resources management in long-term care; marketing long-term care; and the multidisciplinary team approach in the delivery of services to the elderly, mentally ill, chronically ill, and disabled. NOTE: Successful completion of this course satisfies part of the requirements for admission to the New York State Licensing Examination for Nursing Home Administrators. For information about this examination, consult the Department of Health Sciences. PREREQ: HSA 267.

HSA 325: Nursing Home Administration.

3 hours, 3 credits. Management of nursing homes, covering the six Domains of Practice established by the American College of Health Care Administrators: organizational management of nursing homes, resident care, personnel, financial, environmental, and regulatory management. PREREQ: HSA 267 or permission of faculty member.

HSA 350: Contemporary Health Issues.

3 hours, 3 credits (maximum 6 credits). Recent topics of interest pertinent to the management and delivery of healthcare. Emphasis will be given to administrative, political, legislative, and legal dimensions of current health issues. PREREQ: HSD 266 and HSA

HSA 385: Independent Study in Health Services Administration.

One semester, 2-3 credits (maximum 6 credits). Individual study and research of a selected topic, under direction of a faculty member. PREREQ: Departmental permission.

HSA 402: Research and Program Evaluation in Health Services Administration.

3 hours, 3 credits. Analysis of research techniques and their applications in healthcare administration. Principles of research design and program evaluation. Emphasis on student involvement in empirical research and evaluation. PREREQ: HSD 269, HSD 306, and a minimum of 9 credits in HSD or HSA courses.

HSA 403: Strategic Management: Health Planning in a Competitive Environment.

3 hours, 3 credits. Examination of the issues and techniques relevant to the planning of health delivery systems, with emphasis on marketing approaches in a competitive healthcare environment. PREREQ: A minimum of 18 credits in HSD or HSA courses.

HSA 440: Seminar in Health Services Administration: Analysis of Field Work Experience.

2 hours, 2 credits. Seminar is taken concurrently with the internship in Health Services Administration. Provides an opportunity for students to integrate conceptual, academic learning with practical experiences in a setting where health administration students can interface in operational experiences and be exposed to management responsibility. Special emphasis given to different approaches in problem solving and the development of professional attitudes and values. COREQ: HSA 470.

HSA 441: Seminar in Health Services Administration: Analysis of Field Work Experience.

2 hours, 2 credits. Continuation of HSA 440. See description for HSA 440. COREQ: HSA 471.

HSA 470: Administrative Skills in Health Services Organizations I.

180 hours of field placement, 4 credits. Administrative practice with a preceptor, focusing on the development of specific, rolerelated technical and professional skills necessary to function as an administrator. PREREQ: Departmental permission. COREQ: HSA 440 or 441, and 471, or Departmental permission.

HSA 471: Administrative Skills in Health Services Organizations II.

180 hours of field placement, 4 credits. Continuation of HSA 470. PREREQ: Departmental permission. COREQ: HSA 440 or 441, and 470, or Departmental permission.

HSA 490: Honors in Health Services Administration.

One semester, 3 credits. Independent research or project under faculty guidance. Written report required. PREREQ: Departmental permission.

Courses in Recreation Education

REC 300: History and Philosophy of Recreation.

3 hours, 3 credits. Reviews historical development of recreation and leisure and examines theories of play and recreation and the functions of organized recreation services in the U.S. today.

REC 320: Recreation Leadership.

3 hours, 3 credits. Leadership principles and techniques. Group processes and methods for working with diverse populations in varied recreation and leisure service settings. In-class leadership exercises and practice.

REC 321: Introduction to Therapeutic Recreation Service.

3 hours, 3 credits. Overview of special recreation programs provided in institutions or community settings for the physically, mentally, socially, or emotionally disabled. Examines basic concepts and models of service with field observations.

REC 324: Therapeutic Recreation for Children and Youth.

3 hours, 3 credits. Examination of the role of play in typical and atypical child development. Health and social conditions that benefit from therapeutic recreation (TR) intervention. Treatment and inclusive settings, factors affecting participation, and TR program design and intervention for children and youth.

REC 325: Therapeutic Recreation in Long-Term Care.

3 hours, 3 credits. Principles and practices of therapeutic recreation services in settings serving the elderly, with emphasis on the role of the therapeutic recreation professional in client assessment and design of appropriate interventions to address healthcare needs. PREREQ: 45 credits.

REC 360: Selected Topics in Recreation.

3 hours, 3 credits. Consideration of recent developments in recreation. PREREQ: Six credits within program area or permission of program coordinator.

REC 361: Camp Leadership and Outdoor Recreation.

3 hours, 3 credits. Foundations of outdoor recreation in urban and wilderness settings; environmental issues as they affect recreation program planning; outdoor recreation activities, management, and leadership.

REC 370: Recreation Internship.

180 hours plus conferences, 4 credits. Supervised placement in a recreation or leisure service agency in order to develop knowledge of professional practice through on-site experience, with emphasis on leadership and programming. PREREQ: REC 300, 320, and

REC 387: Research and Evaluation in Recreation Service.

3 hours, 3 credits. Basic concepts of research and evaluation applied to the operation of recreation and park programs. Explores techniques of measurement and methods of analyzing and interpreting data. PREREQ: REC 300 and 321.

REC 401: Administration of Recreation Services.

3 hours, 3 credits. Examines management theories and practices in recreation agencies and organizations. Topics include personnel management, public relations, budget and finance, and facility design and operation. PREREQ: REC 300, 320, and 321.

REC 421: Programs in Therapeutic Recreation Service.

3 hours, 3 credits. Examines program services, leadership methods, and current trends and issues in therapeutic recreation service. Individual and group program planning, including assessment, activity analysis, evaluation, and documentation. PREREQ: REC 300, 320, and 321.

REC 422: Program Planning in Recreation.

3 hours, 3 credits. Examines program development and supervision in community-based recreation programs operated by governmental, voluntary, and private agencies. Explores recreation program formats and modalities. PREREQ: REC 300

REC 425: Processes and Techniques of Therapeutic Recreation.

3 hours, 3 credits. The application of therapeutic recreation principles to the clinical situation, including helping skills, therapeutic group process, intervention techniques and methods, and theoretical foundations of therapeutic recreation. PREREQ: REC 421.

REC 470: Senior Internship in Recreation.

1 hour, lecture; minimum 180 field hours, 4 credits. Supervised placement in a recreation setting in which the student will receive advanced training in therapeutic recreation or in administration of recreation programs. PREREQ: 18 credits in recreation, including REC 370.

REC 471: Therapeutic Recreation Internship.

300 field hours, 5 credits. Placement in a therapeutic recreation setting, under the supervision of a certified therapeutic recreation specialist, with emphasis on planning, implementing, and evaluating therapeutic recreation services, as well as participation in the professional activities of the agency. PREREQ or COREQ: REC 370.

REC 485: Honors.

One semester, 3 credits (maximum 6 credits). Individual study, under faculty guidance, leading to completion of an honors essay or production book in the case of creative performance. PREREQ: Departmental permission.

REC 493: Special Project.

One semester, 2 credits (maximum 4 credits). Special problems, research, and production and/or performance, under faculty guidance. PREREQ: Departmental permission.

Courses in Rehabilitation

REH 220: Introduction to Developmental Disabilities.

3 hours, 3 credits. Characteristics and needs of individuals with developmental disabilities; the developmental disabilities service system, its history, values, and strategies for community-based support. PREREQ: 30 credits or Departmental permission.

REH 230: Introduction to Youth Studies.

3 hours, 3 credits. Historical and contemporary influences on youth development and youth work. Development of practice based on ecological, resiliency, and systems theory. Topics include establishing relationships, working with groups, problem solving from a strengths perspective, issues relating to cultural diversity. Overview of youth work professional issues, with emphasis on ethics, values, and professionalism.

REH 240: Principles of Psychiatric Rehabilitation.

3 hours, 3 credits. Introduction to the principles and process of psychiatric rehabilitation. Emphasis on assisting persons with long-term psychiatric disabilities to function in various environments. Examination of the differences between rehabilitation and treatment, and the nature of psychiatric disability. PREREQ: 30 credits or Departmental permission.

REH 330: Management of Youth-Serving Organizations.

3 hours, 3 credits. Organizational structure, mission, and services of youth-serving organizations, with emphasis on program design, funding strategies, and personnel management. PREREQ: REH

REH 370: Practicum in Youth Services.

8 hours, field; 1, lecture; 3 credits. Supervised placement in a youth services setting focusing on interactions with youth, leadership, and planning processes. PREREQ: REH 230, REC 320, and PREREQ/COREQ: REC 324 or EXS 304 or REH 330.

Courses in Exercise Science

EXS 264: Physical Fitness and Exercise.

3 hours, 3 hours. Human anatomy and physiology as related to physical activity, exercise, and work. Study of the musculoskeletal, cardiovascular, and pulmonary systems; bioenergetics; body composition, anatomy, and physiology of aging, and healthrelated benefits. PREREQ: BIO 181-182 and EXS 264.

EXS 265: Behavioral Aspects of Physical Activity.

3 hours, 3 credits. Conceptual and theoretical frameworks for understanding the behavioral component of physical activity and exercise, and for developing intervention strategies for enhancing physical activity and exercise behavior.

EXS 304: Coaching Sports.

3 hours, 3 credits. Methods, strategies, and responsibilities of coaching youth and team sports in a variety of organizations. The course includes supervisory and administrative functions of coaches. PREREQ: Departmental permission.

EXS 315: Kinesiology and Biomechanics.

3 hours, 3 credits. Study and application of anatomic and mechanical principles of human movement. PREREQ: BIO 181-

EXS 316: Motor Learning and Performance.

3 hours, 3 credits. Effects of psychological, social maturational, and neurophysiological factors on the learning and performance of movement patterns. PREREQ: BIO 181-182 and EXS 264.

EXS 323: Exercise Physiology I.

3 hours, 3 credits. Human anatomy and physiology as related to physical activity, exercise, and work. Study of the musculoskeletal, cardiovascular, and pulmonary systems; bioenergetics; body composition, anatomy, and physiology of aging, and healthrelated benefits. PREREQ: BIO 181-182 and EXS 264.

EXS 326: Exercise Testing and Prescription.

3 hours, 3 credits. Principles of fitness and the development of exercise programs to enhance health and/or human performance in a variety of settings. Methods of evaluating physiological adaptation to exercise, using laboratory and field experiences. PREREQ: EXS 323, BIO 181, BIO 182, CHE 114, CHE 115. PREREQ or COREQ: CHE 120, CHE 121.

EXS 342: Sports Nutrition.

3 hours, 3 credits. Nutritional and metabolic requirements of physical activity. The health and well-being benefits of an optimal diet-exercise regimen for physical activity, exercise, and sport participation will be emphasized. PREREQ: HSD 240, BIO 181, BIO 182, CHE 114, CHE 115, EXS 323. PREREQ or COREQ: CHE 120, CHE 121.

EXS 423: Exercise Physiology II.

3 hours, 3 credits. Human anatomy and physiology as related to physical activity, exercise, and work. Study of the nervous, endocrine, muscular, and cardiovascular systems. Factors that affect physiological function, energy transfer, and exercise performance. PREREQ: EXS 323, CHE 114, CHE 115. PREREQ or COREQ: CHE 120, CHE 121.

EXS 424: Principles and Practices of Fitness and Wellness Programming.

3 hours, 3 credits. Planning fitness and wellness programs for a variety of settings, with emphasis on selecting appropriate modalities, needs of specific groups, and safety considerations. PREREQ: EXS 326.

EXS 425: Theory and Methods of Strength and Conditioning.

3 hours, 3 credit. Strength production from a physiological, neurological, biomechanical, and bioenergetic perspective. PREREQ: EXS 323 and EXS 315.

EXS 426: Exercise Testing and Prescription for Special Populations.

3 hours, 3 credits. Prescribing and modifying exercise programs for individuals and groups based on age, medical conditions, and special needs, including coronary heart disease, diabetes, asthma, obesity, arthritis, pregnancy, and physical and mental challenges. PREREQ: EXS 326.

EXS 427: Application of Training Principles.

3 hours, 3 credits. Application of strength and conditioning theories and training principles, including fitness testing, protocol design, and goal assessment to clients in diverse exercise and fitness settings. PREREQ: EXS 425.

EXS 430: Research Methods in Exercise Science.

3 hours, 3 credits. Concepts of research and evaluation in exercise science. Techniques of measurement and methods of analyzing and interpreting data. PREREQ: HSD 269 and EXS 423.

EXS 470: Internship in Exercise Science I.

3 hours (8, field; 1, lecture), 3 credits. Supervised placement in a commercial fitness setting in order to develop knowledge of professional practice through on-site experience, with emphasis on leadership and programming. PREREQ: EXS 326, EXS 424, and permission of advisor.

EXS 471: Internship in Exercise Science II.

3 hours (8, field; 1, lecture), 3 credits. Supervised placement in a clinical or corporate fitness setting in order to develop knowledge of professional practice through on-site experience, with emphasis on leadership and programming. PREREQ: EXS 326, EXS 424, EXS 470, and permission of advisor.

EXS 485: Honors in Exercise Science.

1 Semester, 3 credits (maximum 6 credits). Individual study, under faculty guidance, leading to completion of an honors essay or research manuscript. PREREQ: Completion of 18 credits in Exercise Science with a 3.2 GPA and permission of advisor.

EXS 493: Special Project in Exercise Science.

1 Semester, 2-3 credits (maximum 6 credits). Individual study, under faculty guidance, leading to a project of practical application in the field. PREREQ: Completion of 18 credits in Exercise Science and permission of advisor.

History

Department Chair: Marie C. Marianetti (Carman Hall, Room 202B)

Undergraduate Advisor: Marie Marianetti (Carman Hall, Room 297); Robert Valentine (Carman Hall, Room 229).

Department Faculty: Distinguished Professor: Joseph W. Dauben; Professors: Evelyn B. Ackerman, Timothy Alborn, Jose Luis Rénique; Associate Professors: Martin J. Burke, Dina Le Gall, Marie C. Marianetti, Andrew W. Robertson, Duane Tananbaum; Assistant Professors: Cindy Lobel, Robyn C. Spencer, William Wooldridge, Amanda Wunder; Lecturer: Robert T. Valentine

The Department of History offers a variety of courses that cover the ancient world, European civilization, the United States, and non-Western civilizations. Students are encouraged to interpret and discuss the diversity of human experience, and to think critically about the ways in which historical events affect their own lives. The Department participates in the interdisciplinary programs in African and African American Studies, Classical Culture, Latin American and Puerto Rican Studies, Women's Studies, and American Studies. The faculty members in the Department are committed to excellence in narrative and analytical historical reading and writing. They offer a variety of services to students who wish to improve their reading or writing skills, or who wish to pursue a historical problem in more depth than class time permits. Students may also study with members of the faculty on independent reading or research projects.

Career Opportunities: History majors frequently enter careers in areas such as education, law, politics, business, library work, and government. History students who wish to discuss career opportunities or advanced studies in graduate school should consult with the Department Chair.

History, B.A. (30-36 Credit Major)

For all students who are not enrolled in the Early Childhood Education or Middle and High School Education Social Studies certification sequence, the History major consists of 36 credits. History courses numbered below the 300-level do not qualify toward the major. Students who wish to take 300- or 400-level courses must have successfully completed the Historical Studies distribution requirement (Area VI), or must have obtained permission from the Department. The 36 credits required for the fulfillment of the History major must be distributed as follows:

- 9 in HIA (ancient and medieval history) and/or HIE (modern European history)
- 12 in HIS (comparative history) and/or HIW (Asian, African, and Latin-American history).
- 12 in HIU (American history)
- in any of the five subject codes.

Note: Of these 36 credits, at least 6 credits must be taken in researchintensive courses, designated with an R in the section number.

Early Childhood/Social Studies Education Specialization (30 credits)

This specialization should be taken only by students in the Early Childhood Education or Middle and High School Education's

Social Studies Education certification sequence. The 30 credits required for the fulfillment of this specialization (all at the 300- or 400-level) must be distributed as follows:

- in HIA (ancient and medieval history) and/or HIE (modern European history)
- 9 in HIS (comparative history) and/or HIW (non-Western history).
- 3 in HIU 348 (History of New York City and State)
- in HIU (other courses in American history)

Of these 30 credits, at least 6 credits must be taken in researchintensive courses, designated with an R in the section number.

Requirements for the Minor in History

The History minor consists of 12 credits (four 3-credit courses). These shall be selected from 200-, 300-, or 400-level courses. At least two courses must be at the 300- or 400-level.

Teacher of Social Studies

History is an approved major for students wishing to become elementary school teachers or middle or high school social studies teachers. Students interested in becoming teachers should meet with the History Department Undergraduate Advisor to plan their program as soon as possible in their academic career. They should also consult with the Office of the Dean of Education (Carman Hall, B-33, 718-960-4972) for the latest information on State requirements for teacher certification.

Classical Civilization and the Classical Tradition (Interdisciplinary Minor)

The Minor in Classical Civilization and the Classical Tradition provides students with an interdisciplinary approach to the literature, culture, history, politics, philosophy, mythology, and archaeology of the ancient Greek and Roman civilizations. The program is offered as a minor field that complements a wide variety of majors. It is particularly valuable for students whose major field of study is in the Arts and Humanities, including English, History, Languages and Literatures, and Philosophy, as well as for certain majors in the Social Sciences, including Anthropology, Political Science, and Psychology. Ancient Greek and Latin languages are not required for the minor.

Degree Requirements

Students who minor in Classical Civilization and the Classical Tradition conduct their course of study in consultation with the Minor's Coordinator. They satisfy the College requirement of a minor field by taking four courses (12 credits), at least two of which must be at the 300-level.

All students take a single introductory three-credit course, either HIS 246: Civilizations of the Ancient World or ACU 266: Classical Myth and Human Condition. Electives are divided into two broad categories of courses: Category I (Classical Literature and Classical Culture) and Category II (Classical History and Classical Archaeology). Students choose one course from Category I, one course from Category II, and a third course from either category. Students may replace an elective with ACU 350 and/or HIA 350 (Special Topics) or ACU 381 and/or HIA 381 (Individual Tutorial), but only if their chosen course is not offered in a given semester.

Introduction to Classical Civilization and the Classical Tradition (3 credits):

HIS 246: Civilizations of the Ancient World or ACU 266: Classical Myth and the Human Condition

Electives (9 credits): Students choose one course from Category I, one course from category II, and a third course from either category.

I. Classical Literature and Classical Culture

ACU 305: Greek Literature in Translation

ACU 307: The Greek and Roman Epic in English Translation

ACU 308: Greek and Roman Tragedy in English Translation

HIA (ACU)(WST) 311: Women in Antiquity

HIA 314: Classical Myth and Society

(Students who have completed ACU 266 will not receive credit for HIA 314)

II. Classical History and Classical Archaeology

HIA 306: History of Religions in the Ancient World

HIA (ACU) 316: Greek Archaeology of the Classical Period

HIA (ACU) 318: Roman Archaeology and Topography

HIA 320: History of Ancient Greece

HIA 321: History of Rome

Introductory History Courses

*Courses preceded by an asterisk are not expected to be offered in 2013-2015.

HIS (PRS) 212: History of Puerto Rico.

3 hours, 3 credits. Survey of the history of Puerto Rico.

HIS (LAC) 225: History of the Dominican Republic.

3 hours, 3 credits. Dominican history from pre-history and pre-Colombian times to the Trujillo era. Examination of different socioeconomic trends in the formation of Dominican society, as well as the prominent role played by foreign powers.

HIS 240: East Asian Civilization.

3 hours, 3 credits. The literature, art, religions, and changing social life of people in China, Japan, and Korea. Emphasis on both the changing nature of popular culture and the relationship between long-term historical trends and life today.

HIS 241: Early Modern Europe, 1400-1815.

3 hours, 3 credits. The making of modern Europe from the Renaissance to the fall of Napoleon.

HIS 242: Contemporary European History.

3 hours, 3 credits. Major themes in European history from the nineteenth century to the present.

HIS 243: Foundations of the United States.

3 hours, 3 credits. Major themes in American history from the end of colonization to the Civil War.

HIS 244: Modern United States History.

3 hours, *3 credits*. Major themes in U.S. history from the era of the Civil War and Reconstruction to the present.

HIS (AAS) 245: History of African Americans.

3 hours, 3 credits. A study of the major forces shaping the history and culture of African Americans.

HIS 246: Civilizations of the Ancient World.

3 hours, 3 credits. A survey of the Mediterranean world, beginning with the first humans and tracing the development of civilization from Mesopotamia and Egypt to ancient Greek City-States and the fall of Rome.

HIS 247: Medieval Civilization.

3 hours, 3 credits. Western Europe from the fall of Rome through the Protestant Reformation.

HIS (AAS) 248: African History.

3 hours, 3 credits. Introduction to the history of Africa.

HIS (MES) 249: Islamic Civilization.

3 hours, 3 credits. The formation and diffusion of Islamic civilization during the medieval and early modern period in Anatolia, the Balkans, Africa, and South Asia.

HIS 250: Understanding History.

3 hours, 3 credits. (May be repeated once with change of topic and Departmental approval.) An introduction to the investigation and the interpretation of the past. Strongly recommended for beginning students. Historical subjects vary each semester. (Consult the "Schedule of Classes" for specific topics and sections.)

HIS (LAC) 266: Introduction to Latin America and the Caribbean I.

3 hours, 3 credits. Survey of the peoples and civilizations of Pre-Colombian America, and of the institutions, economy, history, and culture of Latin America and the Caribbean from the European conquest to the early nineteenth century (1492-1808).

HIS (LAC) 267: Introduction to Latin America and the Caribbean II.

3 hours, *3 credits*. Survey of the nations and cultures, history, economy, and politics of Latin America and the Caribbean from the early nineteenth century to the present.

*HIS 281: Introductory Tutorial in History.

One semester, 3 credits. (May not be repeated.) PREREQ: Faculty member's permission prior to registration.

Advanced History Courses

Advanced History courses are divided into five subject groups that are identified by the following course codes:

HIA: History of Ancient and Medieval Civilization

HIE: History of Modern Europe

HIS: History of Special and Comparative Historical Topics

HIU: History of the United States

HIW: Asian, African, and Latin-American History

History of Ancient and Medieval Civilizations

*Courses preceded by an asterisk are not expected to be offered in 2013-

*HIA (HCU) 302: Biblical History and Archaeology.

3 hours, 3 credits. Study of biblical history in the light of archaeological research. Readings from ancient Hebrew sources in translation in relation to major archaeological discoveries in Israel and the Near East.

HIA (HCU) 304: Ancient Jewish History.

3 hours, 3 credits. Survey of the development of the Jewish people, including the origin of the Hebrews, the experience at Sinai, the United and Divided Kingdoms, the Babylonian exile, the Second Commonwealth, Jewish law and thought, and contacts with the Greeks and Romans.

HIA 306: History of Religions in the Ancient World.

3 hours, 3 credits. A survey of religious beliefs and practices of the Ancient Near Eastern and Mediterranean worlds. Religious customs of the ancient Mesopotamian cultures; Mycenaean, Minoan, and Classical Greek myth and ritual; Hellenistic religions and mystery religious cults; private household worship in the Roman Republic; and public religious faith in the Roman Empire.

HIA/ACU/WST 311: Women in Antiquity.

3 hours, 3 credits. Examination of the image, role, and status of women in both Ancient Greek and Roman society, as seen from the important literary works of antiquity.

HIA 314: Classical Myth and Society.

3 hours, 3 credits. A comparison of the origins and development of classical mythology and heroic legend as religious beliefs, their relation to other mythologies, and their adaptation in literature and art from Hesiod and Homer through the present. A comparative analysis of Near Eastern and Nordic myth will be provided. Not open to students who have taken ACU 266.

HIA (ACU) 316: Greek Archaeology of the Classical Period.

3 hours, 3 credits. Study of major Greek sites of the fourth and fifth centuries B.C., including the topographies of Athens, Sparta, Corinth, and Thebes. The influence of Greece on surrounding civilizations, such as Persia's, will be investigated, and the effects of the cultural and political life of the period on urban development will be stressed.

HIA (ACU) 318: Roman Archaeology and Topography.

3 hours, 3 credits. Study of the major pre-Roman sites of Italy, including the cities of Etruria. The development of the city of Rome during the Republican period, and the investigation of sites such as Pompeii and Herculaneum. The spread of Romano-Hellenistic urban civilization throughout the Mediterranean region during the Empire. A detailed study of the topography of Imperial Rome.

HIA 320: History of Ancient Greece.

3 hours, 3 credits. The Ancient Greeks from prehistoric times through the development of the City-State to the death of Alexander the Great. The political, economic, social, and cultural achievement during the Bronze and the Dark Ages, the Archaic and the Classical Period, and the Hellenistic Era.

HIA 321: History of Rome.

3 hours, 3 credits. Foundation and development of the Roman state, including the rise and decline of the Roman Republic and the establishment and fall of the Empire, with emphasis on its political, economic, social, and cultural achievements.

*HIA 325: The Early Christians.

3 hours, 3 credits.

*HIA (HCU) 330: The Jews During the Middle Ages.

3 hours, 3 credits.

*HIA 331: Life and Society in the Middle Ages.

3 hours, 3 credits. The shaping of the European way of life, from 800 to 1450 A.D.: war and peace, work and play, trade and travel, town and country, religious practices, love and sex, clothing and housing, and diet and health care.

*HIA (HCU) 333: A History of Jews in Spain and the Sephardic Dispersion.

3 hours, 3 credits.

*HIA 336: England in the Middle Ages.

3 hours, 3 credits.

HIA 348: Introduction to the History of Science, from Ancient Science to the Scientific Revolution.

3 hours, 3 credits. The course focuses on the essential problems science has faced in theory, religion, and philosophy, providing a background to the understanding of science and its historical development. It studies the character of science in ancient Egypt and Babylonia; the content, methodology, and philosophy of science during the age of Plato and Aristotle; the emergence and decline of Islamic science; the contributions of the medieval period; the roots of the scientific revolution of the Renaissance; the significance of the work of Copernicus, Kepler, Galileo, Vesalius, and Harvey; and the methods and values of science that emerged from an age of witchcraft, magic, and alchemy before the time of Isaac Newton.

HIA 350: Topics in Ancient and Medieval History.

3 hours, 3 credits (maximum 6 credits). Various sections on specific topics in ancient and medieval history. (For specific topics and sections offered each semester, consult the Department.)

HIA 381: Individual Tutorial Project in Ancient and Medieval History.

One semester, 3 credits. (May be repeated for a total of 6 credits.) Individual reading and writing on a specific topic in ancient and medieval history, under faculty direction. PREREQ: Satisfactory completion of 60 college credits, including one 300- or 400-level History course, unless exempted, and instructor's permission prior to registration.

Courses in History of Modern Europe

*Courses preceded by an asterisk are not expected to be offered in 2013-2015

HIE 301: Introduction to the History of Science, from Descartes and Newton to Darwin and Einstein.

3 hours, 3 credits. The course examines the nature and significance of scientific thinking in general through the work of Descartes, Leibnitz, and Newton; the conflict between science and religion in the seventeenth century; materialism's penetration of biology from physics; the revolution in chemistry associated with Priestly and Lavoisier; the interface between science and the industrial revolution; the work of the French biologist Claude Bernard, illustrating the development of biology and experimental medicine; the startling work of Charles Darwin; and twentieth-century topics, such as field and atomic theory, relativity, and quantum theory and their important philosophical implications.

HIE 302: Europe in the Renaissance and Reformation.

3 hours, 3 credits. Major developments in Western Europe in the fifteenth and sixteenth centuries, including Renaissance humanism, the rise of the printed book, reformations of religion, overseas exploration, and empire.

HIE 304: Society and Culture in Renaissance Italy.

3 hours, *3 credits*. The history of Italy (ca. 1350-1550) from the origins of the Renaissance in Florence to its decline following the sack of Rome in 1527; the dissemination of Renaissance culture throughout Europe and beyond.

HIE 305: Golden-Age Spain.

3 hours, 3 credits. The rise and fall of Spain as an imperial power from the Middle Ages to 1700. Topics include the Reconquest, Columbus and the "Columbian Exchange," the Armada, the Inquisition, and Golden-Age painting, theater, and literature.

HIE 307: Europe in the Age of Enlightenment.

3 hours, 3 credits. Society, politics, and economy in Europe from 1689 through the Napoleonic Wars.

HIE 308: The French Revolution and Napoleon.

3 hours, 3 credits. Preconditions of discontent in late eighteenth-century France, the origin and unfolding of the French Revolution, the Thermidorean Reaction, the rise of Napoleon and his influence in Europe.

HIE 309: Europe, 1815-1914.

3 hours, 3 credits. Political, economic, social, and intellectual ideas and developments from the Congress of Vienna to World War I.

HIE 310: History of European Diplomacy.

3 hours, *3 credits*. Survey of European diplomacy, with special emphasis on nineteenth- and twentieth-century developments.

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HIE 314: Europe in the Twentieth Century.

3 hours, 3 credits. World War I, the rise and fall of communism in Russia and Eastern Europe, fascism, World War II, postwar prosperity, European union, and the impact of immigration.

HIE 316: Nineteenth-century European Intellectual History.

3 hours, 3 credits. The social and intellectual formation of liberalism, conservatism, nationalism, socialism, and anarchism, and their impact on political and social change in modern Europe.

HIE 317: The History of Ideas and Ideologies in Twentieth-Century Europe.

3 hours, 3 credits. The social movements and ideas that have shaped our modern consciousness, including communism, fascism, existentialism, feminism, revolution, and total war.

HIE 321: Tudor-Stuart England.

3 hours, 3 credits. The advent of the Tudor dynasty, Henry VIII, the divorce, and the church; Queen Elizabeth's government and the church, and Elizabethan society; poverty and vagrancy in the Tudor state; the divine right of kings and mass political attitudes in early Stuart England; the origins of the civil war; the execution of Charles I; Oliver Cromwell and the Saints; Restoration England; and the Glorious Revolution.

HIE 322: Britain in the Age of Industrialization and Empire.

3 hours, 3 credits. Modern Britain in the eighteenth and nineteenth centuries. The impact of the industrial revolution on British society; the American Revolution; democratization; depression, imperialism, and the new liberalism; and the Irish question in British politics.

HIE 323: Britain in the Twentieth Century.

3 hours, 3 credits. World War I and its effects on politics and society; the economic crisis of 1931 and the National Government; depression; Churchill and the war effort; the Labour Party, nationalization, and the welfare state after 1945; decolonization; economy and society under Thatcher; the rise of New Labour.

*HIE 325: Italy from Napoleon through Mussolini.

3 hours, 3 credits.

HIE 330: History of Modern France.

3 hours, 3 credits. French politics, society, economy, and culture from the fall of Napoleon to the crisis of 1968. The revolutions of the nineteenth century, colonial policy and decolonization, World Wars and recovery after 1950.

HIE 333: Modern Ireland.

3 hours, 3 credits. The political, economic, social, and cultural history of Ireland from the late eighteenth century to the present.

HIE 335: History of Modern Spain.

3 hours, 3 credits. The history of Spain from the Enlightenment to the present. Goya and the Napoleonic invasion, the Generation of '98, Civil War, Picasso's "Guernica," Franco's dictatorship, Catalan and Basque separatism.

HIE 336: Early Russian History.

3 hours, 3 credits. Origins of Russian history, Kievan, Muscovite, and early Imperial Russia to 1855.

HIE 337: Modern Russian History.

3 hours, 3 credits. Russia from 1855 to the present, including the late Imperial and Soviet eras.

HIE 341: Germany from Bismarck through Hitler.

3 hours, 3 credits. Study of Germany from Bismarck and the unification through Hitler, the Nazi regime, and the Second World War, with a brief survey of postwar developments.

HIE (HCU) 343: The Holocaust.

3 hours, 3 credits. Study of the destruction of the Jews of Europe during World War II. Political anti-Semitism in modern Europe. The rise of Hitler and Nazism. The interwar period in Europe and the spread of anti-Semitism. World War II, ghetto, deportation, and liquidation. Problems of rescue and resistance. Selected readings from the literature of the Holocaust.

*HIE 345: Hitler, the Nazis, Fascism, and Neo-Fascism. 3 hours, 3 credits.

HIE 350: Topics in Modern European History.

3 hours, 3 credits (maximum 6 credits). Various sections on topics in modern European history. (For specific topics and sections each semester, consult the Department.)

HIE 381: Individual Tutorial Project in Modern European History.

One semester, 3 credits. (May be repeated for a total of 6 credits.) Individual reading and writing on a specific topic in modern European history, under faculty direction. PREREQ: Satisfactory completion of 60 college credits, including one 300- or 400-level History course, unless exempted, and instructor's permission prior to registration.

Courses in Special and Comparative Historical Topics

*Courses preceded by an asterisk are not expected to be offered in 2013-2015.

HIS (PRS) 212: History of Puerto Rico.

3 hours, 3 credits. Survey of the history of Puerto Rico.

HIS (LAC) 225: History of the Dominican Republic.

3 hours, 3 credits. Dominican history from pre-history and pre-Colombian times to the Trujillo era. Examination of different socioeconomic trends in the formation of Dominican society, as well as the prominent role played by foreign powers.

HIS 239: The Ascent of Man: An Introduction to the History of Science.

3 hours, 3 credits. Exploration of the events and people who have contributed to the technological and scientific progress of civilization from ancient times to the present. Weekly writing assignments, formal essays, and Internet research explore the role of science and technology in world history.

HIS 240: East Asian Civilization.

3 hours, 3 credits. The literature, art, religions, and changing social life of people in China, Japan, and Korea. Emphasis on both the changing nature of popular culture and the relationship between long-term historical trends and life today.

HIS (LAC) 268: History of Mexico.

3 hours, 3 credits. Major themes in Mexican history: development of pre-Colombian civilizations; environmental and demographic impact of the Conquest; Spanish colonial period; wars of independence of the nineteenth century; nation building, the Mexican Revolution, dictatorship, and one-party democracy; and the political, cultural, and economic relationship between Mexico and the United States.

*HIS 301: Introduction to the History of Biology.

3 hours, 3 credits.

HIS 302: Science and Society.

3 hours, 3 credits. Social aspects of the growth of modern science from the seventeenth century to the present. Religion and science in Galileo's Italy, science and technology during the industrial revolution, scientific institutions during the French Enlightenment, Darwin and Social Darwinism, eugenics and racial hygiene, big science, and the human genome project.

HIS 304: History of Science in the Twentieth Century.

3 hours, 3 credits. A multidisciplinary survey of scientific and technological developments in the twentieth century, emphasizing the ethical issues and new social implications arising from them. Topics may include recent work in microbiology, DNA, and genetic "engineering"; technological innovations in synthetic materials, chemical warfare, and consumer concerns; theories of relativity, quantum physics, atomic weapons, and nuclear energy; anthropological discoveries and human evolution; Freudian psychology and psychoanalysis; man in space; medical science and portents for the future of civilization. There are no prerequisites for this course; students need have no previous background in the sciences.

HIS (HCU) 307: The Course of Modern Jewish History.

3 hours, 3 credits. Survey of the Jewish people in the Western World during the past 300 years; their struggle for political and social equality, their search for new homes and forms of life. The new Jewish centers, Messianic hopes, the struggle for emancipation; the Enlightenment movement; religious, national, and social trends; migration of Jews to America; and World Wars I and II and the emergence of the State of Israel.

HIS 315: The Literature of History.

3 hours, 3 credits. Selected works of historical representation and interpretation from antiquity to the modern era.

HIS 327: World Revolutions.

3 hours, 3 credits. The nature, causes, and results of revolutionary change, including the French, American, Haitian, Russian, and Chinese revolutions, and the depiction of revolutionary change in art, theater, and literature.

HIS 328: The Military History of World War I.

3 hours, 3 credits. Study of the First World War, emphasizing military issues while also considering political, social, cultural, and economic questions. Topics will include new technologies; the role of centralized governments; pre-war strategizing; global conflict; use of land, sea, and air; and the interrelationship of World Wars I and II.

HIS 329: The Military History of World War II.

3 hours, 3 credits. Study of the Second World War, emphasizing military issues while also considering political, social, cultural, and economic questions. Topics will include new technologies of mass destruction; the deployment of tanks, aircraft, radar, submarines, and aircraft carriers; the use of weapons to destroy nations' civil morale and industry; the impact of total war on the Home Front; and the interrelationship of World War II and the Cold War.

HIS 334: The Irish Diaspora.

3 hours, 3 credits. A survey of the circumstances and consequences of Irish immigration from the eighteenth century to the present, including the patterns of settlement and assimilation of Irish immigrants in the West Indies, the United States, Canada, England, Scotland, Wales, Australia, New Zealand, and South Africa.

HIS (HCU) 342: Anti-Semitism from Early Christianity to Hitler.

3 hours, 3 credits. The origins of the conflict between Christianity and Judaism, and the fate of the Jews in Medieval Europe. The gradual liberation and assimilation of the Jews of Western Europe, 1789-1870. The rise of modern racism and anti-Semitism in Europe, 1889-1939. Hitler, the Nazis, and the destruction of European Jewry during World War II. Anti-Semitism in the contemporary world. Social, psychological, and cultural theories of anti-Semitism will be considered.

HIS 350: Topics in Comparative History.

3 hours, 3 credits (maximum 6 credits). Various sections on topics in comparative history. (For specific topics and sections each semester, consult the Department.)

HIW (AAS) 351: Topics in African History, Politics, and Society.

3 hours, 3 credits. Selected aspects of African history, politics, and society. Topics to be announced each semester.

HIS (AAS) 353: Topics in Caribbean History, Politics, and Society.

3 hours, 3 credits. Selected aspects of Caribbean history, politics, and society. Topics to be announced each semester.

HIS 381: Individual Tutorial Project in Comparative History.

One semester, 3 credits. (May be repeated for a total of 6 credits.) Individual reading and writing on a specific topic in comparative history, under faculty direction. PREREQ: Satisfactory completion of 60 college credits, including one 300-level history course, unless exempted, and instructor's permission prior to registration.

HIS 450: Seminar in Comparative History.

3 hours, 3 credits (maximum 6 credits). PREREQ: Either satisfactory completion of 12 credits in History and a History major or instructor's permission.

Courses in History of the United States

*Courses precede by an asterisk are not expected to be offered in 2013-2015.

HIU 301: Colonial British America, 1586-1763.

3 hours, 3 credits. The British colonies in North America from the "lost" English settlement at Roanoke to the treaty ending the French and Indian War. The collision of Europeans and Native Americans, conflicts between the European colonial powers, the establishment of slavery in North America, and political, social, and religious development.

HIU 304: The Era of the American Revolution, 1763-1789.

3 hours, 3 credits. American development from the mideighteenth century through the framing of the Constitution, with emphasis on the American Revolution, the interrelation of European and American affairs, and the growth of American institutions and ideals.

HIU 305: The Early Republic, 1789-1824.

3 hours, 3 credits. The founding and development of a republican form of government: the evolution of political parties, the economic growth of the nation and its impact on politics, and the transition from a republic to a democracy engendered by economic growth and the search for political power.

HIU 308: Democracy, Sectionalism, and Slavery in the U.S., 1825-1861.

3 hours, 3 credits. The age of the common man in politics, increasing sectional tensions, and the prominence of the slavery issue in American life. Abolitionism, workingmen's agitation, women's rights, westward expansion, states' rights, the defense of slavery, and the coming of the Civil War.

HIU 309: The Civil War and Reconstruction, 1861-1877.

3 hours, 3 credits. Key events of the Civil War and its aftermath, including emancipation and the status and role of newly freed Black Americans.

HIU 310: The Gilded Age and the Progressive Era, 1877-1914.

3 hours, 3 credits. Industrialization and the rise of the corporation, the importance of the transcontinental railroads, immigration, urbanization, Black disenfranchisement, Jim Crow and the emergence of the New South, Populism, the integration of the Far West, Progressivism, and trust busting.

HIU (AAS) 311: Black Nationalism.

3 hours, 3 credits. Analysis of the social, political, and cultural ideology and practices of Black Nationalist movements.

HIU 314: The United States from World War I Through World War II, 1914-1945.

3 hours, 3 credits. Domestic and foreign affairs, including the two World Wars, the Roaring Twenties, the Great Depression, and Franklin Roosevelt and the New Deal.

HIU 315: Recent United States History, 1945 to the Present.

3 hours, 3 credits. Domestic and foreign affairs since the end of World War II. The Cold War and anti-communism at home and abroad, and changes in American social, economic, and political values and institutions.

HIU 316: The American Constitution in Historical Perspective.

3 hours, 3 credits. The American constitutional system from the American Revolution to the present. The evolution of legal structures, the growth of rights and remedies, the changing content of justice, organization of government, the balance of freedom and order.

HIU 317: History of American Foreign Relations, 1750-1912.

3 hours, 3 credits. A history of American foreign relations from Colonial times to the early twentieth century, with emphasis on the diplomacy of the American Revolution; foreign affairs and the Constitution; the War of 1812; the Monroe Doctrine; expansion, sectionalism, and the coming of the Civil War; and America's emergence as a world power.

HIU 318: History of American Foreign Relations, 1912-Present.

3 hours, 3 credits. American foreign relations from the early twentieth century to the present. The U.S. role in World Wars I and II; the Cold War; and the growth of presidential power in foreign affairs.

HIU 319: The United States and the Vietnam War.

3 hours, 3 credits. The reasons why the United States became involved in the Vietnam War, the methods employed, and the consequences of U.S. involvement.

HIU 320: Early American Culture and Intellectual History.

3 hours, 3 credits. The major ideas, institutions, and individuals in American cultural and intellectual life in the mid-seventeenth through the late nineteenth centuries. Puritanism; the Enlightenment in America; republicanism and romanticism; and the professionalization of letters and learning.

HIU 322: Modern American Cultural and Intellectual History.

3 hours, 3 credits. Major trends in American cultural and intellectual life from the late nineteenth century to the present. The commercialization of culture; the secularization of the public sphere; the development of research universities; and the role of intellectuals as cultural critics.

HIU 323: Protest in America.

3 hours, 3 credits. Discussion of nineteenth- and twentieth-century movements for substantive social change in America, emphasizing race and gender.

*HIU 324: The History of Italian-Americans.

3 hours, 3 credits.

HIU (WST) 328: The Family in American History.

3 hours, 3 credits. Historical study of the family in America, including its European roots, its relationship to the frontier, slavery, immigration, and current developments in industrialism, urbanization, and technology.

HIU (WST) 329: History of Sexuality and Sex Roles in America.

3 hours, 3 credits. The history of sexual roles as they have developed and changed in America from Colonial times to the present.

HIU (AAS) 330: The Civil Rights Movement.

3 hours, 3 credits. Study of the modern Civil Rights movement.

HIU (WST) 331: History of Women in America.

3 hours, 3 credits. Historical study of women's conditions, statuses, and roles in American society from Colonial times to the present.

HIU 332: History of Health Care in the United States.

3 hours, 3 credits. Examination of health care in America from Colonial times to the present. Topics include the development of the medical profession, the rise of the health movement, the growth of hospitals, and popular attitudes toward health and disease.

HIU 333: American Urban History.

3 hours, 3 credits. The formation, growth, and transformation of American cities from the wilderness village to the megalopolis. Emphasis on the changing political and economic roles of cities; patterns of social stratification, power, and mobility; and trends in recent urban social and cultural life.

HIU 335: Immigration in America.

3 hours, 3 credits. The motives and aspirations of immigrants, their contributions to, and effects upon, American social structure, and the tensions between assimilation and ethnicity.

HIU 336: American Religious History.

3 hours, 3 credits. Religious belief and behaviors of Americans from the seventeenth century to the present. Encounters among European, African, and indigenous religions; Christianization, evangelicalism, and revivalism; church and state relations; and religiously based movements for social reform.

HIU (AAS) (WST) 340: History of African American Women.

3 hours, 3 credits. The social, political, and cultural history of African American women in the United States from an interdisciplinary perspective.

HIU 341: American Business History.

3 hours, 3 credits. The rise of business enterprise in America from its earliest commercial origins to giant corporations and conglomerates. Themes include the rise of early commerce, emergence of consolidated industry, prominent businessmen and business techniques, analysis of business philosophy and entrepreneurial attitudes, reactions to corporate power by labor and government, evolution of business forms and structures, and the impact of business enterprise on political, legal, and cultural development.

HIU 342: History of American Labor.

3 hours, 3 credits. The American worker from colonial times to the present, with emphasis on the period since the Civil War. Themes include the origins and character of the American labor movement, the effect of industrialization on the workers, slavery and wage labor, the growth and development of the major American labor unions, the impact of social reformers and radicals on the labor movement and the American worker, public employees and collective bargaining, and the changing attitudes of the American worker.

HIU (HCU) 344: American Jewish History.

3 hours, 3 credits. Survey of American Jewish history from colonial times until the present: migrations, socioeconomic changes, and cultural developments. Special emphasis on the history of American Jewry since 1880: Jewish socialism, Zionism in America, Jewish reactions to anti-Semitism, and Judaic religious life.

HIU 345: American Economic History.

3 hours, 3 credits. (Closed to those who have completed ECO 321.)

HIU 346: History of the American Presidency.

3 hours, *3 credits*. America's presidents and how the presidency has developed from George Washington to the present.

HIU 347: The Mainland Borough: The Bronx as a City in History.

3 hours, 3 credits. The urban history of the Bronx from the seventeenth century to the present. Major emphasis on 1874-1945, the period of the borough's most rapid growth, and experience with modern urban problems. Topics include ethnic immigration and mobility, the effects of mass transit development, Prohibition, and the ways various external events, such as wars and depressions, have influenced the borough and its people.

HIU 348: History of New York: City and State.

3 hours, 3 credits. Examination of the interaction between the urban center and the State from their respective origins as New Amsterdam and New Netherland to the twentieth century. Special emphasis is placed on the socioeconomic reasons for the cosmopolitan nature of the metropolis and its uniqueness as a major urban entity.

HIU (AAS) 349: The Harlem Renaissance.

3 hours, 3 credits. Examination of the poetry, prose, folklore, history, politics, art, and music of the Harlem Renaissance.

HIU 350: Topics in American History.

3 hours, 3 credits (maximum 6 credits). Various sections on topics in American history. (For specific topics and sections each semester, consult the Department.)

HIU (AAS) 352: Topics in African American History and Culture.

3 hours, 3 credits. Selected aspects of African American history and culture. Topics to be announced each semester.

HIU 381: Individual Tutorial Project in American History.

One semester, 3 credits. (May be repeated for a total of 6 credits.) Individual reading and writing on a specific topic in American History, under faculty direction. PREREQ: Satisfactory completion of 60 college credits, including one 300-level History course, unless exempted, and instructor's permission prior to registration.

Courses in Asian, African, and Latin-American History

*Courses preceded by an asterisk are not expected to be offered in 2013-2015.

HIW (LPR) 300: Social and Economic History of Puerto Rico from the Industrial Revolution to the Present.

3 hours, 3 credits. Intensive survey of the socioeconomic formations of Puerto Rico from the Industrial Revolution to the present. PREREQ: LPR 212 or Departmental permission for LAC/LPR majors; Departmental permission for History majors.

HIW (MES) 301: Ottoman History.

3 hours, 3 credits. Political, socio-economic, and cultural history of the Ottoman Empire from its fourteenth-century beginnings to its demise at the end of World War I.

HIW (MES) 302: Modern Middle Eastern History.

3 hours, 3 credits. Societies and politics of the Middle East in the nineteenth and twentieth centuries. The Islamic and Ottoman legacies, reforms and reforming elites, changing roles of religion, nationalist ideologies, Great Power intervention, regional politics, and the Arab-Israeli conflict.

HIW (MES) 303: Contemporary Islamic Movements.

3 hours, 3 credits. Contemporary movements of Islamic resurgence and activism in the Middle East, North Africa, Central and South Asia, and beyond.

HIW (WST) (MES) 304: History of Women and Society in the Islamic Middle East.

3 hours, 3 credits. Women in the Middle East from the advent of Islam to the present. Legal and cultural constructions and social dynamics of marriage, sexual morality, women's access to property, participation in production, and use of space.

HIW (MES) 305: The Arab-Israeli Conflict.

3 hours, *3 credits*. The Arab-Israeli conflict from the late nineteenth century to the present; political, military, diplomatic, economic, cultural, and psychological dimensions.

*HIW (HCU) 308: The Jews of Tsarist and Soviet Russia. 3 hours, 3 credits.

HIW (LAC) 313: Religion in Hispaniola: From Catholicism to African Religions

3 hours, 3 credits. Socio-cultural significance and history of religions in the Dominican Republic and the Republic of Haiti.

HIW (LAC) 315: Comparative History of the Hispanic Caribbean.

3 hours, 3 credits. Comparative history of Cuba, the Dominican Republic, and Puerto Rico in the nineteenth and twentieth centuries.

HIW 316: East Asia in the Modern World.

3 hours, 3 credits. The making of modern East Asia from the Manchu invasions of the seventeenth century to the present-day rise of China, Japan, and Korea as military, economic, and cultural powers.

HIW 317: History of Modern China.

3 hours, 3 credits. Chinese history from 1800 to present, concentrating on transformations of the Chinese economy, relations with the rest of the world, and changing views of reform and revolution in the modern era.

HIW 322: History of Chinese Civilization.

3 hours, 3 credits. Broad chronological survey of Chinese culture and society from ancient times to the present, with special reference to beliefs, family, science, political dissent, art, and literature.

HIW (AAS) 323: History of Africa to 1800.

3 hours, 3 credits. Events and forces shaping African history before 1800.

HIW (LAC) 324: History of Cuba.

3 hours, 3 credits. History of Cuba, from colonial times to the present. Focus on Cuban independence and United States intervention; race, gender, and construction of the nation; the path toward a socialist revolution; efforts at reform; and Cuba's role in Latin America and the world.

HIW 325: History of Modern Japan.

3 hours, 3 credits. The emergence of Japan as a world power, focusing on its sometimes testy relationship with the United States. Samurai and warfare, Shinto, the fragility of democracy, World War II, the U.S. occupation of Japan, and Japan's role in Asia, and the flourishing of consumer culture.

HIW (AAS) 327: History of Africa, 1800 to the Present.

3 hours, 3 credits. Events and forces shaping the history of Africa after 1800.

HIW (LAC) 330: Latin America in the Nineteenth Century.

3 hours, 3 credits. Changes and continuities in Latin America over the course of the "long nineteenth century," from political independence in the 1820s to the rise of nationalist challenges to liberalism in the 1930s.

HIW (LAC) 331: Modern Latin America.

3 hours, 3 credits. The nations of Latin America from the beginning of the twentieth century to the present, with a focus on political reform and revolution, economic development, and social movements.

HIW (LAC) 337: Latin America and the United States from 1823 to the Present.

3 hours, 3 credits. Relations between the United States and Latin American countries since their creation as independent republics.

HIW (LAC) 338: Colonial Latin America.

3 hours, 3 credits. Examination of the development of colonial societies in Latin America from the "encounter" of the sixteenth century to the crisis of the Iberian empires in the late eighteenth century.

HIW (LAC) 340: Slavery in Latin America and the Caribbean.

3 hours, 3 credits. Comparative examination of slavery in Latin America and the Caribbean. Emphasis on the Portuguese (Brazil) and Spanish (Cuba) systems, with reference to the British, North American, and French systems.

HIW (LAC) 345: History of South America.

3 hours, *3 credits*. Pre-Colombian and colonial foundations of the nation-state and the construction of modern nations in South America in the post-independence period.

HIW 348: Europe and the Non-Western World in the Nineteenth and Twentieth Centuries.

3 hours, 3 credits. Imperialism and colonialism in Africa and Asia, the growth of nationalism, decolonization, revolution, independence, and globalization.

HIW 350: Topics in Non-Western History.

3 hours, 3 credits (maximum 6 credits). Various sections on topics in non-Western history. (For specific topics and sections each semester, consult the Department.)

HIW 352 (LAC 351): The Mexican Revolution.

3 hours, 3 credits. Examination of the Mexican Revolution of 1910, including nineteenth-century preconditions, overthrow of the old regime, the civil war phase, and post-revolutionary reconstruction of modern Mexico.

HIW 381: Individual Tutorial Project in Non-Western History.

One semester, 3 credits. (May be repeated for a total of 6 credits.) Individual reading and writing on a specific topic in non-Western history, under faculty direction. PREREQ: Satisfactory completion of 60 college credits, including one 300-level History course, unless exempted, and instructor's permission prior to registration.

Individualized Study Programs

Dean of Continuing and Professional Studies: Marzie Jafari (Carman Plaza NE, Room 128)

Director, Adult Degree Program: Janet Skolnik

The Adult Degree Program

The Adult Degree Program (ADP) is designed for incoming Lehman students who are 25 years old or older and meet the eligibility requirements. Applications are available in Carman Plaza NE, Room 128.

Eliaibility

Students entering Lehman for the first time, either as freshmen or as transfer students, may apply to the ADP if they meet the following criteria: 1) completed 15 college credits or fewer; or 2) completed 16 to 60 college credits but have not been enrolled in an educational institution in the past five years.

Degree Requirements

Adult Degree Program students must successfully complete all exams required by CUNY for admission and for continuation beyond 60 credits. Students must also meet the English writing requirement recommended by the ADP; in addition, all students must meet the minimum index required for graduation by the College and by their major department. ADP students are exempt from the College's Core and Distribution requirements, as well as the requirements in foreign language, oral English, and a minor field of study. They must, however, complete a broad liberal arts course of study that includes a minimum of 36 credits of liberal arts courses outside of the major concentration.

Major

Students may opt for either a regular major as described in this Bulletin (e.g., History, Biology) or design their own interdisciplinary major (e.g., Urban Studies) with the advice and approval of a committee composed of two faculty members representing the relevant study areas. The individually designed major must contain a minimum of 24 upper-division credits, excluding independent study, internships, and field placements. Students pursuing individualized majors must take at least 3 credits of independent study to qualify for Departmental honors at graduation.

Life-Experience Credits

Students in the Program may apply for up to 15 credits for life experience. Students do not automatically qualify for these credits. They are eligible to apply for an evaluation of their employment or volunteer activities when these activities include achievements relevant to a Lehman College department. The credits for life experience will count as electives toward the 120 credits needed for graduation. Veteran's credits, Regents credits, and credits received by departmental qualifying exams are counted as part of the life-experience credits.

Non-Classroom Credits

ADP students may enroll for up to 30 academic credits for independent study activities, such as research projects, reading tutorials, and fieldwork during their college career. Students receiving life-experience credits, however, have the total number of non-classroom credits available to them reduced by the number of credits received for life experience. The precise content or structure of the independent study project must be approved by the student's faculty sponsor and the sponsor's Department Chair. Written approval of his or her independent study proposal must be submitted to the ADP Office prior to registration.

Adult Degree Colloquium

The Individualized Baccalaureate Art Colloquia (IBA 150-165) are designed to introduce Adult Degree students to various aspects of a liberal arts education.

The Individualized Baccalaureate Program

The Individualized Baccalaureate Program (IBAP) allows Lehman students to establish their own academic goals. IBAP students can design their own majors with the assistance and approval of a faculty committee and supplement their major with independent study. Applications are available in the Office of Individualized Studies, Carman Plaza NE, Room 128.

Eligibility

In addition to proposing an individualized major, students must have completed at least 30 credits, but no more than 89 credits, including at least 12 Lehman College credits. Other requirements include a minimum 3.0 Lehman index and successful completion of both the CUNY Proficiency Exam and the College's English writing requirement.

Major

Students can design their individualized major in a number of ways. They may present a course of study that focuses on any of the following: 1) a single aspect of one of the disciplines offered by the College; or 2) an interdisciplinary area of study. The number of credits that constitute the major is determined by the faculty committee supervising the student, subject to the restriction that students must earn a minimum of 24 upper-division course credits in the major area, but no more than 60 credits in any one department, including independent study, internships, and field placements.

Life-Experience Credits

IBAP students who are 25 years old or older may apply for lifeexperience credits, where appropriate. To determine eligibility for these credits, students should meet with an advisor after they have been accepted into the program.

Non-Classroom Credits

Students in the IBAP may take up to 30 credits of independent study, inclusive of credits received for life experience.

Degree Requirements

Program."

See Degree Requirements as outlined under "The Adult Degree

Italian-American Studies

Director: Professor Anthony LaRuffa (Davis Hall, Room 111) Committee Members: Professors Madeline Moran and Manfredi Piccolomini

Cooperating Departments: Anthropology, Art, English, History, Languages and Literatures, Music, Political Science, and Sociology

The program in Italian-American Studies is an interdisciplinary major that focuses on Italian-American experiences as they relate to both the Italian and American contexts. The program provides the student with the opportunity to investigate the social, cultural, psychological, historical, and esthetic dimensions of the Italian-American experience. The major in Italian-American Studies offers an area of specialization for students who plan graduate training in ethnic studies, and for those who expect to teach in urban areas where there are large numbers of Italian-Americans.

For those students who will pursue advanced degrees in the arts, the humanities, or in the various social and behavioral sciences, a major in both the field of their choice and in Italian-American Studies, a dual major, permits a specialty within the academic discipline. The curriculum has practical applicability to teaching at all levels, and to the service-oriented professions (medicine, psychology, social work, law, etc.). A dual major is required of all students majoring in Italian-American Studies, except those preparing to qualify for an Initial Certificate in education. In most instances, 12 credits from the second major may serve as part of the Italian-American Studies major as well (see the outline of requirements below).

In consultation with a member of the Italian-American Studies Committee, each student will formulate an individual program of study, without reference to traditional departmental fields. The program thus offers the opportunity to investigate those features of Italian-American culture that match student interests. Special courses emphasizing research and critical thought, such as seminars and tutorials taught by participating faculty, will be provided to synthesize the work of each student in the major.

NOTE: Cross-listed courses may be taken for credit in either IAS or in the department in which the course originates.

Program Procedure

Each semester the Committee on Italian-American Studies will advise students in the program of the appropriate courses to be offered in the ensuing semester by departments participating in the program, as well as of courses to be offered by the Italian-American Studies program. Each student majoring in Italian-American Studies must receive the Committee's approval before registering for any course to be credited toward the major.

Italian-American Studies, B.A. (36 Credit Major)

The interdisciplinary major in Italian-American Studies consists of 36 credits in courses distributed as follows:

36 credits (12 selected from the following):

IAS 300 (HIE 325): Italy from Napoleon through Mussolini

IAS 302 (HIE 324): History of Italian Emigration to the United States

IAS 303 (HIU 324): The History of Italian-Americans IAS 250 (ANT 250; SOC 250): The Italian-American Community

12 credits selected from the following related courses (no more than three history courses may be included):

ITA 233: Italian-American Contributions

PSY 336: The Psychology of Ethnicity

MSH 239: Italian Opera

ARH 332: Art of the Early Renaissance

ARH 333: Art of the High Renaissance and the Later Sixteenth Century

IAS 245 (ITA 245): Italy Today

IAS 260 (ENG 260): American Minority Literature: The Italian-American Tradition

IAS 450: Topics in Italian-American Studies

IAS 481: Tutorial in Italian-American Studies

IAS 495: Special Project in Italian-American Studies or other appropriate courses as approved by the program coordinator

12 credits (Note: No more than a total of 6 credits may come from IAS 481 and 495.):

In a single discipline related to the student's academic and professional interests and goals. With the approval of the program coordinator, credits from the dual major may be applied to this requirement, where appropriate.

Requirements for the Minor in Italian-**American Studies**

Students should arrange their program with the Italian-American Studies Committee. In order to satisfy the requirements for a minor, students must earn 12 credits, of which 6 credits must be in 300- or 400-level courses.

Courses in Italian-American Studies

*Courses preceded by an asterisk are not expected to be offered in 2013-

*IAS 266: The Italian-American Tradition in American Literature.

3 hours, 3 credits.

*IAS 450: Topics in Italian-American Studies.

3 hours, 3 credits. (May be extended or repeated for an additional 3 credits with permission from the Director.) Special topics to be arranged between student and instructor.

IAS 481: Tutorial in Italian-American Studies.

3 hours, 3 credits.

IAS 495: Special Project in Italian-American Studies.

3 hours, 3 credits. (May be extended or repeated for an additional 3 credits with permission from the Director.) Selection of, and research into, a significant problem in the Italian-American community. Field research will be required. Readings on topics to be arranged between student and instructor. Note: No more than a total of 6 credits may come from IAS 481 and 495.

Journalism, Communication, and Theatre

Department Chair: Miguel Pérez (Carman Hall, Room 259) Faculty: Distinguished Lecturers: Michael Bacon, Elaine Rivera, Marilyn Sokol; Professors: William M. Hoffman, Patricio Lerzundi, Miguel Pérez, Robert Whittaker; Associate Professors: Richard Blot, Marjorie Rosen, David Sullivan; Assistant Professors: Nicolas Boston, Claudia W. Case, Amy Larimer, Thomas O'Hanlon, Susan Watson-Turner; Lecturers: James Carney, Christine McKenna, Philip Ruiz; College Laboratory Technicians: Yves Dossous, Susan Soetaert

Multimedia Journalism, B.A. (42 Credit Major)

All students are required to complete the following courses:

Core Courses (18 credits)

MMJ 217: Journalism in the Movies (3 credits)

MMJ 214: Foundations of Media (3 credits)

MMJ 221: Reporting I (3 credits)

MMJ 222: New Media (3 credits)

MMJ 307: Multimedia Editing and Proofreading (3 credits)

MMJ 370 or 470: Internship I or II (3 credits)

Track Curriculum (24 credits)

Each student is required to complete one of three separate tracks, Print Media, Broadcast Media, or Multilingual Journalism as detailed below.

Print Media Track (15 credits)

MMJ 211: Introduction to Multilingual Media (3 credits)

MMJ 300: The Bronx Journal Online Advance Workshop (3 credits)

MMJ 321: Reporting II (3 credits)

MMJ 322: Online News Page Design and Editing (3 credits)

MMJ 323: Feature Writing (3 credits)

Electives (9 credits):

Electives may be chosen from among all MMJ courses. The following one-credit workshops may be combined for up to 3 credits in the major: MMJ 200, MMJ 201, and MMJ 202.

Broadcast Media Track (15 credits)

MMJ 215: Audiovisual Production (3 credits)

MMJ 314 or 315 or 316: Advanced Audio Production, TV Studio Production, Field Video Production (3 credits)

MMJ 317: Electronic Journalism (3 credits)

MMJ 352: The Bronx Journal TV (3 credits)

MMJ 357: Digital Editing (3 credits)

Electives (9 credits):

Electives may be chosen from among all MMJ courses. The following one-credit workshops may be combined for up to 3 credits in the major: MMJ 200, MMJ 201, and MMJ 202.

Multilingual Journalism Track (12 credits)

MMJ 211: Introduction to Multilingual Media (3 credits)

MMJ 300 or 352: Bronx Journal Online or Bronx Journal TV (3

MMJ 302: Covering Race, Gender, and Ethnicity (3 credits)

MMJ 321: Reporting II (3 credits)

Required 300-level foreign language courses (6 credits):

In Translation (3 credits)

In Journalistic Writing (3 credits)

Course numbers vary according to the chosen foreign language. Electives (6 credits):

Electives may be chosen from among all MMJ courses. The following one-credit workshop may be combined for up to 3 credits in the major: MMJ 200, MMJ 201, and MMJ 202.

Minor in Multimedia Journalism

The minor in Multimedia Journalism consists of 12 credits distributed as follows: MMJ 214, three additional MMJ credits at the 200-level, and six MMJ credits at the 300- or 400-level. Consult with an advisor to ensure that the second 200-level course provides the necessary prerequisite for the upper-level courses selected.

Courses in Multimedia Journalism

MMJ 200: The Bronx Journal Workshop.

4 hours, 1 credit. Introduction to reporting and writing for Lehman's online multilingual news site, including the workings of a newsroom, editing, proofreading, photography, and Web publishing. Note: May be repeated for a maximum of 4 credits; areas are not repeatable. Open to all students. PREREQ: Departmental permission.

MMJ 201: Broadcast and Production Workshop.

4 hours, 1 credit. Practical application of principles and theories of journalism for professional CUNY broadcasts, Internet radio, and select individual media projects. Areas of specialization to include writing and production of television and audio segments, video and audio production techniques, graphics, switching, and lighting design. NOTE: May be repeated for a maximum of 4 credits; areas are not repeatable. Open to all students. PREREQ: Departmental permission.

MMJ 202: Inside Lehman.

4 hours, 1 credit. Introduction to reporting and writing for Inside Lehman, the College's television news magazine. Areas of specialization include writing and production of television and audio segments, video and audio production techniques, graphics, switching, and lighting design. NOTE: May be repeated for a maximum of 4 credits; areas are not repeatable. Open to all students. PREREQ: Departmental permission.

MMJ (MMS) 211: Introduction to Multilingual Media.

3 hours, 3 credits. Introduction to print and electronic multilingual media in the United States. Focus on the growth and diversity of ethnic media, the role they play in the lives of those who use them, and how they compare to mainstream media.

MMJ (MMS) 214: Foundations of Media.

3 hours, 3 credits. History and evolution of technology, structure, and regulatory philosophies of broadcast journalism, newspaper journalism, programming and policies in radio, broadcast television, cable television, and web-based digital content. The growth of news-gathering organizations, network programming, media convergence, and evolution of print media from the penny press to modern-day newspaper publishing and online multimedia journalism.

MMJ (MMS) 215: Audiovisual Production.

4 hours (2, lecture; 2, lab), 3 credits. Fundamental tools and techniques of audio and video production. Basic principles, operations and techniques of audio and video production: camera operation, microphones, audio mixing and processing, studio operations, special effects, lighting, directing, on-camera procedures and basic audiovisual post-production techniques.

MMJ 221: Reporting I.

3 hours, 3 credits. Fundamentals of news reporting and writing in a multimedia context. News-gathering and storytelling styles and approaches to writing for newspapers, magazines, radio, television, and the Internet. Emphasis on grammar, syntax, punctuation, and spelling. PREREQ: ENG 120 or the equivalent.

MMJ (MMS) 222: New Media.

3 hours, 3 credits. Evolution of new communication technologies. Introduction to blogging and other social networking tools used by journalists.

MMJ 300: The Bronx Journal Advanced Workshop.

4 hours (2, lecture; 2, lab), 3 credits. Reporting and writing for Lehman's online multilingual news site, including hands-on reporting experience, proofreading, photography, and Web publishing, with an emphasis on writing and editing. NOTE: May be repeated for a maximum of 6 credits. PREREQ: MMJ 221. COREQ: MMJ 321.

MMJ 302: Covering Race, Gender, and Ethnicity.

3 hours, 3 credits. Reporting and writing on minority and women's issues; covering minorities and women fairly as a beat reporter by providing balanced reporting; developing and writing stories that make mainstream news coverage more diverse and inclusive. PREREQ: MMJ 211, MMJ 221.

MMJ 307: Multimedia Editing and Proofreading.

3 hours, 3 credits. Reading multimedia copy and producing texts that are grammatically correct, following the rules of journalistic writing established by the Associated Press Stylebook. The art of writing headlines and editing copy for all media platforms, and production of copy that is written in meaningful and readable language, and that insures accuracy. PREREQ: MMJ 221.

MMJ 314: Advanced Audio Production.

4 hours (2, lecture; 2, lab), 3 credits. Application of audio production techniques including "radio" news and documentary recording, production, mixing, and sweetening for both broadcast and new media applications. Production and post-production using advanced software applications. PREREQ: MMJ 215.

MMJ (MMS) 315: TV Studio Production.

4 hours (2, lecture; 2, lab), 3 credits. Theory and practice of TV studio operations, including camera techniques, graphics, switching, lighting, and integration of recorded video in live production situations, culminating in a series of studio projects. PREREQ: MMJ (MMS) 215.

MMJ 316: Field Video Production.

4 hours (2, lecture; 2, lab), 3 credits. Theory and practice of field production including single camera, iso-camera, and ENG switched remote video production for live and live-to-tape field productions. Field acquisition and post-production editing for news production. PREREQ: MMJ 215.

MMJ 317: Electronic Journalism.

3 hours, 3 credits. Locating, gathering, writing, and editing news for radio and TV. Styles ranging from the radio newscast to the TV documentary are examined. Evolution of news media from the inception of broadcast media through the Internet. PREREQ: MMJ 214, MMJ 221.

MMJ 321: Reporting II.

3 hours, 3 credits. Practical experience in multimedia storytelling through reporting and writing across platforms; covering a beat, checking government records, practicing police and court reporting, and in-depth feature writing, including human interest stories, profiles, and obituaries. PREREQ: MMJ 214 and MMJ 221.

MMJ 322: Online News Page Design and Editing.

3 hours, 3 credits. Layout, usability, and navigational challenges of designing news websites and managing their huge amount of content. Review of the world's best news websites, and the latest methods and tools used to build them, from HTML and Photoshop to Dreamweaver, WordPress, and beyond. PREREQ: MMJ 222.

MMJ 323: Feature Writing.

3 hours, 3 credits. Feature journalism in print and online, with an emphasis on reporting and writing entertainment, fashion, sports, arts, and business stories, including profiles, theme pieces, and reviews. PREREQ: MMJ 221. COREQ: MMJ 321.

MMJ 324: Opinion Writing and Talking Heads.

3 hours, 3 credits. Influential opinion makers in politics and the arts, with emphasis on writing editorials and op-ed pieces for print media, commentaries for radio and television, and reviews of food, fashion, music, art, books, television, and films. Presentation of opinions in writing, in radio podcasts, and in front of a TV camera. PREREQ: MMJ 221.

MMJ 331: Literary Journalism.

3 hours, 3 credits. Classics of literary journalism from the era of New Journalism in the 1960s and 1970s to the present. Emphasis on journalists who bring the techniques of fiction to their writing, participate in the subjects they cover, write with an impulse toward advocacy and social justice, and/or write subjectively.

MMS (MMJ) (AAS) 332: The African American Media.

3 hours, 3 credits. Analysis of the African American media's role in U.S. history and culture.

MMJ (MMS) 334: The Documentary

3 hours, 3 credits. History of documentary film and the various types of film within the genre, e.g., propaganda, autobiographical, direct cinema, and rockumentary. PREREQ: MMJ (MMS) 215; either MMS 212 or MMS 213.

MMJ (THE) 343: Voice-Over for Radio, Film, and TV.

3 hours, 3 credits. Performance techniques for the spoken word and script analysis with focus on clarity, vocal performance for differing media applications, microphone technique, and audition skills.

MMJ 344: On-Camera Technique.

3 hours, 3 credits. On-camera presentation in the studio and on field assignments, including TV script writing, reading from a teleprompter, preparing for an audition, handling on-air guests, and creating a demo.

MMJ (COM) 347: Advertising.

3 hours, 3 credits. Basic elements of advertising copywriting for various media formats. Introduction to advertising research, including the development of message structure and advertising strategies. PREREQ: COM 218.

MMJ 350: Topics in Multimedia Journalism.

3 hours, 3 credits. Topics vary from semester to semester. PREREQ: Departmental permission.

MMJ 352: The Bronx Journal TV Advanced Workshop.

4 hours (2, lecture; 2, lab), 3 credits. Segment production and guest hosting on the community affairs talk show televised on Bronxnet TV and seen throughout the Bronx. Note: May be repeated for a maximum of 6 credits. PREREQ: MMJ 221.

MMJ 356: Digital Photojournalism.

4 hours (2, lecture; 2, lab), 3 credits. Multimedia storytelling through images using concepts and techniques in digital photography, including shooting, editing, and displaying news photos.

MMJ (MMS) 357: Digital Editing.

4 hours (2, lecture; 2, lab), 3 credits. Principles and practice of step-by-step functions of non-linear editing, including logging, capturing, and organizing audio-video media. PREREQ: MMJ (MMS) 215. COREQ: MMJ (MMS) 315 or MMJ 316.

MMJ (MMS) 370: Internship I.

9 hours (8, in the field; 1, weekly conference), 3 credits (maximum 6 credits). Individual field experience with various media, public relations, publishing, advertising, and marketing firms. The course will include a one-hour weekly meeting with the program director and other internship students. A final report is required. PREREQ: Departmental permission.

MMJ 417: Broadcast Programming.

3 hours, 3 credits. The roles of the public, government, advertisers, stations, and networks in influencing radio, and TV content. PREREQ: MMJ 214.

MMJ 418: Mass Media and Public Policy.

3 hours, 3 credits. Intensive study of selected problems of public policy in mass communication. PREREQ: MMJ 214.

MMJ (MMS) 470: Internship II.

9 hours (8, in the field; 1, weekly conference), 3 credits (maximum 6 credits). Individual field experience with various media, coordinated by the Program Director. The course will include working 8 hours a week with a chosen media outlet, plus one-hour weekly seminar meetings with the Director and other internship students. A journal and a final research paper will be required. PREREQ: 18 credits from the program major and Departmental permission.

MMJ 486: Independent Study in Journalism.

One semester, 3 credits (maximum 6 credits). Independent study and/or research in journalism. PREREQ: Departmental Permission.

Multimedia Studies, B.A. (36 Credit Major)

12 Credits in Core Courses:

All students are required to complete the following courses: MMS 212: Introduction to Film and Television (3 credits) MMS 213 or 219: History of Cinema, American Television (3 credits)

MMS 220: Introduction to Public Relations (3 credits)

MMS 307: Media Industries I (3 credits)

24 Credits (Track Curriculum): Each student is required to complete one of four separate tracks—Media Industries, Film

Production, Television Production, or Oral Communication and Public Relations—as detailed below.

15 Credits in Media Industries Track:

MMJ/MMS 211: Introduction to Multilingual Journalism (3 credits)

MMS 244: Communication in Society (3 credits)

MMS 300: Corporate Communication (3 credits)

MMS 305: Persuasion (3 credits)

MMS 308: Media Industries II (3 credits)

Electives (9 credits): Electives may be chosen from among all MMS courses.

12 Credits in Film Production Track:

MMJ/MMS 215: Audiovisual Production (3 credits)

MMS 224: Fundamentals of Editing (3 credits)

MMS/THE/ENW 309: Screenwriting (3 credits)

MMS 316: Film Production (3 credits)

Electives (12 credits): Electives may be chosen from among all MMS courses.

15 Credits in Television Production Track:

MMJ/MMS 215: Audiovisual Production (3 credits)

MMJ/MMS 315: TV Studio Production (3 credits)

MMJ/MMS 357: Digital Editing (3 credits)

MMS 360: Writing for TV (3 credits)

MMJ/MMS 370 or 470: Internship I or II (3 credits)

Electives (9 credits): Electives may be chosen from among all MMS courses.

15 Credits in Oral Communication and Public Relations Track

MMS 200: Oral Communication (3 credits)

MMS 223: Digital Marketing Strategies (3 credits)

MMS 300: Corporate Communication (3 credits)

ENW/MMS 333: Public Relations and Marketing (3 credits)

MMJ/MMS 370 or 470: Internship I or II (3 credits)

Electives (9 credits): Electives may be chosen from among all MMS courses.

Courses in Multimedia Studies

MMS 200: Oral Communication.

3 hours, 3 credits. Principles of effective verbal and nonverbal communication as applied to personal and professional settings whether in person or through the mass media of digital technologies.

MMS (MMJ) 211: Introduction to Multilingual Media.

3 hours, 3 credits. Introduction to print and electronic multilingual media in the United States. Focus on the growth and diversity of ethnic media, the role they play in the lives of those who use them, and how they compare to mainstream media.

MMS 212: Introduction to Film and Television.

4 hours (2, lecture; 2 lab), 3 credits. Survey of the development and theory of motion picture art.

MMS 213: History of Cinema.

4 hours (2, lecture; 2 lab), 3 credits. Survey of the development and theory of motion picture art.

MMS (MMJ) 214: Foundations of Media.

3 hours, 3 credits. History and evolution of technology, structure, and regulatory philosophies of broadcast journalism, newspaper journalism, programming and policies in radio, broadcast television, cable television, and web-based digital content. The growth of news-gathering organizations, network programming, media convergence, and evolution of print media from the penny press to modern-day newspaper publishing and online multimedia journalism.

MMS (MMJ) 215: Audiovisual Production

4 hours (2, lecture; 2, lab), 3 credits. Fundamental tools and techniques of audio and video production. Basic principles, operations and techniques of audio and video production: camera operation, microphones, audio mixing and processing, studio operations, special effects, lighting, directing, on-camera procedures and basic audiovisual post-production techniques.

MMS (LAC) 216: Latin-American Cinema.

3 hours, 3 credits. An overview of film in Latin America from the silent period to the present.

MMS (MMJ) 217: Journalism in the Movies.

3 hours, 3 credits. Journalism as an industry, a business, and a career—through the movies. Historical and contemporary aspects of news media, as depicted in major films about the journalistic profession.

MMS 218: Animation and Anime Storytelling.

3 hours, 3 credits. Overview and examination of story construction and presentation in animation/anime films focusing on the theory and practice of storyboard creation.

MMS (MMJ) 222: New Media.

3 hours, 3 credits. Evolution of new communication technologies. Introduction to blogging and other social networking tools used by journalists.

MMS 223: Digital Marketing Strategies.

3 hours, 3 credits. Theoretical and strategic perspectives on how new media technologies have fundamentally transformed marketing; te shift from one-way to two-way communication; and the online techniques—viral campaigns, social media, search engine optimization, Web analytics—used to manage consumer interactions.

MMS 224: Fundamentals of Editing.

4 hours (2, lab; 2, lecture), 3 credits. Fundamental principles, practices, and theory of step-by-step editing, with a focus on story, narrative and documentary editing styles. PREREQ: MMS 212 or MMS 213.

MMS (ITA) 230: Italian Cinema.

3 hours, 3 credits. A study of major Italian filmmakers, including their themes, styles, and social significance, through the showing and discussion of selected, outstanding films (with English subtitles). Complementary readings of selected works of Italian literature (in English translation) that have significantly influenced the aesthetics and evolution of Italian films.

MMS (FRE) 234: Introduction to French Cinema.

3 hours, 3 credits. A study of major French film makers; their themes, styles, and aesthetic commitments through the showing and discussion of selected outstanding films (with English subtitles). Complementary reading of selected works of French literature (in English translation) that have significantly influenced the aesthetics and evolution of French films.

MMS 244 (SOC 249): Communication in Society.

3 hours, 3 credits. Role of media in the formation of identity, political opinion, subjectivity (racial, gender and sexual), celebrity, and ethics. Distinctions between interpersonal and mediated communication.

MMS 250: Topics in Asian Cinema.

3 hours, 3 credits (maximum 6 credits). Narrative films from different Asian nations and cultures. Emphasis on traditional artistic influences, cinematic constructs of national identity, historical context, culture, genres, and its relationship with global cinema.

MMS 300: Corporate Communication.

3 hours, 3 credits. Elements of communication in the current corporate environment, including public, community, employee, and government relations. PREREQ: MMS 220.

MMS (LNG) 301: Perception, Language, and Communication.

3 hours, 3 credits. Analysis of how the perception process and personal language meanings are informed by beliefs, emotions, attitudes and values. PREREQ: MMS 200 or LNG 160 (SPV 246).

MMS 304: Interpersonal and Small Group Communication.

3 hours, 3 credits. Principles and methods of oral communication in small group deliberation. Practice in participation and leadership in problem-solving groups. PREREQ: MMS 200.

MMS 305: Persuasion.

3 hours, 3 credits. The direct and indirect influence of mass media (advertising, television, the Web, and social networks) on thoughts, attitudes, and behavior. Principles of persuasion such as attraction, authority, celebrity, social influence, and their uses and misuses in society.

MMS 307: Media Industries I.

3 hours, 3 credits. Contemporary media industries, including print, broadcast, and new media. This course will pay particular attention to the economic and social conditions influencing industrial configurations and outputs, and vice versa.

MMS 308: Media Industries II.

3 hours, 3 credits. Evolution of the media industry as practiced by media technologists, theorists, artists, authors, and programmers. Topics include interactivity, virtuality, censorship, net neutrality, and emerging publishing platforms. PREREQ: MMS 307.

MMS (THE) (ENW) 309: Screenwriting.

3 hours, 3 credits. A practical approach to screen writing for theatre, film, and television, from conception to finished script of the screenplay. PREREQ: Departmental permission.

MMS (POL) 311: Freedom of Speech.

3 hours, 3 credits. Survey of the foundations and contemporary applications of the right to communicate and limitations on that right. Pertinent works from Milton to Emerson, and First Amendment decisions of the Supreme Court are examined.

MMS (MMJ) 315: TV Studio Production.

4 hours (2, lecture; 2, lab), 3 credits. Theory and practice of TV studio operations, including camera techniques, graphics, switching, lighting, and integration of recorded video in live production situations, culminating in a series of studio projects. PREREQ: MMJ (MMS) 215.

MMS 316: Film Production.

4 hours (2, lecture; 2, lab), 3 credits. Theory and practice of filmmaking. Students create their own films. PREREQ: MMS 224 or MMJ/MMS 215 pr MMJ/MMS 357.

MMS (LAC)(LPR) 319: Latinos in Film.

3 hours, 3 credits. Latino ethnicities in Hollywood films from the silent era to the present.

MMS (AAS) 321: African-Americans in Cinema.

3 hours, 3 credits. Visual images of African-Americans in films, shorts, cartoons, and documentaries.

MMS 324: Narrative Film.

3 hours, 3 credits. Techniques, structures, practices, and theories in narrative filmmaking.

MMS (AAS) 326: Africa in Cinema.

3 hours, 3 credits. Study of images of Africa in cinema.

MMS (MMJ) (AAS) 332: The African American Media.

3 hours, 3 credits. Analysis of the African American media's role in U.S. history and culture.

MMS (MMJ) 334: The Documentary.

3 hours, 3 credits. History of documentary film and the various types of film within the genre, e.g., propaganda, autobiographical, direct cinema, and rockumentary. PREREQ: MMJ (MMS) 215; either MMS 212 or MMS 213.

MMS 335: Media Relations.

3 hours, 3 credits. Media relations as an industry, business, and career, focusing on how news is created and disseminated and on what role public relations plays in the American media. Creation of professional press releases and promotion of newsworthy stories across print, broadcast, and multimedia outlets.

MMS 347: Advertising.

3 hours, 3 credits. Basic elements of advertising copywriting for various media formats. Introduction to advertising research, including the development of message structure and advertising strategies. PREREQ: MMS 220.

MMS 350: Topics in Film.

3 hours, 3 credits (maximum 6 credits). Themes and movements in film, including historical developments; groupings of films and directors; and genres, styles, or critical and theoretical issues.

MMS (ANT) 351: The Anthropology of Media.

3 hours, 3 credits. Anthropological approaches to media production and consumption. The uses of media in the construction of local, national, and transnational identities.

MMS 352: Topics in Multimedia Studies

3 hours, 3 credits. (maximum 6 credits). Topics vary from semester to semester.

MMS (LPR) 353: Latino Media.

3 hours, 3 credits. The production, representations, and cultural meanings of Latino media in the U.S., including television, radio, film, advertising, newspapers, and magazines. PREREQ: Completion of 45 credits or Departmental permission.

MMS (MMJ) 357: Digital Editing.

4 hours (2, lecture; 2, lab), 3 credits. Principles and practice of stepby-step functions of non-linear editing, including logging, capturing, and organizing audio-video media. PREREQ: MMJ (MMS) 215. COREQ: MMJ (MMS) 315 or MMJ 316.

MMS 359: The Thought Persuaders.

3 hours, 3 credits. The sensory and cognitive influence of popular culture, the entertainment industry, fashion, style, popular culture, graphics, and fads on media consumers.

MMS 360: Writing for TV.

3 hours, 3 credits (maximum 6 credits). Selected topics on writing for various genres of TV, video, and new media, including children's programming, soap operas, reality TV, the one-hour drama, variety programming, etc. PREREQ: MMS/THE/ENW

MMS 366: Technology and Communications.

3 hours, 3 credits. Influence and impact of advances in technology on interpersonal and mass communications. Historical development of language and writing from the printing press to the internet and beyond. PREREQ: MMS 244.

MMS (MMJ) 370: Internship I.

9 hours (8, in the field; 1, weekly conference), 3 credits (maximum 6 credits). Individual field experience with various media, public relations, publishing, advertising, and marketing firms. The course will include a one-hour weekly meeting with the program director and other internship students. A final report is required. PREREQ: Departmental permission.

MMS 404: Television Directing.

4 hours (2, lecture; 2, lab), 3 credits. Selecting, arranging, and unifying audio/video elements for live, scripted TV programs. PREREQ: A grade of at least C- in COM 315 and instructor's permission.

MMS (THE) (ENW) 409: Advanced Screenwriting.

3 hours, 3 credits. Completion of one full-length screen play or two shorter films, analysis of one's own and others' written work, experimentation with new genres and technologies, and work with a director to shoot one's own scenes. PREREQ: MMS (THE) (ENW) 309.

MMS 420: Cinema Aethestics and Criticism.

3 hours, 3 credits. Study of the art of cinema through viewing and analysis, both in and out of class, of the works of selected film artists. Supplementary readings in the works of film critics and theorists will be assigned. PREREQ: MMS 212 and 213.

MMS 421: Film Directing

4 hours (2, lecture; 2, lab), 3 credits. Theory and practice of controlling and integrating elements of film production. Projects are produced during the semester. PREREQ: MMS 316 and instructor's permission.

MMS (MMJ) 470: Internship II.

9 hours (8, in the field; 1, weekly conference), 3 credits (maximum 6 credits). Individual field experience with various media, coordinated by the Program Director. The course will include working 8 hours a week with a chosen media outlet, plus one-hour weekly seminar meetings with the Director and other internship students. A journal and a final research paper will be required. PREREQ: 18 credits from the program major and Departmental permission.

MMS 489: Research Project in Multimedia Studies

One semester, 3 credits (maximum 6 credits). Individual research and reading under the direction of a faculty member of the Department. An honors essay or some suitable presentation in communication arts is required. PREREQ: Permission from the director.

MMS (DNC) (THE) 4950: Multimedia Performing Arts Project.

4 hours, 1 credit. Multimedia capstone project in performing arts. PREREQ: Department Permission.

Theatre, B.A. (42 Credit Major)

The BA in Theatre challenges students to develop as versatile, selfdirected artists in a rigorous, liberal arts curriculum that combines study in acting, dance, stagecraft, playwriting, and theatre history with practical experience in producing, technical theatre, and arts management. The major is intended for those who envision a career as an actor, director, playwright, theatre administrator, technical director or stage manager, or a profession in such related areas as teaching, law and business. The required courses and credits are distributed as follows:

Credits (42)

Core Requirements (30)

4 Selected from THE 200: Theatre Workshop: Acting / Directing (1); THE 201: Theatre Workshop: Scenery / Properties (1); THE 202: Theatre Workshop: Costume / Wardrobe (1); THE 203: Theatre Workshop: Lighting / Sound (1); THE 204: Theatre Workshop: Stage Management (1)

THE 205: Voice and Diction for the Stage (2 credits)

THE 208: Acting I (3 credits)

THE 211: Play Analysis (3 credits)

THE 235: Stagecraft (3 credits)

THE 308: Playwriting (3 credits)

THE 326: History of Theatre I (3 credits)

THE 327: History of Theatre II (3 credits)

THE 348: Performing Arts Management (3 credits)

THE 370: Theatre Internship or THE 448: Advanced Performing Arts Management (3 credits)

Electives (12)

12 Additional credits in Theatre selected from courses under the advisement of a faculty member of the Theatre program. At least 6 credits should be at the 300-400 level.

Minor in Theatre

Required Courses (12 Credits):

THE 208: Acting I (3 credits)

THE 235: Stagecraft (3 credits)

Six (6) additional THE credits at the 300- or 400-level.

Minor in Theatre Management (12 Credits)

The distribution of courses is as follows:

THE 348: Theatre Management (3 credits).

THE 448: Advanced Theatre Management (credits).

BBA 204: Principles of Management (3 credits).

BBA 407: Strategic Management (3 credits).

Not open to students majoring in Business Administration.

Courses in Theatre

*Courses preceded by an asterisk are not expected to be offered in 2013-

THE 200: Theatre Workshop.

4 hours, 1 credit. Practical application of principles and theories of theatre arts performance through participation in Department theatre productions. Includes acting, directing, and assistant directing. PREREQ: A course in Theatre or Departmental permission.

THE 201: Theatre Workshop: Scenery/Properties.

4 hours, 1 credit. Practical application of principles and theories of theatre arts through participation in Department theatre productions. Includes: scenic construction, scenic run crew, properties construction, and properties run crew. PREREQ: A course in Theatre or permission of the Department.

THE 202: Theatre Workshop: Costume/Wardrobe.

4 hours, 1 credit. Practical application of principles and theories of theatre arts through participation in Department theatre productions. Includes costume construction and wardrobe run crew. PREREQ: A course in Theatre or Departmental permission.

THE 203: Theatre Workshop: Lighting/Sound.

4 hours, 1 credit. Practical application of principles and theories of theatre arts through participation in Department theatre productions. Includes: electrics crew, light board operation, sound crew, and sound board operation. PREREQ: A course in Theatre or Departmental permission.

THE 205: Voice and Diction for the Stage.

3 hours (1, lecture; 2, lab), 2 credits (may be repeated for up to 4 credits). The study of vocal techniques specific to the stage actor. Examines appropriate consonant and vowel production, the phonetic analysis of text, and the use of breath and intention to develop an expressive and audible vocal instrument.

THE 208: Acting I.

4 hours (2, lecture; 2, lab), 3 credits. Study and practice of the fundamentals of acting.

THE 211: Play Analysis.

3 hours, 3 credits. Fundamental principles of dramatic structure applied to selected plays from the viewpoint of theatre artists.

THE 220: Movement for Actors and Dancers.

4 hours (2, lecture; 2, lab), 3 credits. Techniques in movement, mime, and style. Exploration from the traditional to the experimental.

THE (COM) 232: Voice and Speech for the Actor.

3 hours, 3 credits. Vocal techniques for a performing career in professional theatre, film, and television.

THE 233: Stage Makeup.

2 hours, 1 credit. Styles and techniques of stage makeup.

THE 234: Visual Elements of the Theatre.

4 hours (2, lecture; 2, lab), 3 credits. Study of the visual arts of the theatre, with emphasis on basic stagecraft, painting, and materials and design concepts of scenery, lighting, and costume. PRE- OR COREQ: THE 311.

THE 235: Stagecraft.

4 hours (2, lecture; 2, lab) 3 credits. Stagecraft as a foundation for theatre production, including a survey of theatre architecture and machinery. Experience in scenic construction, lighting methodology, and costuming techniques. Introduction to maintenance, shop organization, purchasing, and budgeting. Participation in Department productions as assigned.

THE (AAS) 238: African American Theatre.

3 hours, 3 credits. Contemporary African American plays and playwrights. The changing image of African Americans from the stereotypes of early American theatre to contemporary representations.

THE 239: Creative Dramatics for Children.

4 hours (2, lecture; 2, lab), 3 credits. Foundation for theatre work with children: story dramatization, writing scripts from improvisation, movement, theatre games, basic puppetry. Attendance at children's theatre productions. Final project is a participatory theatrical event.

THE 241: The Art of the Theatre.

3 hours, 3 credits. Examination of the nature of live theatre: its forms, practices, and purposes, and its relevance to society.

THE 243: Queer Theatre.

3 hours, 3 credits. Gay, lesbian, bisexual, and transgendered drama from Christopher Marlowe through Mae West to the present.

THE 245: Puppetry.

4 hours (2, lecture; 2, lab), 3 credits. Design and construction of different kinds of puppets (shadow, rod, hand puppets, and a marionette); the history of puppetry; attendance at professional puppet theatres in New York City; script writing; and a studio performance.

THE 2480: Acting for Musical Theatre.

4 hours (2 lecture, 2 lab), 3 credits. Study and practice of acting, movement, and voice for musical theatre. PREREQ: Department Permission.

THE 251: Experiencing Theatre.

4 hours (2, lecture; 2, lab), 3 credits. Attendance at performances on Broadway, Off-Broadway, and at university theatres. Study of professional theatre (musicals, opera, new plays, classics, and experimental works) through discussion with playwrights and theatre artists, staged readings, and lectures held at Lehman and at theatrical associations around the City.

THE 300: Advanced Theatre Workshop.

4 hours, 3 credits. (May be repeated for a maximum of 6 credits.) Analysis and application of principles and theories of theatre arts through extensive participation in a theatre production. Study of the theatrical work being performed, together with other works from the author's canon. Advanced analysis and interpretation applied to such activities as management (house, stage, props, publicity), design and construction (lighting, scenery, costumes, makeup), and performance (acting, directing, assistant directing). PREREQ: A course in theatre and permission of the Director.

THE (ENW) 308: Playwriting.

3 hours, 3 credits. The theory and practice of writing the one-act play. PREREQ: Departmental permission.

THE (COM) (ENW) 309: Screenwriting.

3 hours, 3 credits. A practical approach to screenwriting for theatre, film, and television, from conception to finished script of the screenplay. PREREQ: Departmental permission.

*THE 310: Play Production and Directing for Secondary Schools.

4 hours (2, lecture; 2, lab), 3 credits. Note: THE 310 may not be taken for credit in addition to THE 335.

THE 320: The Children's Theatre.

4 hours (2, lecture; 2, lab), 3 credits. The history, literature, and production practices of the International Children's Theatre movement.

THE 325: The Artist and Society.

3 hours, 3 credits. The role of the artist in society from scholar to entrepreneur. PREREQ: 45 credits; at least 12 of these credits must be in the Arts. Note: The course includes twelve hours of field work, designed to give students exposure to various organizations, their structures and operations.

THE 326: History of the Theatre I.

3 hours, 3 credits. History of the theatre and drama to the seventeenth century. PREREQ: THE 211 or Departmental permission.

THE 327: History of the Theatre II.

3 hours, 3 credits. History of the theatre and drama from the seventeenth century to the present. PREREQ: THE 211 or Departmental permission.

THE 3280: History of Musical Theatre.

3 hours, 3 credits. The history of musical theatre, including its origins in operetta, burlesque, and vaudeville; the contributions of major practitioners of the form; and the current status of musical theatre and its critical evaluation.

THE 331: Acting II.

4 hours (2, lecture; 2, lab), 3 credits. Continued study and practice of the principles of acting, with emphasis on characterization and scene work. PREREQ: THE 208 and 311.

THE 332: Theatre Theory.

3 hours, 3 credits. Classical and modern theories of theatre from Aristotle to the present, with emphasis on twentieth-century contributions. PREREQ: THE 311.

THE 335: Directing I.

4 hours (2, lecture; 2, lab), 3 credits. Study and practice of the fundamentals of directing. PREREQ: Either THE 211 and THE 208, or Departmental permission.

THE 336: Scenic Design.

4 hours (2, lecture; 2, lab), 3 credits. The scenic elements in the visual arts of the theatre, film, and TV, with emphasis on the design concepts and materials of scenery for the stage and live performance. PREREQ: THE 235 or Departmental permission.

THE 337: Costume Design.

4 hours (2, lecture; 2, lab), 3 credits. The various aspects of costume for the theatre: wardrobe, history, construction, properties, and basic elements of design. PREREQ: THE 235 or Departmental permission.

THE 338: Lighting Design.

4 hours (2, lecture; 2, lab), 3 credits. The lighting elements in the visual arts of the theatre, film, and TV, with emphasis on design concepts and materials of lighting for the stage and live performance. PREREQ: THE 235 or Departmental permission.

THE (MMJ) 343: Voice-Over for Radio, Film, and TV.

3 hours, 3 credits. Performance techniques for the spoken word and script analysis with focus on clarity, vocal performance for differing media applications, microphone technique, and audition

THE 344: Acting for the Camera.

4 hours (2 lecture, 2 lab), 3 credits. Study of fundamental acting techniques specific to performance in film, television, and new media. PREREQ: THE 208.

THE 348: Performing Arts Management.

3 hours, 3 credits. Fiscal and administrative business practices as they apply to the management of professional, not-for-profit, and educational performing arts organizations. PREREQ: THE 241 or DNC 235, or Departmental permission. NOTE: Dance, Dance/Theatre and Theatre majors are exempt from the requirement.

THE 370: Theatre Internship.

12 hours (8-12 in the field, plus conference), 3 credits. May be repeated once with Departmental approval. Supervised work in a theatrical institution to develop skills in production, casting, rehearsals, costuming, and design. PREREQ: Satisfactory completion of 45 college credits and Departmental approval.

THE 408 (ENW 330): Advanced Playwriting Workshop.

3 hours, 3 credits. The goal of this course is the writing of a fulllength play. PREREQ: ENW 308 and Departmental permission.

THE 427: Advanced Costume Design.

4 hours (2, lecture; 2, lab), 3 credits. Continuation of costume design for theatre, film, and television. PREREQ: THE 337 or Departmental permission.

THE 4330: Advanced Acting for the Camera.

4 hours (2 lecture, 2 lab), 3 credits. Continued study of principles and techniques of acting in film/television/new media introduced in THE 344. PREREQ: THE 344.

THE 434: Advanced Technical Theatre.

3 hours, 3 credits. An in-depth exploration of organizational and procedural aspects of budgeting, estimating, construction, rigging, mounting of scenery, and operations and maintenance of equipment used in the theatre and the entertainment industry. PREREQ: THE 235 or Departmental permission.

THE 435: Advanced Acting.

4 hours (2, lecture; 2, lab), 3 credits. Characterization and ensemble work for the actor. PREREQ: THE 331 or Departmental permission.

THE 436: Advanced Scenic Design.

4 hours (2, lecture; 2, lab), 3 credits. Continuation of Scenic Design (THE 336). PREREQ: THE 336 or Departmental permission.

THE 438: Advanced Lighting Design.

4 hours (2, lecture; 2, lab), 3 credits. Continuation of lighting design techniques for theatre, film, and television (THE 338). PREREQ: THE 338 or Departmental permission.

*THE 439: Studies in the Greek and Roman Theatre.

3 hours, 3 credits. PREREQ: Either THE 326 or instructor's permission.

*THE 440: Studies in Elizabethan and Jacobean Theatre.

3 hours, 3 credits. PREREQ: Either THE 326 or instructor's permission.

THE 441: Directing II.

4 hours (2, lecture; 2, lab), 3 credits. Continued study and practice of the principles of directing. Students will direct a one-act play in the Studio Theatre. PREREQ: THE 335.

*THE 442: Studies in Modern Theatre.

3 hours, 3 credits. PREREQ: Either THE 327 or instructor's permission.

THE 443: Contemporary World Theatre.

3 hours, 3 credits. Study of the theatrical practices and conventions of contemporary world theatre.

*THE 445: Studies in Restoration and Eighteenth-Century Theatre.

3 hours, 3 credits. PREREQ: Either THE (CLT) 327 or instructor's permission.

THE 448: Advanced Performing Arts Management.

3 hours, 3 credits. Continuation of THE 348. Economic and managerial practices for performing arts organizations. Creation of a viable plan to produce or manage a project in the performing arts. PREREQ: THE 348 or Departmental permission.

THE 449: Working in Theatre.

3 hours, 3 credits. Introduction to career paths in Theatre for Advance Students.

THE 454: Special Studies in Theatre.

3 hours, 3 credits. Consideration of special topics in theatre. PREREQ: Departmental permission.

THE 470: Advanced Theatre Internship.

12 hours (8-12 in the field plus conference), 3 credits. May be repeated once with Departmental approval. Supervised work in a theatrical institution to develop skills in production, casting, rehearsals, costuming, and design. PREREQ: Satisfactory completion of 60 college credits, 15 of which must be in Theatre, and Departmental approval.

THE 488: Independent Study in Theatre.

One semester, 3 credits (maximum 6 credits). Independent study of special problems and independent research in theatre. PREREQ: Departmental permission.

THE 492: Research Project in Theatre.

One semester, 3 credits (maximum 6 credits). Individual research and reading under faculty direction. An honors essay or some other suitable presentation in theatre is required. PREREQ: Departmental permission.

THE (DNC) (MMS) 4950: Multimedia Performing Arts Project. 4 hours, 1 credit. Multimedia capstone project in performing arts. PREREQ: Department Permission.

Courses in Oral Interpretation

*Courses preceded by an asterisk are not expected to be offered in 2013-2015.

*COM 205: Oral Interpretation of Literature I.

3 hours, 3 credits. Analysis and performance of selected works of poetry, prose, and drama. NOTE: Students who are interested in independent study, special studies, or a research project in oral interpretation may pursue their work in COM 451, 485, or 489; or in THE 454, 488, or 492.

*COM 215: Nonverbal Communication.

3 hours, 3 credits. Study of nonverbal communication, including body language, paralanguage, and proxemics. PREREQ: COM 100, COM 203, COM 204, *COM 205, THE 208, or consent of the instructor.

*COM 302: Oral Interpretation of Literature II.

3 hours, 3 credits. Continuation of Oral Interpretation of Literature I, with emphasis on refining performance techniques and combining separate selections into a program. PREREQ: *COM 205. Note: Students who are interested in independent study, special studies, or a research project in oral interpretation may pursue their work in COM 451, 485, or 489; or in THE 454, 488, or 492.

*COM 303: Ensemble Reading.

3 hours, 3 credits. PREREQ: *COM 205 and instructor's permission.

*COM 402: Special Forms of Oral Interpretation.

3 hours, 3 credits. PREREQ: *COM 205 and 302.

Dance, B.A. (42 Credit Major)

The Major in Dance is intended for students interested in preparing themselves for careers as dance artists, dance educators, or dance therapists, as well as for those who intend to pursue graduate study. The required courses and credits are distributed as follows:

Credits (42). Core Requirements (39)

- DNC (THE) 220: Movement for Actors and Dancers (3); THE 235: Stagecraft (3); DNC (THE) 230: Somatics I (2); DNC 345: Choreography and Improvisation (3); DNC 420: History and Applied Principles of Contemporary Dance (3); DNC 445: Advanced Student Performance Workshop (1); DNC 451: Choreographic Workshop II (2) *Total: 17*
- Selected from DNC 352: World Dance (3); DNC 221 Jazz and Contemporary American Dance Forms (3); DNC 3210 Jazz and Contemporary American Dance Forms (3) Total: 3
- Selected from DNC 211: Modern Dance Principles I (3); DNC 212: Modern Dance Principles II (3); DNC 311: Intermediate Modern Dance (3); DNC 411: Advanced Modern Dance (3) Total: 9
- Selected from DNC 304: Technique Workshop: Ballet (1); DNC 362: Technique Workshop: World (1); DNC 412: Technique Workshop: Modern (1); DNC 4210: Technique Workshop: Advanced Jazz and Contemporary American Dance Forms (1) Total: 2
- Selected from DNC 201: Ballet Principles I (2); DNC 202: Ballet Principles II (2); DNC 303: Ballet Principles III (2) Total: 6
- Selected from THE 201: Theatre Workshop: Scenery / Properties (1); THE 202: Theatre Workshop: Costume / Wardrobe (1); THE 203: Theatre Workshop: Lighting / Sound (1); THE 204: Theatre Workshop: Stage Management (1); DNC 209: Dance Workshop (1) Total: 2

Electives (3)

Additional credits in Dance selected from courses at the 200 level or above, or THE 348: Performing Arts Management (3) Total: 3

Dance-Theatre, B.F.A. (51 Credit Major)

The interdisciplinary Major in Dance-Theatre leads to the Bachelor of Fine Arts degree (B.F.A.). This program stresses dance and physical theatre as performing arts. The required courses and credits are distributed as follows:

Credits (51)

Core Requirements (36)

DNC (THE) 220: Movement for Actors and Dancers (3 credits)

DNC (THE) 230: Somatics I (2 credits)

DNC 345: Choreography and Improvisation (3 credits)

DNC 420: History of Applied Principles of Contemporary Dance (3 credits)

DNC 445: Advanced Student Performance Workshop (1 credit)

DNC 451: Choreographic Workshop II (2 credits)

(2) Selected from THE 200: Theatre Workshop: Acting / Directing (1); THE 201: Theatre Workshop: Scenery / Properties (1); THE 202: Theatre Workshop: Costume / Wardrobe (1); THE 203: Theatre Workshop: Lighting / Sound (1); THE 204: Theatre Workshop: Stage Management (1); DNC 209: Dance Workshop (1)

THE 205: Voice and Diction for the Stage (2 credits)

THE 208: Acting I (3 credits)

THE 235: Stagecraft (3 credits)

THE 211: Play Analysis (3 credits)

THE 326: History of the Theatre I or THE 327 History of the Theatre II (3 credits)

THE 331: Acting II (3 credits)

THE 337: Costume Design, THE 338: Lighting Design, or THE 348: Performing Arts Management (3 credits)

Electives (15)

15 Additional credits in Dance selected from the following courses:

DNC 201: Ballet Principles I (2); DNC 202: Ballet Principles II (2); DNC 303:

Ballet Principles III (2); DNC 304: Technique Workshop: Ballet

DNC 211: Modern Dance Principles I (3); DNC 212: Modern Dance Principles II (3);

DNC 311: Intermediate Modern Dance (3); DNC 411: Advanced Modern Dance (3); DNC 412 Technique Workshop: Modern

DNC 352: World Dance (3); DNC 362 Technique Workshop: World (1)

DNC 309: Advanced Dance Workshop (3); DNC 351: Professional Repertory Workshop (3);

DNC 360: Selected Topics in Dance (3); DNC 405: Seminar and Practicum in Skills and Performance (3);

DNC 445: Advanced Student Performance Workshop (1)

Dance-Theatre students are also encouraged to take BIO 183 (Human Biology) for their Common Core / Life and Physical Sciences requirement.

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Statement of Credits for Dance Performing **Groups**

Students may earn a maximum of 4 credits for participation in the dance performing groups, with no more than 1 credit to be assigned for one dance group each semester.

Minor in Dance

The Minor in Dance consists of 12 credits distributed as follows: DNC 235, plus an additional nine credits selected from 200- to 400-level courses, with at least 6 of the credits from 300- or 400level courses.

Courses in Dance

*Courses preceded by an asterisk are not expected to be offered in 2013-

NOTE: Students must show a valid Physical Activity Card at the first class meeting.

DNC 100: Dance Workout I.

2 hours, 1 credit. A fundamental skills program that integrates general fitness activities with a selection of modern dancercise, aerobic, and toning techniques.

DNC 101: Folk, Square, and Social-Dance Forms I. 2 hours, 1 credit.

DNC 105: Modern Dance Fundamentals I.

2 hours, 1 credit. (Closed to DNC majors.) Elementary movement experiences and beginning modern dance. Leotards and tights recommended.

DNC 221: Jazz and Contemporary American Dance Forms.

4 hours, 3 credits (may be repeated for up to 6 credits). Study of beginning jazz and contemporary American dance forms such as hip hop and tap.

DNC 201: Ballet Principles I.

3 hours, 2 credits (may be repeated for up to 4 credits). The study and analysis of fundamental techniques of barre, adagio and petite allegro.

DNC 202: Ballet Principles II.

3 hours, 2 credits (may be repeated for up to 4 credits). Continuation of Ballet Principles I. PREREQ: DNC 201 or Departmental permission.

DNC 209: Dance Workshop.

4 hours, 1 credit. (May be repeated for a maximum of 4 credits; areas are not repeatable. Open to all students.) Practical application of principles and theories of dance through participation in Department-sponsored productions. Dance and Theatre faculty will supervise students working in a particular faculty member's area of expertise. Areas include management, design, construction, and performance. PREREQ: A course in dance and permission of the instructor and the Department.

DNC 211: Modern Dance Principles.

4 hours, 3 credits (may be repeated for up to 6 credits). Study of basic principles of alignment, movement and elementary techniques in modern dance.

DNC 212: Modern Dance Principles II.

4 hours (2, lecture; 2, lab), 3 credits. Continuation of Modern Dance Principles I. PREREQ: DNC 211 or exemption.

DNC (THE) 220: Movement for Actors and Dancers.

4 hours (2, lecture; 2, lab), 3 credits. Techniques in movement, mime, and style. Exploration from the traditional to the experimental.

*DNC 227: Theory and Practice of Dance in Education.

2 hours, 1 credit. Experimentation with the techniques of folk, ethnic, and contemporary forms, and analysis of their role in education. PREREQ: DNC 166 and either DNC 101 or 201; or Departmental permission.

DNC (THE) 230: Somatics I.

3 hours (1, lecture; 2, lab), 2 credits. The study and experience of anatomical and kinetic principles through the lens of different somatic techniques, such as yoga, Alexander Technique, Feldenkrais Technique, and Body Mind Centering.

DNC 235: Dance Perspectives:

3 hours, 3 credits. The place of dance in cultural history. The role of the choreographer as entertainer, moralist, dramatist, abstractionist, and politician. Students will attend performances and participate in occasional movement exercises related to topics of study.

DNC 249: Rhythmic Analysis of Movement.

2 hours, 1 credit. (Required of DNC majors. Open to students interested in therapy, recreation, and kindergarten and early childhood education.) Survey course in basic rhythmic movements with relation to the musical fundamentals. Use of percussion.

DNC 303: Ballet Principles III.

3 hours, 2 credits (may be repeated for up to 4 credits). Advanced techniques of barre, adagio, and petite allegro. PREREQ: Either DNC 202 or Departmental permission.

DNC 304: Technique Workshop: Ballet.

3 hours, 1 credit (may be repeated for up to 2 credits). Continued study of ballet principles introduced in DNC 303. PREREQ: DNC 303.

DNC 309: Advanced Dance Workshop.

4 hours (2, lecture; 2, lab), 3 credits. Analysis and application of principles and theories of dance through extensive participation in a Department-sponsored production. Advanced analysis and interpretation applied to such activities as performance, management, design, and construction. PREREQ: DNC 209 or permission of the instructor and Department.

DNC 311: Intermediate Modern Dance.

4 hours (2, lecture; 2, lab), 3 credits (may be repeated for up to 6 credits). The study and analysis of the intermediate techniques of modern dance. PREREQ: DNC 211 or 212, or Departmental permission.

*DNC 316: Educational and Recreational Programs in Dance.

3 hours, 2 credits. PREREQ: DNC 101 or Departmental permission.

DNC 3210: Advanced Jazz and Contemporary American Dance Forms.

4 hours, 3 credits (may be repeated for up to 6 credits). Study of advanced jazz and contemporary American dance forms such as hip hop and tap.

DNC (THE) 330: Somatics II.

3 hours (1, lecture; 2, lab), 2 credits. Advanced study of anatomical and kinetic principles through the lens of different somatic techniques, such as yoga, Alexander Technique, Feldenkrais Technique, and Body Mind Centering. PREREQ: DNC (THE) 230, or DNC 211, or THE 208, or Departmental permission.

DNC 345: Choreography and Improvisation.

4 hours (2, lecture; 2, lab), 3 credits. The development of the creative process by means of improvisation and a variety of choreographic projects from the traditional to the experimental. PREREQ: DNC 211, DNC 235, or Departmental permission.

DNC 350: Workshop in Music and Movement.

3 hours, 2 credits (maximum 4 credits). (Limited to qualified REC, MUS, and THE majors.) A survey of the rhythmic bases of movement; the study of dance accompaniment; the analysis of traditional and contemporary sources of sound and music applicable in class and in choreographic and theatre arts situations. PREREQ: DNC 249 or Departmental permission.

DNC 351: Professional Repertory Workshop in Contemporary Dance Form.

4 hours, 3 credits (may be repeated for up to 6 credits when topic changes). Advanced theory and technique with extended sequences and excerpts from the repertory of professional choreographers. Guest artists and choreographers will attend, and differing stylistic sequences from several repertories will be analyzed and performed. Members of the Lehman College Student Apprentice Dance Theatre Company will be selected from this course. PREREQ: One dance class and Departmental permission.

DNC 352: World Dance.

4 hours (2 lecture, 2 lab), 3 credits (may be repeated for up to 6 credits when topic changes). Study and analysis of culturallyspecific traditional dance forms, such as African-American, African, flamenco, Indian, Native American, and tango as theatre art forms. Sequences from the different dance styles are studied and performed. PREREQ: DNC 211 or DNC 311 or Departmental permission.

DNC 353: Performance Group: Modern.

3 hours, 1 credit. Advanced theory and technique with extended sequences from the repertory of professional choreographers of the past and present. Specifically intended for members of the student performing companies. PREREQ: Departmental permission and audition.

DNC 354: Performance Group: Ballet.

3 hours, 1 credit. Advanced theory and technique with extended sequences from the repertory of professional choreographers of the past and present. Specifically intended for members of the student performing companies. PREREQ: Departmental permission and audition.

DNC 355: Performance Group: Ethnic.

3 hours, 1 credit. (Any combination of the above courses may be taken for a maximum of 4 credits.) Advanced theory and technique with extended sequences from the repertory of professional choreographers of the past and present. Specifically intended for members of the student performing companies. PREREQ: Departmental permission and audition.

DNC 360: Selected Topics in Dance.

3 hours, 3 credits (maximum 6 credits). Consideration of recent developments in dance. PREREQ: Six credits in program area or permission of program coordinator.

DNC 362: Technique Workshop: World.

4 hours, 1 credit. Continued study of principles introduced in DNC 352. PREREQ: DNC 352.

DNC 405: Seminar and Practicum in Skills and Performance.

4 hours (2, lecture; 2, lab), 3 credits. This course is designed to prepare advanced students for a comprehensive practicum in technique and composition. PREREQ: DNC 311, or DNC 345, or Departmental permission.

DNC 411: Advanced Modern Dance.

4 hours (2, lecture; 2, lab), 3 credits (may be repeated for up to 6 credits). Advanced theory and technique, with emphasis on choreographic style. PREREQ: DNC 311 or Departmental permission.

DNC 412: Technique Workshop: Modern.

4 hours, 1 credit (may be repeated for up to 2 credits). Continued study of modern dance principles introduced in DNC 411. Specifically intended for dance majors. PREREQ: DNC 411.

DNC 420: History and Applied Principles of Contemporary Dance.

3 hours, 3 credits. Study of the philosophical and historical principles of twentieth- and twenty-first-century dance, with use of applied techniques and compositional studies. PREREQ: Satisfactory completion of 60 college credits or DNC 235.

DNC 445: Advanced Student Performance Workshop.

2 hours (1, lecture; 1, lab), 1 credit (may be repeated for up to 3 credits). Practical application of principles and theories of dance through participation in a Department-sponsored dance concert. Dance faculty will supervise students on the creation of new work. Writing, communication, and technical skills necessary to dance artists will be stressed. PREREQ: DNC 345 or Departmental permission.

DNC 450: Choreographic Workshop I.

One semester, 1 credit (maximum 2 credits). (Limited to qualified DNC, ART, MUS, and THE majors.) Individual choreographic assignments, under faculty guidance. PREREQ: Either DNC 345 or Departmental permission.

DNC 451: Choreographic Workshop II.

3 hours, 2 credits. (Specifically designed for graduating dance majors.) Special choreographic assignments, research, production, and/or performance under faculty guidance. PREREQ: DNC 345 and Departmental permission.

DNC 452: Student Repertory Workshop.

6 hours, 3 credits (maximum 6 credits). Student repertory in performance. This course is designed to analyze and incorporate combined elements of advanced theatrical production and performance: (1) staging works for the proscenium theatre, theatre in the round, and varied environments; (2) analyzing the use of film, slides, props, costumes, collages, and various multimedia elements in production; and (3) studying the elements and techniques of performance. PREREQ: Either DNC 267 and 451 and THE 234 or Departmental permission.

DNC 485: Honors.

One semester, 3 credits (maximum 6 credits). Individual study, under faculty guidance, leading to completion of either an honors essay or a production book in the case of creative performance. PREREQ: DNC Director's permission.

DNC 493: Special Projects.

One semester, 2 credits (maximum 4 credits). Special problems, research, and production and/or performance under faculty guidance. PREREQ: Departmental permission.

DNC (THE) (MMS) 4950: Multimedia Performing Arts Project. 4 hours, 1 credit (may be repeated for up to 2 credits). Continued study of principles introduced in DNC 3210. PREREQ: DNC 3210.

Languages and Literatures

Department Chair: Thomas Ihde (Carman Hall, Room 257) Graduate Director: Maria del Carmen Saen de Casas (Carman Hall, Room 279)

Department Faculty: Professors: Maria Grazia DiPaolo, Ricardo R. Fernández, M. Cristina Guiñazú, Oscar Montero, José Muñoz-Millanes, Manfredi Piccolomini, Gerardo Piña-Rosales, Gary S. Schwartz, Thomas C. Spear; Associate Professor: Carmen Esteves, Thomas Ihde, María del Carmen Saen de Casas; Assistant Professors: Alexandra Coller, Daniel Fernández, Beatriz Lado, Oscar Martín, Zelda Newman; Lecturers:Evelyn Duran-Urrea, Francisco Montaño, Asako Tochika, Lynne Van Voorhis.

The Department of Languages and Literatures offers a wide variety of language and literature courses in Arabic, Chinese, French, German, Greek, Hebrew, Irish, Italian, Latin, Japanese, Portuguese, Russian, Spanish, and Yiddish. The Department also offers courses in literature and culture conducted in English, some of which satisfy the distribution requirement. In addition, a special Spanish-language sequence is offered for heritage speakers of Spanish to enable them to preserve and enhance their knowledge of Spanish. Students may major in French, German, Greek, Hebraic and Judaic Studies, Italian, Latin, Russian, or Spanish. The Department also participates in the interdisciplinary programs in Comparative Literature, Latin American and Caribbean Studies, and Multimedia Journalism. For students majoring in fields with international or global goals, the Department offers courses in phonetics, business, translation, reading in the arts and sciences, and health professions. Students may also declare a minor in language programs that offer intermediate and advanced level courses. Minors in the Department consist of 12 credits above the 100 level. A minimum of two courses must be taken at the 300 or 400 level. The Department currently offers minora in Classical Greek, French, Hebrew, Irish, Italian, Japanese, Latin, Russian, and Spanish.

Placement in Courses: The Department places entering students on the basis of proficiency shown on tests administered before registration, in addition to an approximate placement based on a certain number of years of language study in high school. A Departmental adviser is available throughout the summer registration period.

Teaching and Other Careers: A student majoring in a language will receive a solid foundation for graduate study and may look forward to a career in many areas of business, industry, government service, and mass communication as well as in teaching at all levels from elementary school to college. Students planning to teach a language in secondary school should consult their major advisers, as well as the Office of the Dean of Education (Carman Hall, Room B-33, 718-960-4972) regarding requirements for New York State teacher certification.

Opportunities for Study Abroad: The Department encourages students to develop linguistic proficiency and first-hand cultural knowledge by participating in credit-bearing programs of study abroad. Lehman students have received credit for study in many places, including Argentina, Australia, Canada, Chile, China, the

Dominican Republic, Ecuador, England, France, Greece, India, Ireland, Italy, Japan, Jordan, South Korea, Puerto Rico, Russia and Spain. Additional programs are being developed to offer a wider geographical and content choice. Students need not be language majors or minors to study abroad.

Major Fields

- French
- German
- Greek
- Hebraic & Judaic Studies
- Italian
- Latin
- Russian
- Spanish

Interdisciplinary Programs

- Comparative Literature
- Latin American and Caribbean Studies
- Multilingual Journalism

Other Offerings

Courses in:

- Arabic
- Chinese
- Irish
- Japanese
- Portuguese
- Yiddish
- Literature & Culture (Conducted in English)

Classical Languages, Literatures, and Cultures

Students may major in either Greek or Latin, or may combine the two for a Greek-Latin major. There is also a major in Classical Culture.

Latin, B.A. (36 Credit Major)

The required credits are distributed as follows:

Credits (36)

24 In LAT courses

12 Selected from ACU courses or from any 300-level courses in ancient history or ancient art, or from courses in ancient philosophy. Courses in other related areas, e.g., medieval studies, may be submitted with permission of the Department chair;

or

GRK 101-102 and 3 additional credits may be selected from the history and culture courses specified above or 12 credits from GRK courses.

Greek, B.A. (36 Credit Major)

The required credits and courses are distributed as follows:

Credits (36)

- In GRK courses. 24
- 12 Selected from the history and culture courses specified under the LAT major; or LAT 101-102 and 3 additional credits chosen from the history and culture courses specified under the LAT major.

or

12 credits selected from LAT courses.

Greek and Latin, B.A. (42 Credit Combined Major)

The required credits and courses are distributed as follows:

Credits (42)

- 18 In GRK courses.
- 18 In LAT courses numbered higher than 102.
- Selected from the history and culture courses specified under the LAT major.

Greek and Latin, B.A., with a Specialization in Classical Culture (36 Credit Major)

The required credits and courses are distributed as follows:

Credits (36)

- In ACU courses or HIA courses on Greek and Roman 24 topics or HIS 275, of which 21 credits must be at the 300 level.
- Distributed as follows: 12

9 credits: Students with no previous study of Greek or Latin must complete either GRK 101-102 or LAT 101-102.

3 credits: Students having the equivalent of one year of college Greek or Latin must complete a 3-credit reading course in Greek or Latin authors.

and

The remaining credits (3 or 9) must be chosen from 300-level courses in ancient art or philosophy. (Courses in other appropriate subjects may be substituted with the Chair's permission.)

French

30-Credit Major in French, B.A.

The required courses and credits are distributed as follows:

Credits (30)

- In required French courses: FRE 300 and 303, and either 301 or 302.
- Selected from other 300- or 400-level FRE courses. 21 Students who anticipate graduate work in French should take at least 18 credits of French literature.

Germanic Languages & Literature

36-Credit Major in German, B.A.

Of the 36 credits required for the German major, 24 normally should be in German and the other 12 in related fields. These credits and courses are distributed as follows:

Credits (36)

- In German courses, selected from GER 202, 301, 302. and advanced courses, one of which should be in German literature of the classical period.
- 12 In related fields: e.g., courses in the literature of other countries; comparative literature; or the art, history, music, or philosophy of German-speaking countries. The choice is subject to the approval of the Chair of the Department.

Hebraic and Judaic Studies

Hebraic and Judaic Studies, B.A., with a Specialization in Hebraic Studies (36 Credit Maior)

The requirements are 36 credits, at least 24 of which must be in Hebrew literature and advanced Hebrew language. The choice of courses for all 36 credits is subject to approval by the faculty member in charge of Hebraic and Judaic Studies.

Credits (36)

- In HEB courses selected from HEB 202, 215, 216, 217, 317, 318, 321, 322, 324, 325, 326, 327, 328, 331, 341, and 389.
- 12 In either HCU courses or related courses offered by other departments.

Note: Some courses designated HCU may be substituted for the regular Hebrew courses in the Hebrew major. This applies primarily to students who are fluent in the language or are interested principally in classical Hebrew. Such substitutions require the written approval of the faculty member in charge of Hebraic and Judaic Studies.

Hebraic and Judaic Studies, B.A., with a Specialization in Judaic Studies (38 Credit Maior)

The requirements are 24 credits in HCU courses (taught in English) and 14 credits in Hebraic Studies for attainment of basic competence in Hebrew. The choice of all 38 credits is subject to approval of the officer in charge of Hebraic and Judaic Studies. This distribution of required credits and courses is as follows:

Credits (38)

- in HCU courses. 24
- 14 in HEB courses: HEB 101, 102, and 202 and HEB 215, 216, or 217.

Note: Students may take courses in Yiddish language and literature in partial fulfillment of the 24-credit HCU requirement. Students intending to pursue graduate studies in Judaica are advised to take 300level HEB courses in order to intensify their preparation in the language.

Italian

30-Credit Major in Italian, B.A.

The required courses and credits are distributed as follows:

Credits (30)

6 In required ITA courses: ITA 303, and ITA 447 or 448.

24 Selected from 300- or 400-level courses.

Russian

24-Credit Major in Russian, B.A.

Students in this major must take 24 credits in Russian courses beyond RUS 101 and 102.

Spanish, B.A. (36-Credit Major)

The required courses and credits are distributed as follows:

Credits (36)

12 In required SPA courses: SPA 300, 306, 309, and 331.

3 In one course in Latin American literature.

3 In one course in Spanish literature.

18 Selected from 300- or 400-level SPA courses. PRS 302 or 303 (Puerto Rican

Literature I or II) may be substituted for one of these courses. Students intending

to do graduate work in Spanish should take at least 18 credits in literature.

Minor in Spanish for the Health Professions

Required Courses (12 Credits)

For non-native speakers:

3 SPA 201: Intermediate Spanish Grammar

3 SPA 202: Intermediate Spanish Reading

3 SPA 309: Advanced Spanish Grammar

3 SPA 3120: Spanish for the Health Professions

For heritage learners:

3 SPA 203: Elements of Contemporary Spanish I

3 SPA 204: Elements of Contemporary Spanish II

3 SPA 307: Translation

3 SPA 3120: Spanish for the Health Professions

Interdisciplinary Minor in Russian Area **Studies**

Coordinator: Ekaterina Salmanova (Lecturer, Languages and Literatures)

Steering Committee: Gary Schwartz (Professor, Languages and

Literatures); Elin Waring (Professor, Sociology); Robert Whittaker (Professor, JCT); Ekaterina Belousova (Adj. Asst. Professor, Anthropology); Ralph W. Boone (Adj. Lecturer, English)

The Minor in Russian Area Studies provides students with an interdisciplinary approach to the language, culture, history, politics, and environmental aspects of the Russian Federation (and of its predecessor states, including the Soviet Union). The minor will serve students who are majoring in fields where global and cross-cultural awareness are especially valuable, such as business, political science, nursing, health services, and social work; in such humanities-based fields as music, art, and literature; and in related multimedia fields. Russian language is not a requirement for the

Degree Requirements

Students will satisfy the College requirement of a minor field by taking four courses (12 credits), at least two of which must be at the 300 level or higher. All students must take the introductory three-credit course POL (RUS) 220. The remaining 9 credits may be taken from courses on Russia in any department. Russianlanguage courses on the 200- and 300-level may be included, but are not required.

Introduction to Russian Area Studies (3 credits):

POL (RUS) 220: Russia Today

Electives (9 credits):

Electives may be chosen from among courses on the history and culture of Russia, in English or in Russian. Two of the three electives must be at the 300 level or higher. Examples of courses that meet the requirements for this minor include RUS 201, RUS 202, RUS 281, RUS 301, RUS 302, RUS 381, HIE 336, HIE 337, RUS 333, RUS 336, RUS 338, RUS 343, RUS 346, RUS 347, RUS 360, SLA 362, SLA 365.

Courses in Arabic

ARB 105: Elementary Arabic I.

3 hours, 3 credits. (For students with no prior knowledge of Arabic.) Study of the basic skills of understanding, speaking, reading, and writing basic Arabic. Introduction to the culture and civilization of Arabic-speaking countries.

ARB 106: Elementary Arabic II.

3 hours, 3 credits. Study of the basic skills of understanding, speaking, reading, and writing basic Arabic and the culture and civilization of Arabic-speaking countries. PREREQ: ARB 105 or placement by the Department.

ARB 108: Elementary Arabic III.

3 hours, 3 credits. Study of the basic skills of understanding, speaking, reading, and writing basic Arabic and the culture and civilization of Arabic-speaking countries. PREREQ: ARB 106 or placement by the Department.

ARB 111: Elementary Arabic I.

ARB 111: Elementary Arabic I. 4 hours, 3 credits. (For beginners.) Elements of grammar, reading simple texts, practice in speaking and audio-lingual work in the Language Laboratory. Note: ARB 111 is not credited without 112.

ARB 112: Elementary Arabic II.

ARB 112: Elementary Arabic II. 4 hours, 3 credits. Elements of grammar, reading simple texts, practice in speaking and audiolingual work in the Language Laboratory. PREREQ: ARB 111 or equivalent.

ARB 201: Intermediate Arabic I.

3 hours, 3 credits. Continuation of ARB 108. PREREQ: ARB 108 or placement by the Department.

ARB 202: Intermediate Arabic II.

3 hours, 3 credits. Arabic language and culture. Continuation of ARB 201. PREREQ: ARB 201 or placement by the Department.

ARB 285: Individualized Intermediate Foreign Language Study. 1 hour, 1 credit. Independent study in Arabic generally linked to a

course in another field. PREREQ: ARB 108 or Departmental permission. Note: May be repeated up to four times.

ARB 385: Individualized Advanced Foreign Language Study.

1 hour, 1 credit. Independent study in Arabic generally linked to a course in another field. PREREQ: Two semesters of ARB 285 or Departmental permission. *Note: May be repeated up to 4 times.*

Courses in Chinese

CHI 101: Elementary Chinese I.

4 hours, 4 credits. Elements of grammar, reading simple texts, practice in speaking and audiolingual work in the Language Laboratory. Note: CHI 101 is not credited without 102.

CHI 102: Elementary Chinese II.

5 hours, 5 credits. Elements of grammar, reading simple texts, practice in speaking and audiolingual work in the Language Laboratory. PREREQ: CHI 101 or equivalent.

CHI 111: Elementary Chinese I.

4 hours, 3 credits. (For beginners.) Elements of grammar, reading simple texts, practice in speaking and audio-lingual work in the Language Laboratory. NOTE: CHI 111 is not credited without 112.

CHI 112: Elementary Chinese II.

4 hours, 3 credits. Elements of grammar, reading simple texts, practice in speaking and audio-lingual work in the Language Laboratory. PREREQ: CHI 111 or equivalent.

CHI 285: Individualized Intermediate Foreign Language Study.

1 hour, 1 credit. Independent study in Chinese generally linked to a course in another field. PREREQ: CHI 102 or Departmental permission. Note: May be repeated up to 4 times.

CHI 385: Individualized Advanced Foreign Language Study.

1 hour, 1 credit. Independent study in Chinese generally linked to a course in another field. PREREQ: Two semesters of CHI 285 or Departmental permission. Note: May be repeated up to 4 times.

Courses in French

*Courses preceded by an asterisk are not expected to be offered in 2013-

FRE 101: Elementary French I.

4 hours, 4 credits. For beginners. Elements of grammar, reading of simple modern texts, and practice in speaking. Audiolingual work in the Language Laboratory. Note: FRE 101 is not credited without 102.

FRE 102: Elementary French II.

5 hours, 5 credits. Continuation of FRE 101. Completion of this course will provide students with all the basic linguistic elements needed for proficiency. PREREQ: FRE 101. Note: Completion of FRE 102 satisfies the foreign language requirement. Students planning future work in French language or literature must take FRE 201 and/or FRE 202.

FRE 105: Elementary French I.

3 hours, 3 credits. (Evening or Saturday only.) Study of pronunciation and the elements of French grammar, reading of simple modern texts, and oral practice. Note: FRE 105 will not be credited without 106.

FRE 106: Elementary French II.

3 hours, 3 credits. (Evening or Saturday only.) Study of pronunciation and the elements of French grammar, reading of simple modern texts, and oral practice. PREREQ: FRE 105.

*FRE 107: Elementary French: Intensive Course.

90 hours, 6 credits. (Summer session only.) Note: *FRE 107 is not open to students who have completed either FRE 101-102 or 105-106.

FRE 108: Elementary French III.

3 hours, 3 credits. (Evening or Saturday only.) Study of pronunciation and the elements of French grammar, reading of simple modern texts, and oral practice. PREREQ: FRE 106. Note: FRE 108 is not open to students who have completed FRE 102. Completion of FRE 108 satisfies the foreign language requirement. Students planning future work in French language or literature must take FRE 201 and/or 202.

FRE 111: Elementary French I.

4 hours, 3 credits. (For beginners.) Elements of grammar, reading of simple modern texts, and practice in speaking. Audiolingual work in the Language Laboratory. NOTE: FRE 111 is not credited without 112.

FRE 112: Elementary French II.

4 hours, 3 credits. Continuation of French 111. Completion of this course will provide students with basic linguistic elements needed for proficiency. PREREQ: FRE 111. NOTE: Completion of FRE 112 satisfies the foreign language requirement. Students planning future work in French language or literature must take FRE 201 and/or FRE 202.

FRE 201: Intermediate French Grammar.

3 hours, 3 credits. Grammar review, extensive reading, composition, and oral practice. PREREQ: FRE 102 or Departmental permission. Note: Students who receive a grade of at least B+ in FRE 102 may enroll directly in FRE 202.

FRE 202: Intermediate French Reading and Composition.

3 hours, 3 credits. Grammar review, reading, composition, and practical conversation. PREREQ: FRE 201, or 102 with a grade of B+, or Departmental permission.

FRE 205: French for Reading Knowledge.

3 hours, 3 credits. Extensive reading of varied French to enable students to read and comprehend works of average difficulty: newspapers, journals, correspondence, and selections from contemporary literature. Note: FRE 205 is recommended to prospective graduate students in any field. FRE 205 does not satisfy the foreign language requirement.

FRE 206: Business French.

3 hours, 3 credits. Reading and writing practice for up-to-date business communication in banking, international law, trade, etc. PREREQ: FRE 201 (or equivalent).

FRE 207: Intermediate French Conversation.

3 hours, 3 credits (closed to native speakers). Emphasis is on oral fluency. Intended to provide students with the means to converse easily in French. PREREQ: FRE 102 or Departmental permission. Note: FRE 207 may be taken concurrently with FRE 201 or 202.

FRE 245: Modern France.

3 hours, 3 credits. Discussion of the forces and events that have been characteristic of the lifestyles, popular culture, and ideals of France since World War II. Newspapers, films, and other contemporary sources will serve as the documentation for this course. PREREQ: FRE 201 (or equivalent) or Departmental permission.

FRE 265: Intermediate Studies in Literature.

3 hours, 3 credits (maximum 6 credits). (Primarily for students not in the FRE major.) Readings in contemporary French literature. Topics may vary from semester to semester. PREREQ: FRE 202 or Departmental permission.

FRE 281: Tutorial.

3 hours, 3 credits. Language work as directed by a faculty member to meet the student's specific needs (aspects of French grammar, social work, health professions, etc.). PREREQ: Departmental permission.

FRE 285: Individualized Intermediate Foreign Language Study.

1 hour, 1 credit. Independent study in French generally linked to a course in another field. PREREQ: FRE 201 or Departmental permission. *Note: May be repeated up to 4 times.*

FRE 300: Introduction to French Literature and Literary Criticism.

3 hours, 3 credits. (Required of FRE majors as PREREQ to all advanced FRE language and literature courses.) Selected readings in prose, poetry, and theatre from different periods. Methods and vocabulary of literary research and criticism. Practice in writing critical papers. Individual conferences. PREREQ: FRE 202 or Departmental permission.

FRE 301: French Literature from the Middle Ages through the Seventeenth Century.

3 hours, 3 credits. Selected masterpieces of French literature from the Medieval, Renaissance, and Classical periods, studied within an historical perspective. PREREQ: FRE 202 or Departmental permission. Note: Either FRE 301 or 302 is required of all FRE

FRE 302: French Literature from the Eighteenth Century to the Present.

3 hours, 3 credits. Selected masterpieces of French literature from the eighteenth century to the present day, studied within an historical perspective. PREREQ: FRE 202 or Departmental permission. Note: Either FRE 301 or 302 is required of all FRE majors.

FRE 303: Advanced French Grammar.

3 hours, 3 credits. Advanced principles of grammar and techniques of composition. PREREQ: FRE 202 or Departmental permission. Note: FRE 303 is required of all FRE majors and is a PREREQ for FRE 305, 306, and 307.

FRE 305: Advanced French Conversation.

3 hours, 3 credits (closed to native speakers). Intensive practice in conversation and listening comprehension through nonliterary topics of current interest. Frequent oral reports to be discussed in class by other students. PREREQ: FRE 303 or Departmental permission.

FRE 306: Advanced Composition.

3 hours, 3 credits. Intensive practice designed to improve and develop the ability to write clear and accurate expository prose in French. PREREQ: FRE 303 or Departmental permission.

FRE 307: Advanced Translation.

3 hours, 3 credits. Translation of contemporary standard English into French (and vice versa). Emphasis on problems and techniques of translation. PREREQ: FRE 303 or Departmental permission.

FRE 308: Theory and Practice of French Phonetics.

3 hours, 3 credits. Descriptive study of the French sound system. Practice in phonetic perception, transcription, and articulation will include individual recordings and listening exercises. PREREQ: FRE 202 or Departmental permission.

FRE 310: Comparative Grammar.

3 hours, 3 credits. Comparative analysis of English and French morphology, basic morphology, and syntax. PREREQ: FRE 201 or Departmental permission.

NOTE: All 300-level FRE courses numbered 320 and above carry the following PREREQ: FRE 300. Additional prerequisites are listed.

FRE 320: Francophone Literature.

3 hours, 3 credits. Study of selected literature in French from Africa, North America, the Caribbean, etc. Themes and topics such as colonization and independence, la négritude, la francophonie.

FRE 321: French Literature of the Middle Ages.

3 hours, 3 credits. Readings may include La Chanson de Roland, Le Roman de la Rose, Villon, and Marie de France.

FRE 322: Renaissance and Pre-Classical French Literature.

3 hours, 3 credits. Readings of sixteenth-century authors, such as Montaigne, Rabelais, and the Pléiade poets.

FRE 323: Seventeenth-Century French Literature I: Theatre.

3 hours, 3 credits. Study of the classical French comedy and tragedy; readings in dramatists such as Corneille, Racine, and Molière.

FRE 324: Seventeenth-Century French Literature II: Fiction, Essays, and Poetry.

3 hours, 3 credits. Readings of authors such as Descartes, Pascal, La Rochefoucauld, Mme de Sévigné, La Fontaine, and Mme de Lafayette.

FRE 325: Eighteenth-Century French Literature: The Age of the Enlightenment.

3 hours, 3 credits. Readings of authors such as Montesquieu, Voltaire, Diderot, Rousseau, Laclos, and Beaumarchais.

FRE 327: Nineteenth-Century French Literature I: Romanticism and Realism—The Novel.

3 hours, 3 credits. Readings of authors such as Chateaubriand, Balzac, Gautier, Stendhal, Nerval, Flaubert, and Zola.

FRE 328: Nineteenth-Century French Literature II: Romanticism and Realism—Poetry and Drama.

3 hours, 3 credits. Readings of authors such as Lamartine, Hugo, Musset, Baudelaire, Rimbaud, and Verlaine.

FRE 341: Twentieth-Century French Literature I: Proust L'Entre-deuxguerres Literature.

3 hours, 3 credits. Readings of authors such as Proust, Gide, Colette, Malraux, Cocteau, and Céline.

FRE 342: Twentieth-Century French Literature II: Existentialism and the Nouveau Roman.

3 hours, 3 credits. Readings of authors such as Sartre, Camus, Queneau, Genet, Beckett, Sarraute, Simon, Duras, and Robbe-Grillet.

FRE 344: Modern French Poetry.

3 hours, 3 credits. Readings of poets such as Apollinaire, Saint-John Perse, Ponge, Michaux, Césaire, Bonnefoy, and Eluard.

FRE 352: Special Topics in French Literature.

3 hours, 3 credits (maximum 6 credits). Study of various themes or aspects of French literature. (Topics vary from semester to semester.)

FRE 357: Special Topics in French Language.

3 hours, 3 credits (maximum 6 credits). Study of selected topics dealing with language and literature, such as elements of style, rhetorical structure, levels of discourse. Topics will vary from semester to semester. PREREQ: FRE 202.

FRE 358: French Civilization and Culture.

3 hours, 3 credits (maximum 6 credits). Topics in the study of the evolution of scientific, philosophical, artistic, and literary movements and their interaction.

FRE 370. Internship.

6 hours, 3 credits. Supervised field placements in translation agencies, tutoring centers, and other environments needing foreign language expertise. PREREQ: Departmental permission.

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FRE 381: Tutorial.

3 hours, 3 credits. Opportunity for a student to pursue individual research and reading on a specific topic under close faculty supervision. PREREQ: Departmental permission.

FRE 385: Individualized Advanced Foreign Language Study.

1 hour, 1 credit. Independent study in French generally linked to a course in another field. PREREQ: FRE 202, or two semesters of FRE 285, or Departmental permission. Note: May be repeated up to 4 times.

FRE 450: Advanced Seminar.

3 hours, 3 credits (maximum 9 credits). Study in depth of special topics of French or francophonic literature, which will vary from semester to semester.

FRE 481: Honors Course in French.

One semester, 3 credits. PREREQ: A 3.5 index in the FRE major and Departmental permission prior to registration.

Courses in German Language, Literature, and Culture

*Courses preceded by an asterisk are not expected to be offered in 2013-

Elementary and Intermediate German Language Courses

*GER 100: Elementary German—Intensive Course.

6 hours, 6 credits. (For beginners.) PREREQ: Instructor's or Departmental permission.

GER 101: Elementary German I.

4 hours, 4 credits. (For beginners.) Elements of grammar, reading of simple texts, and practice in speaking. Audiolingual work in the Language Laboratory. Note: GER 101 is not credited without 102.

GER 102: Elementary German II.

5 hours, 5 credits. Elements of grammar, reading of simple texts, and practice in speaking and writing. Audiolingual work in the Language Laboratory. PREREQ: Either GER 101 or 103 or one year of high school German (or equivalent).

*GER 103: Elementary German I.

3 hours, 3 credits. (For beginners, evening only.) Note: GER 103 is not credited without 104 or GER 102 (day session).

*GER 104: Elementary German II.

3 hours, 3 credits. (Evening only.) PREREQ: Either *GER 103 or one year of high school German (or equivalent).

*GER 107: German Reading Course.

3 hours, 3 credits.

*GER 108: Elementary German for General Reading Purposes

3 hours, 3 credits. PREREQ: Either *GER 107 (or equivalent) or GER adviser's permission.

GER 111: Elementary German I.

4 hours, 3 credits. (For beginners.) Elements of grammar, reading of simple texts, and practice in speaking. Audio-lingual work in the Language Laboratory. Note: GER 111 is not credited without 112.

GER 112: Elementary German II.

4 hours, 3 credits. Elements of grammar, reading of simple texts, and practice in speaking and writing. Audio-lingual work in the Language Laboratory. PREREQ: Either GER 101, 103, 111, or one year of high school German (or equivalent).

GER 201: Intermediate German.

3 hours, 3 credits. Reading and discussion of prose and poetry, grammar review, and practice in speaking and writing. PREREQ: *GER 100, 102, or 104, or two years of high school German (or equivalent).

GER 202: Introduction to German Literature.

3 hours, 3 credits. PREREQ: Either GER 201 or three years of high school German (or equivalent).

*GER 205: German Literature on Records.

1 hour, 1 credit. PREREQ: GER 102 (or equivalent).

*GER 207: Reading Course in Expository Prose.

1 hour, 1 credit. PREREQ: Either GER 102 (or 104) or *GER 108 (or equivalent).

*GER 209: Intermediate German Conversation.

2 hours, 2 credits. PREREQ: GER 102 (or equivalent).

GER 281: Individual Study in Germanic Languages.

One semester, 3 credits (maximum 6 credits). Language work under the direction of a faculty member to meet the student's particular requirements. PREREQ: GER adviser's permission.

GER 285: Individualized Intermediate Foreign Language Study.

1 hour, 1 credit. Independent study in German generally linked to a course in another field. PREREQ: GER 201 or Departmental permission. Note: May be repeated up to 4 times.

Courses in German Literature and Culture (Conducted in German)

*Courses preceded by an asterisk are not expected to be offered in 2013-2015.

*GER 301: German Literature I.

3 hours, 3 credits. PREREQ: Either GER 202 or four years of high school German (or equivalent).

*GER 302: German Literature II.

3 hours, 3 credits. PREREQ: *GER 301 (or equivalent).

*GER 307: Translation from German into English.

3 hours, 3 credits. PREREQ: Either GER 202 and 207 (or equivalent) or adviser's permission.

*GER 308: Advanced German Composition.

3 hours, 3 credits (maximum 6 credits). PREREQ: GER 202 (or equivalent).

*GER 309: Advanced German Conversation.

3 hours, 3 credits (maximum 6 credits). PREREQ: Either GER 202

GER 310: Comparative Grammar.

3 hours, 3 credits. Comparative analysis of English and German morphology, basic phonology, and syntax. PREREQ: GER 201 or Departmental permission.

*GER 315: German Civilization.

3 hours, 3 credits. (Recommended for students planning to teach German.) PREREQ: *GER 301 (or equivalent).

*GER 321: Survey of German Literature.

3 hours, 3 credits. PREREQ: *GER 301 (or equivalent).

*GER 323: German Lyric Poetry.

3 hours, 3 credits. PREREQ: *GER 301 (or equivalent).

*GER 325: German Prose of the Nineteenth Century.

3 hours, 3 credits. PREREQ: *GER 301 (or equivalent).

*GER 326: German Prose of the Twentieth Century.

3 hours, 3 credits. PREREQ: *GER 301 (or equivalent).

*GER 327: German Drama of the Nineteenth Century.

3 hours, 3 credits. PREREQ: *GER 301 (or equivalent).

*GER 328: German Drama of the Twentieth Century.

3 hours, 3 credits. PREREQ: *GER 301 (or equivalent).

*GER 333: Goethe.

3 hours, 3 credits. PREREQ: *GER 301 (or equivalent).

*GER 334: Goethe's Faust.

3 hours, 3 credits. PREREQ: Either *GER 301 (or equivalent) or GER adviser's permission.

*GER 350: Proseminar.

2 hours, 3 credits (maximum 9 credits). PREREQ: *GER 301 (or equivalent).

GER 351: Seminar.

2 hours, 3 credits (maximum 9 credits). Investigation of a significant theme and its treatment in German literature. (Topic to be announced.) PREREQ: German adviser's permission.

*GER 352: German Writers.

1 hour, 1 credit (maximum 3 credits). PREREQ: *GER 301 (or equivalent).

*GER 355: Aspects of German Culture.

3 hours, 3 credits (maximum 9 credits). PREREQ: Either GER 202 or GER adviser's permission.

GER 366: German Films (in English).

3 hours, 3 credits. Recent German movies by Kautner, Wicki, Schlöndorff, Fassbinder, and other directors. Analysis of plots and characters against the background of twentieth-century Germany.

GER 381: Tutorial in German.

One semester, 3 credits (may be repeated). Individual study in advanced German under faculty direction. PREREQ: GER adviser's permission.

GER 385: Individualized Advanced Foreign Language Study.

1 hour, 1 credit. Independent study in German generally linked to a course in another field. PREREQ: GER 202 or two semesters of GER 285 or Departmental permission. Note: May be repeated up to four times.

GER 481: Tutorial.

One semester, 3 credits (maximum 6 credits). Independent studies in an area or aspect of German literatures in which no formal coursework has been done. PREREQ: GER adviser's permission.

GER 485: Special Studies.

One semester, 3 credits (maximum 6 credits). Individual study and independent research in German literatures in consultation with a staff member. A paper is required. PREREQ: GER adviser's permission.

GER 491: Honors Project.

One semester, 3 credits (maximum 6 credits). Individual study and independent research in consultation with a staff member. An essay is required. PREREQ: GER adviser's permission.

Courses in Greek

*Courses preceded by an asterisk are not expected to be offered in 2013-2015.

GRK 101: Introduction to Ancient Greek I.

4 hours, 4 credits. GRK 101 and 102 constitute a two-semester sequential unit of instruction designed for students who have had no previous training in Greek. The objective of this sequence is to train the student to read graded passages of Greek literature chosen from ancient authors. Note: GRK 101 will not be credited without 102.

GRK 102: Introduction to Ancient Greek II.

5 hours, 5 credits. Concludes the study of syntax and vocabulary started in GRK 101 and begins the reading of continuous Greek texts. PREREQ: GRK 101.

Note: All 200-level GRK courses (except for GRK 229) carry the following PREREQ: GRK 101-102 (or the equivalent).

*GRK 227: Plato: The Trial of Socrates.

3 hours, 3 credits.

*GRK 228: Homer: The Iliad.

3 hours, 3 credits.

*GRK 229: New Testament Greek.

2 hours, 2 credits.

*GRK 230: Greek Prose Authors.

3 hours, 3 credits.

GRK 281: Intermediate Greek Tutorial.

One semester, 3 credits (maximum 6 credits). Individual readings in Greek prose and poetry under faculty direction. PREREQ: GRK adviser's permission.

GRK 285: Individualized Intermediate Foreign Language Study.

1 hour, 1 credit. Independent study in Greek, generally linked to a course in another field. PREREQ: GRK 102 or Departmental permission. Note: May be repeated up to four times.

*GRK 301: Homer's Odyssey.

3 hours, 3 credits.

*GRK 302: The Homeric Hymns and Hesiodic Poetry.

3 hours, 3 credits.

*GRK 303: Greek Lyric Poetry.

3 hours, 3 credits.

*GRK 304: Aeschylus.

3 hours, 3 credits.

*GRK 305: Sophocles.

3 hours, 3 credits.

*GRK 306: Euripides.

3 hours, 3 credits.

*GRK 307: Aristophanes.

3 hours, 3 credits.

*GRK 308: Thucydides.

3 hours, 3 credits.

*GRK 309: Xenophon.

3 hours, 3 credits.

*GRK 310: The Attic Orators.

3 hours, 3 credits.

*GRK 314: Plato.

3 hours, 3 credits.

GRK 315: Comparative Grammar.

3 hours, 3 credits. Comparative analysis of English and Greek morphology, basic phonology, and syntax. PREREQ: GRK 281 or Departmental permission.

GRK 381: Tutorial.

One semester, 3 credits (may be repeated). Individual study of a special field or author. PREREQ: Departmental permission.

GRK 385: Individualized Advanced Foreign Language Study.

1 hour, 1 credit. Independent study in Greek generally linked to a course in another field. PREREQ: Two semesters of GRK 285 or Departmental permission. Note: May be repeated up to four times.

*GRK 400: Greek Prose Composition and Stylistics.

2 hours, 2 credits.

GRK 491: Honors Research.

One semester, 3 credits (maximum 6 credits). Individual study of a special field or author. PREREQ: Departmental permission.

Courses in Hebraic Studies

*Courses preceded by an asterisk are not expected to be offered in 2013-2015.

Hebrew Language

HEB 101: Elementary Hebrew I.

4 hours, 4 credits. Fundamentals of pronunciation, reading, and grammar. Practice in conversation and reading of simple texts. *Note: HEB 101 will not be credited without 102.*

HEB 102: Elementary Hebrew II.

5 hours, 5 credits. Continuation of the work in HEB 101. PREREQ: HEB 101.

HEB 111: Elementary Hebrew I.

4 hours, 3 credits. (For beginners.) Fundamentals of pronunciation, reading, and grammar. Practice in conversation

and reading of simple texts. NOTE: HEB 111 is not credited without 112.

HEB 112: Elementary Hebrew II.

4 hours, 3 credits. Continuation of the work in HEB 111. PREREO: HEB 111.

HEB (MES) 202: Advanced Hebrew.

3 hours, 3 credits. Sections from ancient, medieval, and modern texts; intensive review of grammar; and practice in oral and written composition. PREREQ: Either HEB 102, three years of high school Hebrew, or equivalent.

HEB 285: Individualized Intermediate Foreign Language Study.

1 hour, 1 credit. Independent study in Hebrew generally linked to a course in another field. PREREQ: HEB 102 or Departmental permission. *Note: May be repeated up to four times.*

*HEB 300: Hebrew Conversation I.

2 hours, 2 credits. PREREQ: Either HEB 202, or four years of high school Hebrew, or equivalent.

*HEB 301: Hebrew Conversation II.

2 hours, 2 credits. PREREQ: *HEB 300 (or equivalent).

*HEB 341: Hebrew Grammar and Composition.

3 hours, 3 credits. PREREQ: HEB 215, 216, or 217 (or equivalent).

HEB 385: Individualized Advanced Foreign Language Study.

1 hour, 1 credit. Independent study in Hebrew generally linked to a course in another field. PREREQ: HEB 202, or two semesters of HEB 285, or Departmental permission. Note: May be repeated up to four times.

Hebrew Literature

HEB 215: Biblical Literature: Pentateuch.

3 hours, 3 credits. Study of the Pentateuch, with a Hebrew commentary. PREREQ: HEB 202 (or equivalent).

*HEB 216: Biblical Literature: Historical Books.

3 hours, 3 credits. PREREQ: HEB 202 (or equivalent).

*HEB 217: The Modern Hebrew Short Story.

3 hours, 3 credits. PREREQ: HEB 202 (or equivalent).

HEB 281: Intermediate Hebrew Tutorial.

One semester, 3 credits (maximum 6 credits). Individual readings in prose and poetry, grammar review, oral practice, and written composition under faculty direction. PREREQ: HEB adviser's permission.

Note: All HEB courses numbered 317 through 331 carry the following PREREQ: Either HEB 215, 216, or 217 (or the equivalent).

*HEB 317: Biblical Literature: Prophetic Books.

3 hours, 3 credits.

*HEB 318: Biblical Literature: Hagiographa.

3 hours, 3 credits.

*HEB 321: Talmudic Literature.

3 hours, 3 credits.

*HEB 322: Medieval Literature.

3 hours, 3 credits.

*HEB 323: Poetry of the Modern Hebrew Renaissance Period. 3 hours, 3 credits.

*HEB 324: The Modern Hebrew Essay.

3 hours, 3 credits.

*HEB 325: History of Modern Hebrew Literature.

3 hours, 3 credits.

HEB (MES) 327: The Modern Hebrew Novel.

3 hours, 3 credits. Intensive study of a major novel of Agnon, Barash, Burla, or Hazaz, with collateral readings in other Hebrew

*HEB 328: Contemporary Hebrew Prose.

3 hours, 3 credits.

*HEB 331: Medieval Hebrew Philosophic Texts.

3 hours, 3 credits.

HEB 381: Tutorial in Hebrew.

One semester, 3 credits (may be repeated). Individual study in advanced Hebrew under faculty direction. PREREQ: HEB adviser's permission.

*HEB 389: Seminar.

2 hours, 2 credits (maximum 4 credits). PREREQ: Permission of the faculty member in charge of HEB/HCU.

HEB 481: Honors Project.

One semester, 3 credits (maximum 6 credits). Individual study and independent research on Hebrew literature, in consultation with a Hebrew-teaching faculty member. An honors essay is required. PREREQ: Permission of the faculty member in charge of HEB/HCU.

Courses in Irish

IRI 103: Elementary Irish I.

3 hours, 3 credits. (For students with no prior knowledge of Irish.) Study of the pronunciation and elements of Irish grammar, reading of simple texts, and oral practice.

IRI 104: Elementary Irish II.

3 hours, 3 credits. Study of the pronunciation and elements of Irish grammar, reading of simple texts, and oral practice. PREREQ: IRI 103.

IRI 105: Elementary Irish III.

3 hours, 3 credits. Study of the pronunciation and elements of Irish grammar, reading of simple texts, and oral practice. PREREQ: IRI 104.

IRI 106 Elementary Irish IV.

3 hours, 3 credits. Elements of Irish grammar and pronunciation; reading of simple texts; and oral practice. PREREQ: IRI 105.

IRI 111: Elementary Irish I.

4 hours, 3 credits. (For students with no prior knowledge of Irish.) Study of the pronunciation and elements of Irish grammar, reading of simple texts, and oral practice.

IRI 112: Elementary Irish II.

4 hours, 3 credits. Study of the pronunciation and elements of Irish grammar, reading of simple texts, and oral practice. PREREQ: IRI 111.

IRI 201: Intermediate Irish Grammar.

3 hours, 3 credits. Grammar review, extensive reading, composition, and oral practice. PREREQ: IRI 105 or Departmental permission.

IRI 202: Intermediate Irish Reading and Composition.

3 hours, 3 credits. Grammar review, reading, composition, and practice conversation. PREREQ: IRI 201 or Departmental permission.

IRI 205: Irish for Reading Knowledge.

3 hours, 3 credits. Reading in various Irish texts, including newspapers, journals, correspondence, and contemporary literature, to enable students to read texts of average difficulty. Particularly suited to prospective graduate students planning to sit for a reading-comprehension exam in Irish. The course does not satisfy the foreign-language requirement for undergraduates.

IRI 207: Conversational Irish.

3 hours, 3 credits. Designed to develop fluency in the conversational use of the Irish language. Topics from current events will serve as a basis for discussions and oral reports. PREREQ: IRI 105 with a grade of B, or Department permission.

IRI 230: Irish-Language Cinema.

3 hours, 3 credits. Major Irish-language filmmakers and their themes, styles, and social significance through the viewing and discussion of selected major films (with English subtitles). Complementary readings of selected works of Irish-language literature (in English translation) that have influenced the aesthetics and evolution of Irish-language films.

IRI 281: Tutorial in Irish Language and Literature.

3 hours, 3 credits. Individual research and reading on a specific topic under faculty supervision. PREREQ: Departmental permission.

IRI 285: Individualized Intermediate Foreign Language Study.

1 hour, 1 credit. Independent study in Irish generally linked to a course in another field. PREREQ: IRI 105 or Departmental permission. *Note: May be repeated up to four times.*

IRI 300: Introduction to Literary Studies.

3 hours, 3 credits. Literary genres and principles of literary analysis through readings of representative texts of Irish language literature. PREREQ: IRI 202 or Departmental permission.

IRI 303. Advanced Grammar and Composition.

3 hours, 3 credits. (Required of IRI majors.) Study of techniques of presentation and development of ideas. Emphasis on creative writing. PREREQ: IRI 202 or Departmental permission.

IRI 305: Advanced Conversation.

3 hours, 3 credits. Intensive oral practice to increase and improve the fluency of students. Topics of conversation based on subjects of literature, civilization, and problems of interest to the Irish community. PREREQ: IRI 207 or Departmental permission.

IRI 3100: Comparative Grammar.

3 hours, 3 credits. Comparative analysis of English and Irish morphology, basic phonology, and syntax. PREREQ: IRI 201 or Departmental permission.

IRI 320: Introduction to the Irish Short Story.

3 hours, 3 credits. Survey of the short story genre in the Irish language, extensive reading, and composition. PREREQ: IRI 202 or Departmental permission.

IRI 323: Irish-Language Poetry of the Twentieth Century.

3 hours, 3 credits. Readings of Louis de Paor, Nuala Ní Dhomhnaill, Joe Steve Ó Neachtain, and Biddy Jenkinson, among other poets. PREREQ: Departmental permission.

IRI 340: The Contemporary Irish-Language Novel.

3 hours, 3 credits. Irish-language fiction from the late nineteenth century to the present.

IRI 341: Irish-Language Theatre.

3 hours, 3 credits. Readings of Dubhghlas de hÍde, Máiréad Ní Ghráda, agus Antoine Ó Flatharta, among other dramatists. PREREQ: Departmenalt permission.

IRI 350: Folklore in the Irish Language.

3 hours, 3 credits. Oral and written accounts of folklore in Irishspeaking districts of Ireland. Analysis of materials collected by Douglas Hyde, the Gaelic League, the Irish Folklore Commission, and the Department of Education. PREREQ: IRI 202 or Departmental permission.

IRI 357: Special Topics in Irish-Language Literature.

3 hours, 3 credits (maximum 6 credits). Irish-language literature of particular times, places, and themes, with attention to elements of style, rhetorical structures, and levels of discourse. PREREQ: IRI 202 or Departmental permission.

IRI 381: Tutorial in Irish Language and Literature.

3 hours, 3 credits. Individual research and reading on a specific topic under faculty supervision. PREREQ: Department permission.

IRI 385: Individualized Advanced Foreign Language Study.

1 hour, 1 credit. Independent study in Irish generally linked to a course in another field. PREREQ: Two semesters of IRI 285 or Departmental permission. *Note: May be repeated up to four times.*

IRI 447: Máirtín Ó Cadhain's Cré na Cille.

3 hours, 3 credits. An in-depth study of the Irish-language masterpiece, Cré na Cille. PREREQ: Two 300-level IRI literature courses.

Courses in Italian

*Courses preceded by an asterisk are not expected to be offered in 2013-2015.

Fundamental Italian Language Skills

ITA 101: Elementary Italian I.

4 hours, 4 credits. (For beginners.) Elements of grammar, reading of simple texts, and practice in speaking. Audiolingual work in the Language Laboratory. Note: ITA 101 is not credited without 102.

ITA 102: Elementary Italian II.

5 hours, 5 credits. Elements of grammar, reading of ordinary Italian prose, and training in oral and written expression. Audiolingual work in the Language Laboratory. PREREQ: ITA 101. Note: Completion of ITA 102 satisfies the foreign language requirement. Students planning future work in Italian language or literature must take ITA 201 and/or 202.

ITA 105: Elementary Italian I.

3 hours, 3 credits. (Evening and Saturday only.) Study of pronunciation and the elements of Italian grammar, reading of simple texts, and oral practice. Note: ITA 105 will not be credited without 106.

ITA 106: Elementary Italian II.

3 hours, 3 credits. (Evening and Saturday only.) Study of pronunciation and the elements of Italian grammar, reading of simple modern texts, and oral practice. PREREQ: ITA 105. Note: ITA 106 is not credited without ITA 108.

ITA 108: Elementary Italian III.

3 hours, 3 credits. (Evening and Saturday only.) Study of pronunciation and the elements of Italian grammar, reading of simple modern texts, and oral practice. PREREQ: ITA 106. Note: ITA 108 is not open to students who have completed ITA 102. Completion of ITA 108 satisfies the foreign language requirement. Students planning future work in Italian language or literature must take ITA 201 and/or 202.

ITA 111: Elementary Italian I.

4 hours, 3 credits. (For beginners.) Elements of grammar, reading of simple texts, and practice in speaking. Audio-lingual work in the Language Laboratory. NOTE: ITA 111 is not credited without 112.

ITA 112: Elementary Italian II.

4 hours, 3 credits. Elements of grammar, reading of ordinary Italian prose, and training in oral and written exercises. Audiolingual work in the Language Laboratory. PREREQ: ITA 111. NOTE: Completion of ITA 112 satisfies the foreign language requirement. Students planning future work in Italian language or literature must take ITA 201 and/or 202.

ITA 201: Intermediate Italian Grammar.

3 hours, 3 credits. Grammar review, extensive readings, composition, and oral practice. PREREQ: ITA 102 or 108 or Departmental permission. Note: Students who receive a grade of B+ or better in ITA 102 or 108 may enroll in ITA 202. All others should enroll in ITA 201.

ITA 202: Intermediate Italian Reading and Composition.

3 hours, 3 credits. Grammar review, reading, composition, and practice conversation. PREREQ: ITA 201, 102, or 108, completed with a grade of B+ or better, or Departmental permission. Note: Students who receive a grade of B+ or better in ITA 102 or 108 may enroll in ITA 202. All others should enroll in ITA 201.

ITA 205: Italian for General Reading Purposes.

3 hours, 3 credits. (Closed to ITA majors.) Extensive reading of varied Italian texts of graded difficulty. This concentrated onesemester course is for students outside the ITA major who wish to gain the first elements of a general reading knowledge of the language. Discussions in English. Note: ITA 205 is designed particularly for prospective graduate students in any field.

ITA 207: Conversational Italian.

3 hours, 3 credits. Designed to develop fluency in the conversational use of Italian. Topics around current events to serve as a basis for discussion and oral reports. PREREQ: ITA 102 or 108 with a grade of B, or Departmental permission.

Italian Language, Literature, and Culture

ITA (IAS) 245: Italy Today.

3 hours, 3 credits. A panoramic view of contemporary Italy and an analysis of its role in industry, fashion, folklore, film making, and theatre, as seen through leading journals and other sources. PREREQ: ITA 201 or Departmental permission. Note: Designed for students not majoring in Italian.

ITA 265: Intermediate Studies in Italian.

3 hours, 3 credits (maximum 6 credits). (Closed to ITA majors.) PREREQ: ITA 202 (or equivalent).

ITA 281: Tutorial.

3 hours, 3 credits. Language work as directed by a faculty member to meet the student's specific needs (aspects of Italian grammar, social work, health professions, etc.). PREREQ: ITA 202 or Departmental permission.

ITA 285: Individualized Intermediate Foreign Language Study.

1 hour, 1 credit. Independent study in Italian generally linked to a course in another field. PREREQ: ITA 201 or Departmental permission. Note: May be repeated up to four times.

ITA 300: Introduction to Literary Studies.

3 hours, 3 credits. This course will introduce students to literary genres and principles of literary analysis through readings of representative texts of Italian literature. PREREQ: ITA 202 or Departmental permission.

ITA 303: Advanced Grammar and Composition.

3 hours, 3 credits. (Required of ITA majors.) Study of techniques of presentation and development of ideas. Emphasis on creative writing on a variety of literary and contemporary themes. PREREQ: ITA 202 or Departmental permission.

ITA 305: Advanced Conversation.

3 hours, 3 credits. Intensive oral practice to greatly increase and improve the fluency of students in the ITA concentration. Topics of conversation based on subjects of literature, civilization, and problems of interest to the Italian community. PREREQ: ITA 207 or Departmental permission.

ITA 307: Advanced Translation.

3 hours, 3 credits. Translation of contemporary standard English into Italian (and vice versa). Emphasis on problems and techniques of translation. PREREQ: ITA 202.

ITA 308: Theory and Practice of Italian Phonetics.

3 hours, 3 credits. Descriptive study of the Italian sound system. Practice in phonetic perception, transcription, and articulation will include individual recordings and listening exercises. PREREQ: ITA 202.

ITA 310: Comparative Grammar.

3 hours, 3 credits. Comparative analysis of English and Italian morphology, basic phonology, and syntax. PREREQ: ITA 201 or Departmental permission.

*ITA 314: Italian Civilization I.

3 hours, 3 credits. PREREQ: ITA 202 or Departmental permission.

*ITA 315: Italian Civilization II.

3 hours, 3 credits. PREREQ: ITA 202 or Departmental permission. Note: All ITA courses numbered 320 and above carry Departmental permission as a PREREQUISITE.

ITA 320: Italian Short Story from Its Origins to the Sixteenth

3 hours, 3 credits. The short story as a narrative form. Readings of texts from Boccaccio to Bandello.

ITA 322: Disguises and Revelations: The Italian Comedy as a

3 hours, 3 credits. The origin and development of the Italian comedy as a genre. Readings of texts from Machiavelli's Mandragola to Goldoni's La Locandiera.

ITA 326: Main Romantic and Post-Romantic Italian Novelists.

3 hours, 3 credits. Readings of texts from Manzoni's Ipromessi sposi to Verga's IMalavoglia.

ITA 327: Petrarca's Love Poetry.

3 hours, 3 credits. This course will examine the Petrarchan sonnet and its influence in Europe.

ITA 329: Renaissance Prose Writers.

3 hours, 3 credits. The study of Machiavelli, Guicciardini, and other representative prose writers.

ITA 330: Love as Escape in Renaissance Chivalric Poetry.

3 hours, 3 credits. Readings from Ariosto's Orlando furioso and Tasso's Gerusalemme liberata.

ITA 335: Italian Poetry of the Nineteenth Century.

3 hours, 3 credits. Study of the major Italian Romantic poets: Foscolo, Leopardi, and Manzoni.

ITA 337: Literature of the Seventeenth and Eighteenth Centuries, from the Baroque through the Enlightenment.

3 hours, 3 credits. An overview of the main literary and philosophical trends of the seventeenth and eighteenth centuries.

ITA 338: In Search of One's Identity: The Modern Italian

3 hours, 3 credits. A study of the modern Italian novel from 1900 to World War II, with readings from Svevo to Pirandello.

ITA 340: The Contemporary Italian Novel.

3 hours, 3 credits. A study of Italian fiction from World War II to the present, based on readings and discussions of works from Vittorini to Eco.

ITA 341: The Contemporary Italian Theatre.

3 hours, 3 credits. A study of major works from Pirandello and Betti through the experimental theatre of today.

ITA 343: Italian Poetry of the Twentieth Century.

3 hours, 3 credits. The "Decadents" (D'Annunzio, etc.), the "Twilight Poets" (Gozzano, etc.), and Futurism and the "Hermetic School" (Ungaretti, Montale, Quasimodo, etc.).

ITA 357: Special Topics in Italian Literature.

3 hours, 3 credits. (Maximum 6 credits.) Study of selected topics dealing with language and literature, such as elements of style, rhetorical structure, levels of discourse. Topics will vary from semester to semester. PREREQ: ITA 202.

ITA 370: Internship.

6 hours, 3 credits. Supervised field placements in translation agencies, tutoring centers, and other environments needing foreign language expertise. PREREQ: Departmental permission.

ITA 381: Tutorial.

3 hours, 3 credits. Opportunity for a student to pursue individual research and reading on a specific topic under close faculty supervision. PREREQ: Departmental permission.

ITA 385: Individualized Advanced Foreign Language Study.

1 hour, 1 credit. Independent study in Italian generally linked to a course in another field. PREREQ: ITA 202, or two semesters of ITA 285, or Departmental permission. Note: May be repeated up to four times.

ITA 447: Dante's Divina Commedia: Inferno.

3 hours, 3 credits. An in-depth study of Inferno. PREREQ: Two 300-level ITA literature courses.

ITA 448: Dante's Divina Commedia: Purgatorio and Paradiso.

3 hours, 3 credits. Study in depth of Purgatorio and Paradiso. PREREO: ITA 447 and two 300-level ITA literature courses.

*ITA 450: Advanced Seminar.

3 hours, 3 credits. PREREQ: ITA 303 and two 300-level ITA literature courses. Note: Qualified juniors may be admitted with ITA adviser's permission.

ITA 481: Honors Course in Italian.

One semester, 3 credits. Individual research under the direction of an Italian-teaching member of the Department. The student reports in weekly conferences to the research adviser and presents such papers as may be prescribed. PREREQ: Chair's permission.

Courses in Japanese Language and Literature

JAL 101: Elementary Japanese I.

4 hours, 4 credits. Elements of grammar, reading simple texts, practice in speaking, and audiolingual work in the Language Laboratory. Note: JAL 101 is not credited without 102.

JAL 102: Elementary Japanese II.

5 hours, 5 credits. Elements of grammar, reading simple texts, practice in speaking, and audiolingual work in the Language Laboratory. PREREQ: JAL 101 (or equivalent).

JAL 111: Elementary Japanese I.

4 hours, 3 credits. Elements of grammar, reading simple texts, practice in speaking, and audio-lingual work in the Language Laboratory. NOTE: JAL 111 is not credited without 112.

JAL 112: Elementary Japanese II.

4 hours, 3 credits. Elements of grammar, reading simple texts, practice in speaking, and audio-lingual work in the Language Laboratory. PREREQ: JAL 111 (or equivalent).

JAL 1170: Elementary Japanese: Intensive Course.

8 hours, 6 credits. Study of pronunciation and the elements of Japanese grammar, reading of simple texts, and oral practice. PREREQ: Placement by the Department. Note: JAL 1170 must be taken during two consecutive summer sessions and is not open to students who have completed any of the following courses: JAL 101, JAL 102, JAL 111, or JAL 112.

JAL 201: Intermediate Japanese I.

3 hours, 3 credits. Development of vocabulary, and practice in speaking, reading, and writing; study of Kanji (Chinese characters). PREREQ: JAL 102 (or equivalent).

JAL 202: Intermediate Japanese II.

3 hours, 3 credits. Emphasis on facilitating communication in speaking and writing; reading and further study of grammar and Kanji. PREREQ: JAL 201 (or equivalent).

JAL 285: Individualized Intermediate Foreign Language Study.

1 hour, 1 credit. Independent study in Japanese generally linked to a course in another field. PREREQ: JAL 201 or Departmental permission. Note: May be repeated up to four times.

JAL 301: Advanced Japanese I.

3 hours, 3 credits. Review and extension of grammar and syntax through the discussion of magazine and newspaper articles. Study of the appropriate use of kana and kanji. PREREQ: JAL 202 (or the equivalent).

JAL 302: Advanced Japanese II.

3 hours, 3 credits. Review and extension of grammar and syntax through the discussion of literary texts and contemporary articles. Continued study of the appropriate use of *kana* and *kanji*. PREREQ: JAL 301 (or the equivalent).

JAL 310: Comparative Grammar.

3 hours, 3 credits. Comparative analysis of English and Japanese morphology, basic phonology, and syntax. PREREQ: JAL 201 or Departmental permission.

JAL 350: Topics in Japanese Literature.

3 hours, 3 credits (maximum 6 credits). Selected topics in Japanese literature. (For specific topics each semester, consult the Department.) PREREQ: JAL 302 or permission of the instructor.

JAL 352: Special Topics in Japanese Literature.

3 hours, 3 credits. Study of various themes or aspects of Japanese literature. (Topics vary from semester to semester. PREREQ: JAL

JAL 385: Individualized Advanced Foreign Language Study.

1 hour, 1 credit. Independent study in Japanese generally linked to a course in another field. PREREO: JAL 202, or two semesters of JAL 285, or Departmental permission. Note: May be repeated up to four times.

Courses in Judaic Studies

*Courses preceded by an asterisk are not expected to be offered in 2013-

(No knowledge of Hebrew required.)

*HCU (YDH) 100: Elementary Yiddish —Intensive Course. 6 hours, 6 credits.

*HCU (YDH) 101: Elementary Yiddish I.

4 hours, 4 credits. Note: HCU (YDH) 101 is not credited without HCU (YDH) 102.

*HCU (YDH) 102: Elementary Yiddish II.

5 hours, 5 credits. PREREQ: HCU (YDH) 101 (or equivalent).

*HCU 111: The World of the Old Testament.

3 hours, 3 credits. PREREQ: COR 100 or 104.

*HCU (YDH) 201: Intermediate Yiddish I.

3 hours, 3 credits. PREREQ: HCU (YDH) 102 (or equivalent).

*HCU (YDH) 202: Intermediate Yiddish II.

3 hours, 3 credits. PREREQ: HCU (YDH) 102 (or equivalent).

*HCU (HIA) 302: Biblical History and Archaeology.

3 hours, 3 credits.

HCU (HIA) 304: Ancient Jewish History.

3 hours, 3 credits. Survey of the development of the Jewish people, including the origin of the Hebrews, the experience at Sinai, the United and Divided Commonwealth, Jewish law and thought, and contacts with the Greeks and Romans.

HCU (HIS) 307: The Course of Modern Jewish History.

3 hours, 3 credits. Survey of the Jewish people in the Western world during the past 300 years; their struggle for political and social equality, their search for new homes and new forms of life. The new Jewish centers, Messianic hopes, and the struggle for emancipation; the Enlightenment movement; religious, national, and social trends; migration of Jews to America; World Wars I and II; and the emergence of the State of Israel.

HCU (HIW) 308: The Jews of Tsarist and Soviet Russia.

3 hours, 3 credits. Russian Jewry from the nineteenth century until the present, with special emphasis on Jewish life in Russia since 1917; Tsarist oppression and ideological developments; World War I and the era of revolutions; interwar consolidation and socioeconomic construction; World War II and the Nazi occupation; the Stalin era; and de-Stalinization and recent developments in Soviet Jewry.

*HCU 318: The Jewish Tradition in Modern French and German Literature.

3 hours, 3 credits.

*HCU 319: Masterpieces of Ancient and Medieval Hebraic Literature in Translation.

3 hours, 3 credits.

*HCU 320: Readings in Modern Hebraic Literature in Translation.

3 hours, 3 credits.

*HCU 324: Job, Ecclesiastes, and the Human Predicament. 3 hours, 3 credits.

*HCU 325: The Hebrew Prophets.

3 hours, 3 credits. Study of the prophetic movement in ancient Israel from Mosaic to postexilic times. Attention to major motifs and contributions of the prophets to historical, ethical, and religious thought. Literary analysis of rhapsodic and oracular poetry in the Bible.

HCU (MES) 326: Cultural Foundations of Modern Israel.

3 hours, 3 credits. Study in depth of the ethos of modern Israel; extensive readings from related literary, philosophical, and publicistic writings that have shaped the new social and spiritual forms in the State of Israel.

HCU (HIA) 330: The Jews During the Middle Ages.

3 hours, 3 credits. Study of the expansion of the Diaspora during the Dark Ages; Babylonian Jewry, its institutions and history; Jews in Moslem Spain; the emergence of Franco-German Jewry; and Jewish life in medieval Christian Europe.

*HCU (HIA) 333: A History of the Jews in Spain and the Sephardic Dispersion.

3 hours, 3 credits. PREREQ: HCU 160, HCU (HIA) 330, HIA 112, or HIE 335, or permission of the faculty member in charge of HEB/HCU.

HCU (YDH) 340: Masterpieces of Yiddish Literature in Translation.

3 hours, 3 credits. Study of major works in Yiddish literature against the background of Jewish life in the cultural centers of Eastern Europe and the United States. Selections from Mendele Mocher Serforim, Peretz, Sholom Aleichem, and representatives of Soviet and American Yiddish literature will be covered.

HCU (HIS) 342: Anti-Semitism from Early Christianity to Hitler.

3 hours, 3 credits. The origins of the conflict between Christianity and Judaism, and the fate of the Jews in Medieval Europe. The gradual liberation and assimilation of the Jews of Western Europe, 1789-1870. The rise of modern racism and anti-Semitism in Europe, 1889-1939. Hitler, the Nazis, and the destruction of European Jewry during World War II. Anti-Semitism in the contemporary world. Social-psychological and cultural theories of anti-Semitism will be considered.

HCU (HIE) 343: The Holocaust.

3 hours, 3 credits. Study of the destruction of the Jews of Europe during World War II. Political anti-Semitism in modern Europe; the rise of Hitler and Nazism. The interwar period in Europe and the spread of anti-Semitism. World War II, ghetto, deportation, and liquidation. Problems of rescue and resistance. Selected readings from the literature of the Holocaust.

HCU (HIU) 344: American Jewish History.

3 hours, 3 credits. Survey of American Jewish history from Colonial times until the present: migrations, socioeconomic changes, and cultural developments. Special emphasis on the history of American Jewry since 1880. Jewish socialism, Zionism in America, Jewish reactions to anti-Semitism, and Judaic religious life.

HCU 350: Topics in Judaic Studies.

3 hours, 3 credits (maximum 6 credits). Selected topics in Judaic culture. (For specific topics and sections each semester, consult the Department.)

*HCU (PHI) 363: Introduction to Jewish Philosophy.

3 hours, 3 credits. PREREQ: Either satisfactory completion of 45 college credits or Departmental permission.

HCU 481: Honors Project.

One semester, 3 credits (maximum 6 credits). Individual study and independent research in Jewish history, culture, or thought, in consultation with an HCU/HEB faculty member. An honors essay is required. PREREQ: Permission of faculty member in charge of HEB/HCU.

HCU (YDH) 485: Yiddish Independent Studies.

One semester, 3 credits (maximum 9 credits). Individual study and independent research in Yiddish under the direction of a faculty member. PREREQ: Satisfactory completion of 12 credits in YDH or related fields and permission of the officer in charge of HEB/HCU.

Courses in Latin

*Courses preceded by an asterisk are not expected to be offered in 2013-2015.

LAT 101: Introduction to Latin I.

4 hours, 4 credits. LAT 101 and 102 constitute a two-semester sequential unit of instruction designed for the student who has had no previous training in Latin. The objective of this sequence is to train the student to read graded passages of Latin literature chosen from ancient authors. Note: LAT 101 will not be credited without 102.

LAT 102: Introduction to Latin II.

5 hours, 5 credits. Concludes the study of syntax and vocabulary started in LAT 101 and begins the reading of continuous Latin texts. PREREQ: LAT 101.

LAT 103: Introduction to Latin I.

3 hours, 3 credits. Note: LAT 103 will not be credited without 104.

LAT 104: Introduction to Latin II.

3 hours, 3 credits. PREREQ: LAT 103.

LAT 105: Introduction to Latin III.

3 hours, 3 credits. PREREQ: LAT 104.

*LAT 228: Prose and Poetry of the Roman Republic.

3 hours, 3 credits. PREREQ: LAT 101-102 or 201 or three years of high school Latin (or equivalent).

LAT 281: Intermediate Latin Tutorial.

One semester, 3 credits (maximum 6 credits.) Individual readings in Latin prose and poetry under faculty direction. PREREQ: LAT adviser's permission. Note: All 300-level LAT courses (except for LAT 381) carry the following PREREQ: Either LAT 228 or 281 or four years of high school Latin (or the equivalent).

LAT 285: Individualized Intermediate Foreign Language Study.

1 hour, 1 credit. Independent study in Latin generally linked to a course in another field. PREREQ: LAT 105 or Departmental permission. Note: May be repeated up to 4 times.

*LAT 301: Roman Comedy.

3 hours, 3 credits.

*LAT 302: The Works of Horace.

3 hours, 3 credits.

*LAT 303: Vergil's Eclogues and Georgics.

3 hours, 3 credits.

*LAT 304: The Works of Cicero.

3 hours, 3 credits.

*LAT 305: Lucretius's On the Nature of Things.

3 hours, 3 credits.

*LAT 306: Vergil's Aeneid.

3 hours, 3 credits.

*LAT 307: Personal Correspondence.

3 hours, 3 credits.

LAT 308: The Roman Novel.

3 hours, 3 credits.

*LA 310: Livy's History of Rome.

3 hours, 3 credits.

*LAT 314: The Works of Ovid.

3 hours, 3 credits.

*LAT 315: Catullus and the Elegiac Poets.

3 hours, 3 credits.

*LAT 316: Caesar's Commentaries.

3 hours, 3 credits.

*LAT 317: The Works of Tacitus.

3 hours, 3 credits.

*LAT 318: Roman Writers of the First and Second Centuries. A.D.

3 hours, 3 credits.

LAT 319: Comparative Grammar.

3 hours, 3 credits. Comparative analysis of English and Latin morphology, basic phonology, and syntax. PREREQ: LAT 281 or Departmental permission.

LAT 381: Tutorial.

One semester, 3 credits (may be repeated). Individual study of a special field or author. PREREQ: Departmental permission.

LAT 385: Individualized Advanced Foreign Language Study.

1 hour, 1 credit. Independent study in Latin generally linked to a course in another field. PREREQ: LAT 281, or two semesters of LAT 285, or Departmental permission. Note: May be repeated up to four times.

*LAT 400: Latin Prose Composition and Stylistics.

2 hours, 2 credits. (Strongly recommended for those planning graduate study in classics.)

LAT 491: Honors Research.

One semester, 3 credits (maximum 6 credits). Individual study of a special field or author. PREREQ: Departmental permission.

Courses in Portuguese

*Courses preceded by an asterisk are not expected to be offered in 2013-2015.

*POR 105: Elementary Portuguese I.

3 hours, 3 credits. Note: POR 105 will not be credited without 106.

*POR 106: Elementary Portuguese II.

3 hours, 3 credits. PREREQ: An earned grade of at least C in *POR

*POR 108: Elementary Portuguese III.

3 hours, 3 credits. PREREQ: *POR 106.

*POR 201: Intermediate Portuguese Reading and Composition.

3 hours, 3 credits. PREREQ: *POR 106 (or equivalent).

*POR 246: Portuguese Literature from the Eighteenth to the Twentieth Century.

3 hours, 3 credits. PREREQ: *POR 201 (or equivalent).

*POR (LAC) 247: Brazilian Literature from the Colonial Period to the Twentieth Century.

3 hours, 3 credits. PREREQ: *POR 201 (or equivalent).

POR 285: Individualized Intermediate Foreign Language Study.

1 hour, 1 credit. Independent study in Portuguese generally linked to a course in another field. PREREQ: *POR 201 or Departmental permission. *Note: May be repeated up to four times.*

POR 310: Comparative Grammar.

3 hours, 3 credits. Comparative analysis of English and Portuguese morphology, basic phonology, and syntax. PREREQ: *POR 201 or Departmental permission.

POR 385: Individualized Advanced Foreign Language Study.

1 hour, 1 credit. Independent study in Portuguese generally linked to a course in another field. PREREQ: Two semesters of POR 285 or Departmental permission. Note: May be repeated up to four times.

Courses in Slavic Languages and Literature

*Courses preceded by an asterisk are not expected to be offered in 2013-2015.

Elementary and Intermediate Russian and Other Slavic Language Courses

*RUS 100: Elementary Russian—Intensive Course.

4 hours, 4 credits. PREREQ: RUS adviser's permission.

RUS 101: Elementary Russian I.

5 hours, 5 credits. Elements of grammar, reading of simple texts, practice in speaking, and audiolingual work in the Language Laboratory. Note: RUS 101 is not credited without 102.

RUS 102: Elementary Russian II.

5 hours, 5 credits. Elements of grammar, reading of simple Russian prose, and audiolingual work in the Language Laboratory. PREREQ: RUS 101 (or equivalent).

*RUS 107: Elementary Russian for General Reading Purposes I. 4 hours, 4 credits.

*RUS 108: Elementary Russian for General Reading Purposes

4 hours, 4 credits. PREREQ: *RUS 107 (or equivalent).

*RUS 201: Intermediate Russian I.

3 hours, 3 credits. PREREQ: RUS 102 (or equivalent).

*RUS 202: Intermediate Russian II.

3 hours, 3 credits. PREREQ: RUS (or equivalent).

RUS 203: Elements of Contemporary Russian I.

3 hours, 3 credits. (For native speakers and students with native speaker competency.) The grammatical structure of today's standard Russian. Intensive practice in reading and composition. Note: RUS 203 will satisfy the College requirement in foreign language.

RUS (POL) 220: Soviet Life and Culture.

3 hours, 3 credits. An introduction to life in Russia and neighboring countries of the former Soviet Union that explores the politics, society, history, and culture of Eurasia today, through a multidisciplinary approach, using a variety of media and materials.

RUS 281: Intermediate Russian Tutorial.

One semester, 3 credits (maximum 6 credits). Individual reading of prose and poetry, grammar review, oral practice, and written composition under faculty direction. PREREQ: RUS adviser's permission.

SLA 281: Individual Study in Slavic Languages.

One semester, 3 credits (maximum 6 credits). Language work as directed by a faculty member to meet the student's particular requirements. PREREQ: RUS adviser's permission.

RUS 285: Individualized Intermediate Foreign Language Study.

1 hour, 1 credit. Independent study in Russian generally linked to a course in another field. PREREQ: *RUS 201 or Departmental permission. *Note: May be repeated up to four times.*

Russian Language, Literature, and Culture (Conducted in Russian)

*RUS 301: Advanced Russian I.

3 hours, 3 credits. PREREQ: *RUS 202 (or equivalent).

*RUS 302: Advanced Russian II.

3 hours, 3 credits. PREREQ: *RUS 301 (or equivalent).

*RUS 308: Advanced Russian Grammar and Composition.

PREREQ: RUS 302 (or equivalent).

*RUS 309: Advanced Russian Conversation.

3 hours, 3 credits (maximum 6 credits). PREREQ: *RUS 202 (or equivalent).

RUS 310: Comparative Grammar.

3 hours, 3 credits. Comparative analysis of English and Russian morphology, basic phonology, and syntax. PREREQ: *RUS 201 or Departmental permission.

*RUS 319: The Language of the Russian 'byt.'

2 hours, 2 credits. PREREQ: *RUS 202 (or equivalent).

*RUS 320: Masterpieces of Russian Literature I—From the Beginning to the 1870s.

1 hour, 1 credit. PREREQ: *RUS 201 (or equivalent). COREQ: *RUS 340.

*RUS 321: Masterpieces of Russian Literature II—From the 1870s to the Soviet Period.

1 hour, 1 credit. Offered concurrently with *RUS 341. PREREQ: *RUS 201 (or equivalent). COREQ: *RUS 341.

*RUS 322: Masterpieces of Russian Literature III—From 1917 to the Present.

1 hour, 1 credit. Offered concurrently with RUS 342. PREREQ: RUS 201 (or equivalent). COREQ: RUS 342. Note: All courses numbered RUS 330 through 350 carry the following PREREQ: RUS 301 (or equivalent).

*RUS 330: Russian Literature from the Middle Ages to the Eighteenth Century.

3 hours, 3 credits.

*RUS 333: The Russian Short Story.

3 hours, 3 credits.

*RUS 336: Russian Drama to Chekhov.

3 hours, 3 credits.

*RUS 337: Twentieth-Century Russian Drama.

3 hours, 3 credits.

*RUS 338: Classical Russian Poetry.

3 hours, 3 credits.

*RUS 339: Modern Russian Poetry.

3 hours, 3 credits.

*RUS 350: Colloquium in Russian Literature.

3 hours, 3 credits (maximum 6 credits). (Subject to be announced.)

RUS 381: Tutorial in Russian.

One semester, 3 credits (may be repeated). Individual study in advanced Russian under faculty direction. PREREQ: RUS adviser's permission.

RUS 385: Individualized Advanced Foreign Language Study.

1 hour, 1 credit. Independent study in Russian, generally linked to a course in another field. PREREQ: *RUS 202, or two semesters of RUS 285, or Departmental permission. Note: May be repeated up to four times.

RUS 491: Honors Course in Russian.

One semester, 3 credits (maximum 6 credits). A course offering qualified students the opportunity to study special topics within fields that may vary from semester to semester. Individual research under the direction of a faculty member. PREREQ: RUS adviser's permission.

SLA 481: Tutorial.

One semester, 1-3 credits (maximum 6 credits, except with special permission). Independent studies in an area and/or aspects of Russian literature in which no formal work has been done.

SLA 485: Special Studies in Slavic.

One semester, 3 credits (maximum 9 credits). Individual study and independent research in one or more of the Slavic literatures in consultation with a staff member. A project is required. PREREQ: RUS adviser's permission.

Courses in Yiddish Language and Literature

*Courses preceded by an asterisk are not expected to be offered in 2013-2015.

*YDH (HCU) 100: Elementary Yiddish—Intensive Course. 6 hours, 6 credits.

*YDH (HCU) 101: Elementary Yiddish I.

4 hours, 4 credits. Note: YDH (HCU) 101 is not credited without YDH (HCU) 102.

*YDH (HCU) 102: Elementary Yiddish II.

5 hours, 5 credits. PREREQ: YDH (HCU) 101 (or equivalent).

*YDH (HCU) 201: Intermediate Yiddish I.

3 hours, 3 credits. PREREQ: YDH (HCU) 102 (or equivalent).

*YDH (HCU) 202: Intermediate Yiddish II.

3 hours, 3 credits. PREREQ: YDH (HCU) 201 (or equivalent).

YDH 285: Individualized Intermediate Foreign Language Study.

1 hour, 1 credit. Independent study in Yiddish generally linked to a course in another field. PREREQ: YDH 201 or Departmental permission.

*YDH (HCU) 340: Masterpieces of Yiddish Literature in Translation.

3 hours, 3 credits.

YDH 385: Individualized Advanced Foreign Language Study.

1 hour, 1 credit. Independent study in Yiddish generally linked to a course in another field. PREREQ: YDH 202, or two semesters of YDH 285, or Departmental permission.

*YDH (HCU) 485: Yiddish Independent Studies.

One semester, 3 credits (maximum 9 credits). PREREQ: Departmental permission.

Courses in Spanish

Fundamental Spanish Language Skills

SPA 101: Elementary Spanish I.

4 hours, 4 credits. (For students with no prior knowledge of Spanish.) Elements of grammar, reading of simple texts, and practice in speaking. Audiolingual work in the Language Laboratory. Note: SPA 101 is not credited without 102.

SPA 102: Elementary Spanish II.

5 hours, 5 credits. Elements of grammar, reading of ordinary Spanish prose, and training in oral and written expression. Audiolingual work in the Language Laboratory. PREREQ: SPA

SPA 103: Elementary Spanish I.

4 hours, 4 credits. (For students with aural comprehension of Spanish.) An intensive beginning course, with emphasis on basic elements of grammar, vocabulary, reading, and conversation. Note: Placement by Departmental examination. SPA 103 and 104 satisfy the College's requirement in foreign language.

SPA 104: Elementary Spanish II.

5 hours, 5 credits. (For students with aural comprehension of Spanish.) A beginning course, with emphasis on elements of grammatical structures and practice in reading, writing, and oral exposition. PREREQ: SPA 103 or placement by Departmental examination. Note: SPA 103 and 104 satisfy the College's requirement in foreign language.

SPA 105: Elementary Spanish I.

3 hours, 3 credits. (For students with no prior knowledge of Spanish.) Study of pronunciation and the elements of Spanish grammar, reading of simple texts, and oral practice. Note: SPA 105 is not credited without 106.

SPA 106: Elementary Spanish II.

3 hours, 3 credits. Study of pronunciation and the elements of Spanish grammar, reading of simple texts, and oral practice. PREREQ: SPA 105.

SPA 107: Elementary Spanish: Intensive Course.

90 hours, 6 credits. (Closed to native speakers.) Study of pronunciation and the elements of Spanish grammar, reading of simple texts, and oral practice. PREREQ: Placement by the Department. Note: SPA 107 is not open to students who have completed either SPA 101-102 or 105-106.

SPA 108: Elementary Spanish III.

3 hours, 3 credits. Study of pronunciation and the elements of Spanish grammar, reading of simple texts, and oral practice. PREREQ: SPA 106. Note: SPA 108 is not open to students who have completed SPA 102.

SPA 111: Elementary Spanish I.

4 hours, 3 credits. (For students with no prior knowledge of Spanish.) Elements of grammar, reading of simple texts, and practice in speaking. Audio-lingual work in the Language Laboratory. NOTE: SPA 111 is not credited without 112.

SPA 112: Elementary Spanish II.

4 hours, 3 credits. Elements of grammar, reading of ordinary Spanish prose, and training in oral and written expression. Audiolingual work in the Language Laboratory. PREREQ: SPA 111.

SPA 113: Elementary Spanish for Heritage Speakers I.

4 hours, 3 credits. (For students with aural comprehension of Spanish.) An intensive beginning course, with emphasis on basic elements of grammar, vocabulary, reading, and conversation. NOTE: Placement by Departmental examination.

SPA 114: Elementary Spanish for Heritage Speakers II.

4 hours, 3 credits. (For students with aural comprehension of Spanish.) A beginning course, with emphasis on elements of grammatical structures and practice in reading, writing, and oral exposition. PREREQ: SPA 113 or placement by Departmental examination.

SPA 201: Intermediate Spanish Grammar.

3 hours, 3 credits. (Closed to native speakers.) Grammar review, extensive reading, composition, and oral practice. PREREQ: SPA 102 or placement exam.

SPA 202: Intermediate Spanish Reading.

3 hours, 3 credits. (Closed to native speakers.) Problems in oral and written expression through reading and discussion of contemporary Spanish and Spanish-American texts. Discussion in Spanish. PREREQ: SPA 201 or placement by Department adviser.

SPA 203: Elements of Contemporary Spanish I.

3 hours, 3 credits. (For native or near-native speakers.) The grammatical structure of today's standard Spanish. Intensive practice in reading, speaking, and elementary composition. PREREQ: SPA adviser's written permission. Note: SPA 203 will satisfy the College's requirement in a foreign language.

SPA 204: Elements of Contemporary Spanish II.

3 hours, 3 credits. (For native or near-native speakers.) Sources of vocabulary, word formation, and problems in oral and written expression. For native speakers already proficient in grammar and written expression who wish to continue their study of the structure of the language. PREREQ: Either SPA 203 or SPA adviser's written permission. *Note: SPA 204 will satisfy the* College's requirement in foreign language.

SPA 207: Conversational Spanish.

3 hours, 3 credits. (Closed to native speakers.) A course designed to improve students' skills in speaking and understanding everyday Spanish. PREREQ: SPA 201, completed with a B- or better, or placement by the Department.

SPA 208: Intermediate Spanish Conversation.

3 hours, 3 credits. (Closed to native speakers.) Discussion of relevant topics in Spanish for the purpose of further developing the students' ability to deal with realistic situations they may encounter in their profession and social contact with Hispanic communities in this country and abroad. PREREQ: SPA 207.

Spanish Language, Literature, and Culture

SPA (LAC) 233: Latin American Literature in Translation.

3 hours, 3 credits. The poetry, novel, and essay of the nineteenth and twentieth centuries.

SPA (LAC) 250: Contemporary Problems in the Hispanic World.

3 hours, 3 credits. Reading and discussion in Spanish of selected texts dealing with problems such as the search for identity, nationalism, and the conflict between tradition and change. PREREQ: Either SPA 265 or SPA adviser's permission.

SPA (LAC) 265: Contemporary Literature of Spain and Spanish America.

3 hours, 3 credits (maximum 6 credits). Contemporary trends in fiction, drama, and poetry as represented in the works of distinguished authors of Spain and Spanish America. Topics may vary from semester to semester. PREREQ: For continuing students, SPA 202, 203, and 204; for entering students, appropriate proficiency as shown on placement test.

SPA 266: Business Spanish and Correspondence.

3 hours, 3 credits. Business and commercial Spanish for the student planning either to teach business education in a bilingual program or to work in a nonteaching position requiring this special training. PREREQ: Departmental permission.

SPA 281: Tutorial.

3 hours, 3 credits. Language work as directed by a faculty member to meet the student's specific needs (aspects of Spanish grammar, law enforcement, social work, health professions, etc.). PREREQ: Departmental permission.

SPA 285: Individualized Intermediate Foreign Language Study. 1 hour, 1 credit. Independent study in Spanish generally linked to a course in another field. PREREQ: SPA 201, or SPA 203, or Departmental permission. *Note: May be repeated up to four times.*

SPA 293: Workshop in Creative Writing.

3 hours, 3 credits. Theory and practice of creative writing. Students' writings and class criticism of poetry and prose. Individual conferences. PREREQ: SPA 204 and Departmental permission.

SPA 300: Introduction to Literary Studies.

3 hours, 3 credits. Literary genres and principles of literary analysis through readings of representative Spanish and Spanish-American authors. This course provides the necessary training to do advanced work in literature. PREREQ: SPA 202 or 204, or Departmental permission.

SPA 301: Spanish Literature from the Middle Ages to 1700.

3 hours, 3 credits. Survey of major works from an historical and cultural perspective. PREREQ: SPA 300.

SPA 302: Spanish and Spanish-American Literature from the Eighteenth to the Twentieth Century.

3 hours, 3 credits. Survey of major trends and works of Spain and Spanish America from an historical and cultural perspective. PREREQ: SPA 300.

SPA 305: Advanced Conversation.

3 hours, 3 credits. (Closed to native speakers.) Intensive practice designed to develop fluency and accuracy in oral expression and comprehension. Recommended for non-majors. PREREQ: SPA 202, 207, or 208.

SPA 306: Advanced Spanish Composition.

3 hours, 3 credits. Intensive practice in writing Spanish and in the translation of standard English prose into Spanish. PREREQ: SPA 202 or 204.

SPA 307: Translation.

3 hours, 3 credits. Translation of nonliterary, nontechnical texts of expository prose into Spanish and English. Use of the translator's basic tools. Emphasis on the expansion of vocabulary and on the morphological and syntactical differences in both languages. PREor COREQ: SPA 202 or 204.

SPA 308: Spanish Phonetics and Diction.

3 hours, 3 credits. Descriptive study of the Spanish sound system. Practice in phonetic perception, transcription, and articulation. Attention to sentence phonetics: juncture, stress, pitch. PREREQ: SPA 202 or 204.

SPA 309: Advanced Spanish Grammar.

3 hours, 3 credits. Grammar of the Spanish language, with emphasis on the syntactical and semantic features. PREREQ: SPA 202 or 204.

SPA 310: Comparative Grammar.

3 hours, 3 credits. Comparative analysis of English and Spanish morphology, basic phonology, and syntax. PREREQ: SPA 201 or Departmental permission.

SPA (LAC) 320: Spanish American Literature of the Nineteenth Century.

3 hours, 3 credits. Readings of representative authors. PREREQ: SPA 300.

SPA 321: Neoclassicism and Romanticism in Spain.

3 hours, 3 credits. Readings from representative works of the eighteenth and nineteenth centuries. PREREQ: SPA 300.

SPA 322: Realism in the Spanish Narrative.

3 hours, 3 credits. Representative works of nineteenth-century realist fiction in Spain. PREREQ: SPA 300.

SPA 323: Spanish Novel and Lyric Poetry of the Golden Age.

3 hours, 3 credits. Study of the narrative and lyric traditions of the Renaissance and Baroque. PREREQ: SPA 300.

SPA 330: Twentieth-Century Spanish Literature.

3 hours, 3 credits. Narrative, poetry, drama, and essay of the Generations of 1898 and 1927. PREREQ: SPA 300.

SPA 331: Cervantes's Don Quixote.

3 hours, 3 credits. Don Quixote and the birth of the Modern European novel. PREREQ: SPA 300.

SPA 332 (LAC 328): Spanish-American Fiction of the Twentieth Century.

3 hours, 3 credits. Critical readings of twentieth-century narrative texts. PREREQ: SPA 300.

SPA 333: Spanish American Literature of the Conquest.

3 hours, 3 credits. A study of texts from the period of the Spanish Discovery and conquest of the New World through the period of colonization. Letters, diaries, chronicles, poems, histories, and travel narratives will be read. PREREQ: SPA 300.

SPA (ENG)(LPR) 339: Latino/Latina Literatures in English.

3 hours, 3 credits. English-language literature developed by Puerto Ricans, Chicanos, Cubans, Dominicans, and other Latino groups in the U.S. Emphasis on the similarities in the development of themes, structures, and genres, and relationships with mainstream American literature.

SPA 340: Spanish Literature of the Middle Ages.

3 hours, 3 credits. Selected representative works of medieval genres, such as epic and romance, ballads, short fiction, La Celestina. PREREQ: SPA 300.

SPA 341: Spanish 'Comedia' of the Golden Age.

3 hours, 3 credits. Origins of the Spanish theatre and the major playwrights of the sixteenth and seventeenth centuries. PREREQ: SPA 300.

SPA 342: Spanish Literature after the Civil War.

3 hours, 3 credits. Narrative, poetry, drama, and photo essay in Spain after 1939. PREREQ: SPA 300.

SPA 343 (LAC 344): Twentieth-Century Latin American Poetry.

3 hours, 3 credits. Study of the major trends in Latin-American poetry from el modernismo to the present. Among the major poets to be studied are Darío, Lugones, Huidobro, Borges, Vallejo, Neruda, Parra, Paz, and others. PREREQ: SPA 300.

SPA 350: History of the Spanish Language.

3 hours, 3 credits. The life of languages. Special emphasis on semantic change; how new words are created, how their meanings change through time, as well as in the wide and varied geographical areas where Spanish is spoken.

SPA (LAC) 352: Special Topics in Hispanic Literature.

3 hours, 3 credits (maximum 6 credits). Study of selected themes (e.g., women) or modes (e.g., parody) or literary forms and strategies (e.g., first-person narrative) in Peninsular and/or Spanish-American literatures. (Topics vary from semester to semester.) PREREQ: SPA 300.

SPA 357: Special Topics in Spanish Language.

3 hours, 3 credits (maximum 6 credits). Study of selected topics dealing with language and literature, such as elements of style, rhetorical structure, levels of discourse. Topics will vary from semester to semester. PREREQ: SPA 202 or 204.

SPA 358: Spanish Civilization.

3 hours, 3 credits (maximum 6 credits). Topics in the study of the development of Spanish institutions and the cultural history of Spain. PREREQ: SPA 202 or 204.

SPA (LAC) 359: Spanish-American Civilization.

3 hours, 3 credits (maximum 6 credits). Topics in the study of the culture and civilization of Spanish America as seen in its literature. PREREQ: SPA 202 or 204.

SPA 370: Internship.

6 hours, 3 credits. Supervised field placements in translation agencies, tutoring centers, and other environments needing foreign language expertise. PREREQ: Departmental permission.

SPA 381: Tutorial.

3 hours, 3 credits. Opportunity for a student to pursue individual research and reading on a specific topic under close faculty supervision. PREREQ: Departmental permission.

SPA 385: Individualized Advanced Foreign Language Study.

1 hour, 1 credit. Independent study in Spanish generally linked to a course in another field. PREREQ: SPA 202, or SPA 204, or two semesters of SPA 285 or Departmental permission. Note: May be repeated up to four times.

SPA 450: Advanced Seminar.

3 hours, 3 credits. Study in depth of special topics of Spanish and Spanish-American literature, which will vary from semester to semester. Written and oral reports. PREREQ: Departmental permission.

SPA 481: Honors Course in Spanish. Special Studies in Spanish-American Literature.

One semester, 3 credits. A course offering qualified students the opportunity to study aspects of Spanish-American literature. Guided individual research. Group meetings, individual conferences, oral and written reports. PREREQ: A 3.5 index in the SPA major and Departmental permission.

SPA 482: Honors Course in Spanish. Special Studies in Spanish Literature.

One semester, 3 credits. A course offering qualified students the opportunity to study special topics of Spanish literature. Guided individual research. Group meetings, individual conferences, oral and written reports. PREREQ: A 3.5 index in the Spanish major and Departmental permission.

SPA 3120: Spanish for the Health Professions.

3 hours, 3 credits. Practical review of grammar and vocabulary through oral and written comprehension and production of healthcare texts, with attention to translation, patient/practitioner dialogue, and related cultural issues. PREREQ: SPA 202 or SPA 204.

Courses in Classical Culture-Conducted in English (No knowledge of Latin or Greek required)

*Courses preceded by an asterisk are not expected to be offered in 2013-

*ACU 160: Introduction to the Greek and Roman Cultures. 3 hours, 3 credits.

*ACU 226: Greek Daily Life.

3 hours, 3 credits.

*ACU 227: Roman Daily Life.

3 hours, 3 credits.

ACU 231: Current English Usage of Latin and Greek.

3 hours, 3 credits. A study of the most important Latin and Greek elements in English usage, both literary and scientific; principles of etymology and word formation; and consideration of such specialized vocabularies as poetic, philosophic, legal, and medical. This course is designed to equip the student with the ability to develop a better understanding of the vocabulary of English.

ACU 232: The Vocabulary of Medical and Scientific Terminology.

3 hours, 3 credits. The course provides students with the ability to understand and use medical and scientific terminology by studying and analyzing those Greek and Latin elements that have served as the basis for all scientific vocabulary since the Renaissance.

ACU 266: Classical Myth and the Human Condition.

3 hours, 3 credits. Study through literary and artistic sources of selected classical myths that explore essential problems of human existence. PREREQ: For students matriculated September 1, 1984, and thereafter: COR 100.

ACU (WST) 302: Women in Antiquity.

3 hours, 3 credits. A study of the roles of women in Greek and Roman society as they can be seen from the important literary works of antiquity. Attitudes toward women also will be examined, with some attention paid to mythological and archaeological sources.

*ACU 304: The Literature of Ancient Science.

3 hours, 3 credits.

ACU 305: Greek Literature in Translation.

3 hours, 3 credits. Study of Greek literature and thought from Homer to Socrates, with supplements from Hellenistic and later literature. Emphasis will be on the emergence of the concept of man as an individual and as a social creature and on the expression of that concept in the evolution of lyric, drama, history, oratory, and philosophy as formal literary genres.

*ACU 306: Roman Literature in Translation.

3 hours, 3 credits.

ACU 307: The Greek and Roman Epic in English Translation.

3 hours, 3 credits. Ancient narrative song and poetry in its development from Homer to Statius, with chief emphasis on the *Iliad* and the *Odyssey* and the *Aeneid* of Vergil.

ACU 308: Greek and Roman Tragedy in English Translation.

3 hours, 3 credits. A study of the plays of Aeschylus, Sophocles, and Euripides against their religious and social backgrounds. The Roman treatment of Greek tragic themes by Seneca the Younger, with some attention to the influence of the latter on European

*ACU 309: Ancient Comedy in English Translation.

3 hours, 3 credits.

*ACU 310: History and Biography as a Genre of Literature.

3 hours, 3 credits.

ACU (HIA)(WST) 311: Women in Antiquity.

3 hours, 3 credits. Examination of the image, role, and status of women in both Ancient Greek and Roman society, as seen from the important literary works of antiquity.

ACU 315: Philosophical Thought Before Socrates.

3 hours, 3 credits. The development of speculative, rhetorical, and ethical literature in Greece from earliest times to the period of Socrates. Special attention will be given to those factors that contributed to the basis of the Socratic method of inquiry. PREREQ: One PHI course.

ACU (HIA) 316: Greek Archaeology of the Classical Period.

3 hours, 3 credits. Study of major Greek sites of the fifth and fourth centuries B.C., including the topographies of Athens, Sparta, Corinth, and Thebes. The influence of Greece on surrounding civilizations, such as Persia, will be investigated, and the effects of the cultural and political life of the period on urban development will be stressed.

ACU (HIA) 318: Roman Archaeology and Topography.

3 hours, 3 credits. Study of the major pre-Roman sites of Italy, including the cities of Etruria. The development of the City of Rome during the Republican period, and the investigation of such sites as Pompeii and Herculaneum. The spread of Romano-Hellenistic urban civilization throughout the Mediterranean region during the empire. A detailed study of the topography of imperial Rome.

*ACU 321: The Ancient Romance.

3 hours, 3 credits.

ACU 350: Topics in Ancient Culture.

3 hours, 3 credits (maximum 12 credits). Selected topics in ancient culture. (For specific topics and sections each semester, consult the Department.)

ACU 381: Tutorial in Ancient Culture.

One semester, 3 credits (maximum 6 credits). Individual or group study of a special field or author. PREREQ: Either satisfactory completion of 60 college credits or Chair's permission.

Courses in French Literature and Culture-Conducted in English (not credited toward the French major)

*Courses preceded by an asterisk are not expected to be offered in 2013-2015.

FRE 232: The Francophone World (in translation).

3 hours, 3 credits. Selected works from the (non-European) French-speaking world in English translation. Religions, colonization, independence, the negritude movement, bilingualism, and other topics pertinent to la Francophonie.

FRE 233: French Literature in Translation.

3 hours, 3 credits. Introduction to some of the most significant works of French literature in English translation. Authors and works chosen within a specific historical perspective for their importance and impact within Western culture and/or their literary innovation.

FRE (MMS) 234: Introduction to French Cinema.

3 hours, 3 credits. A study of major French film makers; their themes, styles, and aesthetic commitments through the showing and discussion of selected outstanding films (with English subtitles). Complementary reading of selected works of French literature (in English translation) that have significantly influenced the aesthetics and evolution of French films.

FRE 250: Special Topics and Themes on French Literature in Translation.

3 hours, 3 credits (maximum 6 credits). Themes and topics vary from semester to semester.

*FRE 251: French Authors in English Translation.

3 hours, 3 credits (maximum 9 credits).

FRE 356: Special Topics in Modern French Literature.

3 hours, 3 credits. The discussion and analysis of a specific author, movement, or a limited number of selected works of French literature of the twentieth century. PREREQ: One 3-credit, 200level FRE course or its equivalent.

Courses in German Literature and Culture-Conducted in English (no knowledge of German required)

*Courses preceded by an asterisk are not expected to be offered in 2013-2015.

Note: All 300-level courses in this section carry the following PREREQ: Either satisfactory completion of 30 college credits or 6 credits in GER or other literature courses.

*GER 340: Famous Works of German Literature in English Translation.

3 hours, 3 credits. (Closed to GER majors.)

*GER 341: Contemporary German Literature in English Translation.

3 hours, 3 credits.

*GER 344: Faust (in English).

3 hours, 3 credits.

*GER 346: Brecht's Plays and Their Sources (in English). 3 hours, 3 credits.

*GER 348: Modern Scandinavian Prose (in English).

3 hours, 3 credits. PREREQ: Either completion of at least 60 college credits or 6 credits in German or other literature courses.

*GER 349: The Modern German and Scandinavian Drama (in English).

3 hours, 3 credits.

*GER (SLA) 450: Independent Study in Drama and Theatre (in

One semester, 3 credits (maximum 6 credits). PREREQ: GER adviser's permission.

*GER 360: German Authors in English Translation.

3 hours, 3 credits (maximum 9 credits except with special permission).

*GER 361: German Writers in English Translation.

1 hour, 1 credit (maximum 3 credits except with special permission).

*GER 362: Topics and Themes in German Literature (in English).

3 hours, 3 credits (maximum 9 credits except with special permission).

*GER 365: Aspects of German Culture (in English).

3 hours, 3 credits (maximum 6 credits).

Courses in Italian Literature and Culture-Conducted in English (not credited toward the Italian major)

*Courses preceded by an asterisk are not expected to be offered in 2013-2015.

ITA (MMS) 230: Italian Cinema.

3 hours, 3 credits. A study of major Italian filmmakers, including their themes, styles, and social significance, through the showing and discussion of selected, outstanding films (with English subtitles). Complementary readings of selected works of Italian literature (in English translation) that have significantly influenced the aesthetics and evolution of Italian films.

ITA 231: Dante's Divina Commedia in Translation.

3 hours, 3 credits. (Closed to ITA majors.) The theme of man and his search for identity. Readings and discussion in English.

ITA 232: Boccaccio in Translation.

3 hours, 3 credits. (Closed to ITA majors.)

ITA 233: Italo-American Contributions.

3 hours, 3 credits. (Open to all students.)

*ITA 234: Machiavelli in Translation.

3 hours, 3 credits. (Closed to ITA majors.)

*ITA 236: Pirandello in Translation.

3 hours, 3 credits. (Closed to ITA majors.)

ITA 237: Masterpieces of Italian Literature (in English).

3 hours, 3 credits. Great works of Italian literature, from Dante to the high Renaissance, with emphasis on their importance as a basis for other European literatures.

Courses in Japanese Literature and Culture (Conducted in English)

JCU 211: Japanese Literature and Culture.

3 hours, 3 credits. Study in English translation of selected literature and dramatic works explored both as works of art and as manifestations of Japanese culture.

JCU 212: Classics of Japanese Literature.

3 hours, 3 credits. Study in English translation of selected classics of Japanese literature representative of the major genres from the early to the modern period. PREREQ: COR 100 (or the equivalent).

Courses in Slavic Literature and Culture (Conducted in English)

*Courses preceded by an asterisk are not expected to be offered in 2013-

Note: All the courses in this section carry the following PREREQ: Either satisfactory completion of 30 college credits or 6 credits in RUS or other literature courses.

*RUS 340: Survey of Russian Literature from the Beginning to the 1870s (in English).

3 hours, 3 credits.

*RUS 341: Survey of Russian Literature from the 1870s to the Soviet Period (in English).

3 hours, 3 credits.

*RUS 342: Survey of Soviet Russian Literature—From 1917 to the Present (in English).

3 hours, 3 credits.

*RUS 343: Survey of Russian Drama (in English).

3 hours, 3 credits.

*RUS 346: Dostoevsky (in English).

3 hours, 3 credits.

*RUS 347: Tolstoy (in English).

3 hours, 3 credits.

*SLA (GER) 450: Independent Study in Drama and Theatre (in

One semester, 3 credits (maximum 6 credits). PREREQ: RUS adviser's permission.

*RUS 360: Russian Authors (in English).

3 hours, 3 credits (maximum 6 credits). (Topics to be announced.)

*SLA 362: Topics and Themes in Slavic Literature (in English).

3 hours, 3 credits (maximum 6 credits). (Topic to be announced.)

*SLA 365: Aspects of Slavic Culture and Civilization (in

3 hours, 3 credits (maximum 6 credits).

Courses in Spanish Literature-Conducted in English (not credited toward the Spanish maior)

*Courses preceded by an asterisk are not expected to be offered in 2013-

*SPA 231: Spanish Literature in Translation I.

3 hours, 3 credits.

*SPA 232: Spanish Literature in Translation II.

3 hours, 3 credits.

SPA (LAC) 233: Latin American Literature in Translation.

3 hours, 3 credits. The poetry, novel, and essay of the nineteenth and twentieth centuries.

SPA 234: Cervantes and the Modern Novel.

3 hours. 3 credits. Cervantes's artistic creation and its relation to the culture of the sixteenth and seventeenth centuries. Discussion and readings in English.

SPA 251: Topics in Spanish Literature and Spanish-American Literature.

3 hours, 3 credits. Study in depth of special topics or authors, varying from semester to semester. Discussions and oral and written reports in English.

World Classics (Interdisciplinary and Interdepartmental)

IDW (CLT) 213: Classics of the Asian World.

3 hours, 3 credits. A study of masterworks in literature and thought of the Asian world, with emphasis on the traditions of India, China, and Japan.

IDW (CLT) 211: Classics of the Western World: Ancient and Medieval.

3 hours, 3 credits. A study of masterworks in ancient and medieval literature and legend that have exerted particular influence on the Western world.

IDW (CLT) 212: Classics of the Western World II: Renaissance and Modern.

3 hours, 3 credits. A study of masterworks in Western literature from the Renaissance to modern times.

Latin American and Puerto Rican **Studies**

Acting Department Chair: Laird Bergad (Carman Hall, Room 282) Department Faculty: Professor: Forrest Colburn; Associate Professors: David A. Badillo (Acting Deputy Chair), Licia Fiol-Matta, Alyshia Gálvez, Milagros Ricourt; Assistant Professor: Teresita Levy; Distinguished Lecturer: Andrés Torres, Lecturer: Xavier Totti

The Department of Latin American and Puerto Rican Studies offers a Bachelor of Arts degree in Puerto Rican Studies and an interdisciplinary Bachelor of Arts degree in Latin American and Caribbean Studies. The Department also participates in the interdisciplinary Comparative Literature Program, as well as the Women's Studies Option.

Professional Opportunities and Graduate Study: A student majoring in Puerto Rican Studies or Latin American and Caribbean Studies will receive a solid foundation for graduate study and may look forward to a career in many areas of business, industry, government service, and teaching at all levels from elementary school to college. (For preparation in elementary or secondary teaching, consult the Department of Early Childhood and Childhood Education or the Department of Middle and High School Education.)

Curriculum in Latin American and Caribbean **Studies**

The interdisciplinary Latin American and Caribbean Studies major is designed to foster a broad-based understanding of this major geographical and cultural area of the world. The major provides the undergraduate student with a comprehensive academic background in the economic, social, political, and cultural problems facing this region today. Its successful completion prepares students to work effectively and knowledgeably in government, international organizations, private industry, journalism, and communications, or to pursue graduate studies in the humanities, social sciences, or law.

Latin American and Caribbean Studies, B.A. (30 Credit Major)

The courses and credits are distributed as follows:

Credits (30)

- LAC 266-267
- 3 SPA 320, 329, 332, 333, or 343 (Portuguese or French may be substituted with Departmental permission.)
- One course from each of the following three study areas: 9 Socioeconomic Structures, Literature and the Arts, and History and Politics (see Departmental adviser for list). Other courses may be substituted with Departmental permission.
- Electives to be taken from the three study areas or from 12 Related Courses (see Departmental adviser for list).

These courses are to be chosen in consultation with a Departmental adviser. At least 6 credits must be 300- or 400-level courses. No student may use more than 9 credits in any department that cross-lists courses with LAC to fulfill the major requirement.

Minor in Latin American Studies

Students may minor in Latin American Studies by accumulating 12 credits. LAC 266 and 267 are required, and students must take 6 additional credits of LAC courses at the 300 level or above.

Minor in Mexican and Mexican-American **Studies**

This minor is designed to introduce students to a variety of topics and issues in the history, politics, arts, and migration of Mexicans and to give them the opportunity to study Mexico and its Diaspora in the United States. The program is offered as a minor field that complements a wide array of majors. It is particularly valuable for students who wish to combine an interest in Mexico with majors such as History, Education, Sociology, Anthropology, or Political Science.

DEGREE REQUIREMENTS

Students must complete four courses (12 credits), two of which are the required courses LAC 267 and LAC 268. The remaining two may be chosen from the list of courses in Mexican and Mexican American Studies and the list of relevant courses in the Humanities and Social Sciences.

Courses in Mexican and Mexican American Studies

LAC 268: History of Mexico

LAC 364: Through Foreign Eyes: Outsides Look at Mexico SPA (LAC) 346: Introduction to Mexican and Chicano/a

Literature

LAC (HIW) 352: The Mexican Revolution

LAC 363: Mexican Migration to the U.S.: History, Culture, and Civil Rights

Relevant Courses in the Humanities and Social Sciences

LAC (HIS) 267: Introduction to Latin America and the Caribbean

LAC 312: Family and Gender Relations Among Latinos

LAC (COM) (PRS) 319: Latinos in Film

LAC (ANT) 347: Race and Ethnicity in Latin America

LAC (ANT) 318: Early Civilizations of Mexico and Central America

LAC (POL) 332: Political Systems in Latin America

Teacher Certification

Students interested in obtaining New York State teacher certification should consult the Office of the Dean of Education (Carman Hall, Room B-33, 718-960-4972).

Courses in Latin American and Caribbean Studies

LAC (ARH) 143: Introduction to the History of Latin American Art.

3 hours, *3 credits*. A study of the principles of art applied to visual forms, with emphasis on modern art of the nineteenth and twentieth centuries in Central America, South America, and the Caribbean.

LAC (GEH) 289: Regional Geography of Selected Areas.

3 hours, 3 credits. The geography of continents of major areas outside Anglo-American and Western Europe. Special emphasis on the basic principles of economic and cultural geography of regionalization as illustrated in Latin America.

LAC (ANT)(WST) 210: Women in Latin America.

3 hours, 3 credits. The course explores the relationship between the socioeconomic position of women and their power in domestic and public spheres in different historical contexts, such as Inca society, as well as contemporary rural and urban settings, making use of historical, ethnographic, and autobiographical sources.

LAC (LPR) 214: Literature of the Caribbean.

3 hours, 3 credits. A comparative survey of Caribbean literature, including common themes, structures, and approaches to literary texts. Examples are chosen from works in Spanish, French, English, and Papiamento, read in translation if necessary.

LAC (MMS) 216: Latin American Cinema.

3 hours, *3 credits*. An overview of film in Latin America from the silent period to the present.

LAC (HIS) 225: History of the Dominican Republic.

3 hours, 3 credits. Dominican history from pre-Columbian times to the present. The different socio-economic trends involved in the formation of Dominican society, as well as the prominent role played by foreign powers.

LAC 226: Contemporary Dominican Politics and Society.

3 hours, 3 credits. Dominican politics, economy, and society from the Trujillo era to the present. The course will focus on the authoritarian legacy of the Trujillo dictatorship, electoral politics in the post-Trujillo period, and recurring trends of *caudillismo*, praetorianism, and personalism.

LAC 231 (LPR 242): Latinos in the United States.

3 hours, 3 credits. A comparative study of the social, political, and economic processes affecting Latino groups in the United States. Discussion will focus on the variable adaptations made by Puerto Ricans, Chicanos, Dominicans, Cubans, Colombians, and other Latinos in their migration and settlement within American society.

LAC 232: Family and Gender Relations among Latinos.

3 hours, 3 credits. Comparative study of gender relations and the family among Latinos in the U.S.

LAC (SPA) 233: Latin American Literature in Translation.

3 hours, 3 credits. The poetry, novel, and essay of the nineteenth and twentieth centuries.

LAC (AAS) 235: Caribbean Societies.

3 hours, 3 credits. A comparative study of Caribbean societies and cultures, with emphasis on the commonality and diversity in their historical, social, political, and economic development.

LAC (AAS) 241: Literature of the English and Caribbean Literature.

3 hours, 3 credits. Analysis of the literary works of Caribbean writers. Poetry, the novel, drama, and other literary forms of major authors.

LAC (POR) 247: Brazilian Literature from the Colonial Period to the Twentieth Century.

3 hours, 3 credits. PREREQ: *POR 201 (or equivalent).

LAC (SPA) 250: Contemporary Problems in the Hispanic World.

3 hours, 3 credits. Reading and discussion in Spanish of selected texts dealing with problems such as the search for identity, nationalism, and the conflict between tradition and change. PREREQ: Either SPA 265 or SPA advisor's permission.

LAC (SPA) 265: Contemporary Literature of Spain and Spanish America.

3 hours, 3 credits (maximum 6 credits). Contemporary trends in fiction, drama, and poetry as represented in the works of distinguished authors of Spain and Spanish America. Topics may vary from semester to semester. PREREQ: For continuing students, SPA 202, 203, and 204; for entering students, appropriate proficiency as shown on placement test.

LAC (HIS) 266: Introduction to Latin America and the Caribbean I.

3 hours, 3 credits. Survey of the peoples and civilizations of Pre-Columbian America and of the institutions, economy, history, and culture of Latin America and the Caribbean from the European conquest to the early nineteenth century (1492-1808).

LAC (HIS) 267: Introduction to Latin America and the Caribbean II.

3 hours, 3 credits. Survey of the nations and cultures, history, economy, and politics of Latin America and the Caribbean from the early nineteenth century to the present.

LAC (HIS) 268: History of Mexico.

3 hours, 3 credits. Major themes in Mexican history: development of pre-Colombian civilizations; environmental and demographic impact of the Conquest; Spanish colonial period; wars of independence of the nineteenth century; nation building, the Mexican Revolution, dictatorship, and one-party democracy; and the political, cultural, and economic relationship between Mexico and the United States.

LAC (LPR) 301: Puerto Rican Literature.

3 hours, 3 credits. Chronological survey of Puerto Rican literature, especially in the twentieth century, in cultural, social, and political context, with attention to the major genres of Spanish and English-language works. PREREQ: Proficiency in Spanish and Departmental permission.

LAC (PRS) 302: Puerto Rican Literature I: From the Sixteenth Century to 1898 (in Spanish)

3 hours, 3 credits. The development of literature in Puerto Rico, from the chronicles and historical documents of the early colonial Spanish period to the Spanish-American War in 1898. Special attention to literary works that played a major role in defining a national identity. PREREQ: Instructor's or Departmental permission, advanced Spanish grammar, a good knowledge of oral Spanish, and reading and writing in Spanish.

LAC (PRS) 303: Puerto Rican Literature II: From 1898 to the Present (in Spanish)

3 hours, 3 credits. A study of the major literary figures instrumental in the development of a national literature in Puerto Rico during the twentieth century. PREREQ: Either PRS 302 or Departmental permission.

LAC 304: The Social History of Hispaniola.

3 hours, 3 credits. History and social developments of the island of Hispaniola from colonial times to the present. Focus on the formation of the Spanish colony, the division of the island, the French and Haitian Revolutions, the creation of two nations (the Republic of Haiti and the Dominican Republic), conflicts over the border and race relations, the massacre of 1937, and the present social conditions in both nations.

LAC (AAS) 306: The Haitian-Dominican Border: Nation, State, and Race.

3 hours, 3 credits. Major issues in the socio-historical development and dynamics of the Haitian-Dominican border, including physical and psychological divisions, social formations, state formation, migration, bi-national relations, and human rights. PREREQ: LAC 225, 226, AAS 235, or Departmental permission.

LAC (LPR) 312: Latino Migrations.

3 hours, 3 credits. Examination of a hemisphere on the move, with particular attention to mass migrations within Latin America as well as to and from the United States. PREREQ: LAC 231 or Departmental permission.

LAC (HIW) 313: Religion in Hispaniola: From Catholicism to African Religions.

3 hours, *3 credits*. Socio-cultural significance and history of religions in the Dominican Republic and the Republic of Haiti.

LAC (LPR) 314: Religions in Latin America, the Caribbean, and Latino U.S.

3 hours, 3 credits. Religion as a revealing lens through which to study the history and contemporary cultures of Latin America and the Caribbean. The central role of religion from before Columbus to the present day, with emphasis on contemporary ethnographies of religion in the Americas (including Latin America, the Caribbean, and Latino U.S.). PREREQ: LAC 266, 267, LPR 231, or Departmental permission.

LAC (HIW) 315: Comparative History of the Hispanic Caribbean.

3 hours, 3 credits. Comparative history of Cuba, the Dominican Republic, and Puerto Rico in the nineteenth and twentieth centuries.

LAC 316 (LPR 343): Visual Culture in the Hispanic Caribbean.

3 hours, 3 credits. Visual culture across the Hispanic Caribbean, including visual arts, photography, film, video, and television and new media. PREREQ: LAC 226, LPR 213, or Departmental permission.

LAC (ANT) 317: Early Civilization of South America and the Caribbean.

3 hours, 3 credits. The Incas and their ancestors; the Arawaks and the Caribs. A region-by-region treatment of the prehistory of South America and the Caribbean, the course examines the diversity of ancient life in this area. Special emphasis on the native civilizations of the Andes. Additional material from all other parts of Central America, the Caribbean, and South America.

LAC (ANT) 318: Early Civilizations of Mexico and Central America.

3 hours, 3 credits. The Aztec and Mayan civilizations of Mexico and northern Central America from the earliest peopling of the new world to the civilizations encountered by Cortes and the Spanish. Topics include the origins of agriculture and settled life, the earliest civilizations, Olmec art, Mayan astronomy, and Aztec sacrifice

LAC (LPR)(MMS) 319: Latinos in Film.

3 hours, 3 credits. Latino ethnicities have been constructed in Hollywood films from the silent era to the present.

LAC (SPA) 320: Spanish American Literature of the Nineteenth Century.

3 hours, 3 credits. Readings of representative authors. PREREQ: SPA 300.

LAC (LPR) 321: Latino New York.

3 hours, 3 credits. A multidisciplinary investigation of the presence and impact of Latino populations in New York City from 1800s to the present. PREREQ: LPR 231 or Departmental permission.

LAC (ECO) 323: Economic Development in Latin America.

3 hours, 3 credits. Examination of major economic trends in Latin American economic development and the impact of North American policy. Special emphasis is placed on Latin American views of economic growth and on foreign intervention in particular areas, such as Brazil, Mexico, Puerto Rico, Cuba, and Chile. PREREQ: Either ECO 166 and 167 and one additional 3-credit ECO course or Departmental permission.

LAC (HIW) 324: History of Cuba.

3 hours, 3 credits. History of Cuba, from colonial times to the present. Focus on Cuban independence and United States intervention; race, gender, and construction of the nation; the path toward a socialist revolution; efforts at reform; and Cuba's role in Latin America and the world.

LAC 328 (SPA 332): Spanish-American Fiction of the Twentieth Century.

3 hours, 3 credits. Critical readings of twentieth-century narrative texts

LAC (SPA) 329: Literature of the Dominican Republic.

3 hours, 3 credits. Study of the literary figures and literary works instrumental in the development of a national literature in the Dominican Republic during the twentieth century. PREREQ: SPA 300 or Languages and Literatures Departmental placement test.

LAC (HIW) 330: Latin America in the Nineteenth Century.

3 hours, 3 credits. Changes and continuities in Latin America over the course of the "long nineteenth century," from political independence in the 1820s to the rise of nationalist challenges to liberalism in the 1930s.

LAC (HIW) 331: Modern Latin America.

3 hours, 3 credits. The nations of Latin America from the beginning of the twentieth century to the present, with a focus on political reform and revolution, economic development, and social movements.

LAC (POL) 332: Political Systems in Latin America.

3 hours, 3 credits. Domestic institutions and foreign policies of selected Latin American republics.

LAC (SPA) 333: Spanish-American Literature of the Conquest.

3 hours, 3 credits. A study of texts from the period of the Spanish Discovery and conquest of the New World through the period of colonization. Letters, diaries, chronicles, poems, histories, and travel narratives will be read.

LAC (AAS) 334: The Musical Experience of Caribbean Cultures and Societies.

3 hours, 3 credits. Analysis of music and performance in Caribbean cultures and societies.

LAC (AAS) 335: The Caribbean in World Politics.

3 hours, 3 credits. Problems and prospects for Caribbean states in contemporary world politics.

LAC (POL) 336: Political Systems of Central America and the Caribbean.

3 hours, 3 credits. Domestic institutions and foreign policies of the Latin American and Caribbean states. The causes, circumstances, and effects of revolution and counterrevolution.

LAC (HIW) 337: Latin America and the United States from 1823 to the Present.

3 hours, 3 credits. Relations between the United States and Latin American countries since their creation as independent republics.

LAC (HIW) 338: Colonial Latin America.

3 hours, 3 credits. Examination of the development of colonial societies in Latin America from the "encounter" of the sixteenth century to the crisis of the Iberian empires in the late eighteenth century.

LAC (SPA)(ENG) 339: Latino Literature.

3 hours, 3 credits. English-language literature developed by Puerto Ricans, Chicanos, Cubans, Dominicans, and other Latino groups in the U.S. Emphasis on the similarities in the development of themes, structures, genres, and relationships with mainstream American literature.

LAC (HIW) 340: Slavery in Latin America and the Caribbean.

3 hours, 3 credits. Comparative examination of slavery in Latin America and the Caribbean. Emphasis on the Portuguese (Brazil) and Spanish (Cuba) systems, with reference to the British, North American, and French systems.

LAC (LPR) 341: Puerto Rican Music.

3 hours, 3 credits. Analysis of musical performance with respect to identity, gender, race, and class. Emphasis will be placed on the hybrid nature of the music and on the role played by the Puerto Rican Diaspora in the creation of the music. PREREQ: PRS 213 or Departmental permission.

LAC 342: Latin American Popular Music.

3 hours, 3 credits. Latin American popular music as cultural product. Important continental genres and their emergence in particular historical and geographical contexts. Local examples of how social and political experiences become manifest through creative expression. PREREQ: LAC 266, 267, or Departmental permission.

LPR 343 (LAC 316): Visual Culture in the Hispanic Caribbean.

3 hours, 3 credits. Visual culture across the Hispanic Caribbean, including visual arts, photography, film, video, and television and new media. PREREQ: LAC 226, LPR 213, or Departmental permission.

LAC 344 (SPA 343): Twentieth-Century Latin American Poetry.

3 hours, 3 credits. Study of the major trends in Latin-American poetry from *el modernismo* to the present. Among the major poets to be studied are Darío, Lugones, Huidobro, Borges, Vallejo, Neruda, Parra, Paz, and others. PREREQ: SPA 300.

LAC (HIW) 345: History of South America.

3 hours, 3 credits. Pre-Columbian and colonial foundations of the nation-state and the construction of modern nations in South America in the post-independence period.

LAC (LPR) (SPA) 346: Introduction to Mexican and Chicano/a Literatures.

3 hours, 3 credits. Major themes in Mexican and Chicano/a literatures within their specific historical and sociopolitical contexts.

LAC (ANT) 347: Race and Ethnicity in Latin America and the

3 hours, 3 credits. Comparative study of racial and ethnic relations in Latin America.

LAC (LPR) 349: Latino Political Economy.

3 hours, 3 credits. The role of Hispanics/Latinos in the U.S. political economy. Emphasis on experiences and challenges involving jobs, income, poverty, wealth, and business administration. Attention to the economic status of the Hispanic/Latino population compared to other ethnic populations; the nature, variety, and relations among various Latino groups; the role of political economy in contemporary public-policy debates; and economic prospects for Hispanics/Latinos.

LAC 351 (HIW 352): The Mexican Revolution.

3 hours, 3 credits. Examination of the Mexican Revolution of 1910, including nineteenth-century preconditions, overthrow of the old regime, the civil war phase, and post-revolutionary reconstruction of modern Mexico.

LAC (LPR) 360: Variable Topics in Latino/Puerto Rican Studies

3 hours, 3 credits. Various topics in Latino/Puerto Rican studies. PREREQ: LPR 212, 213 or Departmental permission.

LAC (SPA) 352: Special Topics in Hispanic Literature.

3 hours, 3 credits (maximum 6 credits). Study of selected themes (e.g., women) or modes (e.g., parody) or literary forms and strategies (e.g., first-person narrative) in Peninsular and/or Spanish-American literatures. (Topics vary from semester to semester.) PREREQ: SPA 300.

LAC (SPA) 359: Spanish-American Civilization.

3 hours, 3 credits (maximum 6 credits). Topics in the study of the culture and civilization of Spanish America as seen in its literature. PREREQ: SPA 202 or 204.

LAC (LPR) 363: Mexican Migration to the U.S.: History, Culture, and Civil Rights.

3 hours, 3 credits. An assessment of the history of Mexican migration to the U.S., as well as Mexico's past and present impact on culture, public policy, and civil rights.

LAC 364: Through Foreign Eyes: Outsiders look at Mexico.

3 hours, 3 credits. A critical and analytical view of the dominant images of Mexico's national identity as Mestizo and Catholic.

LAC (AAS) 400: Seminar: Slavery in the New World.

3 hours, 3 credits. Intensive study of the institution of slavery in the New World. PREREQ: Departmental permission.

LAC 420: Latin American and Caribbean Seminar.

3 hours, 3 credits. This course is for Latin American and Caribbean Studies Program majors only and is a requirement for the B.A. degree. Variable themes of Latin American and Caribbean studies chosen by the instructor. This will be a research-oriented course, and students will pursue independent research projects.

LAC (LPR) 490: Directed Independent Study.

3 hours, 3 credits (maximum 9 credits). Directed independent study affords an opportunity for the student who wishes to undertake a well-defined research project. While the student conducts work under the guidance of a faculty member chosen by the student, the project is carried out in an independent manner, without regular class meetings. PREREQ: Departmental permission.

Curriculum in Latino/Puerto Rican Studies

The Bachelor of Arts curriculum in Latino/Puerto Rican Studies reflects the history, development, and current state of Latino/Puerto Rican Studies as a major interdisciplinary field with origins in the study of Puerto Rican culture and ongoing attention to Latino experience in Latin America, the Caribbean, and the U.S. Some courses are conducted in Spanish, but most are in English.

Latino/Puerto Rican Studies, B.A. (30 Credit Major)

The required courses and credits are distributed as follows:

Credits (30)

- 9 In required courses: LPR 212 or LPR 213; LPR 242 and LPR 269
- 9 Three LPR courses at the 300-level or above
- 3 One course in Latino or Puerto Rican literature. Select from LAC 339, LAC 346,
 - LPR (LAC) 301 or LPR 320.
- 9 In elective courses in Puerto Rican and Latino Studies at the 200-level or
 - above or in related disciplines. (A list of courses in related disciplines is provided by the Department.)

Minor in Latino/Puerto Rican Studies

Completion of the Minor in Latino / Puerto Rican Studies requires 12 credits in courses distributed as follows:

- 6 In required LPR courses: Select two from LPR 212, LPR 213, LPR 242 or LPR 269
- 6 In two additional LPR courses at the 300-level or above

Teacher Certification

Students interested in obtaining New York State teacher certification should consult the Office of the Dean of Education (Carman Hall, Room B-33, 718-960-4972).

Women's Studies Option

See the information on this program contained later in this Bulletin.

Courses in Puerto Rican Studies

LPR (HIS) 212: History of Puerto Rico.

3 hours, 3 credits. Survey of the history of Puerto Rico.

LPR 213: Culture and Globalization: Puerto Rican and Latino **Identity Formation.**

3 hours, 3 credits. Culture as seen from the comparative perspectives of Hispanic Caribbean, Latin American, and the U.S. experience. Particular attention to identity formation, hybridity, and change among island and mainland Puerto Ricans.

LPR (LAC) 214: Literature of the Caribbean.

3 hours, 3 credits. A comparative survey of Caribbean literature, including common themes, structures, and approaches to literary texts. Examples are chosen from works in Spanish, French, English, and Papiamento, read in translation if necessary.

LPR 232: Family and Gender Relations Among Latinos.

3 hours, 3 credits. Comparative study of gender relations and the family among Latinos in the U.S.

LPR (POL) 234: Latino Politics.

3 hours, 3 credits. Latino social and political movements within the U.S political system. Topics include Latino social movements; political incorporation; electoral processes; immigration politics; foreign policy; and identity movements.

LPR 242 (LAC 231): Latinos in the United States.

3 hours, 3 credits. A comparative study of the social, political, and economic processes affecting Latino groups in the United States. Discussion will focus on the variable adaptations made by Puerto Ricans, Chicanos, Dominicans, Cubans, Colombians, and other Latinos in their migration and settlement within American society.

LPR 269: History of U.S. Latinos.

3 hours, 3 credits. The history of Latinos in the United States from their seventeenth-century beginnings to the present.

LPR (HIW) 300: Social and Economic History of Puerto Rico from the Industrial Revolution to the Present.

3 hours, 3 credits. Intensive survey of the socioeconomic formations of Puerto Rico from the Industrial Revolution to the present. PREREQ: LPR 212 or Departmental permission for LAC/LPR majors; Departmental permission for History majors.

LPR 307: Puerto Rico in the Twentieth Century: 1898-Present.

3 hours, 3 credits. Intensive study of socioeconomic and political changes in twentieth-century Puerto Rico. PREREQ: LPR 212 or Departmental Permission.

LPR 308: The Economy of Puerto Rico.

3 hours, 3 credits. The impact of the United States on the economy of Puerto Rico, with emphasis on unemployment, prices, wage rates, industrialization, trade, commerce, and migration. Analysis of the consequences of the economic status of the island for the Puerto Rican people. PREREQ: LPR 212 or Departmental Permission.

LPR 309: Social and Political Movements in Puerto Rico.

3 hours, 3 credits. Social and political movements in Puerto Rico from the nineteenth century to the present. Emphasis on the independence, annexationist, and autonomist movements and their relation to analogous movements across the Caribbean. PREREQ: LPR 212 or Departmental permission.

LPR 311 (SOC 250): Migration and the Puerto Rican Community in the United States.

3 hours, 3 credits. History and development of the Puerto Rican community in the United States: migration, community establishment, institutions, regional patterns of settlement, and issues of class, race, ethnicity, and gender.

LPR (LAC) 312: Latino Migrations.

3 hours, 3 credits. Examination of a hemisphere on the move, with particular attention to mass migrations within Latin America as well as to and from the United States. PREREQ: LAC 231 or Departmental permission.

LPR (LAC) 316: The Visual Arts in the Hispanic Caribbean.

3 hours, 3 credits. Visual culture across the Hispanic Caribbean, including visual arts, photography, film, video, and television and new media. PREREQ: LAC 226, LPR 213, or Departmental permission.

LPR (LAC)(MMS) 319: Latinos in Film.

3 hours, 3 credits. Latino ethnicities have been constructed in Hollywood films from the silent era to the present.

LPR 320: Puerto Rican Literature in English: Nation and Diaspora.

3 hours, 3 credits. Puerto Rican literature originally written in English in the Diaspora, as well as seminal works translated into English from Spanish. PREREQ: LPR 212, LPR 213, or Departmental permission.

LPR (LAC) 321: Latino New York

3 hours, 3 credits. A multidisciplinary investigation of the presence and impact of Latino populations in New York City from 1800s to the present. PREREQ: LPR 231 or Departmental permission.

LPR (SPA) (ENG) 339: Latino Literature.

3 hours, 3 credits. English-language literature developed by Puerto Ricans, Chicanos, Cubans, Dominicans, and other Latino groups in the U.S. Emphasis on the similarities in the development of themes, structures, genres, and relationships with mainstream American literature.

LPR (LAC) 341: Puerto Rican Music

3 hours, 3 credits. Analysis of musical performance with respect to identity, gender, race, and class. Emphasis will be placed on the hybrid nature of the music and on the role played by the Puerto Rican Diaspora in the creation of the music. PREREQ: LPR 213 or Departmental permission.

LPR 343 (LAC 316): Visual Culture in the Hispanic Caribbean.

3 hours, 3 credits. Visual culture across the Hispanic Caribbean, including visual arts, photography, film, video, and television and new media. PREREQ: LAC 226, LPR 213, or Departmental permission.

LPR (HEA) 348: Latino Health.

3 hours, 3 credits. An interdisciplinary perspective on the health of Latinos in the United States. Topics include health disparities, immigrant paradox, chronic disease, and current research on protective factors.

LPR (LAC) 349: Latino Political Economy.

3 hours, 3 credits. The role of Hispanics/Latinos in the U.S. political economy. Emphasis on experiences and challenges involving jobs, income, poverty, wealth, and business administration. Attention to the economic status of the Hispanic/Latino population compared to other ethnic populations; the nature, variety, and relations among various Latino groups; the role of political economy in contemporary public-policy debates; and economic prospects for Hispanics/Latinos.

LPR (LAC) 350: Latino/Puerto Rican Studies Research Seminar. 3 hours, 3 credits.

LPR (MMS) 353: Latino Media.

3 hours, 3 credits. The production, representations, and cultural meanings of Latino media in the U.S., including television, radio, film, advertising, newspapers, and magazines. PREREQ: Completion of 45 credits or Departmental permission.

LPR (LAC) 360: Variable Topics in Latino/Puerto Rican Studies.

3 hours, 3 credits. Various topics in Puerto Rican studies. PREREQ: LPR 212, 213, 242, 269 or Departmental Permission.

LPR (LAC) 363: Mexican Migration to the U.S.: History, Culture and Civil Rights.

3 hours, *3 credits*. An assessment of the history of Mexican migration to the U.S., as well as Mexico's past and present impact on culture, public policy, and civil rights.

LPR 410: Puerto Rican Folklore and Popular Culture.

3 hours, 3 credits. Study of folklore and popular culture in Puerto Rico and of Puerto Ricans in the United States from the perspective of the social sciences. Analysis of the processes and product in the continual making of identity. PREREQ: LPR 213 and proficiency in Spanish.

LPR (LAC) 490: Directed Independent Study.

3 hours, 3 credits. (maximum 9 credits). Directed independent study affords an opportunity for the student who wishes to undertake a well-defined research project. While the student conducts work under the guidance of a faculty member chosen by the student, the project is carried out in an independent manner, without regular class meetings. PREREQ: Departmental permission.

The Lehman Scholars Program

Director of Studies: Gary Schwartz (Library, Room 315)

The Lehman Scholars Program (LSP) is designed for capable and highly motivated students who have the desire and ability to pursue a somewhat more independent liberal arts course of study. The program offers the advantages of a small, intimate college, including special courses, seminars, and individual counseling.

Special Features: The Lehman Scholars Program offers several special features:

- Students are exempt from all Degree Requirements. They must, however, pass the CUNY Skills Assessment Tests to be admitted to the program and meet all course prerequisites and requirements for their major field.
- The Lehman Scholars Program has its own requirements, which students must fulfill:
 - a one-semester honors course in English composition and stylistics;
 - two years of a foreign language at the college level or its equivalent;
 - four honors seminars from any of four different academic areas: Fine and Performing Arts, Humanities, Natural Science, and Social Science; and
 - a senior honors essay.

There is one exception to these requirements: Students who enter the program with more than 30 credits may be considered for exemption from one seminar after consultation with the Program Director.

- *Mentors*. Each student entering the program will be assigned to a faculty mentor in his or her field of interest. The mentor will advise the student in the areas of program planning and academic and career goals.
- Application Procedure: Students who have earned 60 or fewer college credits may apply for either September, June, or January admission. They will be notified about their acceptance in time for the following semester's registration. The application form is available in the LSP Office, 315 Library.

Courses in the Lehman Scholars Program

LSP 150, 152, 153: Honors Seminar.

3 hours, 3 credits. PREREQ: Enrollment in the LSP Program.

LSP 151: English Composition and Stylistics.

3 hours, 3 credits. Study of the grammar and syntax of selected important authors and their application to composition.

LSP 285: Independent Study.

1 credit per course. (May be repeated with a different course.) An LSP student may arrange with the instructor of any course to do extra work for an extra credit. The extra credit may be obtained by registering simultaneously for the course and for LSP 285. Prior to each registration for this course, the course instructor must agree in writing that the extra credit may be attempted. There is no limit on the number of times a student may earn an extra credit. PREREQ: Enrollment in the LSP Program and instructor's written permission. COREQ: The course in which the student seeks one extra credit.

LSP 350: Honors Seminar in the Fine and Performing Arts.

3 hours, 3 credits. May be taken for a maximum of nine credits (three different topics). Interdisciplinary seminar in the fine and performing arts. Permission of Director.

LSP 351: Honors Seminar in the Humanities.

3 hours, 3 credits. May be taken for a maximum of nine credits (three different topics). Interdisciplinary seminar in the humanities. Permission of Director.

LSP 352: Honors Seminar in the Natural Sciences.

3 hours, 3 credits. May be taken for a maximum of nine credits (three different topics). Interdisciplinary seminar in the natural sciences. Permission of Director.

LSP 353: Honors Seminar in the Social Sciences.

3 hours, *3 credits*. May be taken for a maximum of nine credits (three different topics). Interdisciplinary seminar in the social sciences. Permission of Director.

LSP 354: Honors Seminar in Mathematical Reasoning.

3 hours, *3 credits*. May be taken for a maximum of nine credits (three different topics). Interdisciplinary seminar in mathematical reasoning. Permission of Director.

LSP 481: Honors Tutorial.

One semester, 3 credits (maximum 6 credits). Individual research and reading on a specific topic, under faculty supervision.

Linguistics (Interdisciplinary)

Director: Professor Sandra Levey (Speech & Theatre Building, Room 133)

Advisory Board: Associate Professor Richard Blot (Journalism, Communication, and Theatre), Assistant Professor Bertrade Banoum-Ngo-Ngijol (African and African American Studies), Deena Bernstein (Speech-Language-Hearing Sciences), Richard Blot (Journalism, Communication, and Theatre), Rosalind Carey (Philosophy), Cecelia Cutler (Middle and High School Education), Margo DelliCarpini (Middle and High School Education), Thomas Ihde (Languages and Literatures), Sandra Levey (Speech-Language-Hearing Sciences), John Locke (Speech-Language-Hearing Sciences), Janis Massa (English), Kathleen McClure (Speech-Language-Hearing Sciences), Francisco Montaño (Languages and Literatures), Joye Smith Munson (Middle and High School Education), Zelda Newman (Languages and Literature)

Participating Departments: Anthropology, English, Languages and Literatures, Mathematics and Computer Science, Philosophy, Sociology, and Speech-Language-Hearing Sciences

The interdisciplinary Program in Linguistics offers courses to prepare students for (1) graduate study in theoretical and applied linguistics and (2) careers in the teaching of linguistics, and applied linguistics, including the teaching of English as a second language.

Linguistics, B.A. (30 Credit Major)

The Linguistics major consists of 30 credits, distributed as follows: 15 LNG 160 (SPV 246), LNG 321, LNG 323, LNG 324, LNG 335. 15 Other LNG courses (at least 6 credits at 300- or 400-level)

It is recommended that students complete their minor requirement in a foreign language. Students in this major must arrange their programs in consultation with the Program Director.

Minor in Linguistics

Students in this minor must arrange their programs in consultation with the Program Director. A minor in linguistics must include four courses at the 200-level or higher, with at most two courses being at the 200-level.

Honors in Linguistics

Honors in Linguistics may be conferred on students who have satisfied the College requirement for departmental honors at the time of graduation and have completed the honors tutorial LNG 481 with a grade of 3.5 or better.

Courses in Linguistics

*Courses preceded by an asterisk are not expected to be offered in 2013-2015.

LNG 150: The Phenomena of Language.

3 hours, 3 credits. The nature of language—its forms and uses. A survey of linguistic analysis. Language as data in psychology, anthropology, sociology, and other social sciences.

LNG 160 (SPV 246): Introduction to Linguistics.

3 hours, 3 credits. Survey of linguistic science, with special attention to descriptive and applied linguistics.

LNG (SPV) 245: Articulatory Phonetics.

3 hours, 3 credits. Fundamentals of articulatory phonetics; descriptive analysis of spoken forms of American English and other languages.

LNG 266 (PHI 230): Symbolic Logic.

3 hours, 3 credits. Introduction to the techniques and applications of modern deductive logic; a development of formal systems of propositional and quantificational logic. Note: LNG 266 (PHI 230) is recommended to students with some background in logic, philosophy, computer science, or mathematics.

LNG (SPV) 312: Bilingualism.

3 hours, 3 credits. The nature of bilingualism as a societal and individual human phenomenon; linguistic and applied linguistic issues; second language acquisition, psycholinguistic, sociolinguistic, neurolinguistic, educational aspects of bilingualism, and language policy. PREREQ: LNG 160 (SPV 246.

LNG 321: Introduction to Syntax.

3 hours, 3 credits. Government Binding (GB) syntax for the study of linguistics minimalism and post-minimalism; structure of an uncommonly taught language; other syntactic theories. PREREQ: LNG 160 (SPV 246).

LNG 323: Introduction to Phonology.

3 hours, 3 credits. The sound system of languages and underlying representation of the sound structure and lexicon. Analysis of data from different languages; investigation of the differences and similarities in the sound systems of different languages. Exploration of language universals. PREREQ: LNG 160 (SPV 246).

LNG 324: Semantics.

3 hours, 3 credits. Linguistic meaning, including word and sentence meaning, reference, and truth; connections among language, thought, and the world; speech act theory and formal semantic theory; metaphor and meaning in practice. PREREQ: LNG 160 (SPV 246).

LNG 334: Historical Linguistics.

3 hours, 3 credits. Principles of historical linguistics. The nature of language change, types and causes of change, variation and diffusion of changes through populations, differentiation of dialects and languages, determination and classification of historical relationships among languages, the reconstruction of ancestral languages and intermediate changes. PREREQ: LNG 160 (SPV 246).

LNG 335: Sociolinguistics: The Sociology of Language.

3 hours, 3 credits. The interaction among language, culture, and society; issues of language diversity; the development of dialects, pidgins, and creoles. PREREQ: LNG 160 (SPV 246).

LNG 337: Conversational and Discourse Analysis.

3 hours, 3 credits. Spoken and written conversational and discourse analysis with an overview of various psycholinguistic and sociolinguistic approaches. Application to language teaching and research. PREREQ: LNG 160 (SPV 246).

LNG (WST) 338: Women, Men, and Language.

3 hours, 3 credits. Review of major theoretical approaches to the field of language and gender, from diverse cultural perspectives. Analysis of ways in which gender ideologies shape and are shaped by language use.

LNG (AAS) 339: African Languages.

3 hours, 3 credits. African languages and language families, their characteristics and development, including pidgin and Creole languages. Analysis of relations of language to ethnicity and identity. The contributions of African languages to general linguistic theory.

LNG 340: Pragmatics.

3 hours, 3 credits. Language use relative to structure and context. Theoretical perspectives on speech acts and their application to human communication and language instruction. PREREQ: LNG 160 (SPV 246).

LNG 341: The Evolution of Language.

3 hours, 3 credits. Evaluates proposals and research on the evolution of the uniquely human capacity to learn and use language. Samples literature in a broad range of fields from anthropology and animal behavior to evolutionary and developmental biology, psychology, and linguistics.

LNG (PSY) 342: The Psychology of Literacy Development.

3 hours, 3 credits. Psychological processes involved in reading and literacy development, including the relations between oral language and reading/literacy development, as well as the several stages of reading development.

*LNG 444: Readings in Linguistics.

3 hours, 3 credits. PREREQ: Instructor's permission. RECOMMENDED: LNG 160 (SPV 246).

LNG 481: Honors Tutorial.

One semester, 3 credits (maximum 6 credits). Individual study under faculty guidance leading to completion of an honors paper. PREREQ: Program Director's permission.

List of Courses Relevant to the Linguistics Major

Course	Title	Credits
LNG 150:	The Phenomena of Language	3
LNG 160 (SPV 246):	Introduction to Linguistics	3
LNG 228 (ANT 228):	Language and Culture	3
LNG 240 (COM 301):	Language and	3
	Communication	
LNG (SPV) 245:	Articulatory Phonetics	3
LNG (SPV) 247:	Anatomy and Physiology of	3
	the Speech Mechanism	
LNG (SPV) 248:	Acoustic Phonetics	3
LNG 266 (PHI 230):	Symbolic Logic	3
LNG 267 (PHI 231):	Language, Meaning, and	3
	Knowledge	
LNG (ANT) 326:	Anthropological Linguistics	3
LNG (SPV) 312:	Bilingualism	3
LNG 318 (ENG 304):	The Structure of Modern	3
	English	
LNG 319 (ENG 305):	History of the English	3
	Language	
LNG 321 (SPV 322):	Introduction to Grammar	3
LNG (SPV) 323:	Introduction to Phonology	3
LNG (SPV) 324:	Semantics	3
LNG (SPV) 325:	The Contrastive Analysis of	3
	English with Other Languages	
LNG 328 (SPV 329):	Social & Regional Dialects of	3
	English	
LNG 230 (SPV 221):	Language Acquisition	3
LNG 334:	Historical Linguistics	3
LNG 335:	Sociolinguistics	3
LNG 341:	The Evolution of Language	3
LNG (PSY) 342:	The Psychology of Literacy	3
	Development	
LNG 346 (PHI 351):	Logic and Language	3
LNG 444:	Readings in Linguistics	3*
LNG 481:	Honors Tutorial	3*

^{*} Maximum of 6 credits allowed.

Macaulay Honors College

Program Director: Gary Schwartz (Leonard Lief Library, Room 315)

The Macaulay Honors College at Lehman College admitted its first class in September 2002. Member of the Honors College are designated "University Scholars." They receive full tuition, stipends, laptop computers, and an opportunities fund for academic enrichment experiences, such as study abroad. A "Cultural Passport" provides entrée to concerts, the theater, museums, and other cultural institutions in New York City. Passport activities also will put students in contact with people active in many facets of city life, the arts, government, business, and science.

Criteria for selection include the student's high school academic record, SAT/ACT scores, an essay, two letters of recommendation, and an interview.

Students intending to apply for Macaulay must apply directly from high school; Macaulay does not accept transfers from any institution. Students wishing to apply should consult the Macaulay homepage through the CUNY Portal at www.cuny.edu and select "Apply Online," as well as the Lehman homepage at www.lehman.edu/lehman/honorscollege. The curriculum of the Honors College is seminar based, and the program offers rich opportunities for academic enhancement and intellectual growth, supplemented by study abroad, internships, preparation for graduate school, and global engagement.

Courses in Macaulay Honors College

MHC 350: The Arts in New York City.

3 hours, 3 credits. Interdisciplinary seminar on the arts and culture of New York City.

MHC 351: The Peopling of New York City.

3 hours, 3 credits. Interdisciplinary seminar on immigration and migration patterns that have shaped the city's identity.

MHC 352: Science and Technology in New York City.

3 hours, 3 credits. Interdisciplinary seminar analyzing science and technology in contemporary New York.

MHC 353: Shaping the Future of New York City.

3 hours, 3 credits. Interdisciplinary seminar on planning for the future of New York City.

MHC 354: Honors English: Composition and Style.

3 hours, 3 credits. Interdisciplinary seminar on the study of grammar and syntax of selected important authors and their application to composition.

MHC 355: Research Seminar.

3 hours, 3 credits (maximum 6 credits). Interdisciplinary capstone project seminar in research methods. PREREQ: Permission of director or instructor.

MHC 356: Special Topics in Culture and Society.

3 hours, 3 credits. May be taken for a maximum of nine credits (three different topics). Interdisciplinary seminar in cultural studies. PREREQ: Permission of director or instructor.

MHC 357: Special Topics in Politics, Philosophy, and Economics.

3 hours, 3 credits. May be taken for a maximum of nine credits (three different topics). Interdisciplinary seminar in politics, philosophy, and economics. PREREQ: Permission of director or instructor.

Mathematics and Computer Science

Chair: Robert Schneider (Gillet Hall, Room 211).

Department Faculty: Distinguished Professors: Adam Koranyi and Victor Pan; Distinguished Lecturer: Anthony Cocchi; Professors: Robert Feinerman, Melvin Fitting, Nancy Griffeth, Michael Handel, Nicholas Hanges, Leon Karp, Linda Keen, Nikola Lakic, Joseph Lewittes, Melvyn B. Nathanson, Robert Schneider, Christina Sormani, Katherine St. John, Zoltan Szabo; Associate Professors: Jason Behrstock, Gwang Jung; Assistant Professors: Brian Murphy, Robert Schneiderman; Lecturers: Sameh Fakhour, Joseph Fera, Rhys Rosholt; Math and Computer Science Learning Center Coordinator: Loric Madramootoo; IT Academic Technology Coordinator: Marvin Florin

The Department of Mathematics and Computer Science offers undergraduates four different degree programs, as well as a major in the interdisciplinary area of Computer Graphics and Imaging and the opportunity to select a minor in any of these fields. Students can pursue programs leading to the Bachelor of Arts degree in either Mathematics or Computer Science and to the Bachelor of Science degree in either Computer Science or Computer Information Systems. These programs prepare students both for graduate study and for careers in industry, education, government, and the non-profit sector.

College Requirement in Mathematics

All Lehman College students are required to pass either:

a) a 3- or 4-credit MAT course numbered above 125

b) three MAT courses numbered between 180 and 199 (each 1 credit).

Note: Students should consult with an adviser from their (prospective) major or from the Department of Mathematics to determine the appropriate course(s) to take.

Departmental Honors in Mathematics or Computer Science

Students who wish to qualify for Departmental honors in any of the Department's majors must meet the requirements outlined under Academic Honors in the chapter on Academic Services and Policies in this Bulletin.

Mathematics, B.A. (40-44 Credit Major)

There are eleven required courses:

Credits

12 MAT 175, MAT 176, and MAT 226

8 MAT 313 and MAT 314

4 MAT 320 CMP 230 4

12-16 Four additional courses chosen from among 200-level

or higher MAT courses, not counting *MAT 231, 300,

301, and 348. CMP 326 and CMP 332 may be chosen.

A minor is also required.

Note: All students who wish to apply for certification as a Secondary School Teacher of Mathematics must take (as three of the four electives required for the Mathematics major): MAT 237, MAT 343, and either MAT 345 or MAT 346.

Requirements for the Minor in Mathematics

A minor in Mathematics consists of 12 credits in MAT courses at the 200 or higher level, with 6 of these credits in courses at a 300 or higher level.

Note: (1) Students majoring in Computer Science who elect a minor in Mathematics must include MAT 320 and cannot include any courses used to satisfy the Computer Science major. (2) Students not majoring in Computer Science must include MAT 226 and 313 and 4 additional credits in courses at the 300 or higher level.

Computer Science, B.A. (43-44 Credit Major)

There are eleven required courses:

MAT 175: Calculus I (4 hours, 4 credits)

MAT 176: Calculus II (4 hours, 4 credits)

MAT 313: Linear Algebra (4 hours, 4 credits)

CMP 230: Programming Methods I (4 hours, 4 credits)

CMP 232: Elementary Discrete Structures & Applications to Computer Science (4 hours, 4 credits)

CMP 326: Programming Methods II (4 hours, 4 credits)

CMP 334: Computer organization (4 hours, 4 credits)

CMP 338: Data Structures (4 hours, 4 credits)

CMP 339: Programming Languages or

CMP 426: Operating Systems (4 hours, 4 credits)

Two advanced (300- or 400-level) CMP electives (MAT 226 can be used as one of these electives).

Notes:

- 1. A minor is also required.
- 2. All students, particularly those considering graduate work, are advised to take more upper-level Computer Science courses. (The list above is only the minimum required for graduation.)
- 3. For Departmental honors, see one of the advisers in the Department of Mathematics and Computer Science.

Computer Science, B.S. (56-60 Credit Major)

There are fifteen required courses:

MAT 175: Calculus I (4 hours, 4 credits)

MAT 176: Calculus II (4 hours, 4 credits)

MAT 313: Linear Algebra (4 hours, 4 credits)

CMP 230: Programming Methods I (4 hours, 4 credits)

CMP 232: Elementary Discrete Structures & Applications to

Computer Science (4 hours, 4 credits)

CMP 326: Programming Methods II (4 hours, 4 credits)

CMP 334: Computer Organization (4 hours, 4 credits)

CMP 338: Data Structures (4 hours, 4 credits)

CMP 339: Programming Languages (4 hours, 4 credits)

CMP 426: Operating Systems (4 hours, 4 credits)

Four advanced (300- or 400-level) CMP courses (MAT 226: Vector Calculus, 4 hours, 4 credits or PHY 305: Digital Electronics, 2 hours, lecture; 2 hours, lab; 3 credits, can be substituted for one of these courses). One advanced (300- or 400-level) MAT course, not including MAT 300, 301, or 348 (CMP 332 or CMP 416 can be used for this course). A minor is not required.

Requirements for the Minor in Computer Science

A minor in Computer Science consists of 12 credits in CMP courses at the 200 level, with 6 of these credits in 300-level courses or courses at a higher level.

Note: (1) Students majoring in Mathematics who elect a minor in Computer Science must include CMP 332 or 338 and cannot include any courses used to satisfy the Mathematics major. (2) Students not majoring in Mathematics must include CMP 334 and 338.

Requirements for the Minor in Computer **Applications**

(13-16 credits) (includes only CIS courses). The minor consists of CIS 211, two other courses chosen from the 200 level (or higher) CIS courses, and one CIS course at the 300 level. All grades must be C- or better.

Computer Information Systems, B.S. (56-58 Credit Major)

In Computer Science: Required Courses (20 credits):

CIS 166: Computer Programming for Information Processing (4 hours, 4 credits)

CIS 211: Computer Information Systems (4 hours, 4 credits)

CIS 212: Microcomputer Architecture (4 hours, 3 credits)

CIS 244: Introduction to Database Management (4 hours, 3

CIS 331: Network Introduction (4 hours, 3 credits)

CIS 344: Database Design and Programming (4 hours, 3 credits)

In Computer Science: Elective Courses (6-8 credits):

Two additional courses chosen from the 200-level (or higher) CIS courses or from CGI 221, CGI 321, CGI 421, and CMP 326. One of the courses must be a 300- (or 400-) level CIS course.

In Mathematics: Required Courses (15 credits):

MAT 132: Basic Concepts of Probability and Statistics (4 hours, 4 credits)

MAT 174: Elements of Calculus (4 hours, 4 credits)

MAT 301: Applied Statistics and Computer Analysis (4 hours, 3 credits)

MAT 348: Mathematical Methods for Management (4 hours, 4 credits)

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In Economics: Required Courses (9 credits):

ECO 166: Fundamentals of Economics (3 hours, 3 credits)

ECO 167: Economic Analysis (3 hours, 3 credits)

ACC 185: Introduction to Accounting for Non-Accounting Majors (3 hours, 3 credits)

Further Electives (6 credits):

Students must choose two courses from the following:

One additional 200 level (or higher) CIS course, 3 credits

PHI 221: Ethical Issues in Computing and Technology (3 hours, 3 credits)

POL 299: Law, Computers, and the Internet: The Politics of Information Technology (3 hours, 3 credits)

Note 1: At least one of PHI 221 and POL 299 must be chosen.

Note 2: (a.) A minor is NOT required; (b). Students considering graduate work should take MAT 175 - 176 instead of MAT 174; (c.) For Departmental honors, see one of the advisors in the Department of Mathematics and Computer Science.

Computer Graphics and Imaging, B.S. (58) Credit Major)

The required credits are distributed as follows:

In ART/CGI (24 credits; may be taken as CGI or ART)

ART/CGI 221: Applied Imaging and Applications to the World Wide Web I. (4 hours, 3 credits)

ART/CGI 222: Applied Imaging and Applications to the World Wide Web II. (4 hours, 3 credits)

ART/CGI 321: Computer Modeling and Design I. (4 hours, 3 credits)

ART/CGI 322: Evolving Techniques in Digital Photography. (4 hours, 3 credits)

ART/CGI 325: Digital Multimedia. (4 hours, 3 credits)

ART/CGI 421: Computer Animation I. (4 hours, 3 credits)

ART/CGI 422: 3D Interactive Design. (4 hours, 3 credits)

ART/CGI 441: Broadcast Design. (4 hours, 3 credits)

In Computer Science (11 credits)

CMP 230: Programming Methods I. (4 hours, 4 credits)

CMP 326: Programming Methods II. (4 hours, 4 credits)

CMP 342: Internet Programming. (4 hours, 3 credits)

In Mathematics (5 credits)

MAT 155: Calculus Laboratory. (2 hours, 1 credit)

MAT 175: Calculus I. (4 hours, 4 credits)

In Art (18 credits)

ART 100: Basic Drawing. (4 hours, 3 credits)

ART 101: Introduction to two-Dimensional Design. (4 hours, 3 credits)

ART 102: Introduction to Three-Dimensional Design. (4 hours, 3 credits)

ART 106: Introduction to Sculpture. (4 hours, 3 credits)

Or

ART 108: Introduction to Photography. (4 hours, 3 credits) ART 112: Introduction to Digital Imaging. (4 hours, 3 credits) ARH 167: Tradition and Innovation in the Art of the West. (3 hours, 3 credits)

Or

ARH 141: Introduction to the History of Modern Art of the Nineteenth and Twentieth Centuries in Europe and the United States. (3 hours, 3 credits)

No minor required.

Departmental Minors

Minor in Computer Applications (13-16 credits)

The minor includes only CIS courses, consisting of CIS 211, two other courses chosen from the 200 level (or higher) CIS courses and one CIS course at the 300 level. All grades must be C- or better.

Minor in Computer Graphics and Imaging (12 credits)

The minor consists of any 12 credits chosen from the CGI courses. CMP 342 can be substituted for one of these courses.

Minor in Computer Science (12 credits)

This minor includes only CMP courses:

General requirement: 12 credits at the 200-level or above, with at least 6 at 300-level or above. All grades must be C- or better.

- Students not majoring in Mathematics must include CMP 334 (Assembly Language) and CMP 338 (Data Structures).
- Students majoring in Mathematics, who elect to have a minor in Computer Science, must include CMP 332 (Numerical Methods) or CMP 338 (Data Structures) and cannot include any courses used to satisfy the Mathematics major.

Minor in Mathematics (12 credits)

General requirement: 12 credits at the 200 level or above, with at least 6 at the 300 level or above. All grades must be C- or better.

- 1. Students not majoring in Computer Science must include MAT 226 (Intermediate Calculus I) and MAT 313 (Linear Algebra).
- 2. Students majoring in Computer Science, who elect to have a minor in Mathematics, must include MAT 320 (Advanced Calculus) and cannot include any courses used to satisfy the Computer Science major.

Introductory Mathematics Courses (MAT)

*Courses preceded by an asterisk are not expected to be offered in 2013-2015.

*MAT 050: Applications of Arithmetic and Algebraic Skills.

2 hours, 2 credits. PREREQ: Satisfaction of College mathematics requirements.

MAT 080: Elementary Algebra.

4 hours, 0 credits. Integers, polynomials, solution of linear equations and inequalities, absolute value, systems of linear equations, graphing, applications. Mathematics Laboratory attendance may be assigned at the discretion of the instructor. PREREQ: Placement by the Department of Mathematics and Computer Science.

MAT 090: Algebra and Geometry.

4 hours, 1 credit. Factoring, solving quadratic equations, rational and radical expressions, direct and inverse variation, topics from geometry, introduction to trigonometry, applications to the natural and social sciences. Mathematics Laboratory attendance may be assigned at the discretion of the instructor. PREREQ: MAT 080 or placement by the Department of Mathematics and Computer Science.

MAT 104: College Algebra.

4 hours, 3 credits. Rational expressions, integer and rational exponents, quadratic formula, complex numbers, exponential and logarithmic functions, conic sections, trigonometry. Mathematics Laboratory attendance may be assigned at the discretion of the instructor. PREREO: A grade of C (or better) in MAT 090 or placement by the Department of Mathematics and Computer Science.

MAT 123: A Problem-Solving Approach to Mathematics.

4 hours, 4 credits. A problem-solving approach to fundamental ideas in mathematics: properties of counting numbers, integers, rationals and reals; elementary number theory; probability and statistics; geometry. PREREQ: MAT 104 or placement by the Department of Mathematics and Computer Science.

MAT 132: Introduction to Statistics.

4 hours, 4 credits. Collection, plotting, and comparison of data sets, histograms, descriptive statistics, the frequency definition of probability, random experiments, random sampling, binomial and normal variables, confidence intervals and tests of hypotheses for binomial and normal parameters. Additional topics chosen from tests for the difference of proportions or population means, the Chi Square test, and regression analysis. Introduction to a computer statistical package. PREREQ: MAT 104 or placement by the Department of Mathematics and Computer Science.

MAT 135: Concepts and Uses of Mathematics.

3 hours, 3 credits. A survey course for liberal arts students. Topics chosen from a wide range of concepts in mathematics such as: probability, statistics, game theory, number theory, set theory, linear programming, geometry, and logic. PREREQ: MAT 104 or placement by the Department of Mathematics and Computer Science.

MAT 155: Calculus I Laboratory.

2 hours, 1 credit. Calculus computer software will be used to illustrate the ideas introduced in MAT 175. Students will be asked to solve problems using the software and to submit lab reports. COREQ: MAT 175.

MAT 156: Calculus II Laboratory.

2 hours, 1 credit. Calculus computer software will be used to illustrate the ideas introduced in MAT 176. Students will be asked to solve problems using the software and to submit lab reports. COREQ: MAT 176.

MAT 161: Computer/Calculator Usage.

1 hour, 1 credit. (May be repeated, with change in topic and Departmental approval, up to a maximum of three credits.) An introduction to the use of computers or scientific calculators to solve problems arising in science, business, and mathematics. PREREQ: Departmental approval.

MAT 171: Problem Solving for Management, Economics, and Life Sciences.

4 hours, 4 credits. The use of functions, graphs, and matrices to solve various applied problems. Geometry of linear, quadratic, logarithmic, and exponential functions. PREREQ: A grade of C (or better) in MAT 104 or placement by the Department of Mathematics and Computer Science. Notes: (1) MAT 171 is a prerequisite for MAT 174. Students planning on taking MAT 175 should take MAT 172 instead of MAT 171. (2) Students may not receive credit for both MAT 171 and MAT 172.

MAT 172: Precalculus.

4 hours, 4 credits. Polynomial, rational, logarithmic, and trigonometric functions, with applications to problems in mathematics and the sciences. PREREQ: A grade of C (or better) in MAT 104 or placement by the Department of Mathematics and Computer Science. Notes: (1) Students may not receive credit for both MAT 171 and MAT 172. (2) MAT 172 is a prerequisite for MAT 175. Students planning on taking MAT 174 should take MAT 171 instead of MAT 172.

Enrichment Topics (Mini Courses)

MAT 180: Voting and Polling Problems.

1 hour, 1 credit. Different kinds of voting schemes in elections. Different kinds of "fairness" in voting. Sampling techniques in polling. PREREQ: Three years of Regents-level high school mathematics or MAT 104.

MAT 181: Number Systems.

1 hour, 1 credit. Different types of numbers and different schemes for representing them. The base in a number system. Computer representation. PREREQ: Three years of Regents-level high school mathematics or MAT 104.

MAT 184: Codes and Number Patterns.

1 hour, 1 credit. Prime and composite numbers. Different kinds of codes, code breaking. Security and error detection. PREREQ: Three years of Regents-level high school mathematics or MAT

MAT 186: Geometry and the Real World.

1 hour, 1 credit. Geometric forms in the real world. Topics: symmetry, geometric solids, crystals, and fractals. PREREQ: Three years of Regents-level high school mathematics or MAT 104.

MAT 189: Sets and Infinity.

1 hour, 1 credit. Finite and infinite sets. Different orders of infinity. Paradoxes. PREREQ: Three years of Regents-level high school mathematics or MAT 104.

MAT 192: Statistical Inference.

1 hour, 1 credit. Understanding statistics and judging the accuracy and relevance of statistical results. PREREQ: Three years of Regents-level high school mathematics or MAT 104.

MAT 194: Games and Puzzles.

1 hour, 1 credit. The mathematical principles behind many games and puzzles. PREREQ: Three years of Regents-level high school mathematics or MAT 104.

MAT 195: Gambling and Games of Chance.

1 hour, 1 credit. A study of gambling situations. Casino games. Probability and expected value. PREREQ: Three years of Regentslevel high school mathematics or MAT 104.

MAT 197: Trees, Networks, Paths, and Flows.

1 hour, 1 credit. Cycles, connectedness, the Koenigsberg bridge problem, minimum paths, and minimum spanning trees. PREREQ: Three years of Regents-level high school mathematics or MAT 104.

MAT 199: Topics in Elementary Mathematics.

1 hour, 1 credit. Various mathematical topics of current interest. PREREQ: Three years of Regents-level high school mathematics or MAT 104.

Courses in Mathematics (MAT)

*Courses preceded by an asterisk are not expected to be offered in 2013-2015.

MAT 126: Quantitative Reasoning.

3 hours, 3 credits. Survey of modern quantitative techniques in a variety of disciplines. Critical thinking and mathematical/quantitative literacy are emphasized. PREREQ: 60 on the algebra section of the Compass exam or Department permission. Note: This course provides a student-optional onehour per week homework review session with the instructor.

MAT 139: The Mathematics of Games of Chance

3 hours, 3 credits. Mathematics applied to the study of games, gambling, sporting events, and other decision-making situations. Topics to include permutations, combinations, probability, expected value, binomial distribution, and game theory. PREREQ: MAT 104 or placement by the Department.

MAT 174: Elements of Calculus.

4 hours, 4 credits. (Not open to students majoring in MAT.) Differentiation and integration of elementary functions with applications to business, social sciences, and life sciences. PREREQ: A grade of C (or better) in MAT 171 or placement by the Department of Mathematics and Computer Science. Notes: (1) Students may not receive credit for both MAT 174 and MAT 175. (2) MAT 174 will not serve as a prerequisite for MAT 176.

MAT 175: Calculus I.

4 hours, 4 credits. Differentiation of functions of one variable; applications to motion problems, maximum-minimum problems, curve sketching, and mean-value theorems. PREREQ: A grade of C (or better) in MAT 172 or placement by the Department of Mathematics and Computer Science. COREQ: MAT 155. Notes: (1) Students may not receive credit for both MAT 174 and MAT 175. (2) MAT 174 will not serve as a prerequisite for MAT 176.

MAT 176: Calculus II.

4 hours, 4 credits. Riemann sums; logarithmic and exponential functions; integration of functions; applications of the definite integral, including area, volume, and arc length; infinite series and power series in one variable. PREREQ: A grade of C or better in MAT 175. COREQ: MAT 156.

MAT 226: Vector Calculus.

4 hours, 4 credits. Vectors in two and three dimensions, equations of lines and planes, functions of several variables, partial differentiation, directional derivatives, gradients, optimization with Lagrange multipliers, multiple integration, line integrals, and vector fields. PREREQ: A grade of C or better in MAT 176.

MAT 227: Intermediate Vector Calculus.

4 hours, 4 credits. A continuation of MAT 226. Taylor expansion in several variables, maximum and minimum problems, line integrals, Green's theorem, and introduction to differential equations. PREREQ: MAT 226.

*MAT 231: Statistics for Biologists.

4 hours, 4 credits. (Limited to BIO concentrators.) Basic probability theory, randomization, conditional probability and independence, binomial Poison and normal distributions, testing statistical hypotheses, confidence and fiducial intervals, analysis of variance, Chi-square test of fit, correlation and linear regression, and selected topics in bioassay. PREREQ: MAT 175 and BIO 166.

MAT 237: Applications of Discrete Mathematics.

4 hours, 4 credits. Concepts and applications of graph theory, recurrence relations, linear programming, game theory, difference equations, matrices, combinatorics, statistical inference, probability. Problem solving using mathematical modeling. PREREQ: MAT 176. Note: Primarily for students planning to teach mathematics in a secondary school.

MAT 300: Mathematical Models in the Social Sciences.

3 hours, 3 credits. This course is designed for students interested in the social sciences. Topics covered will be selected from elementary probability, theory of gambling, random walks, game theory, and linear programming. Emphasis is placed on a descriptive treatment of mathematical material and its application to the social sciences. PREREQ: Either three years of high school math or MAT 172. Note: MAT 300 may not be counted toward the MAT major.

MAT 301: Applied Statistics and Computer Analysis.

4 hours (2, lecture; 2, lab), 3 credits. An elementary treatment of statistical concepts. Data analysis using standard statistical methods available in the Statistical Package for Social Scientists or similar statistical software. PREREQ: MAT 132 and MAT 171. Notes: (1) MAT 301 may not be counted toward the Mathematics major. (2) An equivalent college-level statistics course may be substituted for MAT 132 as a prerequisite for this course.

MAT 305: Introduction to Topology.

3 hours, 3 credits. Intuitive discussion of topological concepts and problems, such as networks, map-coloring problems, one-sided surfaces, topological transformations, Jordan curve theorem, winding numbers and zeros of polynomials, fixed point theorems, and dimension. PREREQ: MAT 226.

MAT 313: Elements of Linear Algebra.

4 hours, 4 credits. Vector spaces, systems of linear equations, determinants, linear transformations, and matrices. PREREQ: MAT 176. With Departmental permission, MAT 176 may be taken as a COREQ.

MAT 314: Algebra and Number Systems I.

4 hours, 4 credits. The syllabus of this course is continued in MAT 315. Algebraic structures, such as groups, rings, and fields; their relations and applications to school and college mathematics, including the number systems of arithmetic and analysis. PREREQ: MAT 313.

MAT 315: Algebra and Number Systems II.

3 hours, 3 credits. Continuation of MAT 314. Further study of algebraic structures; polynomials; topics chosen from theory of equations; Galois theory; and rules and compass constructions. PREREQ: MAT 314.

MAT 316: Theory of Numbers.

4 hours, 4 credits. Study of problems concerning numbers and the properties of numbers, such as divisibility, continued fractions, and congruences. Fermat's and Euler's theorems, quadratic residues and reciprocity law, elementary diophantine analysis, and introduction to algebraic numbers. Computer applications involving testing for primality and topics from coding theory. PREREQ: MAT 226 or Departmental permission.

MAT 320: Analysis I.

4 hours, 4 credits. Analysis I. The syllabus of this course is continued in *MAT 321. Introduction to real analysis, the real number system, limits, continuity, differentiation, the mean value, and Taylor's theorems and applications. Riemann integration and improper integrals. PREREQ MAT 226.

*MAT 321: Analysis II.

4 hours, 4 credits. Continuation of MAT 320. Infinite series and power series, pointwise and uniform convergence, ndimensional Euclidean space, metric spaces, functions from Rn to Rm, continuity, and the differential as a linear map: inverse and implicit function theorems. PREREQ: MAT 320.

MAT 323: Ordinary Differential Equations.

4 hours, 4 credits. Exact and approximate solutions of ordinary differential equations, existence theorems, and applications to problems in the physical sciences. Series solutions; Laplace transforms and Fourier analysis. Computer applications. PREREQ: MAT 226.

MAT 327: Statistical Inference.

4 hours, 4 credits. Introduction to the ideas and methods of probability and statistical inference for students in mathematics and the sciences. Topics include confidence intervals, tests of significance, chi-square tests of goodness-of-fit and independence, regression analysis, and analysis of variance. Students will be introduced to a standard computer statistical package. PREREQ: MAT 176.

MAT 330: Probability.

4 hours, 4 credits. Basic probability theory. Combinatorial problems, distributions, expectation, law of large numbers and central limit theorem, Bernoulli processes, and Markov chains. Other topics from probability and statistics. PREREQ: MAT 176.

*MAT 335: Applied Mathematics I.

3 hours, 3 credits. The syllabus of this course is continued in *MAT 336. Calculus of variations, Lagrange's and Hamilton's formulations for mechanics, wave and heat equations, boundaryvalue problems, and solutions by separation of variables and special functions. Fourier series and integrals. PREREQ: MAT 226.

*MAT 336: Applied Mathematics II.

3 hours, 3 credits. Continuation of *MAT 335. Existence and uniqueness theorems for initial value problems in ordinary differential equations. Green's function, and eigenvalue problems; control theory. PREREQ: *MAT 335.

MAT 340: Foundations of Mathematics.

3 hours, 3 credits. The nature of mathematical proof, basic logic, and set theory. A rigorous construction of the natural numbers within set theory, of the rational numbers, and of the real numbers via Dedekind cuts or their equivalent. PREREQ: MAT 226 or MAT 314.

MAT 343: History of Mathematics.

4 hours, 4 credits. Study of the historical development of mathematics from ancient to modern times, including the contributions of underrepresented groups and diverse cultures. PREREQ: MAT 313.

MAT 345: Axiomatic Geometry.

4 hours, 4 credits. Geometric theory from an axiomatic viewpoint motivated by Euclidean geometries and additional non-Euclidean examples. Emphasis on the relationship between proof and intuition. PREREQ: MAT 314.

MAT 346: Geometry.

4 hours, 4 credits. Euclidean and non-Euclidean geometries approached from the points of view of axiomatics and transformation groups. PREREQ: MAT 314.

MAT 347: Game Theory and Linear Programming.

3 hours, 3 credits. An introduction to the mathematical theory of games of strategy. Matrix games. Optimal strategies for zero-sum two-person games. Convex sets in Euclidean n-space, systems of linear inequalities, linear programming, and the simplex method. N-person games and non-zero-sum games. PREREQ: One course in linear algebra.

MAT 348: Mathematical Methods for Management.

4 hours, 4 credits. Conditions for optimization, classical inventory problems. Linear programming and its applications, including the transportation problem. Use of software packages for linear programming calculations. Probability, expectation, and risk. Portfolio selection. Stochastic processes and queues. Computer simulation of stochastic processes. PREREQ: MAT 174 (or 175), 301, and CIS 211. Note: Primarily for students in the Computing and Management major; not to be counted toward the Mathematics major.

MAT 349: Operations Research.

4 hours, 4 credits. Inventory theory, queuing theory, linear programming, integer linear programming, nonlinear programming, the transportation problem, network analysis, and applications to industrial models. Software packages for linear programming. PREREQ: MAT 313 and CMP 230.

MAT (CMP) 417: Cryptography.

4 hours, 4 credits. Methods for transforming information into cryptic messages and for deciphering secret code. Review of selected topics in elementary number theory. Construction of linear, quadratic, and exponential ciphers, as well as key exchange protocols. PREREQ: MAT 313.

MAT 423: Theory of Functions of a Complex Variable.

4 hours, 4 credits. Algebra and geometry of complex numbers, analytic functions, elementary functions, and conformal mapping. Cauchy integral theorem and applications. Taylor and Laurent series, calculus of residues, and classification of functions by singularities. Computer applications, including conformal mapping. PREREQ: MAT 320.

MAT 424: Partial Differential Equations and Applications.

4 hours, 4 credits. Study of the wave equation, heat equation, and Laplace's equation, with an emphasis on problems in one and two dimensions. Topics to include: harmonic functions and the Dirichlet problem, mixed boundary conditions, and Fourier series, Fourier transform and convolution. Computer-based projects. PREREQ: MAT 226.

MAT 432: Differential Geometry.

4 hours, 4 credits. Metric spaces, Curves in Euclidian 3 space (E3): Curvature, torsion, fundamental theorem of ordinary differential equations, fundamental existence theorem for space curves. Surfaces in E3: geometry on a surface, Inverse Function Theorem, Implicit Function Theorem, and Gauss curvature. Coordinate charts, Fubini's Theorem, orientation and introduction to Riemannian Geometry. PREREQ: MAT 313 and MAT 320.

MAT 433: Topology.

4 hours, 4 credits. Sets, functions, metric spaces, topological spaces, neighborhoods, Hausdorff spaces, discrete spaces, continuity, connectedness, path connectedness, compactness, homeomorphisms, homotopy, simply connected spaces, locally simply connected spaces, fundamental groups and universal covers. PREREQ: MAT 314 and MAT 320.

MAT 434: Calculus on Manifolds.

4 hours, 4 credits. Inverse and Implicit Function Theorems, Manifolds, Differential Forms, Fubini's Theorem, Partition of Unity, Integration on Chains, Stokes and Green's Theorems, and an introduction to Riemannian geometry. PREREQ: One course each in linear algebra and advanced calculus.

MAT 441: Set Theory.

4 hours, 4 credits. Axiomatic approach to the theory of sets. Relations, functions, the axiom of choice, ordinal numbers, wellordering, Zorn's lemma, cardinal numbers and transfinite arithmetic, and transfinite induction. PREREQ: Any two courses chosen from linear algebra, modern algebra, or advanced calculus.

MAT 442: Mathematical Logic.

4 hours, 4 credits. Propositional logic, logic with quantifiers, and with equality. Proof techniques such as Hilbert systems, tableaus, and others. Models, and the extent to which the notion of model embodies and generalizes the various structures studied by mathematicians. Gödel's Completeness Theorem, and consequences such as Compactness and Löwenheim-Skolem Theorems. The incompleteness results of Tarski, Gödel, and others. PREREQ: MAT 314.

*MAT 450: Seminar in Algebra.

3 hours, 3 credits. Selected topics from algebra and number theory. Students will be expected to make oral presentations and work with periodical literature. PREREQ: MAT 314.

*MAT 451: Seminar in Geometry.

3 hours, 3 credits. Selected advanced topics from Euclidean geometry. Students will be expected to make oral presentations and work with periodical literature. PREREQ: Either MAT 345 or MAT 346.

MAT 456: Topics in Mathematics.

4 hours, 4 credits (maximum 8 credits). Various sections on topics in mathematics. (For specific topics and sections, consult the Department.)

MAT 485: Independent Study.

3 hours, 3 credits (maximum 6 credits). Independent reading under faculty supervision. PREREQ: Departmental permission.

MAT 486: Independent Study.

1 hour, 1 credit (maximum 3 credits). Not allowed as an elective for Mathematics or Computer Science concentrations.

Courses in Computer Science (CMP)

CMP 108: Programming for Non-Computer Science Majors.

4 hours (2, lecture; 2, lab), 3 credits. Implementation of basic programming constructs using robots, designing of simple video games, and creation of elementary Web pages.

CMP 230: Programming Methods I.

4 hours, 4 credits. Introduction to structured computer programming using a modern high-level programming language. Programming constructs covered to include console I/O, data types, variables, control structures, including iteration, arrays, function definitions and calls, parameter passing, functional decomposition, and an introduction to objects. Debugging techniques. PREREQ: MAT 104 or placement by the Department of Mathematics and Computer Science. Note: For students who intend to major in Computer Science, Mathematics, Computer Graphics and Imaging, or the sciences. Some previous computer programming experience is highly recommended.

CMP 232: Elementary Discrete Structures and Applications to Computer Science.

4 hours, 4 credits. Sets, relations, and functions; propositional calculus, Boolean algebras, and combinatorial circuits, counting methods; proof techniques; analysis of algorithms; graphs and trees, puzzles; finite machines, sequential circuits, and recognizers. PREREQ: MAT 172 or placement by the Department of Mathematics and Computer Science or Departmental permission. Note: Students who receive a grade below B- in MAT 172 are strongly urged to speak to an adviser in the Department of Mathematics and Computer Science prior to registering for CMP

CMP 270: Computer Programming in Visual Basic.

2 hours, 2 credits. Intensive introduction to Visual Basic, for students who have successfully completed a two-semester sequence in another programming language. PREREQ: Two semesters of programming in another language, or Departmental permission. Note: Taught as a regular programming course or as a self-study course with reading and programming assignments and weekly conferences with the instructor.

CMP 273: Computer Programming in Fortran.

2 hours, 2 credits. Intensive introduction to Fortran for students who have successfully completed a two-semester sequence in another programming language. PREREQ: Two semesters of programming in another language or Departmental permission. Note: Taught as a regular programming course or as a self-study course with reading and programming assignments and weekly conferences with the instructor.

CMP 274: Computer Programming in C++.

2 hours, 2 credits. Intensive introduction to C++, for students who have successfully completed a two-semester sequence in another programming language. PREREQ: Two semesters of programming in another language, or Departmental permission. Note: Taught as a regular programming course or as a self-study course with reading and programming assignments and weekly conferences with the instructor.

CMP 277: Computer Programming in Java.

2 hours, 2 credits. Intensive introduction to Java, for students who have successfully completed a two-semester sequence in another programming language. PREREQ: Two semesters of programming in another language, or Departmental permission. Note: Taught as a regular programming course or as a self-study course with reading and programming assignments and weekly conferences with the instructor.

CMP 279: Topics in Computer Programming.

2 hours, 2 credits. (May be repeated, with change of language and Departmental permission.) Intensive introduction to a programming language, for students who have successfully completed a two-semester sequence in another programming language. PREREQ: Two semesters of programming in another language, and Departmental permission. Note: Taught as a regular programming course or as a self-study course with reading and programming assignments and weekly conferences with the instructor.

CMP 326: Programming Methods II.

4 hours, 4 credits. Continuation of parameter passing with a focus on devising function definitions, and tracing recursive calls. Sorting and searching algorithms and a comparison of their performance. GUI programming. Threads, Exceptions, and Exception Handling. Object-Oriented Programming techniques. PREREQ: A grade of B- or better in CMP 230 or Departmental permission.

CMP 332: Numerical Methods.

4 hours, 4 credits. Computer methods of approximate calculation. Topics chosen from polynomial approximation and interpolation, orthogonal polynomials, finite difference methods, splines, and least square approximations; numerical differentiation and integration; numerical solutions of equations by iterative methods and matrix inversion; eigenvalue computations; sparse matrix methods. PREREQ: CMP 326 and MAT 226 and MAT 313.

CMP 334: Computer Organization.

4 hours, 4 credits. Introduction to digital logic-expressions, gates, flip-flops, adders, busses, multiplexers, introduction to assembly language and assembly level organization-data representation, instruction formats, addressing modes, interrupts. Memory systems-caches (mapping and management policies) and memory hierarchies, latency and bandwidth, virtual memory (pagetables, TLB). Input/Output-busses, channels, and DMA. Performance considerations-pipelining, RISC architecture, branch prediction, introduction to instruction-level parallelism. PREREQ: CMP 230 and CMP 232 or Departmental permission.

CMP 335: Computer Organization Laboratory.

2 hours, 1 credit. A practical course applying principles taught in CMP 334. Construction and operation of the separate hardware components; system software installation. PRE or COREQ: CMP 334. Note: Not allowed as one of the electives in the Computer Science B.S. or B.A. degrees; however, if both CMP 335 and CMP 406 are taken, the combination can be used as one of the electives for the Computer Science B.S. degree.

CMP 338: Data Structures and Algorithms I.

4 hours, 4 credits. Abstract characterizations of data structures, such as arrays, stacks, queues, trees, and graphs, will be studied along with algorithms that make use of such structures, including algorithms for sorting, searching, and memory management. Implementation issues will be considered, and students will write programs that embody these structures and algorithms. PREREQ: CMP 232 and CMP 326.

CMP 339: Programming Languages.

4 hours, 4 credits. Design, evaluation, and implementation of programming languages. Syntax and semantics of language constraints. Control structures, including branching, selection, iteration, procedure calls and recursion; data types and data structures, and operations on them; name structures, binding, environments, dynamic and static scoping; parameter passing. PREREQ: CMP 334 and CMP 338.

CMP 342: Internet Programming.

4 hours, 4 credits. Programming using languages for the Internet, such as Java or Visual Basic. Web server management, including administrative software tools. PREREQ: CMP 326.

CMP 346: Object-Oriented Techniques.

4 hours, 4 credits. Study of design patterns and a virtual machine. Class file structure, the virtual machine computer architecture and instruction set, Just-In-Time compilation, different forms of garbage collectors and their merits, and performance enhancements. PREREQ: CMP 326.

CMP 405: Introduction to Networks.

4 hours, 4 credits. Introduction to network protocols and algorithms. Intensive study of the most important protocols at each layer. Examination of their strengths and weaknesses. Basic algorithms for identifying primary servers, constructing forwarding and broadcasting trees, and determining routing tables. Writing a simple networking service at the I.P. layer or higher. PREREQ: CMP 334 and CMP 338.

CMP 406: Network Systems Lab.

4 hours, 2 credits. Introduction to installation and configuration of networking equipment, network monitoring and troubleshooting, and network management. Use of typical networking equipment. Some programming in Java or C will be required. PREREQ: CMP 338. PRE- or CO-REQ: CMP 405. Note: Not allowed as one of the electives in the Computer Science B.S. or B.A. degrees; however, if both CMP 335 and CMP 406 are taken, the combination can be used as one of the electives for the Computer Science B.S. degree.

CMP 407: Compiler Construction.

4 hours, 4 credits. Compilation of simple expressions and statements. Organization of a compiler, including compile-time and run-time symbol tables, lexical scan, object code generation, error diagnostics, object-code optimization techniques, such as register allocation via graph coloring, and method in-lining. Use of compiler writing languages and bootstrapping. Note: Students will work on a compiler for a small language. PREREQ: CMP 339.

CMP 408: Software Engineering.

4 hours, 4 credits. Classical and object-oriented software engineering. System life cycle, structured coding techniques, modularity, data encapsulation, and generic facilities. Verification, validation, and testing techniques: static analysis, input-output assertions, structured induction, and symbolic execution. PREREQ: CMP 338.

CMP 409: Security of Networks.

4 hours, 4 credits. Introduction to attack and defense in network security. Basic tools for both attacking and defending networks and their use. NOTE: Students will be required to work with a variety of network attack and defense tools in a sandbox or virtual network. PREREQ: CMP 405.

CMP 410: Data Structures and Algorithms II.

4 hours, 4 credits. Design and analysis of algorithms: Worst and average case behavior. Design strategies, such as divide and conquer, the greedy principle, dynamic programming, and backtracking, are illustrated by examples chosen from sorting and searching, applications of graph theory, scheduling, pattern matching, matrix multiplication, and other topics. NP-complete problems. Parallel processing and algorithms. PREREQ: CMP 338. PRE- or COREQ: MAT 313.

CMP 412: Computer Graphics.

4 hours, 4 credits. Techniques of producing graphical displays. Two-dimensional transformations. World vs. Screen coordinates. Line drawing algorithms. Clipping. Motion. Use of devices such as light pens, graphics tablets, and mouses. PREREQ: CMP 326. PRE- or COREQ: MAT 313.

CMP 414: Artificial Intelligence.

4 hours, 4 credits. Survey of artificial intelligence with an introduction to LISP programming. Graph-searching algorithms applied to problem solving. Selected topics from pattern recognition, natural language processing, and expert systems. PREREQ: CMP 338.

CMP 416: Computability Theory.

4 hours, 4 credits. Mathematical formulation of computability theory and abstract machine theory. Finite-state machines and Turing machines; Church-Turing Thesis; recursive functions and recursively enumerable sets; unsolvability and the Halting Problem. PREREQ: CMP 232 and CMP 326.

CMP (MAT) 417: Cryptography.

4 hours, 4 credits. Methods for transforming information into cryptic messages and for deciphering secret code. Review of selected topics in elementary number theory. Construction of linear, quadratic, and exponential ciphers, as well as key exchange protocols. PREREQ: MAT 313.

CMP 418: Systems Analysis and Design.

4 hours, 4 credits. Development of many systems will be studied using a structured approach to system design. Feasibility study, project cost estimation, top down design,

Hierarchy/Input/Process/Output (HIPO), data flow diagrams, data dictionaries, backup, security, maintenance, and testing system. PREREQ: CMP 326.

CMP 420: Database Systems.

4 hours, 4 credits. Introduction to theory of database systems and database management: theory of relational, hierarchical, and network database organization, with emphasis on the first; views of data, data organization, data dependency and redundancy, normal forms, and query language. A database language will be taught and a project assigned in that language. PREREQ: CMP 338.

CMP 425: System Programming Languages.

4 hours, 4 credits. Assembly language for one machine language. Projects to illustrate programming techniques in assembly language, including loops, procedure, and subroutine call and return, parameter passing, call stacks, data structures. Introduction to the C language, including the C preprocessor, macros, and syntax. Data types, structures, pointers, and pointers to functions. PREREQ: CMP 326 and CMP 334.

CMP 426: Operating Systems.

4 hours, 4 credits. Operating systems and their role in various types of computer systems; the principles of multiprogramming; algorithms for resource allocation; multiple-computer systems. PREREQ: CMP 338 and CMP 334.

CMP 428: Video Game Programming.

4 hours, 4 credits. General game architecture, asynchronous input, animated sprites, action oriented AI, collision detection, scrolling, sound clips, and 3D graphics. Student projects involving development of several video games, both individually and in teams. PREREQ: CMP 338 and a strong foundation in objectoriented programming techniques. COREQ: MAT 226. Note: Students should expect to devote a great deal of time working both individually and in teams to produce several video games written in Java. This is a Programming Intensive course.

CMP 436: Introduction to Enterprise Computing.

4 hours, 4 credits. Technical issues and principles for building distributed enterprise systems. Applications of these principles using the Java EE framework. Server-side distributed component model, such as Enterprise Java Beans and Web Services. PREREQ: CMP 338 and proficiency in Java.

CMP 438: Communicating Robots.

4 hours, 4 credits. Techniques and principles for building communicating robots. Programming on resource-limited systems, designing communications protocols, and testing distributed algorithms. Project to involve building a robot to work/compete with other robots. PREREQ: CMP 338.

CMP 444: Modeling Cellular Networks.

4 hours, 4 credits. Mathematical models and computational tools for studying regulatory networks in the cell. PREREQ: BIO 166 and CMP 232.

CMP 446: Computational Tools for Bioinformatics.

4 hours, 4 credits. Foundational tools, techniques and algorithms for Bioinformatics and Molecular Biology. PREREQ: BIO 166, CMP 230 and CMP 232.

CMP 464: Topics in Computer Science.

4 hours, 4 credits (maximum 8 credits). Various sections on topics in computer science. (For specific topics and sections, consult the Department.)

CMP 485: Independent Study.

3 hours, 3 credits (maximum 6 credits). Independent study on a specific topic under faculty supervision. PREREQ: Departmental permission.

CMP 486: Independent Study.

1 hour, 1 credit (maximum 3 credits). Not allowed as elective for Mathematics or Computer Science concentrations.

CMP 487: Internship in Computer Science.

One semester, 3 credits (maximum 6 credits). On-the-job training in a public or private institution. PREREQ: Prior approval of Department Chair. Note: Not allowed for credit toward the B.A. in Computer Science.

Courses in Computer Applications (CIS)

CIS 106: Computer Literacy.

4 hours (2, lecture; 2, lab), 3 credits. Use of software packages for word processing, database manipulation, and spreadsheet calculation. Introduction to the Internet and the World Wide Web.

CIS 166: Computer Programming for Information Processing I.

4 hours, 4 credits. Computers, algorithms, and programs. Data representation; processing of quantitative and character data. Control structures, multidimensional arrays. Introduction to formatted input/output procedures. Programming applications drawn from business information processing. PREREQ: MAT 104 or placement by the Department of Mathematics and Computer Science. Note: Intended for students in Accounting or Computer Information Systems. Not intended for students in Mathematics or Computer Science.

CIS 211: Computer Information Systems.

4 hours, 4 credits. Survey of the technology and applications of computer-based information systems in business. PREREQ: Three years of Regents-level mathematics or MAT 104.

CIS 212: Microcomputer Architecture.

4 hours (2, lecture; 2, lab), 3 credits. Architecture of microcomputer systems and its supporting system software. Various microprocessor systems, expansion bus design, memory design and management, secondary storage technologies and management, peripherals, and telecommunication technologies. PREREQ: CIS 211.

CIS 216: Computer Group Productivity Tools.

4 hours (2, lecture; 2, lab), 3 credits. Use and characteristics of basic group-ware and productivity tools such as electronic mail and messaging, presentation creation, group calendaring and scheduling, electronic meeting systems, desktop and real-time data conferencing, group document handling, work-flow and work-group utilities, and group-ware development tools. PREREQ: CIS 211.

CIS 228: The Internet.

4 hours (2, lecture; 2, lab), 3 credits. Website creation; coding HTML documents; tags of the HTML language; style sheets. Writing and embedding simple Java script code. PREREQ: CIS 211 and CIS 166.

CIS 234: Introduction to Spreadsheet Analysis.

4 hours (2, lecture; 2, lab), 3 credits. Use of spreadsheet software for elementary data analysis, simple modeling and forecasting. Worksheets, files, graphs, and formatted output and screen presentation. Macro programming. PREREQ: MAT 171 and a grade of B- (or better) in CIS 166.

CIS 241: Computer Graphics in Business.

4 hours (2, lecture; 2, lab), 3 credits. Applications of graphics in business as a reporting and analysis tool: presentation packages, project management packages, desktop publishing, CAD/CAM Overview of the methods (software and hardware) used for generating graphics, including algorithmic image manipulation, interactive processing, input tools, and display tools. PREREQ: MAT 171.

CIS 242: Introduction to Systems Analysis and Design.

4 hours, 4 credits. Study of a computer system life cycle via a structured approach: problem definition, feasibility study, cost estimation, analysis, design, implementation, testing, and maintenance. Hardware and software organization. Several case studies will be considered. PREREQ: CIS 211.

CIS 244: Introduction to Database Management.

4 hours (2, lecture; 2, lab), 3 credits. Fundamental concepts of database organization: fields, records, tables, indexes, queries, forms, reports. Use of a relational database system for loading, modifying, and querying a database. Programming in a database language. PREREQ: A grade of B- (or better) in CIS 166.

CIS 247: Practical UNIX: Programming and System Administration.

4 hours (2, lecture; 2, lab), 3 credits. Topics chosen from the following: text editors, file system, utility programs, pipe and filter paradigms, shell language programming; tools for maintenance of normal system operation, security, hardware and software configuration management, and network connections. PREREQ: CIS 211 and CIS 166.

CIS 252: Topics in Computer Applications.

4 hours (2, lecture; 2, lab), 3 credits. (May be repeated for credit as the topic changes up to a maximum of 6 credits.) Various sections on topics in Computer Applications (for specific topics, see the Department.) PREREQ: See the Department.

CIS 266: Computer Programming for Information Processing II.

4 hours, 4 credits. Techniques of business information processing using object-oriented programming. Random access files, data management and control, variable arrays, object variables. Introduction to advanced techniques. PREREQ: A grade of C or better in CIS 166.

CIS 324: Spreadsheet Design and Programming.

4 hours (2, lecture; 2, lab), 3 credits. Advanced features of spreadsheets, including graphics, database manipulation, built-in functions, and macros, applied to a variety of business-oriented problems. PREREQ: CIS 234.

CIS 329: Local Area Networks (LANs).

4 hours (2, lecture; 2, lab), 3 credits. An overview of LANs as well as a hands-on introduction to a popular network operating system. General topics will include LAN media, topologies, protocols, multiplatform connectivity, remote access, and rudimentary internetworking. PREREQ: CIS 211 and CIS 212.

CIS 331: Network Introduction.

4 hours (2 lecture, 2 lab), 3 credits. Introduction to network technologies (Ethernet, ATM, WiFi, Bluetooth, ZigBee), network architectures (telephone, OSI, and Internet), and standard tools for administering and monitoring networks. Evaluation of network technologies and designs for supporting some services; design and configuring networks for those services. PREREQ: CIS 211 and CIS 212.

CIS 333: Network Security.

4 hours (2, lecture; 2, lab), 3 credits. Introduction to securing networks, with emphasis on firewalls, intrusion detection, and monitoring tools. Monitoring and improving the security of an organization's network. Building firewalls and configuring intrusion detection systems. Detection of some well-known attacks. PREREQ: CIS 331.

CIS 341: Computer System Fundamentals.

4 hours (2, lecture; 2, lab), 3 credits. Examination, removal, and reassembly of computer hardware components, such as processors, disks, memory, and buses. Installing and operating the following computer system components: operating systems, user interfaces, subsystems (such as Web servers), development environments, communications, and distributed file systems. Performance characteristics also will be discussed and measured. PREREO: CIS 211. COREO: CIS 212.

CIS 344: Database Design and Programming.

4 hours (2, lecture; 2, lab), 3 credits. Programming in a database language. Emphasis on programming ideas and techniques and user interfaces in a modern database system. Review of elementary relational database concepts, with emphasis on programming rather than theory. PREREQ: CIS 244 and CIS 166.

CIS 345: Introduction to Operating Systems.

4 hours (2, lecture; 2, lab), 3 credits. Overview of operating systems (OS) from both a theoretical and a systems manager's point of view. Process management and multitasking, memory management, resource management, file management, I/O management, command interpreter/shell, and shell scripts will be covered. Large networked systems will be discussed from a systems point of view. PREREQ: CIS 211, 212, and 166.

CIS 346: E-Commerce.

4 hours (2, lecture; 2, lab), 3 credits. Introduction to electronic commerce on the Internet: Designing an e-commerce site including Web server installation, configuration, and tuning; Web page content and development, site marketing and advertisement, legal and security considerations, shopping cart management, credit card, and other debit transactions. PREREQ: CIS 211 and CIS 166.

CIS 356: Intermediate-Level Topics in Computer Applications.

4 hours, 4 credits. (May be repeated for credit as the topic changes up to a maximum of 8 credits.) Various sections on topics in Computer Applications at the intermediate level (for specific topics, see the Department). PREREQ: See the Department.

CIS 488: Internship in Computer Information Systems.

12 hours per week, 3 credits (maximum 6 credits). On-the-job training in a public or private institution.

Courses in Computer Graphics and Imaging (CGI)

CGI (ART) 221: Applied Imaging and Applications to the World Wide Web I.

4 hours (2, lecture; 2, lab), 3 credits. Concepts and techniques underlying the World Wide Web. Image processing and twodimensional graphics as methods to produce material for the World Wide Web. Emphasis on the artistic, mathematical, and computer science underpinnings of these topics. PREREQ: An introductory hands-on microcomputer course. COREQ: ART 108. Note: May be substituted for a CIS elective in the Computing and Management major.

CGI (ART) 222: Applied Imaging and Applications to the World Wide Web II.

4 hours (2, lecture; 2, lab), 3 credits. Advanced methods of twodimensional graphics, image processing, and World Wide Web design, leading to team projects in the fields of science and art. PREREQ: CGI (ART) 221.

CGI (ART) 321: Computer Modeling and Design I.

4 hours (2, lecture; 2, lab), 3 credits. An introduction to the theory and practice of two- and three-dimensional modeling and rendering. Exploration of mathematical and design concepts in the lecture room, on the computer, and in the studio. Topics to include primitive objects, transformations, curve creation and manipulation, symmetries, surface creation and modification, basic rendering. PREREQ: CGI (ART) 221 or MAT 172, together with any hands-on microcomputer course. Note: May be substituted for a CIS elective in the Computing and Management major.

CGI (ART) 322: Computer Modeling and Design II.

4 hours (2, lecture; 2, lab), 3 credits. Advanced surface modeling, with consideration of continuity of surfaces and their tangents and curvature. Evaluation techniques, construction planes, modeling workflow. Creation of computer models from two-dimensional views and three-dimensional models. Projects from industrial design and scientific visualization. World Wide Web applications. PREREQ: CGI (ART) 321.

CGI (ART) 325: Digital Multimedia.

4 hours (2, lecture; 2, lab), 3 credits. Web- and disk-based multimedia projects in the digital realm, including digital audio, digital video, and interactivity. PREREQ: CGI (ART) 221 or CGI (ART) 321.

CGI (ART) 421: Computer Animation I.

4 hours (2, lecture; 2, lab), 3 credits. Introduction to computer animation. Frames, keyframes, hierarchical animation, morphing, expressions, and character animation with skeletons. PREREQ: CGI (ART) 321 and either MAT 175 or MAT 174. Note: May be substituted for a CIS elective in the Computing and Management major.

CGI (ART) 422: Computer Animation II.

4 hours (2, lecture; 2, lab), 3 credits. Advanced animation. Inverse kinematics, constraints and particle systems, manipulation of graphs to control animation. Applications to scientific visualization, film, multimedia, and TV. PREREQ: CGI (ART) 421.

ART(CGI) 441: Broadcast Design.

4 hours (2, lecture; 2, lab), 3 credits. Creation of sophisticated title sequences, TV show packaging, and on-air promotions to be used as part of DVD, video, and film production. PREREQ: ART (CGI) 325.

CGI (ART) 451: Topics in Computer Imaging.

4 hours (2, lecture; 2, lab), 3 credits (maximum 6 credits). For specific topics and sections, consult the Department.

CGI (ART) 480: Senior Project.

3 hours, 3 credits. Advanced projects in the field of computer imaging under faculty guidance. PREREQ: Departmental permission.

CGI (ART) 481: Independent Study in Computer Imaging. *3 hours, 3 credits.* Independent study on a specific topic under faculty supervision. PREREQ: Departmental permission.

Middle Eastern Studies (Interdisciplinary Minor)

Coordinator: Dina Le Gall (Carman Hall, Room 295)

Steering Committee: Associate Professors: Dina Le Gall, Christa Salamandra, Elhum Haghighat; Assistant Professors: Zelda Newman, Jennifer Johnson Oneydum; Lecturer: Devirm Yavuz; Stephanie Endy, Director of Research and Sponsored Programs; Marzie Jafari, Dean of Continuing and Professional Studies

This interdisciplinary program is designed to introduce students to a variety of topics and issues in the history, politics, languages, societies and cultures of the Middle East and to give them the opportunity to study the Middle East using the tools of several different disciplines. The program is offered as a minor field that complements a wide array of majors. It is particularly valuable for students who wish to combine an interest in the Middle East with majors such as History, Anthropology, Sociology, or Political Science in preparation for graduate work in Middle Eastern Studies or for professional careers in education, business, government, foreign service, law, and journalism, among others.

Degree Requirements

Students construct their course of study in consultation with the Minor's Coordinator. They must complete four courses (12 credits), one of which will be the required course MES 245: Introduction to Middle Eastern Studies. The other three may be chosen from any MES course or from the following list of relevant course offerings in the Humanities and the Social Sciences. Some additional courses, including language tutorials and relevant topics courses, may be counted toward the Minor with the Coordinator's approval. Two of the four courses taken as part of the minor must be at the 300 level or above. Students may take no more than two courses with the same alpha code other than MES. Courses from a student's major department may be taken as part of the Minor, but the credits cannot count toward both.

Courses in Middle Eastern Studies

MES (HEB) 202: Advanced Hebrew.

3 hours, 3 credits. Sections from ancient, medieval, and modern texts; intensive review of grammar; and practice in oral and written composition. PREREQ: Either HEB 102, three years of high school Hebrew, or equivalent.

MES (ANT) 231: Selected Studies in Societies and Cultures: Middle East.

3 hours, 3 credits. Description and analysis of the area's distinctive ecological, economic, socio-political, and ideological systems.

MES 245: Introduction to Middle Eastern Studies.

3 hours, 3 credits. An introduction to the Middle East viewed through a variety of lenses and disciplinary approaches, including history, anthropology, sociology, political science, and literature.

MES (HIS) 249: Islamic Civilization.

3 hours, 3 credits. The formation and diffusion of Islamic civilization during the medieval and early modern period in Anatolia, the Balkans, Africa, and South Asia.

MES (GEH) 295: Middle East: A Regional Geographic Perspective.

3 hours, 3 credits. Physical, cultural, and human geography and environmental issues of the Middle East from antiquity to the

MES (HIW) 301: Ottoman History.

3 hours, 3 credits. Political, socio-economic, and cultural history of the Ottoman Empire from its fourteenth-century beginnings to its demise at the end of World War I.

MES (HIW) 302: Modern Middle Eastern History.

3 hours, 3 credits. Societies and politics of the Middle East in the nineteenth and twentieth centuries. Topics include the Islamic and Ottoman legacies; reforms and reforming elites; changing roles of religion; nationalist ideologies; Great Power intervention; regional politics; and the Arab-Israeli conflict.

MES (HIW) 303: Contemporary Islamic Movements.

3 hours, 3 credits. Contemporary movements of Islamic resurgence and activism in the Middle East, North Africa, Central and South Asia, and beyond.

MES (HIW) (WST) 304: History of Women and Society in the Islamic Middle East.

3 hours, 3 credits. Women in the Middle East from the advent of Islam to the present. Legal and cultural constructions and social dynamics of marriage, sexual morality, women's access to property, participation in production, and use of space.

MES (HIW) 305: The Arab-Israeli Conflict.

3 hours, 3 credits. The Arab-Israeli conflict from the late nineteenth century to the present; political, military, diplomatic, economic, cultural, and psychological dimensions.

MES (HCU) 326: Cultural Foundations of Modern Israel.

3 hours, 3 credits. Study in depth of the ethos of modern Israel; extensive readings from related literary, philosophical, and publicistic writings that have shaped the new social and spiritual forms in the State of Israel.

MES (HEB) 327: The Modern Hebrew Novel.

3 hours, 3 credits. Intensive study of a major novel of Agnon, Barash, Burla, or Hazaz, with collateral readings in other Hebrew novels.

MES (POL) (SOC) 328: Gender Politics in Middle East & North African Societies.

3 hours, 3 credits. Norms, values, and the political and social institutions that shape the dynamics of gender relations in different MENA societies.

MES (POL) 334: Political Systems in the Middle East.

3 hours, 3 credits. Domestic institutions and foreign policies of selected nations in the Middle East.

MES 350: Topics in Middle Eastern History, Society, Politics, and Culture.

3 hours, 3 credits (may be repeated for up to 6 credits when content is different). Intensive study of selected aspects of Middle Eastern history, society, politics, and culture. Topic to be announced each semester.

MES (ARH) 338: Islamic Art.

3 hours, 3 credits. The art of Islamic peoples from Spain and North Africa to India and Central Asia; its sources and extensions.

Relevant Courses in the Humanities and Social Sciences

ANT 231: Ethnography of the Middle East

ARH 338: Islamic Art

GEH 295: Middle East: A Regional Geographic Perspective

HEB 202: Advanced Hebrew

HEB 217: The Modern Hebrew Short Story

HEB 300: Hebrew Conversation I

HEB 301: Hebrew Conversation II

HEB 324: The Modern Hebrew Essay

HEB 325: History of Modern Hebrew Literature

HEB 327: The Modern Hebrew Novel

HEB 328: Contemporary Hebrew Prose

HCU 326: The Cultural Foundations of Modern Israel

HIS 249: Islamic Civilization

HIW 301: Ottoman History

HIW 302: Modern Middle Eastern History

HIW 303: Contemporary Islamic Movements

HIW (WST) 304: History of Women and Society in the Islamic

Middle East

HIW 305: The Arab-Israeli Conflict

POL 334: Political Systems in the Middle East

SOC 328: Gender and Society in the Middle East and North Africa

(MENA)

WST 304: Women in the Islamic Middle East (same as HIW 304)

Middle and High School Education

Chair: Margo DelliCarpini (Carman Hall, Room B29)

Department Faculty: Professors: Herminio Martinez; Associate Professors: Russell P. Bradshaw, Serigne M. Gningue, Mario DelliCarpini; Assistant Professors: Orlando Alonso, Gillian Bayne, Cecelia Cutler, David Fletcher, Amanda Gulla, Immaculee Harushimana, David Hyman, Wesley Pitts, Joye Smith-Munson; College Lab Technician: Joi Jones.

The Department of Middle and High School Education prepares teacher candidates to meet requirements for New York State initial certification¹ to teach the following academic subjects in middle and high school: English, foreign languages, mathematics, science (biology and general science; chemistry and general science; physics and general science; and earth science and general science), and social studies. It also prepares students to meet requirements to teach the following special subjects: art (K-12), music (K-12), health, and recreation education.

Advisement: Students should obtain advisement before enrolling in an education sequence. Information about prerequisites, and the requirements for New York State certifications2 for teachers of academic or special subjects, may be obtained in the Department office. Students seeking New York City public school licenses will be advised as to the requirements for the appropriate New York State teaching certificate currently accepted as partial City credentialing. Candidates for certification are expected to demonstrate specified knowledge, skills, and performance competencies through class sessions on campus and through a variety of field-based activities in schools and other education agencies. Students interested in dual certification should consult the Department Chair.

¹The sequence described in this section meets the requirements for New York State certification. Students seeking a license to teach in New York City public schools may need to meet other requirements and should contact the New York City Public Schools Office of Recruitment for specific information (718-935-2670).

²New York State also requires applicants for provisional teacher certification to achieve a satisfactory level of performance on the New York State Test of the Liberal Arts and Sciences (LAST), and on the Assessment of Teaching Skills-Written (ATS-W). Candidates are also required to earn a certificate in child abuse detection and prevention. For updated certification requirements, please contact the school certification adviser (Carman Hall, B-33).

Teacher Education Programs in Middle and **High School Education**

Students cannot major in education. Students major in the appropriate academic or special subject, complete the 12-credit minor shown below, and, if they wish to become certified as a teacher, continue on to complete one of the teacher certification sequences outlined below. Students should consult with the undergraduate advisor in the Department of Middle and High School Education to be placed in the appropriate sequence. Students may complete the minor without continuing in the teacher certification sequence.

Teacher Certification

College- and State-approved sequences have been designed for students seeking certification in the academic subject areas of English, foreign language, mathematics, science, and social studies, and for students in other subject areas.

Teacher certification and licensure are carried out by the New York State Education Department. The public schools of the City of New York have requirements beyond those required for State certification. At both the State and City levels, certification requirements are subject to change without notice. The information about certification contained in this Bulletin is the most up-to-date available at press time, but may become obsolete after publication. It is the responsibility of the student to consult periodically with a departmental adviser about the latest certification requirements.

Notes: Changes in program requirements designated by the New York State Education Department for Teacher, Counselor, and/or Administrator certifications occur from time to time. As such, students are advised to consult the Office of Teacher Certification, Room B-33 of Carman Hall, to determine the most current program requirements for certification. Students not seeking an institutional recommendation but who intend to apply independently for certification should consult with a Departmental adviser prior to registration so that a course of study fulfilling State requirements may be planned. New York State may at some point end the independent transcript review route to certification. Students should consult the New York State Education Department website for updates or may check with the Division of Education's Certification Officer to determine if a change in this policy has been adopted.

Entrance, Continuation, and Exit Conditions for the Education Minor

To enter the program, students must:

- 1. Pass all CUNY skills tests.
- 2. Pass English 120 and Speech 100 with a grade of B or better.
- 3. Declare a major in the area of certification.

To continue in the program, students must:

- 1. Complete ESC 301 and ESC 302 with a combined index of 3.0 or better.
- 2. Complete ESC 429 and ESC 409. To register for either course, an index of 3.0 or better in ESC courses and an overall index of 2.7 or better are required.

To exit the program and receive Lehman College's recommendation for New York State Teacher Certification, students must:

- 1. Complete all course requirements as outlined above.
- 2. Complete student teaching with a grade of B or better in each course.
- 3. Complete the major in the area of certification with an index of
- 4. Complete all degree requirements with an index of 2.7 or
- 5. Complete one year of college-level study of a language other than English.

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- Complete two State-mandated workshops on (a) Child Abuse Identification and Reporting and (b) School Violence Intervention and Prevention.
- 7. Complete all required NYS arts and science requirements.
- 8. Individuals seeking certification in foreign languages must submit scores from the ACTFL Oral Proficiency Interview (OPI).

Certification Sequence

Program Requirements for Undergraduate Secondary Teacher Education (Art, English, Foreign Language, Health, Mathematics, Music, Science)

Certification Sequence

Sequences have been designed for students wishing certification in the academic subject areas of English, foreign language, mathematics, science, and social studies, and for students in other subject areas.

To enroll in a special methods course, the student must have completed 60 undergraduate credits (or have earned an associate's degree) and must have declared a major in a certification area.

To enter student teaching, students must have passed the teaching of a subject course with a minimum grade of B and have indices of 3.0 in education and 2.7 in the major. For an institutional recommendation for State certification, students must have earned a B or above in student teaching and must have completed the College/State-approved sequence for the respective subject area.

Students must complete the appropriate subject area method courses (ESC 410-462). To register for these courses, ESC 301, 302, 429, and 409 must be completed with a combined index of 3.0 or better; an overall index of 2.7 must be maintained; and scores must be submitted on the NYS LAST Teacher Certification examination. In addition, at least 50 percent of the requirements for the major in the area of certification must be completed.

Program Requirements for Undergraduate Secondary Teacher Education (Art, English, Foreign Language, Health, Mathematics, Science)

Students pursuing teacher education must enter a formal program leading to a Lehman College recommendation for teacher certification, and then satisfy the specific requirements, often in a particular sequence. The entrance, continuation, and exit conditions listed below describe the procedures that need to be followed.

Secondary Education Requirements

Credits (26-30) in the following courses:

3 ESC 301

3 ESC 302

- 4 ESC 409**
- 3 ESC 429*
- 4-8 ESC 410-462
- 3 ESC 463
- 3 ESC 471 (Student Teaching Seminar)
- 3 ESC 470 (Student Teaching)
- *Foreign Language students should take ESC 424 or ESC 462 instead of ESC 429.
- **Social Studies students should take ESC 433 or 434 instead of ESC 409.
- **English students should take ESC 410 or 422 instead of ESC 409.
- **Mathematics students should take ESC 432 or 4480 instead of ESC 409.
- **Science students should take ESC 419 or 467 instead of ESC 409.

Entrance, Continuation, and Exit Conditions

To enter the program, students must:

- File an application with the undergraduate adviser in the Department of Middle and High School Education;
- Complete the education minor courses with a combined index of 3.0 or better in ESC 301, 302, 429, and 409 (or alternate minor courses for Foreign Language, Social Studies, English, Mathematics, and Science candidates);
- Have an overall college index of 2.7;
- Complete Eng 120 and COM 100 with a grade of 3.0 or better or an alternate course chosen in consultation with the advisor.
- Must have declared a major in the area of certification.

After entering the program, students must:

- Consult with an education adviser;
- Submit scores on the NYS ALST Teacher Certification examination;
- Complete the appropriate subject area method course(s) ESC 410-467

To be eligible to enroll in Student Teaching (ESC 470), the Student Teaching Seminar (ESC 471) and Special Needs Students (ESC 463) students must:

- Complete all education courses with a combined index of 3.0 or better
- Complete each Education methods course with a 3.0 or better.
- Submit scores on all current Teacher Certification Examinations to the certification officer.
- Must have successfully completed at least 75 percent of the requirements for the major in the area of certification with a GPA index of a 2.70 or better

To exit the program and receive Lehman College's recommendation for New York State Teacher Certification:

- Complete all course requirements as outlined above.
- Complete student teaching with a grade of B or better.
- Complete the major in the area of certification with an overall index of 2.7 or better.

- Complete all degree requirements with an overall college index of 2.7 or better.
- Complete one year of college-level study of a language other than English.
- Complete two State-mandated workshops on (a) Child Abuse Identification and Reporting and (b) School Violence Intervention and Prevention.
- Complete all required NYS liberal arts and science requirements

Program Requirements for Undergraduate Secondary Teacher Education in Social Studies

Students majoring in History who are interested in getting their certification in teaching social studies at the secondary level can take the following sequence of required courses in addition to required courses for their History major. Upon successful completion, the students will be recommended by Lehman College for certification by the New York State Department of Education.

Required Courses: 44 credits in total

26 credits in the following required ESC courses:

ESC 301: Psychological Foundations of Education (3 credits)

ESC 302: Historical Foundations of Education (3 credits)

ESC 429: Language, Literacy, and Technology (3 credits)

ESC 433: Teaching World History to Middle and High School Students (4 credits)

ESC 434: Teaching U.S. History to Middle and High School Students (4 credits)

ESC 470: Supervised Student Teaching (3 credits)

ESC 463: Special Needs Students (3 credits)

ESC 471: Student Teaching Seminar (3 credits)

Total 18 credits. One undergraduate course in each of the following social science areas:

Anthropology (3 credits)

Sociology (3 credits)

Geography (3 credits)

Political science (3 credits)

Economics (3 credits)

Psychology: (3 credits)

Courses must be chosen in consultation with the coordinator of the social studies program.

Entrance, Continuation, and Exit Conditions

To enter the program, students must

- pass all CUNY skills tests
- pass COM 100 with a grade of B or better
- declare a major in History

• meet with the social studies program education coordinator

To continue in the program, students must

- complete all courses with a combined index of 2.7 or better
- complete ESC 433 and ESC 434 with a combined index of 3.0 or better
- take current exams and submit scores to the Office of the Dean of Education
- take one course in each the following social science disciplines: political science, economics, geography, psychology, sociology, and anthropology
- complete ESC 470 (Student Teaching in the Middle Grades and High School Grades), ESC 463 (Special Needs Students), and ESC 471 (Student Teaching Seminar)

To exit the program and receive Lehman College's recommendation for New York State Teacher Certification, students must

- complete all course requirements as outlined above
- complete student teaching with a grade of B or better in each
- complete the major in the area of certification with an index of 2.7 or better
- complete all degree requirements with an index of 2.7 or better
- complete one year of college-level study of a language other than English
- complete two State-mandated workshops on (a) Child Abuse Identification and Reporting and (b) School Violence Intervention and Prevention
- complete all required NYS arts and science requirements

Individual Applicants for NYS Certification

Students not seeking an institutional recommendation but who intend to apply independently using the individual evaluation pathway for certification should visit the New York State Education Department website at www.highered.nysed.gov/tcert.

Extension of Individual Evaluation Pathway to Certification

The date of the individual evaluation option was extended from February 1, 2009 to February 1, 2012.

Middle and High School Education (12 Credit Minor)

The Department of Middle and High School Education offers a 12-credit minor. This minor partially satisfies requirements for New York State Certification.

To be eligible for a minor in Middle and High School Education, students must:

- File an application with the undergraduate adviser in the Department of Middle and High School Education.
- Have an overall college index of 2.7.
- Complete ENG 120 and COM 100 with a grade of 3.0 or better or an alternate course chosen in consultation with the advisor.

The required minor courses are:

ESC 301: Psychological Foundations of Middle and High School (15 hours of fieldwork required, 3 credits)

ESC 302: Social Foundations of Education: A Multicultural Perspective (15 hours of fieldwork required, 3 credits)

ESC 409: Instructional Strategies for Middle and High School (20 hours of fieldwork required** 3 credits)

ESC 429: Teaching Language, Literacy, and Educational Technology (20 hours of fieldwork required* 3 credits)

- *Foreign Language students should take ESC 424 or ESC 462 instead of ESC 429.
- **Social Studies students should take ESC 433 or 434 instead of ESC 409.
- **English students should take ESC 410 or 422 instead of ESC 409.
- **Mathematics students should take ESC 432 or 4480 instead of ESC 409.
- **Science students should take ESC 419 or 467 instead of ESC 409.

Courses in Middle and High School Education

*Courses preceded by an asterisk are not expected to be offered in 2013-2015.

ESC 135: Introduction to Secondary Education.

3 hours, 3 credits. An examination of the development of secondary education in the United States: its structure, governance, and finance. Consideration of the unique role of the secondary school and its interrelationships with other societal institutions. Field visits to selected secondary schools.

ESC 170: Introduction to Education in Nontraditional Settings.

3 hours, 3 credits. Introduction to the field of education through the study of educational settings other than traditional schools. Examination of professional responsibilities of educators working in nontraditional schools. Field experience to develop a deeper understanding of one of the settings (hospitals, alternate schools, prisons, adolescent treatment centers, etc.) will supplement class lectures. Note: All 300-level ESC courses require lower sophomore standing.

*ESC 300: Human Relations.

3 hours, 3 credits. (Graded Pass/Fail.) Study of the attitudes and behavioral patterns that affect human relations in the schools. The emphasis will be on the development of the personal awareness of future teachers with respect to racial, cultural, and social conflicts and interactions in urban centers. Group-dynamics techniques, such as sensitivity training and role playing, will be used. Minimum of 15 hours' practicum experience in an appropriate setting. Note: Sections 7 and 87 can be taken only by Corporate Training and Business Education majors.

ESC 301: Psychological Foundations of Middle and High School.

3 hours; 3 credits; 15 hours of supervised fieldwork. Development from childhood through adolescence (cognitive, emotional, social, and physical), learning theories, measurement and evaluation, inclusion of special student populations, and use of relevant technology and software. Theories and research findings will be discussed in relation to classroom observations.

ESC 302: Social Foundations of Education: A Multicultural Perspective.

3 hours, 3 credits. Study of the historical development of education and schools within the context of various communities and families. Emphasis on the school as a sociocultural institution: issues of equity and bias, and the contributions of the major racial and ethnic groups, especially in the multicultural schools of New York City. Presentation of relevant technology and software; special student populations included.

ESC 303: Sex Roles and Attitudes in Secondary Education.

1 hour, 1 credit. Experimental examination of sex roles and their implications for educational practice in secondary school grades 7-12.

*ESC 304: Theories of Prejudice and Stereotyping: Implications for Educational Settings.

3 hours, 3 credits. Examination of theories and research relating to prejudice and stereotyping: causes, manifestations, effects. Application of research findings to effective behavior in educational settings.

*ESC 308: Current Issues and Problems in Education.

3 hours, 3 credits. Examination of social and philosophical issues that face educators, parents, and the public at large. Practicum experience arranged by the instructor.

*ESC (ECE) 310: The Spanish-Speaking American in the Urban School Setting.

3 hours, *3 credits*. Study of the contemporary Spanish-speaking American in the urban setting. Special emphasis on opportunities to investigate the education of, and environmental influences on, the Puerto Rican.

*ESC 315: American Education: Philosophical and Historical Foundations.

3 hours, 3 credits. Study of the development of educational theories and practices in the United States from their European origins to the present. The contemporary period examined through the writings of educational philosophers and critics.

*ESC 400: Evaluation in Teaching English to Speakers of Other Languages in Secondary and Continuing Education.

3 hours, 3 credits. Study of techniques for use in the classroom to measure achievement in listening, speaking, reading, writing, and knowledge of American culture. Practice in the construction of classroom tests. PREREQ: ESC 301.

*ESC 403: Assessment in Secondary, Adult, and Business Education Settings.

3 hours, 3 credits. Educational testing for the secondary school and other educational settings. The construction, administration, interpretation, and evaluation of educational tests. PREREQ: ESC 301.

*ESC 405: Teaching of English as a Second Language (Grades 7-12).

3 hours, 3 credits. Methods and materials of teaching English to secondary-school students whose native language is not English. Attention will be directed to problems of language, cultural orientation, and the various techniques for teaching children of different age levels and lifestyles. PREREQ: ESC 301. Note: No student may count both ESC 405 and ECE 427 for credit toward the degree.

*ESC 406: Sex Education, Cultural Values, and Family Life.

3 hours, 3 credits. Development of attitudes, sensitivities, and skills necessary to teach sex education in the school. Instruction will focus on sexual behavior and its relationship to social patterns, child development, and interpersonal behavior. PREREQ: ESC 301.

*ESC 407: Bilingualism and Bilingual Education.

3 hours, 3 credits. Investigation of theories and research related to bilingualism and its educational implications. Examination of the principles underlying bilingual education. Study of practice, school organization, curricula, and problems in bilingual education. PREREQ: ESC 301.

*ESC 408: Methods and Materials for Teaching Prevention of Drug and Alcohol Abuse.

1 hour, 1 credit. (Closed to students in Elementary Education Program A.) Study of the objectives and content of abuse education, including methods, materials, and resources appropriate for teaching in these areas. PREREO: ESC 301.

ESC 409: Instructional Strategies for Middle and High School.

3 hours, lecture; 3 credits; 20 field hours required. Topics include classroom management principles and techniques, "generic" lesson planning skills, use of relevant technology and software, and individualizing teaching methods for particular student populations, including limited English-proficient students, lowachieving students, minority and inner-city students, and students in special education. This course is a prerequisite to middle and high school subject-area methods courses. PREREQ: ESC 301 and ESC 302.

ESC 410: Teaching Writing in Secondary School.

4 hours (2, lecture; 2, fieldwork), 3 credits. An examination of writing theory and practice for the purpose of developing effective performance in the teaching of composition. Practice in teaching and evaluating writing and in measuring progress. Field experience and instruction in individual writing instruction. PREREQ: ESC 301. Note: For students preparing to teach English, completion of an advanced course in writing is strongly recommended.

*ESC 411: Teaching Corrective Reading in Secondary School.

3 hours, 3 credits. Methods and theory of corrective reading instruction in secondary school classrooms, laboratories, and resource rooms. PREREO: ESC 301.

*ESC 412: Teaching Reading: The Use of Adolescents' Literature.

3 hours, 3 credits. An examination of adolescents' literature and methods of teaching reading through the use of such literature. PREREQ: ESC 301.

ESC 413: Teaching Developmental Reading in Secondary School.

3 hours, 3 credits. Methods and theory of developmental reading instruction in secondary-school classrooms. PREREQ: ESC 301.

ESC 414-440 and 445: Teaching a Subject in Secondary School.

3 hours; 3 credits; 30 hours fieldwork required. Aims, problems, and methods of teaching a subject at the secondary level. PREREO: ESC 301 or its equivalent and 3 additional education credits as prescribed by the Department; a 2.7 cumulative Grade Point Average overall; pass ENG 102 or its equivalent; and Departmental permission. COREQ: Either ESC 476 or 477 (Fieldwork I or II), or ESC 471. Additional PREREQ for ESC 414 only: *ECE 405.

ESC 414: Special Methods in Art.

3 hours, 3 credits. Students enrolled in this course are required to demonstrate proficiency in computer graphics or take a course in computer imaging.. Computer graphics programs can be effective design tools, enabling learners to change and enhance images through a variety of techniques, such as drawing, cutting/pasting, duplicating, shrinking, distorting, magnifying, and collaging. The goal is for students to use technology as a medium for art expression in the school art curriculum. The course also introduces students to the computer as a research tool, enabling them to explore the possibilities offered in computer programs, such as exploration and assessment of Internet sites for art and art education information and research, as well as networking, discussion, and critique through Web boards and e-mail.

ESC 419: Teaching Science in Middle and High School.

3 hours, lecture; 2, lab, 4 credits. 30 hours fieldwork required. Research and practice in the teaching of science at the middle and high school levels. Attention to inquiry-driven methods consistent with current standards in science education, uses of technology and relevant software, teaching strategies, assessment, inclusion of special student populations, and literacy development in science. Fieldwork under supervision. PREREQ: A combined index of 3.0 or better in ESC 301, 302, 409, and 429; completion of at least 50 percent of the credits in a State-accredited science major, with a minimum 2.7 cumulative GPA; and submission of scores on the New York State LAST examination to the Division of Education Office.

*ESC 420: Accounting and Business Subjects.

*ESC 421: Secretarial Subjects.

ESC 422: Teaching English in Middle and High School.

3 hours, lecture; 2 hours, lab; 4 credits. 30 hours fieldwork required. Introduction to methods and materials for teaching English at the middle and high school levels. Developing communicative competence, academic literacy through the four skills, and crosscultural awareness in a language other than English. Curriculum development; use of relevant technology; current standards; lesson planning; instructional strategies; inclusion of special populations; and assessment. PREREQ: A combined index of 3.0 or better in ESC 301, 302, 409, 429; at least 50 percent of the credits in the student's major, with a minimum 2.7 cumulative GPA; and submission of scores on the New York State LAST examination to the Division of Education Office.

ESC 424: Teaching Foreign Languages in Middle and High School.

3 hours, lecture; 2 hours, lab; 4 credits. Methods and materials for teaching foreign languages at middle and high school levels. Developing communicative competence, academic literacy through the four skills, and crosscultural awareness in a language other than English. Curriculum development; use of relevant technology; current standards; lesson planning; instructional strategies; inclusion of special populations; and assessment. PREREQ: A cumulative index of 3.0 or better in ESC 301, 302, and 409; completion of at least 50 percent of the credits in the student's major, with a minimum 2.7 cumulative GPA; submission of scores on the NYS LAST examination to the Division of Education Office.

ESC 429: Language and Literacies Acquisition in Secondary Education.

3 hours, lecture; 3 credits, 20 hours fieldwork required. The teaching and acquisition of language and literacies through secondary content areas, including media literacy, with students of diverse language backgrounds and abilities. Curriculum development; current standards; inclusion of students with disabilities; and assessment. Integrated field experience.

*ESC 431: Family & Consumer Studies.

ESC 432: Teaching Mathematics in Middle and High School.

3 hours, lecture; 2 hours, lab; 4 credits; 30 hours fieldwork required. Introduction to methods and materials for teaching mathematics in middle and high school, overview of curriculum, current standards, lesson planning; instructional strategies, uses of technology, problem solving; assessment, inclusion of special student populations, and literacy development in mathematics. PREREQ: A cumulative index of 3.0 or better in ESC 301, 302, 409, 429; completion at least 50 percent of the credits in the student's major, with a minimum 2.7 cumulative GPA; submission of scores on the New York State LAST examination to the Division of Education Office.

ESC 433: Teaching World History to Middle and High School Students.

3 hours, lecture; 25 hours, fieldwork in a middle or high school; 4 credits. Methods of teaching world history to urban middle and high school students. Critical examination of the roles of both content and teachers in an urban classroom.

ESC 434: Teaching Social Studies in Middle and High School.

3 hours, lecture; 2 hours, lab; 4 credits; 30 hours fieldwork required. Introduction to current theory on curriculum, alternate views on scope and sequence, lesson planning, and national and State standards. Uses of technology and reviews of relevant software, alternative teaching strategies, different types of assessment, inclusion of special student populations, and literacy development in social studies. PREREQ: A cumulative index of 3.0 or better in ESC 301, 302, 409, 429; completion of at least 50 percent of the credits in the student's major, with a minimum 2.7 cumulative GPA; and submission of scores on the New York State LAST examination to the Division of Education office.

*ESC 435: Speech.

*ESC 436: Clerical Subjects.

ESC 437: Teaching Health in Middle and High School.

3 hours, lecture; 2, lab; 4 credits; 30 hours fieldwork required. Methods and materials for teaching health at the middle and high school levels. Curriculum development; use of relevant technology; developing multicultural literacy through language arts in the health curriculum; current standards; instructional strategies; inclusion of special populations; and assessment. Includes fieldwork under faculty supervision. PREREQ: A cumulative index of 3.0 or better in ESC 301, 302, 409, and 429; completion of 50 percent of the credits in a State-accredited health major, with a minimum overall cumulative GPA of 2.7; and submission of scores on the New York State LAST examination to the Division of Education Office.

*ESC (PRS) 440: Puerto Rican Studies

*ESC 442: Teaching Environmental Science.

3 hours, 3 credits. Studies of selected materials, methods, and techniques of environmental education appropriate for teachers of middle school, high school, and adult education courses. PREREO: ESC 301. COREO: Students who take *ESC 442 and a course numbered ESC 414 to 440 during the same semester are required to take only one course—either ESC 476 or 477.

*ESC 443: The Systematic Design of Instruction for Business and Industry.

3 hours, 3 credits. The systematic method of designing training courses and programs in business and industry. PREREQ: ESC 301.

*ESC 444: Delivering Instruction in Business and Industry.

3 hours, 3 credits. Principles and practices of delivering instruction to adult learner populations in corporate settings. Emphasis on using presentation techniques. Students plan and deliver instruction. PREREQ: *ESC 443 and either SPE 100, SPE 203, or an equivalent introductory speech course.

*ESC 445: Recreation Studies.

ESC 462: Teaching Language Arts in Languages Other than

3 hours, lecture; 2 hours, lab; 4 credits; 30 hours fieldwork required. Methods, materials, and assessment for developing literacy through language arts in a language other than English at the middle and high school levels. Curriculum development; use of relevant technology and software; current standards; instructional strategies; inclusion of special populations; assessment. Fieldwork under supervision. PREREQ: A combined index of 3.0 or better in ESC 301, 302, and 409; completion of at least 50 percent of the credits in a foreign language major, with a minimum 2.7 GPA; and submission of scores on the New York State LAST examination to the Division of Education Office. PRE- or COREQ: ESC 424.

ESC 463: Special Needs Education: The Identification, Instruction, and Assessment of Special Needs Populations in Middle School and High School Settings.

3 hours, 3 credits. Laws and regulations pertaining to the education of special needs children; information on categories of disability, including autism; identifying and remediating specific learning disabilities; special education process; classroom management and positive behavioral supports and interventions; individualized and differentiated instruction; effective co-teaching and collaboration. Fieldwork required. PREREQ: Specialized methods: ESC 414-462. COREQ: ESC 470.

ESC 470: Student Teaching in the Middle and High School

One semester of full-time supervised student teaching, minimum two experiences of 20 days each (or other approved experiences); 6 credits. Student teaching in the middle and high school grades, plus a weekly seminar. PREREQ: Completion of appropriate Content Area Teaching Methods course(s), with a B or better; maintenance of overall GPA of at least 2.7; submission of scores on the LAST and ATS-W Teacher Certification Examination to the Division Office; Departmental permission; and approval from the Professional Development Network Coordinator.

NOTES: (1) Student teaching on both the middle and high school level is required for State certification in English, social studies, foreign languages, science, and mathematics. Students seeking certification in music, health, art, and speech language pathology must complete a K-12 student teaching experience and should see the undergraduate advisor in the Department of Middle and High School Education for advisement. New York State may add this requirement for other subjects, so students are advised to consult their advisers in this Department regularly. (2) Student teaching requires formal application and approval the semester before the course is to be taken. It is the student's responsibility to check with the Professional Development Network Coordinator for meeting and application dates early in the prior semester.

ESC 475: Community Change Model: Creating New Communities.

4 hours, 3 credits (2 hours, lecture; 2 hours, lab). Examination, design, and implementation of the Community Change Model as a means to engage youth and adults in analyzing and addressing community problems and concern. Community surveys, interviews, and focus groups will be conducted. PREREQ: Permission of the instructor.

ESC 4480: Teaching Problem Solving in Mathematics in Middle and High School.

3 hours, lecture; 20 hours, fieldwork in middle or high school, 3 credits. Introduction and application of heuristic techniques to facilitate mathematical problem solving in Grades 7-12; use of technology as a problem solving tool; assessment. Problems will be analyzed on both teacher and pupil levels. PREREQ: Calculus I and II.

Music

Chair: Diana M. Battipaglia (Music Building, Room 309)

Department Faculty: Distinguished Professor: John Corigliano;

Professors: Diana M. Battipaglia, Marta Ghezzo, Jack Hyatt,

Bernard Shockett; Associate Professors: Alan Hollander, Molly

Morkoski, Janette Tilley; Assistant Professors: David Claman,

Penny Prince; Lecturer: Allan Molnar; Senior College Lab

Technician: Karl Watson; College Lab Technicians: Darina Bejtja,

Robert Windbiel

The Department of Music offers a 64-credit major in Music leading to the B.S. degree. Entrance into this program is by examination.

Music, B.S. (64 Credit Major)

The Department of Music offers a 64-credit major in Music leading to the B. S. degree. Entrance into this program is by examination.

The required courses and credits are distributed as follows:

Credits (64)

18 Music Theory: MST 236, 237, 238, 239, 315, 317

4 Musicianship: MST 266, 267, 268, 26915 Music History: MSH 330, 331, 332, 333, 334

6 Private Lessons: MSP 210

6 Ensemble: MSP 100, 201, 202, 203, 204, 205

12 Electives to be taken from the following courses: MSH 269, 270, MSH 350; MST 316, 318, 319, 320, 321, 322; MSP 445, 446; other electives by permission of the Department

3 Senior Project: MST 496

Note: Students studying with a private teacher approved by the Department of Music may petition the Department Chair to receive 1 to 6 credits.

Placement in Courses

A basic knowledge of music theory is required of all students who wish to major in Music. Students will demonstrate their ability to enter MST 236 (Theory 1) and MST 266 (Musicianship 1) by taking a placement examination. Successful completion of MST 100 will be accepted in lieu of the placement examination.

Piano Requirement

In addition to the major instrument, students must pass a proficiency examination in piano. Examples of the required level of proficiency are available in the Music Office (Music Building, Room 316). Students are expected to complete this requirement before their fifth semester.

Departmental Ensembles

All students, faculty, staff, and members of the community audition for the principal ensembles of the College. Music majors are required to participate in at least one ensemble per semester. MSH 114 and 115 may not be taken for credit by students majoring in Music.

Courses in Music History

*Courses preceded by an asterisk are not expected to be offered in 2013-2015.

MSH 114: Introduction to Music.

3 hours, 3 credits. History of Western music through the study of various complete works. Focus on the skills and perspectives needed for informed listening. Note: Music majors must obtain Chair's permission.

MSH 115: World Music.

3 hours, 3 credits. Ethnomusicology as the intersections of music and culture, with focus on non-Western music.

*MSH 228, 229, 230, 231, 232, and 233: The Literature of Music. *Each 3 hours, 3 credits.* PREREQ: MSH 114 (or equivalent) for those not in a Music major; MST 100 (or equivalent) for those in a Music major.

228: Orchestral Music

229: The Concerto

230: Choral Literature

231: Chamber Music

232: The Art Song

233: Piano Music

*MSH 234, 235, 236, 237, 238, and 239: Opera.

Each 3 hours, 3 credits. PREREQ: MSH 114 (or equivalent) for those not in a Music major. MST 100 (or equivalent) for those in a Music major.

234: Opera: 1600 to 1830.

235: Opera: 1830 to Twentieth Century.

236: The Operas of Mozart.

237: The Operas of Wagner.

238: Twentieth-Century Opera.

239: Italian Opera.

*MSH 245: American Musical Traditions.

3 hours, *3 credits*. The history of music in America, with focus on folk and religious music, classical and contemporary compositions, popular songs, jazz, and musical theater.

*MSH 250: Master Composers.

3 hours, 3 credits (maximum 6 credits).

*MSH 266: Folk and Traditional Music.

2 hours, 2 credits.

MSH 269: Jazz: Literature and Evolution.

3 hours, *3 credits*. The origins and development of jazz before 1950; cross-influence with concert music. Contemporary trends, such as soul and rock. PREREQ: MSH 114 or MST 236 (or equivalent).

MSH 270: Jazz: Literature and Evolution Since 1950.

3 hours, 3 credits. Development and literature of jazz since 1950 and its cross-influence with popular trends, such as rock. PREREQ: MSH 114 or MST 236, or equivalent. Note: All 300-level MSH courses carry the following PREREQ: either MSH 114 (or equivalent) or instructor's permission.

MSH 330: Introduction to Music History and Culture.

3 hours, 3 credits. A multidisciplinary introduction to music as an academic discipline exploring the place of music in human culture and in particular societies, past and present, Western and global. Students examine musical concepts across time and space, including meter, harmony, melody, and form. Emphasis on independent research and critical writing about music. PREREQ: MST 100 or its equivalent; ability to read music.

MSH 331: Music of the Middle Ages and Renaissance.

3 hours, 3 credits. Western music from 900 to 1600. Topics include the history of notation, the emergence of polyphony, and issues of performance practice. PREREQ: MSH 330; MST 100 or its equivalent; ability to read music.

MSH 332: Music of the Baroque and Classical Eras.

3 hours, 3 credits. Western music from 1600 to 1810. Topics include the development of opera and other major genres including the cantata, oratorio, concerto, sonata, and symphony. Attention to issues of performance practice. PREREQ: MSH 330; MST 100 or its equivalent; ability to read music.

MSH 333: Music of the Romantic and Early Modernist Eras.

3 hours, 3 credits. Western music from 1810 to 1945. Topics include the influence of Romanticism on musical forms and styles; the continued development of such genres as the Lied, opera, and symphonic music; the rise of nationalistic schools; late Romantic disintegration of the Classical-Romantic tradition; the emergence of musical Modernism, atonality, and dodecaphony. PREREQ: MSH 330; MST 100 or its equivalent; ability to read music.

MSH 334: Music Since 1945.

3 hours, 3 credits. Western music from 1945 to the present. Topics include such major artistic movements of the period as Modernism, Serialism, and Minimalism. Attention to issues of notation and performance. Various topics in American music, including Jazz, "Third Stream," and musical theatre. PREREQ: MSH 330; MST 100 or its equivalent; ability to read music.

MSH 350: Topics in Ethnomusicology.

3 hours, 3 credits. Selected musical cultures of the world. Emphasis on the musical forms, instruments, tonal material, and the role of music in particular societies. Critical attention to the principal concepts and methods used in ethnomusicology. PREREQ: MSH 330; MST 100 or its equivalent; ability to read music. Course may be taken for a maximum of 6 credits.

Courses in Music Theory

*Courses preceded by an asterisk are not expected to be offered in 2013-2015

MST 100: Fundamentals of Music Theory.

3 hours, 3 credits. Elements of music notation, the structure of scales and chords and the study of melodic, rhythmic, and harmonic techniques using both folk and composed material. No previous musical experience is required. This course will not be credited toward any Music major.

MST 236: Theory I.

3 hours, 3 credits. PREREQ: A knowledge of scales, triads, and intervals established by placement exam or MST 100. COREQ: MST 266.

MST 237: Theory II.

3 hours, 3 credits. A continued study of harmonic techniques, including chromatic harmony; written exercises. PREREQ: MST 236. COREQ: MST 267.

MST 238: Theory III.

3 hours, 3 credits. Advanced harmonic techniques; written exercises. PREREQ: MST 237. COREQ: MST 268.

MST 239: Theory IV.

3 hours, 3 credits. Continued advanced harmonic techniques, including modes and elementary compositional techniques. PREREQ: MST 238. COREQ: MST 269.

MST 241: Introduction to the Structure & Literature of Music I.

3 hours, 3 credits. Analytical study of the elements of musical style, texture, and forms as represented in the principal genres characteristic of various periods, as preparation for the study of music history.

MST 242: Introduction to the Structure & Literature of Music II.

3 hours, 3 credits. Continued analytical study of the elements of musical style, texture, and form, as represented in the principal genres characteristic of various periods as preparation for the study of music history.

MST 266: Musicianship I.

2 hours, 1 credit. Progressive development of basic musical skills through sightsinging, dictation, and other aural exercises. PREREQ: MST 236.

MST 267: Musicianship II.

2 hours, 1 credit. A continuation of MST 266. COREQ: MST 237.

MST 268: Musicianship III.

2 hours, 1 credit. A continuation of MST 267. COREQ: MST 238.

MST 269: Musicianship IV.

2 hours, 1 credit. A continuation of MST 268. COREQ: MST 239.

*MST 312: Fugue I.

3 hours, 3 credits. PREREQ: MST 239.

*MST 313: Fugue II.

3 hours, 3 credits. PREREQ: *MST 312 (or equivalent).

MST 315: Orchestration I.

3 hours, 3 credits. Score reading; the instruments of the orchestra and the band and practice in scoring for various groups. PREREQ: MST 239.

MST 316: Orchestration II.

3 hours, *3 credits*. Further study in score reading. Advanced practice in scoring for various groups. PREREQ: MST 315 (or equivalent).

MST 317: Form and Analysis I.

3 hours, 3 credits. A study of musical style, texture, and form as exemplified in the composition of Baroque and Classical composers. PREREQ: MST 236.

MST 318: Form and Analysis II.

3 hours, 3 credits. A study of musical style, texture, and form as exemplified in the composition of Medieval, Renaissance, Romantic, and Contemporary composers. PREREQ: MST 317.

MST 319: Composition I.

3 hours, 3 credits. Composition in various types and forms of music; practice in free composition. PREREQ: Instructor's permission.

MST 320: Composition II.

3 hours, *3 credits*. Advanced study of composition, with emphasis on instrumental combinations. PREREQ: MST 319 and 315 and instructor's permission.

MST 321: Electronic Music I.

3 hours, 3 credits. This course is an intense "hands-on" study of the computer-based electronic music studio and electronic music techniques. Topics include acoustics, digital sound recording, editing, processing and synthesis, MIDI hardware and software, music notation, and the historical origins and literature of electroacoustic music. Short compositional exercises will be assigned. Additional studio time outside of class is required. PREREQ: MST 236.

MST 322: Electronic Music II.

3 hours, 3 credits. This course continues the intense "hands-on" study of the computer-based electronic music studio and electronic music techniques studied in Electronic Music I. Topics include multitrack audio recording, audio engineering, and audio production, introduction to interactive and algorithmic instrument design, and music for video production techniques. Short compositional exercises will be assigned. Additional studio time outside of class is required. PREREQ: MST 321.

MST 485: Independent Studies in Music.

One semester, 1-3 credits. (May be repeated to a maximum of 9 credits.) Individual projects in an appropriate field, under faculty supervision. PREREQ: Departmental permission.

MST 496: Senior Project.

One semester, 3 credits. Advanced study in an area of music performance or scholarship. Independent study under the direction of a faculty mentor. Appropriate projects include an academic thesis in musicology or music theory, a recital on an instrument or voice, a musicianship or music education project or portfolio, or a musical composition. PREREQ: Departmental permission.

Courses in Musical Performance

*Courses preceded by an asterisk are not expected to be offered in 2013-2015.

MSP 100: Chorus.

3 hours, 1 credit (maximum 4 credits). (Open to any student with the ability to participate in group singing.) The study and public performance of selected works. Emphasis on basic choral techniques.

MSP 166: Strings I.

2 hours, 1 credit (maximum 2 credits). Bowing and the positions, practice in reading simple compositions, and care of instruments. No previous knowledge of a string instrument required. PREREQ: Departmental permission for those who are not Music majors.

MSP 167: Strings II.

2 hours, 1 credit. Continued study to provide elementary facility on string instruments. PREREQ: MSP 166 (or equivalent).

MSP 168: Woodwinds I.

2 hours, 1 credit (maximum 2 credits). Breathing, tone production, and fingering. Principles underlying construction of woodwind instruments. Practice in simple ensemble music. Care of instruments. No previous knowledge of a woodwind instrument required. PREREQ: Departmental permission for those not in a Music major.

MSP 169: Woodwinds II.

2 hours, 1 credit. Continued study to provide elementary facility on woodwind instruments. PREREQ: MSP 168 (or equivalent).

MSP 170: Brass I.

2 hours, 1 credit (maximum 2 credits). Breathing, tone production, and fingering. Acoustic principles governing techniques of brass instruments. Practice in simple ensemble music. Care of instruments. No previous knowledge of a brass instrument required. PREREQ: Departmental permission for those not in a Music major.

MSP 171: Brass II.

2 hours, 1 credit. Continued study to provide elementary facility on brass instruments. PREREQ: MSP 170 (or equivalent).

MSP 172: Percussion.

2 hours, 1 credit. The performance techniques of tuned and untuned percussion instruments. Group exercises in rhythm and work in percussion ensemble.

*MSP 185: Elementary Guitar Playing.

2 hours, 1 credit. Note: Students must supply their own instruments.

MSP 190: Piano.

2 hours, 1 credit per semester (maximum 4 credits). A piano course for beginners. No previous piano knowledge required.

MSP 201: The College Choir.

3 hours, 1 credit (maximum 6 credits). (Open to all qualified students, faculty, staff, and members of the community.) The study and performance of major choral works. PREREQ: Instructor's permission.

*MSP 202: The Chamber Choir.

3 hours, 1 credit (maximum 4 credits). (Open to all qualified students, faculty, staff, and members of the community.) PREREQ: Instructor's permission.

MSP 203: Band.

3 hours, 1 credit (maximum 8 credits). (Open to all qualified students, faculty, staff, and members of the community.) The study and performance of band repertoire. PREREQ: Instructor's permission.

MSP 204: Orchestra.

3 hours, 1 credit (maximum 8 credits). The study and performance of orchestral works. PREREQ: Instructor's permission.

MSP 205: Ensemble for Voices and/or Instruments.

3 hours, 1 credit (maximum 4 credits). A study of chamber music through rehearsals and performance of representative works in various styles. PREREQ: Instructor's permission.

MSP 210: Instruction in Principal Instrument or Voice.

1 credit per semester (maximum 4 credits for Music majors). Intensive study of one instrument or voice. Instruction with a member of the Music faculty. PREREQ: Chair's permission. Note: Students who study with a private teacher approved by the Department of Music and who can demonstrate satisfactory progress by audition may petition the Chair to receive 1 to 4 credits.

MSP 226: Voice I.

2 hours, 1 credit. Fundamentals of tone production, breath control, enunciation, and style. Both group instruction and individual attention. PREREQ: Ability to read music.

MSP 227: Voice II.

2 hours, 1 credit. Continued study of the fundamentals of tone production, breath control, enunciation, and style. Both group instruction and individual attention. PREREQ: MSP 226 (or equivalent).

MSP 246: Instrumental Laboratory Ensemble.

2 hours, 1 credit. The study and performance of a wide variety of ensemble music without preparation for public concerts. A systematic survey, through performance, of elementary and intermediate music for band and orchestra. PREREQ: Either instructor's permission or completion of at least one of the following: MSP 166, 168, or 170.

MSP 340: Instrumental Music Methods.

3 hours, 3 credits. Techniques and tone production of instruments. Designed to prepare the student for the development and direction of school ensembles and instrumental classes. PRE- or COREQ: MSP 166, 168, and 170.

MSP 445: Conducting.

3 hours, *3 credits*. Principles of conducting; techniques of the baton, interpretation, repertoire, and score reading. PREREQ: MST 239.

MSP 446: Conducting.

3 hours, 3 credits. Advanced principles of conducting; techniques of the baton, interpretation, repertoire, and score reading. PREREQ: MSP 445.

School of Natural and Social Sciences

Dean of Natural and Social Sciences: Acting Dean Stefan Becker

NSS 470: Science Internship.

15 hours per week and a biweekly conference, 5 credits. The course may be repeated once under special circumstances and with the approval of the Internship Committee. Grading will be Pass/Fail. Student interns in the Natural and Social Sciences departments will undertake supervised work or research in selected public or private institutions for which their studies and skills equip them. For example, the Bronx Zoo and the American Museum of Natural History would be possible host institutions for students in Biology or Anthropology. PREREQ: Satisfactory completion of 75 college credits, recommendation by a faculty member, and approval by an advisory and screening committee to be appointed by the Dean of Natural and Social Sciences.

Nursing

Chair: Catherine Alicia Georges (Building T-3, Room 209) Director of Undergraduate Studies: Alice Akan

Department Faculty: Distinguished Lecturer: Barbara DiCicco-Bloom; Professors: Keville Frederickson, C. Alicia Georges; Associate Professors: Linda Scheetz, Martha Velasco-Whetsell; Assistant Professors: Eleanor Campbell, Brigette Cypress; Cassandra Dobson, Alsacia Pacsi, Ivreen Robinson, Scott Saccamano, Mary G. Tesoro; Lecturers: Alice Akan, Shirlee Cohen, Theresa Lundy; Chief College Lab Technician: Marcia Brown

Professional Nursing: The Department of Nursing offers a Bachelor of Science degree in Nursing for non-nurses and for Registered Nurses licensed in New York State. The upper-division Nursing program, which leads to a B.S. degree, is designed to prepare for a career and to build a foundation for graduate study in professional nursing. It fulfills the requirements of the New York State Education Department, is accredited by the Commission on Collegiate Nursing Education, and entitles its graduates to take the National Council Licensing Examination (NCLEX) for licensure as a registered nurse. The clinical laboratory sections of the Nursing courses are conducted in diverse and culturally rich clinical facilities in the Bronx, Westchester, and other surrounding communities. Independent study and honors projects are available to qualified students.

Generic Nursing Students: Designed to be completed in four academic years, the generic program is a 75-credit major within a total of 120 credits required for graduation. Students must complete their general education, distribution, and prerequisite courses in the first two years of study and then embark on a concentrated study of professional nursing, supported by the liberal arts and sciences. The generic Nursing curriculum is designed for full-time study only. The program aims to help students gain the knowledge and experience needed to function independently, as well as in collaboration with other members of the healthcare team, and to help individuals and families achieve maximum levels of health. Graduates will have developed skills in critical thinking and the ability to provide competent and compassionate care to a diverse population.

B.S. for Registered Nurses: Graduates of Associate Degree programs in nursing and graduates of hospital schools of nursing (diploma programs) who are licensed as Registered Professional Nurses in New York State are eligible for admission to the program. R.N. students are required to complete a 37.5-credit major of the total 120 credits required for graduation. Graduates of Associate Degree programs should follow directions for transfer students when applying for admission to the College and then seek advisement in the Office of Academic Advisement, Shuster Hall, Room 280, in addition to advisement in the Nursing Department. Graduates of hospital schools of nursing who have not earned previous college credits should follow directions for new applicants to the College and then see an adviser in the Adult Degree Program. Graduates of diploma nursing programs are encouraged to take the Excelsior College (formerly Regents College) exams in Adult Nursing, Maternal and Child Nursing,

and Psychiatric Mental Health Nursing to earn advanced standing credits.

Accelerated (Generic) Nursing Program: The Department offers the Generic Accelerated Nursing Program. The Applicants must have a 4-year Bachelor's Degree (any discipline) and meet the admission requirements for the Nursing Department. Applicants will follow the Generic Nursing path, conditions, and application procedures as described in the Department of Nursing's "Bachelor of Science Program in Nursing-Generic." Applicants for the accelerated component of the Generic Nursing Program must meet all of the same eligibility requirements outlined in the Generic program for prerequisite courses, testing, legal status, and any other College and Department requirements and deadlines, in order to submit a Generic Nursing application, including Generic Nursing is a full-time program. Accelerated nursing courses will be held every semester: Fall, Winter, Spring, and both Summer sessions. If accepted into the Accelerated Program-Generic, this program must be completed in one (1) year.

Requirements for Entrance into the Bachelor of Science Program in Nursing (Generic)

To enter the Nursing Program, students must earn a minimum grade of "C" or better in each of the science courses listed below, with a minimum cumulative index of 2.75 in these courses, or their equivalents, and a cumulative index of 2.0 or greater for all college work.

CHE 114: Essentials of General Chemistry (3 credits)

CHE 115: Essentials of General Chemistry (lab, 1.5 credits)

CHE 120: Essentials of Organic Chemistry (3 credits)

CHE 121: Essentials of Organic Chemistry (lab, 1.5 credits)

BIO 181: Anatomy and Physiology I (4 credits)

BIO 182: Anatomy and Physiology II (4 credits)

BIO 230: Microbiology (4 credits)

Students must also pass the HESI A2 Admission Assessment Exam. The department will schedule exams for students applying to Lehman's nursing program during Winter Recess and early spring semester. The dates and times will be posted in the Nursing Department. There is a non-refundable fee to sit for the exam. Students must pass the HESI A2 exam in order to be considered for admission to the nursing program.

The City University of New York has instituted the following requirement: Beginning in the Fall 2009 semester, all CUNY Nursing Departments will require applicants for admission into Nursing programs to provide documentation in one of the following categories: U.S. Citizenship, Permanent Residency, International student with F1 Status; or Granted Asylum, Refugee Status, Temporary Protected Status, Withholding of Removal, or Deferred Action Status by the U.S. Government. There will be no exceptions to this policy.

A grade of "C" or better is required in the following Foundation courses:

HIN 268: Human Growth and Development (3 credits)

HIN 269: Analysis and Action for Community Health (3 credits)

Requirements for Entrance into the Bachelor of Science Program in Nursing for Registered Nurses (Licensed in New York State)

Graduates of Associate Degree programs in nursing and graduates of diploma programs who are currently licensed as Registered Professional Nurses in New York State are eligible to apply for admission to the B.S. program after completing 60 college credits with a cumulative index of 2.5 or greater and providing evidence of college courses in chemistry and human growth and development (or their equivalents). Some students may qualify to earn credits for the human growth and development course through a validation examination. Students must seek advisement in the Department of Nursing for this process. Registered nurses may pursue either full-time or part-time study.

Application to the Nursing Program

All applicants to the program must first apply for admission to the College. After being admitted to the College, applicants apply to the Department of Nursing for admission to the program.

Applicants must have completed a minimum of 60 credits before being admitted to the Nursing program. Transfer students should submit a copy of their evaluation of transfer credits from the Admissions Office. Second-degree students must file a Second Degree Area of Concentration form in the Office of Academic Standards and Evaluation. Shuster Hall 280.

Generic students planning to enroll in NUR courses in the fall semester of their junior year must complete and submit an application to the Department of Nursing by March 15 of the previous spring semester.

Registered nurses may apply at any time during the academic year. Applications are available in the Department of Nursing Office (T-3 Building, Room 201) during College business hours and at the Department's website at www.lehman.edu/deannss/nursing. Applicants must also submit official transcripts of all previous college work and a copy of the Transfer Credit Evaluation form if they are transfer students. All required prerequisite science and foundation courses must be completed prior to admission to the program. Students who have been dropped from another Nursing program for any reason are not admissible to the Nursing program at Lehman unless the student has subsequently passed the NCLEX exam and become a registered nurse.

Nursing, B.S. (75 Credit Major)

Prerequisite sciences (21 credits)

CHE 114: Essentials of General Chemistry (3 credits)

CHE 115: Essentials of General Chemistry, lab (1.5 credits)

CHE 120: Essentials of Organic Chemistry (3 credits)

CHE 121: Essentials of Organic Chemistry, lab (1.5 credits)

BIO 181: Anatomy and Physiology I (4 credits)

BIO 182: Anatomy and Physiology II (4 credits)

BIO 230: Microbiology (4 credits)

Foundation Course (Prior to Admission)

HIN 268: Human Growth and Development (credits)

Foundation Course (Prior to or After Admission)

HIN 269: Analysis and Action for Community Health (3 credits)

Nursing Courses (48 credits)

NUR 300: Nursing as a Human Science (3 credits)

NUR 301: Therapeutic Intervention I (6 credits)

NUR 302: Ways of Knowing (3 credits)

NUR 303: Therapeutic Intervention II (6 credits)

NUR 304: Therapeutic Intervention III (3 credits)

NUR 330: Pharmacologic Basis of Nursing Practice (3 credits)

NUR 330: Pharmacologic Basis of Nursing Practice (3 credits)

NUR 344: Altered Health States (3 credits)

NUR 405: Therapeutic Intervention IV (6 credits)

NUR 406: Clinical Decision Making (3 credits)

NUR 408: Trends and Issues in Nursing and Health Care (3 credits)

NUR 409: Therapeutic Intervention V (6 credits)

NUR 410: Professional Nursing Management (3 credits)

Nursing, B.S. (37.5 Credit Major)

Prerequisite sciences (4.5 credits)

CHE 114: Essentials of General Chemistry (3 credits)

CHE 115: Essentials of General Chemistry, lab (1.5 credits)

Foundation Course (Prior to Admission)

HIN 268: Human Growth and Development (3 credits)

Foundation Course (Prior to or After Admission)

HIN 269: Analysis and Action for Community Health (3 credits)

Nursing Courses (27 credits)

NUR 300: Nursing as a Human Science (3 credits)

NUR 302: Ways of Knowing (3 credits)

NUR 400: Professional Nursing Practice (6 credits)

NUR 406: Clinical Decision Making (3 credits)

NUR 408: Trends and Issues in Nursing and Health Care (3 credits)

NUR 409: Therapeutic Intervention V (6 credits)

NUR 410: Professional Nursing Management (3 credits)

Department Grade Requirement

A minimum grade of C (73) or better is required in each of the prerequisite science courses, or their equivalents, to be eligible for admission to the generic Nursing program. If a prerequisite science course is repeated, the first grade will be counted when considering eligibility for admission to the Nursing program. A minimum grade of C (73) is required for a student to progress from one Nursing course to the next. Nursing students may repeat only one HIN or NUR course. Note: A student who does not achieve a grade of C or better in a NUR or HIN course may repeat the course only once.

Time Limit to Complete the Nursing Program

In addition to the College requirement for completion of the baccalaureate degree, the following time limit applies: Once admitted to the Nursing program, the student must complete the baccalaureate in Nursing within five years. Students who do not meet this time requirement may reapply to have the currency of their Nursing courses reevaluated. Students may be required to demonstrate current knowledge as evidenced by recent or present practice, portfolio, or certification.

Courses in Nursing

HIN 268: Growth and Development.

3 hours, 3 credits. Physical, cognitive, social, and emotional development from conception to adulthood. Consideration of contributions of major developmental theorists. PREREQ: 30 college credits.

HIN 269: Analysis and Action for Community Health.

3 hours, 3 credits. Health needs of families in the context of their communities. Introduction to epidemiological method and the principles of epidemiological investigation as tools for analyzing health needs. Issues of prevention, environmental health, special risk families, planned change, the concept of health teams, and the roles of health workers in the community are addressed. PREREQ: 30 college credits.

NUR 300: Nursing as a Human Science.

3 hours, 3 credits. Historical, philosophical, and theoretical foundations of nursing and selected topics relating to the intersubjective nature of professional nursing and its moral, ethical, and legal dimensions. PREREQ: Admission to the Nursing major.

NUR 301: Therapeutic Intervention I: Introduction to Professional Nursing Practice.

6 credits (3 hours, lecture; 12 hours, clinical laboratory). Emphasis on therapeutic communication, health assessment, and data analysis. COREQ: NUR 300, NUR 344. PRE- or COREQ: HIN 269.

NUR 302: Ways of Knowing in Nursing.

3 credits (3 hours, lecture). Methods of research and inquiry in nursing and their implications for clinical practice. PREREQ or COREQ: NUR 300.

NUR 303: Therapeutic Intervention II: Adult Health Nursing.

6 credits (3 hours, lecture; 12, hours clinical laboratory). Clinical focus on nursing care of adults with acute and chronic illnesses. PREREQ: NUR 300, NUR 301, NUR 344, HIN 269. COREQ: NUR 304, NUR 330.

NUR 304: Therapeutic Intervention III: Psychiatric-Mental Health Nursing.

3 credits (2 hours, lecture; 4 hours, clinical laboratory). Clinical focus on nursing care of adults with acute and chronic psychiatric and mental health conditions. PREREQ: NUR 300, NUR 301, NUR 344, HIN 269. COREQ: NUR 303, NUR 330.

NUR 330: Pharmacologic Basis of Nursing Practice.

3 credits (3 hours, lecture). General pharmacological principles as they relate to nursing practice and health care. COREQ: NUR 303.

NUR 344: Altered Health States.

3 hours, 3 credits. The relationships of normal body functioning and other physiological changes that occur as a result of illness. Epidemiological, preventive, and pathological aspects of disease. COREQ: NUR 301.

NUR 400: Professional Nursing Practice.

6 credits (3 hours, lecture; 9 hours, clinical laboratory). Health assessment and therapeutic intervention through communication theory and skills, interprofessional collaboration, and professional role development. PRE- or COREQ: NUR 300, NUR 302, and HIN 269.

NUR 405: Therapeutic Intervention IV: Childbearing and Childrearing Families.

6 credits (3 hours, lecture; 12 hours, clinical laboratory). Relation of nursing care to positive health experiences and outcomes in childbearing and childrearing families. PREREQ: NUR 303, NUR 304, NUR 330. COREQ: NUR 302, NUR 406.

NUR 406: Clinical Decision Making.

3 credits (3 hours, lecture). The processes of clinical judgment and decision-making. Examination of the interaction between diagnostic and therapeutic reasoning within the context of ethical reasoning. PREREQ: NUR 303 or NUR 400.

NUR 408: Trends and Issues in Nursing and Healthcare.

3 credits (3 hours, lecture). Identification and exploration of trends and issues, with opportunity to debate and to defend a position on issues. PREREQ: NUR 405 *or* NUR 406 or permission of instructor.

NUR 409: Therapeutic Intervention V: Nursing Synthesis.

6 credits (3 hours, lecture; 12 hours, clinical laboratory). Synthesis of knowledge and skills required to effectively support clients, families, and groups along a trajectory from diagnosis through end of life. Population-based care, as it relates to disaster preparedness and targeted nursing response. PREREQ: NUR 405 or NUR 400 and NUR 406. COREQ: NUR 410.

NUR 410: Professional Nursing Management.

3 credits (3 hours, lecture). Professional role of the nurse in the healthcare system. Emphasis on leadership and management theory, as related to nursing administration, organizational design, and governance. COREQ: NUR 409.

NUR 489: Honors Project.

One semester, 3 credits (maximum 6 credits). Independent study or investigation, under faculty direction. A written report is required. PREREQ: Satisfactory completion of 24 credits in NUR or related fields and Departmental permission; cumulative college index of 3.2 and an index of 3.5 in Nursing.

Courses of Interest

NUR (SOC) 240: Death, Dying, and Bereavement.

3 hours, 3 credits. Sociological, psychological, and healthcare perspectives and ethical issues surrounding the processes of dying and bereavement. Topics include the history of attitudes toward death, the new medical technology, the ways individuals confront their own death and that of others, dying in institutions, death and the child, and suicide.

NUR 350: Topics in Nursing.

3 credits, 3 hours (maximum 6 credits). PREREQ: 45 credits in Nursing and permission of the Chair.

NUR 385: Independent Study in Nursing.

One semester, 1-3 credits. (Limited to juniors and seniors in Nursing.) Independent study on a specific topic or clinical area of interest, under the supervision of a faculty member in the Department of Nursing. PREREQ: Instructor's permission.

Philosophy

Chair: Massimo Pigliucci (Carman Hall, Room 360) Department Faculty: Professors: Bernard H. Baumrin, Richard L. Mendelsohn, Massimo Pigliucci; Associate Professors: Rosalind Carey, Julie Maybee; Assistant Professors: Michael Buckley

Philosophy is the pursuit of wisdom about ourselves, others, and the world through sustained reflection on general questions—e.g., what is the nature of reality, what is the purpose of life—arising from the human experience. Philosophy is thus both a body of knowledge and a set of skills.

The Department of Philosophy offers students the opportunity to gain knowledge of the best of philosophical literature and to develop their own skill in analysis and argument, both written and

The Department offers students a major leading to the B.A. Students who major in Philosophy may choose either Option A: Knowledge and Reality or Option B: Ethics and Public Policy. The Department also offers a Minor in Philosophy and participates in the interdisciplinary program in Linguistics.

The Department offers students a Major leading to the BA. It also offers a MInor. The Department participates in the interdisciplinary programs in Linguistics.

Philosophy (24 Credit Major)

Students who Major in Philosophy may choose either Option A: Knowledge and Reality or Option B: Ethics and Public Policy.

A: Knowledge and Reality

6 credits selected from PHI 170 or 230; and from PHI 232 or 358.

6 credits selected from PHI 242, 243, 244, or 251. (At least 3 of these 6 credits must be from 242 or 243.)

12 credits selected from 300-level or 400-level Philosophy courses.

B: Ethics and Public Policy

6 credits selected from PHI 170 or PHI 230; and from PHI 242, PHI 243, PHI 244, or PHI 251.

9 credits selected from any of PHI 232, PHI 234, PHI 235, PHI 236, PHI 247, and PHI 250.

6 credits selected from any of PHI 330, PHI (POL) 364, PHI 343, PHI 354, PHI 358, PHI 359, and PHI 369.

3 credits selected from a 300-level or 400-level Philosophy course related to the field of Ethics and Public Policy.

HONORS

Students must achieve an A or A- grade in PHI 482 Honors Tutorial. They must also satisfy both the Department's and the College's requirements for graduation with Departmental honors.

12-CREDIT MINOR

Students who minor in Philosophy may choose from a general Philosophy Minor or from several specialized options.

A. Philosophy (general)

12 credits: No more than three credits may be taken in 100-level courses; at least six credits must be taken in 300-level courses or an appropriate 400-level course approved by the Department.

B. Business, Society, and Law

3 credits selected from PHI 169, PHI 170, PHI 173, or PHI 176

3 credits selected from PHI 234, PHI 235, PHI 247, or any of the

6 credits selected from PHI 330, PHI 354, PHI 359, PHI 364, PHI 369, or an appropriate 400-level course approved by the Department.

C. The Diverse World

3 credits selected from PHI 173, PHI 174, or PHI 176

3 credits selected from PHI 225, PHI 236, PHI 238, PHI 250, PHI 269, or any of the following:

6 credits selected from PHI 305, PHI 336, PHI 338, PHI 363, or an appropriate 400-level course approved by the Department.

D: Language and Logic

3 credits selected from PHI 169 or PHI 170

3 credits selected from PHI 230, PHI 231, PHI 251, or any of the following:

6 credits selected from PHI 350, PHI 351, PHI 362, or an appropriate 400-level course approved by the Department.

E: Understanding Science

3 credits selected from PHI 169 or PHI 170

3 credits selected from PHI 221, PHI 230, PHI 247, PHI 251, or any of the following:

6 credits selected from PHI 343, PHI 350, PHI 352, PHI 353, PHI 354, PHI 355, or an appropriate 400-level course approved by the Department.

F. Wellbeing and the Helping Professions

3 credits selected from PHI 169, PHI 173, PHI 174, or PHI 176

3 credits selected from PHI 234, PHI 236, PHI 241, PHI 246, PHI 247, PHI 250, or any of the following:

6 credits selected from PHI 336, PHI 354, PHI 360, PHI 364, PHI 369, or an appropriate 400-level course approved by the Department.

Honors Program

Students must satisfy the College requirements for graduation with Departmental honors and win the approval of the Department.

Philosophy (12 Credit Minor)

In Philosophy, at least 6 of which must be at the 300 or 400 level, and no more than 3 of which can be at the 100-level. (12 credits)

Courses in Philosophy

PHI 169: Critical Reasoning.

3 hours, 3 credits. Introduction to the concepts and methods of thinking, reading, and writing analytically and evaluatively. Note: No previous study of logic or philosophy is required.

PHI 170: Introduction to Logic.

3 hours, 3 credits. An introduction to logical analysis covering propositional logic, syllogistic inference, deductive techniques, probability and statistical inference, scientific method, language and logic, definition, and meaning.

PHI 171: Problems of Philosophy.

3 hours, 3 credits. Introduction to philosophic thinking via a discussion of questions such as "How should I live?," "What is the truth about reality?," and "Can God's existence be known?"

PHI 172: Contemporary Moral Issues.

3 hours, 3 credits. Fundamental ethical theories and their applications to current moral issues, such as capital punishment, abortion, sexual equality, economic justice, and issues in medical and other professional ethics.

PHI 173: Justice and Society.

3 hours, 3 credits. A study of freedom, justice, and order, and the primary conflicts among them.

PHI 174: Theories of Human Nature.

3 hours, 3 credits. A consideration of several different views of human nature both pre- and post-Darwinian, and within and outside the bounds of contemporary science.

PHI 175: Philosophy of Religion.

3 hours, 3 credits. Philosophic study of the foundations of religious beliefs and practices. Consideration of concepts such as God, the divine, the soul, immortality, and human destiny; of traditional proofs and disproofs of the existence of God; of the differences between faith and belief; and of the nature of religious language. Note: All 200-level PHI courses carry the following PREREQ: Either one 100-level PHI course or instructor's permission.

PHI 176: Philosophy of Freedom.

3 hours, 3 credits. Examination of a broad range of philosophic questions whose unifying theme is the idea of freedom. Topics may include liberation strategies for both individuals and social groups, freedom as an ultimate category or value, and the concept of freedom present in most modern philosophies.

PHI 177: Philosophy of Contemporary Music.

3 hours, 3 credits. A critical examination from a philosophic point of view of contemporary genres of music. Topics may include a philosophic analysis of the meaning and value of forms, such as rap music, within their cultural contexts and in relation to the larger American society.

PHI (POL) 218: Fundamentals of Human Rights and Peace.

3 hours, 3 credits. Basic concepts and perspectives in the study of peace and human rights. The history and development of theoretical and practical approaches to human security. Topics may include terrorism, war and nonviolence, conflict resolution, genocide, class-, gender-, and race-based violence, notions of justice, and universal rights versus local cultural practices.

PHI 221: Ethical Issues in Computing and Technology.

3 credits, 3 credits. Introduction to ethical systems and ethical decision making with reference to issues arising in computing and the use of technology. Topics chosen from among the following: privacy, consumer information, free speech, wiretapping, encryption, policies, open access to technology, computer crime, software protection, and hacking. PREREQ: 30 college credits.

PHI (WST) 225: Philosophy and Gender.

3 hours, 3 credits. Conceptions of gender from the classical to the modern period.

PHI 230 (LNG 266): Symbolic Logic.

3 hours, 3 credits. Introduction to the techniques and applications of modern deductive logic; a development of formal systems of propositional and quantificational logic. Note: PHI 230 (LNG 266) is recommended to students with some background in logic, philosophy, computer science, or mathematics.

PHI 231: Language, Meaning, and Knowledge.

3 hours, 3 credits. Introduction to the philosophical study of language and meaning. Methods employed and problems encountered in the analysis of both constructed and natural languages will be examined.

PHI 232: Classical Ethical Theories.

3 hours, 3 credits. Examination of ethical theories chosen from the works of Plato, Aristotle, Hobbes, Spinoza, Butler, Hume, Kant, Bentham, Mill, and others.

PHI 233: Aesthetics.

3 hours, 3 credits. Some of the central problems in understanding the nature of art and our appreciation of art. These problems include the relevance of the artist's activities to the understanding and criticism of art; meaning, truth, and value in the arts; and the nature and uses of criticism.

PHI 234: Philosophy of Law.

3 hours, 3 credits. Philosophical study of legal concepts and legal reasoning. Topics to be examined include the logic structure of law, the problems of natural law and justice, and the grounds of laws.

PHI 235: Political Philosophy.

3 hours, 3 credits. An inquiry into basic questions of political philosophy, such as concepts of democracy, legitimacy, political freedom, and the role of politics in a good society. Selected political ideologies from classical and/or contemporary sources will be discussed.

PHI 236: Social Philosophy.

3 hours, 3 credits. An inquiry into the nature of the good society. Questions such as the structure and legal systems in the good society may be considered.

PHI 237: Issues in the Philosophy of Religion.

3 hours, 3 credits. Study of selected issues in the philosophy of religion, such as the relationship between religion and science, the possibility of specifically religious truth, and arguments concerning the infinite.

PHI 238: Asian Philosophies.

3 hours, 3 credits. Survey of philosophical and religious doctrines in the Orient, with emphasis on such viewpoints as Confucianism, Taoism, and Buddhism.

PHI 239: Philosophical Ideas in Literature.

3 hours, 3 credits. Study of the relations between philosophy and literature, the mode of existence of a literary work of art and its sources in the imagination, and how philosophical ideas are embodied in literature. Selected classics of world literature, ancient and modern, are carefully read and analyzed.

PHI 240: Philosophy of History.

3 hours, 3 credits. Readings from classical and contemporary philosophers of history. Philosophic problems raised by the study of history are emphasized. Among these are problems about the nature and limits of historical knowledge, the nature of historical explanation, and the relationships between history and other disciplines.

PHI 241: Existentialism and Phenomenology.

3 hours, 3 credits. Elementary study of some of the major doctrines.

PHI 242: History of Philosophy I: Ancient.

3 hours, 3 credits. Intensive reading and critical examination of some of the principal writings of major thinkers of the Western philosophical tradition. Emphasis on Plato and Aristotle.

PHI 243: History of Philosophy II: Modern.

3 hours, 3 credits. Intensive reading and critical examination of some of the principal writings of major thinkers of the Western philosophical tradition. Emphasis on Descartes, Spinoza, Leibnitz, Locke, Berkeley, Hume, and Kant.

PHI 244: History of Philosophy III: Later Modern.

3 hours, 3 credits. Western philosophical thought from Kant through the nineteenth century.

PHI 245: American Philosophy.

3 hours, 3 credits. The pivotal writing of philosophers such as Peirce, James, Royce, Santayana, Whitehead, Dewey, and Lewis.

PHI 246: Philosophies of the Self.

3 hours, 3 credits. Classical and modern conceptions of human nature. Questions include: Is there a universal human nature? How is it to be defined and explored? What is consciousness? What is the self? What is reason? How are reason and the emotions related?

PHI 247: Environmental Ethics.

3 hours, 3 credits. Philosophical reflection upon issues arising from a consideration of environmental problems confronting humanity. Topics that might be considered include whether we have obligations to future generations, other species, and ecosystems. If ethical concepts should be extended to include nature, are there viable alternatives to our current practices of using, exploiting, and dominating nature?

PHI 250: Contemporary Social Ethics.

3 hours, 3 credits (maximum 6 credits). Examination of selected major ethical problems confronting modern society. Topics to be considered will vary from semester to semester and may include the ethical aspects of abortion, social justice, racism, sexism, poverty, the environment, medical ethics, and animal rights.

PHI 251: History of Philosophy IV: Twentieth Century. 3 hours, 3 credits. Philosophical movements of the twentieth

century.

PHI 265: Special Topics in Philosophy.

3 hours, 3 credits (maximum to 6 credits). Various topics in Philosophy.

PHI (AAS) 269: Introduction to African Philosophy.

3 hours, 3 credits. Examination of traditional and contemporary African philosophies. PREREQ: none.

PHI 281: Readings in Philosophy.

One semester, 3 credits (maximum 6 credits). Topics to be arranged between student and instructor. Note: All 300-level PHI courses carry the following PREREQ: Satisfactory completion of 30 college credits, including one 200-level PHI course.

PHI 330: Business Ethics.

3 hours, 3 credits. Social responsibilities of business organizations. Analysis of ethical, moral, and social issues stemming from the interaction of individuals, businesses, and government. PREREQ: BBA 204 or Departmental permission.

PHI (AAS) 305: African Philosophical Thought.

3 hours, 3 credits. Traditional and contemporary African philosophical thought, including world views, ethics, ontology, and religions.

PHI (DST) 336: Disability, Ethics and the Body.

3 hours, 3 credits. Examination of how disability is defined and of moral issues surrounding the treatment of people with disabilities. Topics may include the role of the body in the definition and experience of disability, privacy issues, disability identity, and the moral issues involved in eugenics, prenatal screening, rehabilitation, and social services for disabled people.

PHI (AAS) (SOC) 338: Race and Ethnicity in Society.

3 hours, 3 credits. Sociological perspectives on race and ethnic relations in the United States and other societies.

PHI 343: Philosophy of Technology.

3 hours, 3 credits. Philosophical issues concerning the relationship between human beings and technology. Issues to be discussed include: What is technology? What is its proper role in human affairs? How should technological change be evaluated?

PHI 350: Logical Theory.

3 hours, 3 credits. General introduction to the theory of formal axiomatic systems, proof of the soundness, completeness, and consistency of some axiomatic systems of logic; decision problems and independence; some topics in the semantics of formalized languages; and many-valued and modal logics.

PHI 351: Logic and Language.

3 hours, 3 credits. Investigation of some of the relations between language and logic.

PHI 352: Probability and Induction.

3 hours, *3 credits*. Introduction to several theories of scientific inference, the weighing of evidence, probability, and inductive inference.

PHI 353: Philosophy of Science.

3 hours, 3 credits. Introductory course in which emphasis is placed on the clarification of pivotal concepts common to the empirical sciences. In particular, concepts such as explanation, confirmation, prediction, systematization, and empirical significance will be introduced. The relationship of uses of these concepts to the structure of scientific theory will receive close attention.

PHI (SOC) 354: Philosophy of the Social Sciences.

3 hours, 3 credits. Study of some of the problems involved in the social sciences. Possible topics include the structure of theories in the social sciences, methods of inquiry, the nature of human action, and the relationship between knowledge in the social and natural sciences.

PHI 355: Theory of Knowledge.

3 hours, 3 credits. Examination of some main problems in epistemology and of the various solutions that have been proposed.

PHI 356: Metaphysics.

3 hours, 3 credits. Examination of some main problems in metaphysics and of the various solutions that have been proposed.

PHI 358: Ethical Theory.

3 hours, 3 credits. Intensive examination of the theoretical problems involved in the construction of a moral philosophy.

PHI 359: Philosophical Problems in Legal Theory.

3 hours, 3 credits (maximum 6 credits). The course will examine selected problems, such as abortion, capital punishment, civil disobedience, punishment, and population control, through a philosophical analysis of topics in legal theory such as legal causation, evidence, jurisdiction, and human rights.

PHI 360: Philosophy of Protest and Liberation.

3 hours, 3 credits. The philosophical study of civil disobedience and of various liberation movements such as Third World liberation and women's liberation.

PHI 361: Nineteenth-Century Continental Philosophy.

3 hours, *3 credits*. This course will closely examine one or more of the main figures in nineteenth-century Continental philosophy.

PHI 362: Analytic Philosophy.

3 hours, 3 credits. Intensive study of the writings of Moore, Russell, Carnap, Wittgenstein, and others.

PHI (HCU) 363: Introduction to Jewish Philosophy.

3 hours, 3 credits. PREREQ: Either satisfactory completion of 45 college credits or Departmental permission.

PHI (POL) 364: Capitalism and Its Critics.

3 hours, 3 credits. Defenders and critics of capitalism in the nineteenth, twentieth, and twenty-first centuries. Philosophical and political consideration of liberalism, Marxism, anarchism, socialist-feminism, and the radical ecology movement. PREREQ: one 200-level PHI or POL course.

PHI 365: Special Topics in Philosophy.

3 hours, 3 credits (maximum to 6 credits). Various topics in Philosophy.

PHI (POL) 369: Global Justice.

3 hours, 3 credits. Moral obligations in global politics and economy. Contemporary theories of justice and their applications to the relationships between rich and poor countries. PREREQ: One of the following courses: PHI 173, PHI 234, POL 226, POL 227, or POL 240.

Note: With the exception of PHI (CLT) 481 and 482, all 400-level PHI (CLT) courses carry the following PREREQ: Either three PHI (CLT) courses (200- or 300-level) or instructor's permission.

PHI 462: Seminar in Philosophy and Social Policy.

3 hours, 3 credits (maximum 9 credits). Examination of various theories of social policy and the application of these theories in selected areas. Application of utilitarianism, democracy, and the idea of a social contract to policy areas such as technology and risk, the environment, the law, foreign policy, civil rights, education, and the family.

PHI 465: Special Topics in Philosophy.

3 hours, 3 credits (maximum to 6 credits). Various topics in Philosophy.

PHI (CLT) 481: Readings in Philosophy.

One semester, 3 credits (maximum 9 credits). Topics to be arranged between the student and instructor. PREREQ: Chair's permission.

PHI 482: Honors Tutorial.

3 hours, 3 credits (maximum 6 credits). Topics to be arranged between the student and instructor. PREREQ: Chair's permission.

Physics and Astronomy

Chair: Daniel Kabat (Gillet Hall, Room 131A)

Department Faculty: Distinguished Professor: Eugene Chudnovsky; Professors: Christopher C. Gerry, Dimitra Karabali, Daniel Kabat; Associate Professors: Dmitry Garanin; Assistant Professor: Matthew O'Dowd; Chief College Laboratory Technician: Elpidio Jiménez

The Department of Physics and Astronomy prepares students for positions in government and industry and for graduate study in physics and related fields. Students in the Department may choose either a 36-credit major leading to a B.A. degree or a 55-credit major leading to a B.S. degree. The Department also offers a variety of basic courses designed for general education and for students in other departments, and cooperates with the Department of Middle and High School Education in preparing students to teach physics in secondary schools.

The Department of Physics and Astronomy also administers the Pre-engineering Transfer Program. See the description of the requirements for this program earlier in this Bulletin, in the chapter entitled "Baccalaureate Programs."

Physics, B.A. (36 Credit Major)

The B.A. program in Physics is designed for students who, although not planning a career in physics research and/or college/university-level teaching, have a strong interest in physical science, particularly physics, and wish to prepare for a career in which a good basic knowledge of physics is useful. Among such careers are the health professions, elementary and secondary school science teaching, patent-law practice, industrial management, and science journalism.

Credits (36)

24 *In required PHY courses*: in one of the following three combinations:

> 10 credits in PHY 168-169 and 14 credits in additional PHY courses;

or with Chair's permission either:

10 credits in PHY166-167 and 14 credits in additional PHY courses at the 200 level or above; or 9 credits in PHY 135 and 167, and 15 credits in additional PHY courses at 200 level or above;

12 In required mathematics courses: MAT 175-176 and MAT 226.

Physics, B.S. (54 Credit Major)

The B.S. degree program in Physics is designed for students who are planning a career in physics research and/or college- and university-level teaching. Any student following this program may select the B.A. degree instead of the B.S. degree.

The minimum of 54 required credits is distributed among the following courses (students receiving credit toward a major in Physics for either PHY 166 or 168 may not also receive credit for PHY 135):

Credits (54)

In required PHY courses: in one of the following combinations: 24 credits: PHY 168 (5), 169 (5), 251 (2), 300 (4), 301 (4), 302 (4) and 12 credits in additional PHY courses at the 200 level or above; or, with Chair's permission, 24 credits: PHY 166 (5), 167 (5), 251 (2), 300 (4), 301 (4), 302 (4)] and 12 credits in additional PHY courses at the 200 level or above; or, with Chair's permission, 23 credits: PHY 135 (4) and 167 (5), 251 (2), 300 (4), 301 (4), 302 (4) and 13 credits in additional PHY courses at the 200 level or above. In mathematics courses: MAT 175-176 (8), MAT 226 (4), and two additional 3-credit MAT courses.

Minor in Physics

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A minor in Physics consists of either PHY 166 and 167 or PHY 168 and 169, or, with chair's permission, PHY 135 and 167, and at least 12 credit hours of courses at

the 200-level or above.

Preparation for Secondary School Teaching

Students preparing to teach physics and general science at the secondary level are advised to supplement the minimum physics concentration with courses in astronomy, biology, chemistry, geology, and education, including ESC 419 (Methods of Teaching Science in Secondary School), which is offered by the Department of Middle and High School Education. That Department, as well as the Office of the Dean of Education (Carman Hall, B-33, 718-960-4972), will also provide information on certification requirements.

Courses in Humanities and Social Studies

Since the City College School of Engineering requires 14 to 21 credits in these areas for graduation, such courses may be taken profitably at Lehman College by pre-engineering students. Students expecting to transfer to City College should note that the School of Engineering does not have any foreign language requirement for graduation. Students who wish to enter this program should see the pre-engineering adviser in the Department of Physics and Astronomy at Lehman College for advice on current requirements at colleges of engineering.

Courses in Physics

*Courses preceded by an asterisk are not expected to be offered in 2013-2015.

PHY 131: Conceptual Physics.

3 hours (2, lecture; 1, lab), 3 credits. Basic concepts and methods of physics. The nature of physical laws and the methods by which these laws are developed and tested. Topics include motion and energy; heat, light, and sound; the structure of matter; gravity, electricity, and magnetism.

PHY 135: Fundamental Concepts and Methods of Physics.

5 hours (3, lecture; 2, lab), 4 credits. An introduction to some of the most significant ideas about the nature of the physical world and the methods by which these ideas are developed and tested experimentally, including Newtonian mechanics, conservation laws, the kinetic-molecular theory of matter, electromagnetic fields, light waves and interference, special relativity, general relativity, quantum mechanics, atoms, nuclei, and elementary particles.

PHY 140: The Physics of Sound.

5 hours (3, lecture; 2, lab), 4 credits. Harmonic motion, waves, perception and measurement of sound, the physics of musical instruments and human voice, electrical reproduction of sound, acoustics of rooms, and environmental noise.

Note 1: Recommended for undergraduate students of Speech, Language, and Hearing Sciences to fulfill the requirements for A.H.S.A. certification. It is also appropriate for students who are interested in the physics of music. Note 2: This course does not fulfill Physics major/minor requirements.

PHY 141: Sound, Speech, and Music.

3 hours (2, lecture; 1, lab), 3 credits. Introduction to the physics of sound and the principles underlying speech, hearing, and music. Sound waves and their properties; the production, propagation, and perception of sound; acoustics; the recording and reproduction of sound. Note: Appropriate for students interested in Speech-Language-Hearing Sciences and Music.

PHY 145: Light and Color.

5 hours (3, lecture; 2, lab), 4 credits. Introduction to the nature of light and color and its applications in science, technology, and art. Light as an electromagnetic wave phenomenon, interference, geometrical optics, polarization, the laser, holography, fiber optics, reproduction of sound with light, vision, visual illusions, color theory, light and color in nature and art.

PHY 151: Energy and the Environment.

3 hours (2, lecture;1, lab), 3 credits. Energy as a physical concept: various forms of energy, conservation of energy, heat and thermodynamics, energy from fossil fuels, electrical energy and its generation, solar energy, nuclear energy. The environmental effects of the generation of energy: air pollution, global warming, nuclear radiation in the environment.

PHY 166: General Physics I.

6 hours (4, lecture; 2, lab), 5 credits. (Algebra-based Physics: Customarily taken by premedical, preveterinary, and predental students.) Mechanics, heat, and sound. PREREQ: The completion of the College's Requirement in Mathematics. Note: Only one of the following courses may be taken for credit: PHY 166 or 168.

PHY 167: General Physics II.

6 hours (4, lecture; 2 lab), 5 credits. (Algebra-based Physics: Customarily taken by premedical, preveterinary, and predental students.) Electromagnetism, geometrical and physical optics, and introduction to modern physics. PREREQ: Either PHY 166 or 168; or PHY 135 and Departmental permission. Note: Only one of the following courses may be taken for credit: PHY 167 and 169.

PHY 168: Introductory Physics I.

6 hours (4, lecture; 2, lab), 5 credits. (Calculus-based Physics: Designed for those preparing for careers in the physical sciences and engineering.) Motion, Newton's laws, work and energy, mechanics of rigid bodies, elasticity, mechanics of fluids, temperature, heat, kinetic theory of matter, wave motion, and sound. PREREQ: MAT 175 (or Departmental permission). Note: Only one of the following courses may be taken for credit: PHY 166 or 168.

PHY 169: Introductory Physics II.

6 hours (4, lecture; 2, lab), 5 credits. (Calculus-based Physics: Designed for those preparing for careers in the physical sciences and engineering.) Electrostatics, electrodynamics, geometrical and physical optics. PREREQ: PHY 168 (or Departmental permission). PRE- or COREQ: MAT 176. Note: Only one of the following courses may be taken for credit: PHY 167 or 169.

*PHY 215: Medical Physics.

5 hours (3, lecture; 2, lab), 4 credits. PREREQ: PHY 166 and 167 or PHY 168 and 169, or the equivalent (including courses in anatomy and physiology), with Departmental approval.

PHY 251: Intermediate Physics Laboratory I.

4 hours, 2 credits. Individual experimentation in selected areas of physics and introduction to analysis of experimental data. PREREQ: Either PHY 167 or 169 and MAT 175 and 176.

PHY 252: Environmental Physics.

4 hours, 4 credits. Physical principles applied to the environmental sciences. Forms of energy, conservation of energy, heat and thermodynamics, energy from fossil fuels, physics of air pollution and global warming, electrical energy and its generation, solar energy, nuclear energy, environmental effects of nuclear radiation.

PHY 300: Modern Physics.

4 hours, 4 credits. Relativity; fundamental physical processes at the atomic level; introductory Schrodinger quantum mechanics; introductory nuclear physics; atomic and nuclear models. PREREQ: Either PHY 167 or 169. PRE- or COREQ: MAT 175.

PHY 301: Intermediate Electricity and Magnetism.

4 hours, 4 credits. Electrostatics, dielectrics, magnetism and electromagnetic induction, magnetic properties of matter, DC and AC circuits, Maxwell's equations. PREREQ: Either PHY 167 or 169. PRE- or COREQ: MAT 226 or Departmental permission.

PHY 302: Intermediate Mechanics.

4 hours, 4 credits. Dynamics of a particle. The harmonic oscillator. The central force problem: planetary orbits. Dynamics of systems of particles: rotation of rigid bodies. Accelerating coordinate systems. PREREQ: Either PHY 167 or 169. PRE- or COREQ: MAT 226 or Departmental permission.

PHY 303: Thermodynamics and Statistical Mechanics.

4 hours, 4 credits. First and second laws of thermodynamics, equation of state, entropy, and other concepts of thermodynamics, applications to heat engines, and thermal properties of gases, solutions, and solids; introduction to statistical mechanics. PREREQ: Either PHY 167 or 169 and MAT 226.

PHY 304: Optics.

3 hours, 3 credits. Reflection and refraction, interference, diffraction and polarization, lasers and holography. PREREQ: Either PHY 167 or 169, and MAT 175.

PHY 305: Digital Electronics.

4 hours (2, lecture; 2, lab), 3 credits. Design of digital electronic circuits. Binary, octal, and hexadecimal number systems, Boolean algebra and logic gates, combinational logic (adders, subtractors, etc.), synchronous sequential logic, registers, counters, memory units, digital integrated circuits. PREREQ: CMP 230 or CIS 166 or permission of the Department.

*PHY (AST) 306: Astrophysics.

3 hours, 3 credits. PREREQ: Either AST 116 or 136; either PHY 167 or 169; PHY 300 recommended but not required.

PHY 307: Mathematical Physics.

4 hours, 4 credits. Vector calculus, matrix and tensor algebra, Fourier and Laplace transforms, complex variable theory, and solutions of differential equations. Applications to problems in physics. PREREQ: Either PHY 167 or 169. PRE- or COREQ: MAT 226.

PHY 310: Nuclear Physics.

3 hours, 3 credits. Systematics of nuclei: nuclear levels, transitions, and decay modes. Models of nuclear forces and structure. Quantum scattering theory and nuclear form factors. Methods of particle production, acceleration, and detection. Topics from nuclear astrophysics. PREREQ: PHY 166 and 167 or PHY 168 and 169; PHY 300 or Departmental approval.

PHY 350: Intermediate Physics Laboratory II.

4 hours, 2 credits. Individual experimentation, with emphasis on modern experimental techniques. PREREQ: PHY 250 and 300.

PHY 351: Intermediate Physics Laboratory III.

4 hours, 2 credits. PREREQ: PHY 350.

PHY 355: Special Topics in Physics.

1-3 hours, 1-3 credits. Course content will be chosen from topics valuable to Physics majors or students from other departments. Topics to be covered and number of hours and credits will be announced in advance. Can be taken repeatedly as long as course content is not the same. PREREQ: Chair's permission.

PHY 400: Introductory Quantum Mechanics.

4 hours, 4 credits. Wave and particle nature of matter and radiation. The uncertainty principle. Operators and the Eigenvalue equations; Schrodinger formulation; stationary states. Harmonic oscillator and potential barrier problems. Angular momentum. Central potential and the hydrogen atom. Perturbation theory of energy levels. Spin and statistics. PREREQ: PHY 301. PRE- or COREQ: MAT 323.

PHY 401: Solid State Physics.

3 hours, 3 credits. Principles of crystallography; crystal structure; reciprocal space; crystalline defects. Lattice dynamics; phonon statistics and lattice specific heats. Thermal conduction. Electrons in metals; classical and quantized free electron theory. Band theory of solids. Dynamics of electron motion. Superconductivity. Semiconductors. Dielectric and magnetic properties of solids. PREREQ: PHY 300 and MAT 226.

*PHY 403: Theoretical Mechanics.

3 hours, 3 credits. PREREQ: PHY 302 and either MAT 229 or 323.

*PHY 404: Electromagnetic Theory.

3 hours, 3 credits. PREREQ: PHY 301 and either MAT 229 or 323.

PHY 489: Honors Course.

One semester, 6 or 9 hours, 2 or 3 credits (maximum 6 credits). Independent study or participation in a research project under faculty direction. PREREQ: PHY 350 and Departmental permission.

Courses in Astronomy

*Courses preceded by an asterisk are not expected to be offered in 2013-

AST 101: Introduction to Astronomy.

3 hours, 3 credits. Basic exploration of our universe and the laws that govern it. History and origins of the universe, life-cycles of stars and galaxies, properties of the sun and planets, the motion of the earth and its effect on seasons and astronomical observation.

AST 117: Astronomy of Stellar Systems.

5 hours (3, lecture; 2, lab), 4 credits. Stars, interstellar matter, and stellar systems. Pulsars and quasars. Introduction to modern theories of stellar evolution and cosmology.

AST 136: Astronomy of the Solar System.

5 hours (3, lecture; 2, lab—some evening lab hours), 4 credits. The sun and its planets, satellites, and comets. Laws of motion and gravitation. Techniques of astronomical observation.

AST 137: Solar Astronomy.

3 hours (3, lecture; several evening observations required), 3 credits. (Open only to students who entered Lehman prior to September 1984.) The sun and its planets, satellites, and comets. Laws of motion and gravitation. Techniques of astronomical observation.

AST 180: General Astronomy I.

3 hours, plus 2 hours additional lab/observation, 3 credits. (Closed to students who have taken either AST 116 or 136.) Solar and stellar astronomy. PREREQ: One year of physics.

AST 181: General Astronomy II.

3 hours, plus 2 hours additional lab/observation, 3 credits. (Closed to students who have taken either AST 116 or 136.) Astrophysics, relativity, and modern cosmology. PREREQ: AST 180.

*AST (PHY) 306: Astrophysics.

3 hours, 3 credits. PREREQ: Either AST 116 or 136; either PHY 167 or 169; PHY 300 recommended but not required.

Political Science

Chair: Elhum Haghighat (Carman Hall, Room 358)

Department Faculty: Professors: Ira Bloom, Stanley A. Renshon; Associate Professors: Elhum Haghighat, Young Kun Kim, Donna Kirchheimer; Assistant Professors: Alfonso Gonzales, Jeannette Graulau, Tomohisa Hattori, Chiseche Mibenge

The curriculum in Political Science is designed to enhance a student's liberal arts education and to develop an understanding of government and the political process in the United States and the world. Political Science is a flexible major that prepares students for careers in law, government, public service, teaching, journalism, non-profit organizations, business, and labor organizations. A graduate or professional degree is often required for professional careers in these fields.

Careers in Government: Students interested in government service or non-profit organizations should take courses in Group VI (Public Policy and Administration). Students with these career interests may pursue master's degrees in public administration (M.P.A.) or public policy (M.P.P.) in order to learn how public agencies (local, State, and Federal) and non-profit organizations operate.

Careers in Law: While no prescribed pre-law course of study is required for admission to law school, Political Science is the traditional undergraduate major that most students select. It should be supplemented by courses in English writing, critical and logical reasoning (via philosophy and mathematics courses), and economics. The abilities to read and analyze complex material carefully and critically, to form and support independent judgments, and to communicate ideas in writing in a precise and cogent fashion are essential to success in law school. Pre-law students majoring in Political Science should take courses listed in Group V (Law and Politics) and courses in other departments, such as PHI 229, ENW 201, ECO 166, and ECO 167. Pre-law students majoring in other disciplines should consider a 18-credit minor in Law and Government (see below).

Teaching and Other Careers: The Political Science Department also prepares students for careers in business, social, and political research, elected political office at the local, State, or Federal level, journalism, and college teaching. Political Science majors interested in graduate studies in Political Science and International Affairs as well as professional degrees, such as J.D., M.P.P., and M.P.A., should consider joining the Lehman Scholars Program (LSP). The Business and Liberal Arts Program is also complementary to Political Science majors interested in working in the business world upon graduation. Students interested in secondary or elementary school teaching should consult with the Department of Early Childhood and Childhood Education and the Department of Middle and High School Education for information on programs leading to New York State teacher certification.

Internships: Internship opportunities are available to students in Federal, State, and City government. The Department offers a summer internship in Washington, D.C., that involves work with legislators and other public officials. Lehman College credit is

given for approved programs. Students also may spend one semester in Albany on a paid internship organized by the New York State Legislature. Students receive credit for a full-time program during the spring semester and attend courses at the campus of the State University of New York at Albany. In addition, a New York City Internship Program is offered by all senior colleges of The City University of New York (see POL 470 and 471). Consult the Department for more information on any of these internships.

Women's Studies Option: Political Science majors may specialize in the Women's Studies program described later in this Bulletin.

Political Science, B.A. (39-40 Credit Major)

The distribution of credits between 33 credits (11 courses) in Political Science and 6 or 7 credits (2 courses) in other departments is as follows:

Credits (39-40)

- Three required courses for all majors: POL 166: The American Political System POL 245: Political Analysis and Interpretation One course in political theory chosen from POL 226, 227, 228, 319, 321, or 322.
- Eight elective POL courses at the 200, 300, or 400 level. 24 At least twelve credits at 300 or 400 level. Students may choose any combination of courses in the subfields of study covered in Political Science.
- 6-7 Two courses in other departments, selected from ANT 211, ECO 166, ECO 167, ENW 201, or PHI 229. The Department waives this requirement for double majors.

Departmental Honors

Students who wish to qualify for Departmental honors are required to take POL 481 (Honors Tutorial).

Requirements for the Minor in Political Science

The minor in Political Science consists of POL 166 plus 12 credits in POL courses at the 200, 300, or 400 level. At least 6 of these 12 credits must be at the 300- or 400-level.

Global Studies, B.A. (15 Credit Minor)

The distribution of credits is as follows:

Credits (15):

- Two required courses for all minors:
 - POL 240: International Politics
 - POL 241: Globalization
- Three elective POL courses selected from the following: POL 339: Human Rights

 - POL 343: International and Regional Organization
 - POL 344: International Law
 - POL 345: Integration of the Americas
 - POL 347: The Law of Diplomacy, Treaties, and War
 - POL 348: International Conflict and Conflict Resolution
 - POL 364: Capitalism and Its Critics
 - POL 366: Global Political Economy

POL 367: Political Economy of Development POL 368: Global Environmental Politics

POL 369: Global Justice

Law and Government, B.A. (18 Credit Minor)

The distribution of credits is as follows:

Credits (18):

9 Three required course for all minors:

POL 166: The American Political System

POL 227: Modern Political Philosophy

POL 302: The Judiciary

3 One of the following courses:

> POL 303: Constitutional Law: Government Structures and Powers

POL 304: Constitutional Law: Personal Rights and Liberties

Two elective courses selected from the following: 6

POL 301: Legislative Politics

POL 303: Constitutional Law: Government Structures and Powers

POL 304: Constitutional Law: Personal Rights and

Liberties

POL 312: Jurisprudence POL 340: Law in Action

POL 344: International Law

POL 470: Seminar and Internship in New York City

Government

POL 471: Seminar and Internship Program in Law

Note: At least one of POL 303 or 304 must be chosen.

Urban Community Development (Interdisciplinary minor)

Director: Donna Kirchheimer

Steering Committee: Mario Gonzalez-Corzo, David Fletcher, Dene Hurley, Cindy Lobel, Juliana Maantay, Shehzad Nadeem, James Jervis, Joseph Rachlin, Milagros Ricourt, Robyn Spencer, Elin Waring.

This interdisciplinary program is designed to introduce students to a variety of topics and issues in urban community development. Students will be exposed to community-based local, national, and international social, political, and economic analyses, as well as to political figures, philosophies, theories, and movements. The minor is designed especially for students who wish to combine an interest in community development with majors such as African and African American Studies, Anthropology, Economics, Geography, History, Latin American and Puerto Rican Studies, Philosophy, Political Science, and Sociology.

Degree Requirements

Students will satisfy the College requirement of a minor field by taking four courses (12-15 credits), at least two of which must be at the 300 level or higher.

3 credits AAS 226 (Community Organization)

One fieldwork course in community service to be 3-4 credits

chosen from the list of fieldwork courses for the

Urban Community Development Minor and

approved by a member of the Steering Committee.

6-8 credits Two courses to be chosen from the electives list of

> courses for the Urban Community Development Minor in consultation with a member of the Steering Committee (who may also approve non-

listed courses).

Note: The same courses may not be used for both the major and the minor. Some of these courses have prerequisites.

Elective Courses for the Urban Community **Development Minor**

AAS 316: Introduction to Community Development and Planning

ANT 342: Anthropology of Urbanization

ECO 314: Urban Economics

GEP: 230: Urban Environmental Management

GEH 240: Urban Geography

HIU 333: American Urban History

HIU 347: The Mainland Borough: The Bronx as a City in History

HIU 348: History of New York: City an State

LAC (ANT) 238: Latino Community Organizing in New York City

POL 211: Public Policy

POL 305: Public Administration

POL 307: Political Power in America

POL 309: State and Local Politics

POL 310: Urban Politics and Government

POL 313: Political Issues in New York City

POL 314: Issues in Urban Policy

POL (SOC) 326: Political Socialization

PSY 338: Community Psychology

SOC 234: Urban Sociology

SOC 314: Social Change and Social Planning

SOC 334: Urban Sociology in Global Perspective

Fieldwork Courses For the Urban Community **Development Minor**

AAS 470: Fieldwork in the Black Community

ESC 475: Community Change Model: Creating New Communities

GEP 475: Internship in Geographic Information Science

SOC (POL) 470: Seminar and Internship Program in New York Government

Courses in Political Science

POL 150: Contemporary Political Issues.

3 hours, 3 credits. An examination of key domestic and international problems from the perspective of political science. (This course cannot be counted toward the Political Science concentration.)

POL 166: The American Political System.

3 hours, 3 credits. The theory and practice, and the form and substance, of American government and politics.

POL 172: Great Political Thinkers.

3 hours, 3 credits. Study of the philosophical foundations of political thought. (This course cannot be counted toward the Political Science concentration.)

POL 211: Public Policy.

3 hours, 3 credits. The institutions and the political systems involved in selected areas of policy making. Discussion of the behavior and influence of the various participants. Analysis and prediction of both governmental and nongovernmental action in the policy process.

POL 217: Criminal Justice.

3 hours, 3 credits. Roles of political bodies and court decisions affecting criminal incarceration, punishment, and rehabilitation and more general principles of due process, freedom, and justice. Interactions between criminal justice personnel and agencies and broader political systems.

POL (PHI) 218: Fundamentals of Human Rights and Peace.

3 hours, 3 credits. Basic concepts and perspectives in the study of peace and human rights. The history and development of theoretical and practical approaches to human security. Topics may include terrorism, war and nonviolence, conflict resolution, genocide, class-, gender-, and race-based violence, notions of justice, and universal rights versus local cultural practices.

POL (RUS) 220: Russia Today.

3 hours, 3 credits. An introduction to life in Russia and neighboring countries of the former Soviet Union that explores the politics, society, history, and culture of Eurasia today through a multidisciplinary approach, using a variety of media and materials.

POL 226: Classical and Medieval Political Philosophy.

3 hours, 3 credits. Critical study of political philosophy from Plato to Machiavelli.

POL 227: Modern Political Philosophy.

3 hours, 3 credits. Critical study of political philosophy since Machiavelli.

POL 228: Democracy and Its Critics.

3 hours, 3 credits. Arguments for and against constitutional democracy, and an examination of its inherent problems.

POL 229: Classical Political Economy.

3 hours, 3 credits. Foundations of classical political economy. Theories of value, laissez faire, division of labor, production, distribution, trade, and economic growth. Importance of classical political economy to government and capitalism.

POL 230: Immigration and Citizenship.

3 hours, 3 credits. The impact of U.S. immigration policy upon its politics and economy. The role of migration in globalizing politics and economy. Changing notions of citizenship in the age of globalization, including controversies regarding the rights of citizens and non-citizens, particularly in times of national crisis. Topics include economic interests of immigrants, politics of change in immigration law, and the implications of globalization for citizenship and integration.

POL (LPR) 234: Latino Politics.

3 hours, 3 credits. Latino social and political movements within the U.S political system. Topics include Latino social movements; political incorporation; electoral processes; immigration politics; foreign policy; and identity movements.

POL 240: International Politics.

3 hours, 3 credits. Theory and practice in international relations. The tools used by nation-states to achieve their international policy goals under conditions of cooperation and conflict.

POL 241: Globalization.

3 hours, 3 credits. Introduction to the political history of globalization. Historical changes in the national, corporate, and individual pursuit of power and wealth. Global flows of trade, migration, and information technology. The effects of globalization on nation-states.

POL 245: Political Analysis and Interpretation.

3 hours, 3 credits. Introduction to the methods of gathering and interpreting data for political science courses. Focus on reading, understanding, and analyzing graphs and charts. Ways to gather, select, and present data. PREREQ: POL 166 and the completion of the College Mathematics Requirement. Note: Students are advised to use MAT 132 to satisfy the College Mathematics Requirement.

POL 331 (SOC 301): Methods of Social Research.

4 hours, 3 credits. Methods of data collection and interpretation; measures of central tendency, variation and change; preparation and reading of tables and graphs; and the use of quantitative data to evaluate hypotheses and draw conclusions about the social world. Extensive use of computer applications. PREREQ: Either SOC 166 or POL 166 or any 200-level Sociology or 200-level Political Science course.

POL 265: Topics in Political Science.

3 hours, 3 credits. (May be repeated when topics change. Maximum 6 credits.) Selected topics of contemporary significance.

POL 266: Politics and Culture.

3 hours, 3 credits. Impact of cultural ideals and practices on political institutions, and on political conflict and cooperation among nationalities, races, classes, genders, and tribal, ethnic, and religious groups.

POL 268: Introduction to Comparative Politics.

3 hours, 3 credits. An introductory comparison of the organization and operation of selected political systems, representing the liberal-democratic West, the socialist world, and the emerging nations of the underdeveloped world.

POL 299: Law, Computers, and the Internet: The Politics of Information Technology.

3 hours, 3 credits. The influence and impact of politics, policy, and law as government and society grapple with issues raised by advances in computing and by the increasing pervasiveness of the Internet. Among the issues that will be studied is whether advances in information technology will enhance or curtail democracy, as reflected in controversies about privacy and electronic surveillance.

POL 300: The American Presidency.

3 hours, 3 credits. The development and contemporary importance of the presidency as a focus for decision making in the conduct of domestic and foreign affairs. PREREQ: POL 166.

POL 301: Legislative Politics.

3 hours, 3 credits. Policy making in Congress, with emphasis on the interaction of private and public agencies. PREREQ: POL 166.

POL 302: The Judiciary.

3 hours, 3 credits. The contemporary role of the judiciary as a part of the decision-making process in American public policy, with an analysis of the various levels of Federal and State judicial systems in terms of (1) input: judicial recruitment, judicial policy making, and relations between national and state court systems; (2) implementation: relation to other national and State policy makers and problems of compliance with court decisions; and (3) problems of our judicial system and the chances for change. PREREQ: POL 166.

POL 303: Constitutional Law: Government Structures and Powers.

3 hours, 3 credits. Supreme Court decisions bearing on the extent of judicial, legislative, and executive power; federalism, and property rights and economic liberties. PREREQ: POL 166.

POL 304: Constitutional Law: Personal Rights and Liberties.

3 hours, 3 credits. Supreme Court decisions bearing on equality, procedural due process of law, and First Amendment freedoms. PREREQ: POL 166.

POL 305: Public Administration.

3 hours, 3 credits. (Recommended for students considering government and civil service positions.) The operations of government agencies and other large organizations dealing with public policy. The effect of such agencies on their employees and the public at large. PREREQ: POL 166.

POL 306: Political Parties, Campaigns, and Elections.

3 hours, 3 credits. The changing role of political parties in modern American government. Strategy and financing of modern political campaigns. Significance of elections for public representation and accountability. PREREQ: POL 166.

POL 307: Political Power in America.

3 hours, 3 credits. The structure and operations of interest groups in U.S. public life, with emphasis on the relative power and influence of various groups, techniques of influencing public policy, and group impact on public policy and on the operation of the political system. PREREQ: POL 166.

POL 308: American Foreign Policy.

3 hours, 3 credits. The making, administration, and control of foreign policy in the United States, with an analysis of the pressure exerted and the organs of government involved. PREREQ: POL 166.

POL 309: State and Local Politics.

3 hours, 3 credits. American state and local governments, in theory and in practice; emphasis on federalism, state politics, and selected policy areas. Special attention to New York State politics. PREREQ: POL 166.

POL 310: Urban Politics and Government.

3 hours, 3 credits. Emergence of the modern city and of suburban sprawl, and their political impact. PREREQ: POL 166.

POL (COM) 311: Freedom of Speech.

3 hours, 3 credits. Survey of the foundations and contemporary applications of the right to communicate and limitations on that right. Pertinent works from Milton to Emerson and First Amendment decisions of the Supreme Court of the United States are examined. PREREQ: POL 166.

POL 312: Jurisprudence.

3 hours, 3 credits. Nature and function of law in modern states. Basic legal concepts such as right, duty, crime, and punishment; major theories of law. Examination of how basic legal concepts affect the political and legal processes in modern states. PREREQ: POL 166.

POL 313: Political Issues in New York City.

3 hours, 3 credits. Government of the City of New York and issues affecting the City today. Impact of economic and social forces on the political process. Analysis of groups that compete for power and the significance of fiscal crisis. The City's relationship to the State and Federal governments and to a changing international economy. PREREQ: POL 166.

POL 314: Urban Policy

3 hours, 3 credits. Theories and practices of urban policies, including their spatial and historical consequences. Significance of social and political issues for urban policy-making.

POL 315: The Politics of American Poverty.

3 hours, 3 credits. The nature and extent of American poverty and the political, social, and economic factors that perpetuate it. Consideration of policy alternatives to reduce poverty. PREREQ: POL 166.

POL 316: Organizing an Election Campaign.

3 hours, 3 credits. A course in "practical politics," analyzing strategies for attaining elective office on the local level. Students will construct a model of a complete local campaign as a term project. PREREQ: POL 166.

POL 317: The Politics of American Public Education.

3 hours, 3 credits. The interaction among state, local, and national governments and interest groups, and their effect upon education policy, including the purposes, structure, funding, standards, curriculum, and student populations of public schools. PREREQ: POL 166.

POL 318: The Politics of Health.

3 hours, 3 credits. The nature and extent of healthcare and public policy in the United States. Means for achieving and methods of evaluating public-policy goals related to health. The role of public and private sectors in the shaping of health-oriented laws and regulations. PREREQ: POL 166.

POL 319. Contemporary Political Thought.

3 hours, 3 credits. The major political doctrines and political thinkers in the contemporary world.

POL 320 (SOC 335): Education, Politics, and Society: Global and Cross-Cultural Perspectives

3 hours, 3 credits. Connections between education and society, including political and economic institutions from a global and comparative perspective. Analysis of systems of social inequality based on relevant data from the U.S. and other nations and cultures.

POL 321: American Political Thought.

3 hours, 3 credits. Analysis of the development and contemporary significance of basic trends in American thought, viewed in terms of such topics as the nature of man, private property, the purpose and proper organization of the state, resistance, and a country's place in the world.

POL 322: Non-Western Political Thought.

3 hours, 3 credits. A selective survey of political thinking outside the Western political tradition.

POL 323: Marxism.

3 hours, 3 credits. Main principles of Marxism in theory and

POL (SOC) 324: Sociology of Politics.

3 hours, 3 credits. An interdisciplinary course focusing on the substantive concerns of political science and employing theoretical perspectives developed in sociology. PREREQ: POL 166 and SOC 166.

POL 325: Psychology and Politics.

3 hours, 3 credits. A course focusing on the substantive concerns of political science and employing theories of individual and group behavior developed in psychology. PREREQ: POL 166.

POL (SOC) 326: Political Socialization.

3 hours, 3 credits. An examination of the agents and channels of political socialization, such as the family, schools and colleges, youth subcultures, peers, media, and life experiences from childhood to early adulthood. The impact of various forms of political socialization on conventional and unconventional political attitudes, opinions, and activities. Special problems of political socialization, such as generational conflict, sexual differences in political orientations, impact of childhood learning on leaders and followers, and national, class, and other group differences. PREREQ: POL 166 and SOC 166.

POL (ECO) 327: Comparative Labor Movements.

3 hours, 3 credits. History, organization, government, and policies of unionism in the United States in comparison with labor movements of other contemporary and recent cultures. PREREQ: POL 166.

POL (SOC) (MES) 328: Gender Politics in Middle East, and North African Societies.

3 hours, 3 credits. Norms, values, and the political and social institutions that shape the dynamics of gender relations in different MENA societies.

POL 329: Political Systems in Europe.

3 hours, 3 credits. The government and politics of European countries will be studied comparatively, with emphasis on regional integration and the development of constitutional democracy.

POL 330: The Russian Political System.

3 hours, 3 credits. Government institutions and society in contemporary Russia. Problems of political integration, economic growth, and the history of Communism.

POL 331 (SOC 301): Methods of Social Research.

4 hours, 3 credits. Methods of data collection and interpretation; measures of central tendency, variation and change; preparation and reading of tables and graphs; and the use of quantitative data to evaluate hypotheses and draw conclusions about the social world. Extensive use of computer applications. PREREQ: Either SOC 166 or POL 166 or any 200-level Sociology or 200-level Political Science course.

POL (LAC) 332: Political Systems in Latin America.

3 hours, 3 credits. Domestic institutions and foreign policies of selected Latin American republics.

POL 333: Political Systems in Africa.

3 hours, 3 credits. Colonialism, nationalism, and liberation movements in sub-Saharan Africa. Problems of national integration in several African states. Africa's place in the world

POL (MES) 334: Political Systems in the Middle East.

3 hours, 3 credits. Domestic institutions and foreign policies of selected nations in the Middle East.

POL 335: Major Asian Political Systems.

3 hours, 3 credits. Study of China, Japan, and other selected Asian nations; the enduring and changing features of their political systems.

POL (LAC) 336: Political Systems of Central America and the Caribbean.

3 hours, 3 credits. Domestic institutions and foreign policies of the Latin American and Caribbean states. The causes, circumstances, and effects of revolution and counterrevolution.

POL 337: Public Opinion and Polling.

3 hours, 3 credits. Expanded influence of polls in modern American government and politics. Types and mechanisms of polls and their manipulation and interpretation. Mathematical foundations of polling. PREREQ: POL 166 and the completion of the College Mathematics Requirement. Note: Students are advised to use MAT 132 to satisfy the College Mathematics Requirement.

POL 338: Nationalism and Challenges to National Unity.

3 hours, 3 credits. The bases of nationalism and their variations in contemporary states. Analysis of ethnic, religious, regional, linguistic, and other loyalties threatening to undermine national unity. PREREQ: Satisfactory completion of 60 college credits.

POL 339: Human Rights.

3 hours, 3 credits. Theories and practices of human rights and their historical development in the context of globalization. Impact of human rights on local and global social movements. Significance of human rights activism at home and abroad. PREREQ: Satisfactory completion of 45 college credits.

POL 340: Law in Action.

3 hours, 3 credits. The use of the courts as a political instrument to improve social and economic conditions. Study of recent cases in such selected fields as housing, health, employment, civil rights, and the environment. Impact and limitations of the courts. PREREQ: POL 166.

POL (WST) 341: Women and Politics.

3 hours, 3 credits. An examination of the legal and political status of women in the United States and in other countries.

POL (AAS) 342: African-Americans in the Political System.

3 hours, 3 credits. The role, influence, and impact of African Americans on the political process in the United States.

POL 343: International and Regional Organizations.

3 hours, 3 credits. The United Nations' system and other global and regional organizations.

POL 344: International Law.

3 hours, 3 credits. The nature, sources, principles, and rules of international law in the framework of the nation-state system.

POL 345: Integration of the Americas.

3 hours, 3 credits. Cooperation, dissent, and power relations in the process of economic and political integration. The implications of the South American Common Market, the Caribbean Community and Common Market, and the Free Trade Area of the Americas, among others, for inter-American relations. PREREQ: Satisfactory completion of 45 college credits.

POL 346 (SOC 303): Advanced Methods of Social Research.

4 hours, 3 credits. Systematic and scientific procedures for conducting social research. Consideration of the strategies of research design and elements of data-gathering techniques. PREREQ: SOC 301 (POL 331.

POL 347: The Law of Diplomacy, Treaties, and War.

3 hours, 3 credits. International law applied specifically to questions of peace keeping, negotiation, rights of aliens and foreign diplomats, and the law of war. Recent developments in treaty law, treaty making, and regulating the use of force, the control of weapons, and the trials of war criminals. PREREQ: Either POL 334 or instructor's permission.

POL 348: International Conflict and Conflict Resolution.

3 hours, 3 credits. Forms and levels of violence in domestic and international conflicts. Factors leading to the outbreak of armed conflicts among states and between the state and non-state actors, such as terrorists, insurgents, and refugees. Prevention and escalation of violence and the resolution of conflict. PREREQ: Satisfactory completion of 60 college credits.

POL 365: Special Problems in Political Science.

3 hours, 3 credits. (May be repeated when content is different. Maximum 6 credits.) An advanced topical course that addresses significant issues in political science.

POL 366: Global Political Economy.

3 hours, 3 credits. Concepts and principles of political economy, with a focus on the political economy of growth in the contemporary world.

POL 367: Political Economy of Development.

3 hours, 3 credits. History of worldwide industrial development. Theories and policies of international development. Global impact of economic growth and stagnation on the unequal distribution of power and wealth. PREREQ: Satisfactory completion of 45 college

POL 368: Global Environmental Politics.

3 hours, 3 credits. Examination of institutions and structures of global environmental politics. Impact of environmental organizations and multilateral environmental and trade agreements on global environment and its governance. Emerging environmental inequalities between industrialized and industrializing regions. PREREQ: Satisfactory completion of 45 college credits.

POL (PHI) 369: Global Justice.

3 hours, 3 credits. Moral obligations in global politics and economy. Contemporary theories of justice and their applications to the relationships between rich and poor countries. PREREQ: One of the following courses: PHI 173, PHI 234, POL 226, POL 227, or POL 240.

POL 389: Political Research Laboratory.

3 hours, 3 credits.

POL 451: Selected Problems in Political Science.

3 hours, 3 credits (maximum 12 credits). PREREO: One relevant 200- or 300-level course and Departmental permission.

POL (SOC) 470: Seminar and Internship Program in New York City Government.

One or two semesters, each 4 credits. Students attend weekly seminars on problems of New York City government and serve from eight to ten hours a week as administrative assistants in New York City government offices and agencies. PREREQ: Chair's permission. Note: POL 470 is offered in cooperation with other senior colleges of The City University.

POL 471: Seminar and Internship Program in Law.

One or two semesters, each 4 credits. (Limited enrollment.) Students attend a weekly seminar on legal problems and serve from eight to ten hours a week as legal interns. The seminar provides a structured program to relate individual student experiences to one another and to broader intellectual issues. The internships are generally in areas in which lawyers are particularly understaffed, e.g., in Legal Aid offices, social service agencies related to courts, complaint bureaus of consumer affairs agencies, and investigative offices of district attorneys. PREREQ: Instructor's permission. Recommended: One or more laworiented courses.

POL 4720: Model United Nations.

3 hours, 3 credits. (maximum 6 credits). Practical understanding of the United Nations through participating in a simulation exercise known as the Model UN Conference. Topics will vary from year to year, but the course requires students to write a country fact sheet, a position paper, and draft resolutions to be used in the simulation exercise. PREREQ: Instructor's permission.

POL 478: Political Science Senior Research Seminar. 3 hours, 3 credits.

POL 481: Honors Tutorial.

3 hours, 3 credits (maximum 6 credits). An opportunity for outstanding seniors to carry out individual research projects under faculty direction. PREREQ: Departmental permission.

Courses in Political Science Grouped by Area of Study

Group I: American Politics

POL 166: The American Political System

POL 300: The American Presidency

POL 301: Legislative Politics

POL 302: The Judiciary

POL 306: Political Parties, Campaigns, and Elections

POL 307: Political Power in America

POL 308: American Foreign Policy

POL 309: State and Local Politics

POL 316: Organizing an Election Campaign

POL 337: Public Opinion and Polling

POL (AAS) 342: African Americans in the Political System

Group II: Political Theory and Methods of Political Analysis

POL 226: Classical and Medieval Political Philosophy

POL 227: Modern Political Philosophy

POL 228: Democracy and Its Critics

POL 245: Political Analysis and Interpretation

POL (SOC) 246: Sociological Analysis

POL 319: Contemporary Political Thought

POL 321: American Political Thought

POL 322: Non-Western Political Thought

POL 323: Marxism

POL (SOC) 324: Sociology of Politics

POL 325: Psychology and Politics

POL (SOC) 326: Political Socialization

POL (SOC) 346: Methods of Social Research

Group III: Comparative Politics and Area Studies

POL (RUS) 220: Russia Today

POL 268: Introduction to Comparative Politics

POL (ECO) 327: Comparative Labor Movements

POL 329: Political Systems in Europe

POL 330: The Russian Political System

POL (LAC) 332: Political Systems in Latin America

POL 333: Political Systems in Africa

POL 334: Political Systems in the Middle East

POL 335: Major Asian Political Systems

POL (LAC) 336: Political Systems of Central America and the Caribbean

POL 338: Nationalism and Challenges to National Unity

POL (WST) 341: Women and Politics

Group IV: International Politics

POL 230: Immigration and Citizenship

POL 240: International Politics

POL 241: Globalization

POL 266: Politics and Culture

POL 339: Human Rights

POL 343: International and Regional Organizations

POL 345: Integration of the Americas

POL 348: International Conflict and Conflict Resolution

POL 366: Global Political Economy

POL 367: Political Economy of Development

POL 368: Global Environmental Politics

POL (PHI) 369: Global Justice

Group V: Law and Politics

POL 217: Criminal Justice

POL 299: Law, Computers, and the Internet: The Politics of

Information Technology

POL 303: Constitutional Law: Government Structures and Powers

POL 304: Constitutional Law: Personal Rights and Liberties

POL (COM) 311: Freedom of Speech

POL 312: Jurisprudence

POL 340: Law in Action

POL 344: International Law

POL 347: The Law of Diplomacy, Treaties, and War

POL 471: Seminar and Internship Program in Law

Group VI: Public Policy and Administration

POL 211: Public Policy

POL 305: Public Administration

POL 310: Urban Politics and Government

POL 313: Political Issues in New York City

POL 315: The Politics of American Poverty

POL 317: The Politics of American Public Education

POL 318: The Politics of Health

POL (SOC) 470: Seminar and Internship in New York City

Government

Special and Honors Work in Political Science

POL 265: Topics in Political Science

POL 365: Special Problems in Political Science

POL 389: Political Research Laboratory

POL 451: Selected Problems in Political Science

POL 478: Political Science Senior Research Seminar

POL 481: Honors Tutorial

Psychology

Chair: Alan Kluger (Gillet Hall, Room 113)

Department Faculty: Professors: Alan Kluger, Fred D. Phelps; Associate Professors: Jean Bresnahan, Gisela Jia, Humberto Lizardi, David Manier, John McDonald, Vincent Prohaska, Anne Reid, Kevin Sailor, Suzanne Yates; Assistant Professors: Mia Budescu, Keith Happaney, Anna Luerssen, Wingyun Mak, Ruby S.C. Phillips.

The undergraduate program in Psychology is intended to serve three principal objectives: (1) to contribute to the liberal education of all students by providing an understanding of psychology as a science and as a profession; (2) to provide an understanding of psychological principles and techniques for those students interested in work in other behavioral and social sciences and in professional fields such as education, social work, and medicine; and (3) to establish a sound foundation for those planning to pursue graduate studies in psychology that can lead to careers in college teaching, scientific research, clinical psychology, and school psychology or to professional work in industry, government, and social agencies.

Psychology, B.A. (35 Credit Major)

Students are required to consult with Department advisers for guidance and approval of course selection. The required courses and credits are distributed as follows:

Credits (35)

- 14 In required courses: PSY 166 (3), 226 (4), 305 (4), and
- 6 One 3-credit course from each of two of the following three options:

Option 1: PSY 217, 218, or 219 Option 2: PSY 234 or 320 Option 3: PSY 240 or 330

One 3-credit course from each of two of the following 6 three options:

> Option 1: PSY 310 or 245 Option 2: PSY 314 or 317 Option 3: PSY 316 or 366

9 In additional PSY courses: Three 200-, 300-, or 400-level Psychology courses or PSY 165 and two 200-, 300-, or 400-level Psychology courses.

Students planning to pursue graduate study in psychology and related fields should consult with Department faculty. The Department encourages students to participate in faculty research programs.

Departmental Honors

Students who wish to qualify for Departmental honors are required to complete PSY 485 and PSY 495. PSY 485 may be used to fulfill the requirements of the major; PSY 495 is an addition to the courses required for the psychology major.

Minor in Psychology

The minor consists of four courses, of which at least two must be at the 300 level or above. Note that PSY 166, a prerequisite to all courses in the minor, cannot be counted toward the minor.

Careers in Mental Health

Those students who are interested in preparing for careers in mental health professions, such as clinical and community psychology, psychiatry, social work, guidance, and rehabilitation counseling, should consult with Department faculty.

Women's Studies Option

See the description of this program contained later in this Bulletin.

Primate Behavior and Evolution

See the description of this track within the Interdepartmental Concentration in Anthropology contained earlier in this Bulletin.

Courses in Psychology

PSY 135: Psychology of Personal Adjustment.

3 hours, 3 credits. Application of psychological concepts to everyday life, with a focus on the description and understanding of human behavior. Includes topics such as personality, normal and abnormal behavior, and adjustment to stress. Note: This course does not fulfill distribution requirements or requirements for a major or minor in Psychology.

PSY 165: Critical Thinking in Psychology.

3 hours, 3 credits. Scientific hypothesis testing in the social sciences as distinguished from intuitive hypothesis testing. Topics include cognitive biases, methods for assessing argument strength, and techniques for minimizing confounds and biases.

PSY 166: General Psychology.

3 hours, 3 credits. Introduction to the fundamental concepts and methods of modern psychology. Consideration of the scientific basis of psychology and of the significant problems in the areas of learning, motivation, emotion, individual differences, physiological bases of behavior, perception, developmental processes, personality, and social behavior. Note: There is a research requirement for this course that students can fulfill either by writing about their participation as a subject in approved studies or by writing their reactions to approved articles or colloquia.

Note: All of the following PSY courses carry PSY 166 as a prerequisite. Additional prerequisites are indicated where appropriate.

PSY 201: Science and Practice of Psychology.

3 hours, 3 credits. A writing-intensive course in which students will gain experience in locating, reading, understanding, and evaluating primary empirical research from the various sub-fields within psychology and learn to use standard APA format in writing research reports, case studies, progress reports, and review papers.

PSY (WST) 209: Psychology of Women.

3 hours, 3 credits. Survey of empirical and theoretical issues regarding the psychology of women, dynamics of personality, and inherent and learned factors influencing their behavior.

PSY 217: Child Psychology.

3 hours, 3 credits. Consideration of theories, research findings, and methodology with respect to physical growth, sensorimotor, emotional, cognitive, perceptual-conceptual, language, and intellectual development of the individual prior to adolescence.

PSY 218: Psychology of Adolescence.

3 hours, 3 credits. Adolescence as a transition between childhood and adulthood. Theory and research on age-related changes, developmental tasks, and role in society. Topics include physical and cognitive development, self-concept and autonomy, family, school, and peer relations, and the adolescent at risk.

PSY 219: Psychology of Adulthood and Aging.

3 hours, 3 credits. Development from adulthood to the final stages of life. Theory and research findings on age-related biological, cognitive, personality, and sensory changes. Topics include sex roles, parenting, family relationships, work, leisure, retirement, death, and bereavement.

PSY 226: Statistical Methods in Psychology.

4 hours, 4 credits. Descriptive and inferential statistics and their applications to the analysis and interpretation of psychological data. Among the topics discussed are central tendency, variability, correlation and regression, hypothesis testing, analysis of variance, power analysis, and the relationship of research design to statistics. Hand calculators and computers will be introduced and utilized throughout the course as adjuncts to data analysis. PREREQ: MAT 104 or equivalent, any MAT course that has MAT 104 as a prerequisite, or Departmental permission.

PSY 232: Childhood Psychopathology.

3 hours, 3 credits. Study of the concept of abnormality as it applies to children and adolescents. Consideration of specific syndromes such as anxiety disorder, depression, ADHD, conduct disorders, autism, and schizophrenia with regard to etiology, diagnosis, and treatment.

PSY 234: Abnormal Psychology.

3 hours, 3 credits. Examination of the concept of abnormality and of the major categories of psychopathology with regard to symptoms and diagnosis. Consideration of etiology and treatment of psychological disorders from psychodynamic, behavioral, cognitive, humanistic, sociocultural, and biological perspectives.

PSY 238: Environmental Psychology.

3 hours, 3 credits. Study of the relationship of the individual and the natural and "built environment." Analysis of the psychological dimension of problems such as pollution, crowding, and energy conservation.

PSY 240: Industrial/Organizational Psychology.

3 hours, 3 credits. Survey of current research problems; practices in personnel selection and training; management; consumer, marketing, and advertising psychology.

PSY 245: Psychological Testing and Assessment.

3 hours, 3 credits. Basic concepts of psychological testing and assessment. Survey of the major methods of assessment and tests of general ability, aptitude, achievement, interest, and personality. Examination of the contribution of psychological tests to applied psychology and their role in contemporary society.

PSY 248: Introduction to Primate Behavior Studies.

3 hours, 3 credits. Overview of the Order Primates as a biological entity, with a focus on monkeys and apes. Methods for studying their behavior in captivity and in native habitats. Note: Course will include field trips to zoos and appropriate animal laboratories.

PSY 305: Experimental Psychology I.

6 hours (2, lecture; 4, lab), 4 credits. Theory and method of psychological experimentation and measurement as applied to the study of behavioral phenomena. Design and execution of selected experiments in such areas as learning, thinking, motivation, personality, and social behavior. PREREQ: PSY 226.

PSY 306: Experimental Psychology II.

6 hours (2, lecture; 4, lab), 4 credits. Continuation of PSY 305, including such areas as sensation and perception, with emphasis on independent research on selected topics. PREREQ: PSY 305.

PSY 307: Research in Social Psychology.

6 hours (2, lecture; 4, lab), 4 credits. Use of laboratory and field techniques in the investigation of social psychological topics, such as attitudes, conformity, social interaction, altruism, and ethics of research. Individual and group research projects in the laboratory and in the community, where possible. PREREQ: PSY 226 and

PSY 308: Motivation and Emotion.

3 hours, 3 credits. Study of motives (hunger, sex, aggression, etc.) and emotions (anger, love, fear, etc.) as underlying causes of behavior.

PSY 310: Psychology of Learning.

3 hours, 3 credits. Survey of fundamental concepts, empirical findings, and theoretical issues in animal and human learning. Topics include classical and operant conditioning, generalization and discrimination, observational and social learning, choice, problem solving, and behavioral change. Applications to complex human learning situations.

Psychology of Memory

3 hours, 3 credits. Theoretical issues, established findings, empirical research, and contemporary controversies in the study of memory. Analysis of the processes of encoding, storage and retrieval, including models, developmental changes, neurophysiology, and memory distortions. Consideration of the ways memory influences behavior, problem solving, and sense of self.

PSY 314: Cognitive Psychology.

3 hours, 3 credits. A consideration of the manner in which humans process, code, and store information. Current ideas and research pertaining to selective attention, short- and long-term memory, consciousness, and the constructive nature of perception and thinking.

PSY 316: Physiological Psychology.

3 hours, 3 credits. An introduction to the nervous system and its relation to the understanding of such psychological processes as sensation, perception, attention, learning, motivation, memory, arousal, sleep, and dreaming.

PSY 317: Psychology of Sensation and Perception.

3 hours, 3 credits. Review of the classic concepts of sensation and perception. Examination of each of the major senses, with emphasis on vision and hearing. Survey of modern perceptual formulations and appraisal of current theories.

PSY 318: Comparative Psychology and Ethology.

3 hours, 3 credits. Comparative analysis of animal behavior with special emphasis on instinct, imprinting, and territoriality. Comparative and ethological methods in the study of learning, aggression, sexual behavior, motivation, and social organization.

PSY 319: Social and Emotional Development.

3 hours, 3 credits. Social and emotional competencies from birth to early adulthood.

PSY 320: Theories of Personality.

3 hours, 3 credits. Review of the major theories of personality development, including the psychoanalytic, constitutional, behavioral, and biosocial.

PSY 326: Advanced Statistical Methods in Psychology.

3 hours, 3 credits. Comprehensive treatment of selected topics, including experimental design and nonparametric and multivariate techniques. PREREQ: PSY 226.

PSY 328 (WST 348): Family Psychology.

3 hours, 3 credits. Study of the psychological dynamics affecting contemporary families, including family structures, development, communication patterns, disorders, and treatment approaches.

PSY 330: Social Psychology.

3 hours, 3 credits. Consideration of theoretical approaches, research methodology, and findings pertinent to the study of individuals in their social context. Emphasis is given to attitude formation and change, interpersonal perception, group structure and processes, leadership, conformity, and communication.

PSY 331: Psychology and the Law.

3 hours, 3 credits. The role of psychology in the legal process. Psychological issues in problems of confidentiality; evidence and testimony; jury selection and decision making; the insanity defense.

PSY 335: Health Psychology.

3 hours, *3 credits*. Role of psychological factors in health and illness. Topics include stress-related physical disorders; psychological assessment in medical settings; prevention and treatment of illness; health attitudes; management of pain; chronic and terminal illness.

PSY 336: The Psychology of Ethnicity.

3 hours, 3 credits. The dynamics of ethnic identification. The effect of psychological, physiological, cultural, demographic, and socialization factors associated with ethnicity on individual development and behavior.

PSY 338: Community Psychology.

3 hours, 3 credits. Consideration of the contributions of psychology to problems of social intervention in community mental health centers, schools, and the like. Review of various social intervention projects in order to study present and possible future contributions of psychology. Attention will be given to ethical problems and interdisciplinary relationships.

PSY 340: Evolutionary Psychology.

3 hours, 3 credits. Evolutionary bases of human thought, behavior, and brain structure. Topics include the role of phylogenetic evolution on food preferences, sexual and mating strategies, parenting, kinship, group living, aggression, language, and problem solving.

PSY (LNG) 342: The Psychology of Literacy Development.

3 hours, 3 credits. Psychological processes involved in reading and literacy development, including the relations between oral language and reading/literacy development, as well as the several stages of reading development.

PSY 348: History of Psychology.

3 hours, 3 credits. Study of the evolution of theory and methods in psychology as it has developed from its early philosophical roots to its present status as a science and profession. The contributions of major individuals and theoretical systems and their influence on contemporary psychology will be reviewed.

PSY 350: Special Topics in Geropsychology.

3 hours, 3 credits. Examination of selected areas in the psychology of aging. Topics to be announced each semester.

PSY 366: Clinical Neuropsychology.

3 hours, 3 credits. Consideration of the effects of brain damage on psychological functioning, with emphasis on impairments in perception, attention, emotion, memory, and language abilities.

PSY 410: Learning Theory.

3 hours, 3 credits. Critical evaluation of the major theories of learning, stressing an examination of relevant research methodology and experimental data. PREREQ: PSY 310.

PSY 415: Seminar in Theories of Developmental Psychology.

3 hours, 3 credits. Research and theory concerning the development of human behavior from conception to death. Focus upon developmental research in the areas of cognitive, social and moral, perceptual, physiological, and linguistic psychology. Consideration of major developmental concepts, such as stage, critical periods, and maturity, and of major developmental theorists, such as Piaget and Erikson.

PSY 416: Seminar in Physiological Psychology.

3 hours, 3 credits. Selected topics dealing with the physiological bases of behavior are studied in depth. Current literature in the field is emphasized. PREREQ: PSY 316 and instructor's permission.

PSY 417: Seminar in Perception.

3 hours, 3 credits. Classic concepts and contemporary research in perception, with an emphasis on perceptual development and application of scientific discoveries in perception. PREREQ: PSY 317 or Instructor's permission.

PSY 430: Seminar in Social Psychology.

3 hours, 3 credits. Examination of the application of psychological concepts and research to contemporary social and cultural issues. PREREQ: PSY 330.

PSY 433: Methods of Psychological Intervention.

3 hours, 3 credits. Psychological intervention techniques: interviews, modes of counseling, behavioral- and psychotherapies. PREREQ: 12 prior credits in Psychology, including PSY 234.

PSY 434: Seminar in Abnormal Psychology.

3 hours, 3 credits. Intensive consideration of current issues and research relevant to selected problem areas. PREREQ: PSY 234.

PSY 440: Seminar in Psychological Services.

2 hours, 2 credits. Analysis of field experiences. COREQ: PSY 470.

PSY 445: Seminar in Psychological Testing and Assessment.

4 hours, 4 credits. Principles, applications, and contemporary issues in psychological testing and assessment. Supervised administration, scoring, and interpretation of measures of general ability, aptitude, achievement, interest, and personality. Instruction in computerized testing applications. PREREQ: PSY 226.

PSY 450: Advanced Seminar in Contemporary Issues in Psychology.

3 hours, 3 credits. (Maximum 6 credits; only 3 credits may be applied to requirements of the major.) Intensive analysis of experimental and theoretical material on specific significant problems of contemporary psychology. PREREQ: PSY 166 and 12 additional PSY credits and permission of the instructor.

PSY 470: Practicum in Psychological Services.

Hours to be arranged, 2-4 credits. Supervised placement in one of a variety of occupational settings in which the student may obtain first-hand experience in the provision of psychological services to clients. PREREQ: PSY 333, 15 additional credits in psychology, and permission of the instructor. Note: Students in the Specialization in Psychological Services may take a second semester of fieldwork with credit toward completion of the specialization. Other students may be permitted to repeat the course for elective credit only.

PSY 485: Independent Study in Psychology.

One semester, 3 credits (maximum 6 credits; only 3 credits may be applied to requirements of the major). Individual research project (e.g., lab, library, or community oriented), under the direction of a member of the Psychology faculty. Written report required for each semester of work. PREREQ: A 2.75 GPA, a 3.0 GPA in Psychology, instructor's and Departmental permission.

PSY 495: Honors Research in Psychology.

3 credits. A preliminary outline for the student's independent research must be approved by a faculty screening committee that will include the student's Departmental adviser. Granting of credit will be contingent upon presentation of a report of the research at a Departmental seminar and the filing of the research paper in the Departmental office before the end of the senior year. PREREQ: PSY 305, completion of 12 credits in Psychology, a 3.2 GPA, a 3.5 GPA in Psychology, and Departmental permission.

Quantitative Systems Biology

The new minor will engage students across several departments within the School of Natural and Social Sciences in the area of Quantitative Systems Biology involving computer modeling. The minor is very focused and will provide valuable training for

Quantitative Systems Biology (16 Credit Minor)

Degree Requirements:

The minor will require the following 16 credits. There are three tracks depending upon your major.

If you are a Biology or Biochemistry major you will be required to follow Track 1:

CMP 230 (4 credits)

CMP 232 (4 credits)

CMP 444: Modeling Cellular Networks (4 credits)

CMP 446: Computational Tools for Bioinformatics (4 credits)

If you are a Computer Science Major you will be required to follow Track 2:

BIO 166 (4 credits)

students in computer and mathematical modeling of complex biological systems. The minor will be jointly housed between the Department of Biological Sciences and the Department of Mathematics and Computer Science.

BIO 238 (4 credits)

CMP 444 (4 credits)

CMP 446 (4 credits)

C. All other Majors are required to follow Track 3:

BIO 166 (4 credits)

BIO 238 (4 credits)

CMP 230 (4 credits)

CMP 232 (4 credits)

CMP 462 Modeling Cellular Networks (4 credits)

CMP 446 Computational Tools for Bioinformatics (4 credits)

NOTES: No course can be used for both the minor and major. The level of math needed for successful completion for the minor is either MAT 175 and 176 or MAT 175 and BIO 240.

Social Work

Chair: Norma Phillips (Carman Hall, Room B18)

Department Faculty: Professor: Norma Phillips; Associate Professors: Graciela Castex, Sharon Freedberg, Patricia Kolb; Carl Mazza; Assistant Professors: Joy Greenberg, Jessica Kahn, Justine McGovern, Lydia Ogden, Evan Senreich, Mohan Krishna Vinjamuri, Bryan Warde, Brenda Williams-Gray; Lecturers: Jonathan Alex, Jermaine Monk, Manuel Muñoz.

The undergraduate program in Social Work, which leads to a Bachelor of Arts degree with a Major in Social Work, prepares students for entry-level, generalist social work practice in urban social service agencies and organizations. The program fulfills the requirements of the New York State Education Department and is fully accredited by the Council on Social Work Education. Social work courses required for the Major are offered in both day and evening sections. Some courses may also be available on the weekend.

All Social Work majors must complete the 55 credits required for the major. Students may elect to take a minor, but it is not required for the social work major. Social Work cannot be taken as a minor. No credit for life experience will be given for any courses required for the Social Work Major.

The program in Social Work builds upon a liberal arts base and integrates knowledge from required study areas with the professional social work curriculum, specifically as it applies to an understanding of human behavior, human diversity, political and social systems, research-based practice, and the helping process. Senior students in the program complete a two-semester field placement (insert link) in which they spend two days a week in one of many community agencies that provide services to children, adults, families, and communities. Graduates of the program will have mastered the competencies of the profession and gained the knowledge, values, and skills essential for ethical, competent, and effective practice with diverse individuals, groups, communities, and organizations in the urban environment. Students will be prepared for beginning generalist social work practice in fields such as child and family welfare, gerontology, substance abuse, health, mental health, developmental disabilities, immigration, and homelessness.

Since the program is accredited, B.A. social work graduates interested in pursuing an M.S.W. degree may apply for advanced standing status in a graduate program in social work.

Career Preparation for Social Work Majors: The program in Social Work builds upon a liberal arts base and integrates knowledge from required study areas with the professional curriculum, particularly as it applies to an understanding of human behavior, human diversity, political and social systems, and the helping process. Senior students in the program complete a two-semester field placement in which they spend two days a week in one of many community agencies that provide services to children, adults, and families. Graduates of the program will have gained the knowledge, values, and skills of the core competencies of the social work profession essential for ethical, competent, and effective practice with diverse individuals, families, groups,

communities, and organizations in the urban environment. Graduates will be prepared for beginning generalist social work practice in such fields as child and family welfare, substance abuse, health, mental health, developmental disabilities, immigration, gerontology, income maintenance, and homelessness. The program does not grant social work course credit for life experience or previous work experience; all Social Work majors must complete the 55 credits in the basic program.

Admission to the Program

Applications to the Undergraduate Social Work Program are available in Carman Hall, Room B-18. Applications must be submitted to the Undergraduate Social Work Program, either by mail or in person, to the Undergraduate Social Work Coordinator, located in Carman Hall, Room B-18. This application is separate from the application to Lehman College.

Students may submit the application for admission to the Social Work program after completing the following requirements, or during the semester in which they are completing these requirements:

- Minimum of 48 college credits
- Introduction to Social Work (SWK 237)
- Foundations of Sociology (SOC 166)
- Minimum cumulative index of 2.7
- Application forms are available in the Social Work Department office, Carman Hall, Room B18 or may be downloaded. All students are encouraged to consult the Pre- and Corequisite Guide when planning their program. To discuss eligibility for admission and to plan your program, contact Catherine Cassidy, Undergraduate Social Work Program Coordinator, in Carman Hall, Room B-18, 718-960-6782.

The following information applies to Transfer students:

- Students must be accepted to Lehman College before submitting their application to the Social Work Program.
- The above requirements may be completed at Lehman College, or the equivalent courses may be completed at other colleges previously attended, if the credits are transferable.
- All transcripts from colleges previously attended must be included with the social work application; student copies of transcripts are acceptable for this purpose.
- Transfer students with a cumulative index lower than 2.7 may apply to the Social Work Program after completing 12 credits at Lehman College and achieving a 2.7 cumulative index.

Program Retention Policies

In order to remain in the program, students are required to demonstrate professional behavior consistent with the Code of Ethics of the National Association of Social Workers.

A minimum grade of "C" is required to progress in the following courses:

• from Human Behavior and the Social Environment I (SWK 305) to Human Behavior and the Social Environment II (SWK 306)

- from Social Work Practice I (SWK 311) to Social Work Practice II (SWK 312)
- from both SWK 306 and SWK 312 to Fieldwork Seminar I (SWK 440) and Fieldwork I (SWK 470,)
- from Fieldwork Seminar I (SWK 440) and Fieldwork I (SWK 470,) to Fieldwork Seminar II (SWK 441) and Fieldwork II (SWK 471).

Students with a grade of "Incomplete" in any of these courses are not eligible to begin the continuation courses or any course for which that course is a co-requisite.

A student who does not achieve a minimum grade of at least "C" in any of the following courses: SWK 305, 306, 311, 312, 440, and 470, will be dropped from the Program. Students who are dropped from the Program may reapply when they have a GPA of 2.7. If readmitted, they may repeat any of these courses only once, in accordance with Lehman College policy.

Social Work, B.A. (55 Credit Major)

The following credits and courses are required of all Social Work majors:

- 33 In social work: SWK 237, 239, 305-306, 311-312, 440-441, 443, and 470-471 (majors are expected to register for SWK 470 for the Fall semester after completing SWK 312).
- 12 In sociology: SOC 166, 246, 346, and any 300-level SOC course in addition to SOC 346.
- 10 In other disciplines: PSY 166, POL 166, and BIO 183.

Note: For students in the 1984 curriculum, PSY 166 and BIO 183 may be used toward fulfillment of Distribution Requirements.

Social Work may not be selected as a minor. Social Work majors are exempt from the College's requirement of a minor.

According to New York State Education Department regulations, students receiving a B.A. degree must complete 90 credits in liberal arts courses. Please note that 300- and 400-level courses in Social Work do not qualify as liberal arts courses.

Courses

Note: Students should note that the following year-long sequences begin only in the Fall semester:

- Human Behavior and the Social Environment I and II (SWK 305 and SWK 306)
- Social Work Practice I and II (SWK 311 and SWK 312)
- Fieldwork Seminar I and II (SWK 440 and SWK 441)
- Fieldwork I and II (SWK 470 and SWK 471)

Courses in Social Work

Note: Admission into the Social Work program requires completion of 48 college credits, submission of an application to the program, completion of SWK 237 and SOC 166, and achieving a minimum cumulative college index of 2.7.

SWK 237: Introduction to Social Work.

3 hours, 3 credits. Role of the social work profession in relation to social, political, and economic environments. Introduction to the value, knowledge, and skill base of the profession, including the helping relationship, cultural sensitivity, and the social work process. PRE- or COREQ: SOC 166.

SWK 239: Social Welfare Institutions.

3 hours, 3 credits. History and philosophy of social welfare and social work in the United States within the context of social, economic, and political change. The impact of social welfare policy on populations at risk. PREREQ: SOC 166 and SWK 237. PRE- or COREQ: POL 166.

SWK 2410: Social Work Practice with Lesbian, Gay, Bisexual and Transgender (LGBT) Clients.

3 hours, 3 credits. Policy and social issues affecting the lives of LGBT populations and their families. Topics include social work practice and the resilience of diverse LGBT populations in the face of social stigma and oppression.

SWK 242: Social Work Practice with Older Adults.

3 hours, 3 credits. Approaches to providing social work services for older adults in varied settings, and to practicing such approaches with their families. Topics include biological, psychological, social, ethical, and spiritual functioning in later adulthood.

SWK 250: Special Studies in Social Work.

3 hours, 3 credits. Special topics related to social work and social welfare; analysis of the interaction of cultural, historical, political, economic, and legal factors with various social systems. Topic to be announced each semester. May be repeated for a maximum of 6 credits, with approval of the Program Director.

SWK 251: Introduction to Social Work Practice with Substance Abusing Clients.

3 hours, 3 credits. A bio-psycho-social-spiritual focus on substance-abusing clients in an urban environment, including information regarding basic assessment of substance abuse and dependence; properties of the different substances; modalities of substance abuse treatment; and individual, group, and family interventions. Issues of working with tobacco using clients are covered in this course.

SWK 305: Human Behavior and the Social Environment I.

3 hours, 3 credits. The cultural, political, and economic factors that influence individual and family systems, and the effect of available social welfare resources on these systems. Emphasis on issues of human diversity, including, race, ethnicity, gender, age, and sexual orientation. PREREQ: Admission into the Social Work program. PRE- or COREQ: PSY 166 and SWK 239. COREQ: SWK 311. Note: SWK 305 is offered only in the spring semester.

SWK 306: Human Behavior and the Social Environment II.

3 hours, 3 credits. A continuation of SWK 305. Small and large groups, formal organizations, and communities as social systems; the effects of available social welfare resources and the interaction between diverse populations and these systems. PREREQ: Completion of SWK 305 and SWK 311, both with a minimum grade of C. PREREQ or COREQ: BIO 183. COREQ: SWK 312. Note: SWK 306 is offered only in the spring semester.

SWK 311: Social Work Practice I.

3 hours, 3 credits. Theories and principles of social work practice. Emphasis on knowledge, skills, and values required for working with individuals, families, groups, and communities. PREREQ: Admission into the Social Work program. COREQ: SWK 305. NOTE: SWK 311 is offered only in the fall semester.

SWK 312: Social Work II.

3 hours, 3 credits. A continuation of SWK 311. PREREQ: Completion of SWK 311 and 305 with a minimum grade of C. COREQ: SWK 306. NOTE: SWK 312 is offered only in the spring semester.

SWK 342: Social Welfare Policies in an Aging Society.

3 hours, 3 credits. A strengths-based and preventive perspective on policies and programs affecting older adults. Analysis of policy responses to ageism, elder abuse, and changing demographic and health trends. Public policies and programs, including components of the Social Security Act. Particular attention to vulnerable older populations.

SWK 351: Theories and Social Work Practice Interventions with Substance Abusing Clients.

3 hours, 3 credits. Theoretical models of addiction and assessment tools used in social work practice with substance abusing clients. Included are the continuum of addiction services for adults and for youth; prevention programs; and basic concepts of social, political, and cultural systems and their impact on substance use.

SWK 381: Tutorial in Social Work.

3 credits. (May be repeated for a maximum of 6 credits.) Content to be determined by student and instructor. Note: Only students who have successfully completed the College's English requirements may register for SWK 440, 441, 470, and 471.

SWK 440: Fieldwork Seminar I.

2 hours, 2 credits. Offered only in the fall semester. Integration of theories and principles of social work practice with fieldwork experience. PREREQ: Completion of SWK 312 and SWK 306 with a minimum grade of C. COREQ: SWK 470.

SWK 441: Fieldwork Seminar II.

2 hours, 2 credits. Offered only in the spring semester. Continuation of SWK 440. PREREQ: Completion of SWK 440 and SWK 470 with a minimum grade of C. COREQ: SWK 471.

SWK 443: Social Welfare Policy.

3 hours, 3 credits. Analysis of the factors influencing social welfare policies; the process of policy formulation; and the impact of social policies on individuals, families, groups, and communities, and the delivery of social services. PREREQ: SWK 239. COREQ: SWK 440 and 470 or SWK 441 and 471. Note: SWK 443 must be taken concurrently with either SWK 440 and 470 or SWK 441 and

SWK 470: Fieldwork I.

Two days, 4 credits. Placement in a community service agency two full days a week throughout the semester. PREREQ: Completion of SWK 312 and SWK 306 with a minimum grade of C and completion of the College English requirement. COREQ: SWK 440. Note: Students must complete 450 hours of fieldwork in SWK 470 and SWK 471 during the academic year.

SWK 471: Fieldwork II.

Two days, 4 credits. Continuation of SWK 470. Placement continues in the same agency. PREREQ: Completion of SWK 470 with a minimum grade of C. COREQ: SWK 441. Note: Students must complete 450 hours of Fieldwork in SWK 470 and SWK 471 during the academic year.

SWK 485: Honors Seminar in Social Work.

3 hours, *3 credits*. Topics to be arranged between students and instructor. PREREQ: Permission of the Director of the Social Work program.

SWK 495: Honors Tutorial in Social Work.

3 hours, 3 credits. Topics to be arranged between student and instructor. PRE- or COREQ: SWK 470 or 471, and permission of the Director of the Social Work program.

Credentialed Alcoholism and Substance Abuse Counselor

The Department of Social Work has been designated by the New York State Office of Alcoholism and Substance Abuse Services (OASAS) as an Education and Training Provider for individuals who wish to obtain credentialing as a Credentialed Alcoholism and Substance Abuse Counselor (CASAC).

Lehman students who fulfill the following will have completed all educational requirements for the CASAC in New York State and will be issued the OASAS CASAC 350-Hour Standardized Certificate of Completion by the Lehman College Social Work Department:

- Successful completion of all requirements for the undergraduate social work major at Lehman College
- Successful completion of the following two social work elective courses*
 - SWK 251: Introduction to Social Work Practice with Substance Abusing Clients (3 hours, 3 credits)
 - SWK 351: Theories and Social Work Practice Interventions with Substance Abusing Clients (3 hours, 3 credits)
- Completion of the New York State mandated two-hour training, "Identification and Reporting of Child Abuse and

Maltreatment." Training is offered by the Social Work Department each Spring semester; if completed elsewhere, a certificate of completion must be presented to the Lehman College Social Work Department.

Other requirements for the CASAC will include the following:

- Work experience in the field of substance abuse; Successful completion of the N.Y. State CASAC credentialing examination; Submission of an application and required fee to OASAS Credentialing Unit staff.
- Arrangements to meet those requirements will be made individually by the student with the N.Y. State Office of Alcoholism and Substance Abuse Services (OASAS).

*Note: Students who are not Social Work majors may register for the two elective courses; there are no pre- or co-requisites for these courses.

Field Placement Agencies

Senior students in the Social Work program complete a twosemester field placement in which they spend two days a week in one of the many community agencies that provide services to children, adults, and families. Fieldwork must be completed at the assigned agency during regular working hours; evening and weekend placements are rarely available. The following community service agencies are among those that provide fieldwork placements:

Bay Park Center for Nursing and Rehabilitation Bellevue Hospital Bronx Addiction Treatment Center Bronx Lebanon Hospital

Bronx State Psychiatric Center

Catholic Guardian Society and Home Bureau

Citizens Advice Bureau

Community Health Action of Staten Island

Court Appointed Special Advocates (CASA)

Federation Employment and Guidance Services (FEGS)

Fordham Tremont Mental Health

Hebrew Hospital Home

Henry Street Settlement House

Hispanic AIDS Forum

Institute for the Puerto Rican/Hispanic Elderly

Jewish Board of Family and Children's Services

New York City Department of Education

Orange County Department of Social Services

Part of the Solution (POTS)

Puerto Rican Family Institute

Queens Community House

Riverdale Mental Health Center

Sanctuary for Families

The Salvation Army

Urban Justice Center

Vassar Brothers Hospital

Veterans Affairs Medical Center

Westchester Family Services

YAI/National Institute for People with Disabilities

YWCA

Sociology

Chair: Elin Waring (Carman Hall, Room B65)

Department Faculty: Professors: Madeline Moran, Elin Waring, Esther Wilder; Associate Professors: Kofi Benefo, Chistopher Bonastia; Assistant Professors: Barbara Jacobson, Susan Markens, Shehzad Nadeem, Naomi Spence; Lecturers: Thomas Conroy, Dana Fenton, Devrim Yavuz

The course of study in the Department of Sociology provides students with the opportunity to gain basic knowledge in the sociological study of human behavior as part of their general liberal arts training, leading to the B.A. degree. The major in Sociology is available in day, evening, and weekend classes. A list of courses is contained within this chapter of the Bulletin.

Career Preparation for Sociology Majors: The program in Sociology is designed to (1) meet the academic and preprofessional needs of potential sociologists and teachers; (2) provide training in research methods, data analysis, and computer applications for those interested in pursuing a career in social research; and (3) begin to equip students for virtually any career (e.g., business, government, law, healthcare, etc.), insofar as such a career involves group settings. For students who are interested in a variety of positions calling for a knowledge of data collection and analysis, the following sequence is of importance: SOC 246 (sociological analysis), SOC 267 (Social Statistics), SOC 301 (Applied Statistics and Computer Analysis for Social Scientists), SOC 346 (Methods of Social Research), and SOC 347 (Methods of Data Collection and Analysis)

Students interested in early childhood or elementary education should consult the Sociology Department adviser for the appropriate course selection in the major. The Department of Sociology, in cooperation with the Department of Middle and High School Education, also offers students the opportunity to prepare for teaching social studies at the secondary level. Students interested in obtaining NYS Teacher Certification should contact either that Department (Carman Hall, Room B29-A) or the Office of the Dean of Education (Carman Hall, Room B-33, 718-960-4972) for information on the most current approved program.

Sociology, B.A. (30 Credit Major)

The required courses and credits are distributed as follows: CORE COURSES (12 credits)

All students are required to complete the following courses:

Credits	Course	Title		
3	SOC 300	The Sociological Imagination		
3	SOC 301 (POL 331)	Methods of Social Research		
3	SOC 302	Foundations of Modern Sociological		
		Theory		
3	SOC 303 (POL 346)	Advanced Methods of Social Research		

COURSES IN STUDENT'S CONCENTRATION (18 credits)

Each student is required to complete a concentration in one of three separate tracks. At least 9 of these credits must be at the 300-400 level. The tracks, detailed below, are (1) General Sociology, (2) Demography and Population Health, and (3) Education, Social Inequality and Urban Studies.

NOTES: 1. SOC 166 or any 200 level SOC course is a prerequisite for all 300 and 400 level courses. 2. Students registering for SOC 300 and SOC 301 must have a Sociology Grade Point Average of C (2.0) or better. 3. Students registering for SOC 302 and all 400 level courses must have completed SOC 300 with a grade of C- (1.7) or better. 4. Students registering for SOC 303 and all 400 level courses must have completed and SOC 301 with a grade of C- (1.7) or better.

CONCENTRATION IN GENERAL SOCIOLOGY (18 credits)

Students are required to take 6 courses beyond the required 4 courses specified above. These courses are to be chosen from the list of Sociology Courses in the Bulletin. At least three of these courses must be at the 300-400 level.

CONCENTRATION IN DEMOGRAPHY AND POPULATION HEALTH (18 Credits)

Required Courses (9 credits)

Credits	Course	Title
3	SOC 319	Population and Society
3	SOC 320	Immigration and Adaptation
3	SOC 339	American Demography

*Electives (9 credits) to be chosen from the list below:

SOC 166, SOC 220, SOC 223, SOC 227 (WST 337), SOC (NUR) 240,

SOC 243, SOC 305, SOC 321, SOC (WST) 322, SOC (DST) 333, SOC 343, SOC 345, SOC 402, SOC 460 and SOC 481.

NOTE: MAT 104 or higher is strongly recommended.

CONCENTRATION IN EDUCATION, SOCIAL INEQUALITY AND URBAN STUDIES (18 credits)

Required Courses (12 credits)

		•
Credits	Course	Title
3	SOC 234	Urban Sociology
3	SOC 235	Education and Society
3	SOC 309	Social Inequality
3	SOC 334	Urban Sociology in Global Perspective

Electives (6 credits) to be chosen from the list below:

SOC 166, SOC 222, SOC 227 (WST 337), SOC 228 (WST 218), SOC 230, SOC 231, SOC 233,

SOC 237, SOC 238, SOC 250, SOC (WST) 322, SOC (POL) (MES) 328, SOC 332, SOC(POL) 335,

SOC(AAS,PHI) 338, SOC 344, SOC 345, SOC 402, SOC 460 and SOC 481.

REQUIREMENTS FOR THE MINOR IN SOCIOLOGY

The Minor in Sociology consists of five courses totaling 15 credits. At least three courses must be at the 300-level or higher.

DEPARTMENTAL HONORS

Students who wish to qualify for Departmental Honors are required to take either SOC 460: Honors Seminar or SOC 481: Advanced Tutorial in Sociology.

WOMEN'S STUDIES OPTION

See the description of the program contained later in the Bulletin.

Areas of Study Within Sociology

The General Area of Sociology

SOC 166: Fundamentals of Sociology

Substantive Areas in Sociology

SOC 222: The Women's Movement in the U.S.: Eighteenth

Century to the Present

SOC 225: Women and Religion

SOC 226: Social Movements

SOC 227 (WST 237): Sociology of the Family

SOC 228: Women in Society

SOC 229: Sociology of Leisure

SOC 230: Criminology

SOC 231: Social Problems

SOC 233: Youth in Modern Society

SOC 234: Urban Sociology

SOC 235: Sociology of Education

SOC 236: Mind, Self, and Society

SOC 237: Ethnic Stratification

SOC 239: Sociology of Culture

SOC (NUR) 240: Death, Dying, and Bereavement

*SOC 241: Nature and Function of Social Groups

SOC 242 (HIS 342)(HCU 342): Anti-Semitism from Early

Christianity to Hitler

SOC 243: The Aged in Modern Society

SOC 255: Selected Topics in Social Policy

SOC 302: Sociology of Health Care

SOC 303: Sociology of Work

SOC 304: Collective Behavior

SOC 307: Mass Communication and Public Opinion

SOC 308: Modern Organizations

SOC 309: Social Inequality

*SOC 310: Knowledge, Science, and Society

*SOC 314: Social Change and Social Planning

SOC (WST) 322: Sociology of Gender and Reproduction

SOC (POL)324: Sociology of Politics

SOC (POL)326: Political Socialization

SOC 327: Sociology of American Policymaking

SOC 332: Religion and Society

SOC 334: Urban Sociology in Global Perspective

SOC (PHI) (BLS) 338: Race and Ethnicity in Society

SOC 339: American Demography

SOC (PHI) (CLT)354: Philosophy of the Social Sciences

Comparative Studies in Sociology

SOC 245: Social Processes of Global Interdependencies

SOC 250: Racial and Ethnic Communities in the United States

SOC 252: Religious Groups

*SOC 317: Comparative Analysis of Modern Industrial Societies

SOC 319: Population Problems

Research Methods and Theory

SOC 246: Sociological Analysis

SOC 267: Social Statistics

SOC 301: Applied Statistics and Computer Analysis for Social

Scientists

SOC 316: Foundations of Modern Sociological Theory

SOC 346: Methods of Social Research

SOC 347: Methods of Data Collection and Analysis

*SOC 351: Issues and Problems in Sociology Theory

Seminars, Tutorials, and the Internship In Sociology

SOC 251: Special Studies in Sociology

SOC 281: Tutorial in Sociology

*SOC 450: Seminar in Selected Problems of Sociology

SOC (POL) 470: Seminar and Internship Program in New York

Government

SOC 481: Advanced Tutorial in Sociology

Courses in Sociology

*Courses preceded by an asterisk are not expected to be offered in 2013-2015.

Notes: PREREQ: (1) SOC 166 is a prerequisite for all SOC courses unless otherwise noted. (2) Students registering for SOC 246 must have a Sociology Grade Point Average of C (2.0) or better. (3) Successful completion of SOC 246 is a prerequisite for SOC 346, 316, and all 400-level SOC courses. In addition, SOC 166, 246, 346, 316, and a variety of 300-level SOC courses are offered every fall and every spring in both day and evening sessions. All but 246 are also offered every year on the weekends.

SOC 166: Fundamentals of Sociology.

3 hours, 3 credits. Introduction to sociological concepts and perspectives and their applications to societies in the modern

SOC (DST) 220: Social Scientific Perspectives on Health and Disability.

4 hours (2, lecture; 2, lab), 3 credits. Use of quantitative social science methods to understand health and disability. Topics include definitions of health and disability, demographic information on health and disability, library research, development of hypotheses, primary data analysis, and interpretations of research findings on health and disability. Extensive use of computers.

SOC 222: The Women's Movement in the United States— Eighteenth Century to the Present.

3 hours, 3 credits. The women's movement and associated problems will be seen through the eyes of women of the relevant periods. The course will present a feminist social history of a movement that is continuing to have a profound effect on our society.

SOC 223: Quantitative Reasoning and Data Analysis for Social Scientists.

4 hours (2, lecture; 2, lab), 3 credits. Use of quantitative social science methods to critically analyze and evaluate data. Topics include, but are not limited to: aging, education, poverty, global inequality, race and ethnicity, criminology and health. PREREQ: A score of 60 or higher on the algebra section of the Compass exam or its equivalent as determined by the Dept. of Mathematics and Computer Science.

SOC 225: Women and Religion.

3 hours, *3 credits*. Images of women in the Judeo-Christian tradition and the influences of these representations on secular phenomena, such as Harlequin romances.

SOC 226: Social Movements.

3 hours, 3 credits. Analysis of historical and contemporary movements, such as the temperance movement, the women's movement, the civil rights movement, and the labor movement.

SOC 227 (WST 237): Sociology of the Family.

3 hours, 3 credits. The family as structure and process; analysis of its institutional and interpersonal aspects and its functions in different societies.

SOC 228 (WST 218): Gender and Society.

3 hours, 3 credits. Construction of gender at both the interpersonal and institutional levels. Topics include the intersection of gender with class, race, and sexuality in education, media, health, family, and work.

SOC 229: Sociology of Leisure.

3 hours, 3 credits. Leisure, recreation, play, and free time examined as distinct components of nonwork behavior. Comparative analysis of the relationship between these components and social structure in pre-industrial, industrial, and, particularly, postindustrial societies.

SOC 230: Criminology.

3 hours, *3 credits*. The nature and significance of crime as a social phenomenon. Study of the sociological factors that contribute to and maintain the criminal institutional structure and the justice system in the United States.

SOC 231: Social Problems.

3 hours, 3 credits. An analysis of social problems from the perspectives of functionalism, subculture theory, conflict theory, and labeling. Topics may include: crime, alcoholism, and others, e.g., drug addiction, mental illness, sexual promiscuity, and suicide.

SOC 233: Youth in Modern Society.

3 hours, 3 credits. Analysis of the emergence of adolescent subcultures, the social role of youth, and the passage from childhood to adulthood in modern society.

SOC 234: Urban Sociology.

3 hours, 3 credits. The study of the urban community and neighborhood; social forces responsible for the modern urban community; the ecology of cities; social pathology and urban blight; and analysis of policies for urban redevelopment.

SOC 235: Education and Society.

3 hours, 3 credits. Analysis of education as a social institution, the school as a social system, and the professional and organizational roles of teachers. Special attention is given to the problems of the school in the urban community.

SOC 236: Mind, Self, and Society.

3 hours, 3 credits. The impact of society on thought processes, emotions, and the conception of self. An exploration of childhood socialization, the shedding of old identities, and the development of new ones. Contexts examined may include slavery, concentration camps, religious experiences, the culture of youth, and commune life.

SOC 237: Ethnic Stratification.

3 hours, *3 credits*. Racism and ethnocentrism in the post-colonial world in two of the following areas: Africa, Asia, Latin America, and North America.

SOC 238: Religion in America.

3 hours, 3 credits. Sociological perspectives on the development of religious diversity in the United States. Topics include the encounters among various religious groups, major religious social movements and issues of religion and state.

SOC 239: Sociology of Culture.

3 hours, *3 credits*. Production and transmission of culture within society. Topics include popular culture, such as film, television, and popular music; institutions in the production of culture; and social class and culture.

SOC (NUR) 240: Death, Dying, and Bereavement.

3 hours, 3 credits. Sociological, psychological, and healthcare perspectives and ethical issues surrounding the processes of dying and bereavement. Topics include: the history of attitudes toward death, the new medical technology, the ways individuals confront their own death and that of others, dying in institutions, death and the child, and suicide.

*SOC 241: Nature and Function of Social Groups.

3 hours, 3 credits.

SOC 242 (HIS 342)(HCU 342): Anti-Semitism from Early Christianity to Hitler.

3 hours, 3 credits. The origins of conflict between Christianity and Judaism, and the fate of the Jews in Medieval Europe. The gradual liberation and assimilation of the Jews of Western Europe, 1789-1870. The rise of modern racism and anti-Semitism in Europe, 1889-1939. Hitler, the Nazis, and the destruction of European Jewry. Anti-Semitism in the contemporary world. Social-psychological and cultural theories of anti-Semitism will be considered.

SOC 243: The Aged in Modern Society.

3 hours, *3 credits*. The changing role of the elderly in the family and work force; styles of life of the elderly; systems and organizations that service the elderly; problems of leisure and retirement.

SOC 245: Social Processes of Global Interdependencies.

3 hours, 3 credits. Analysis of major processes of change in Africa, Latin America, the Middle East, and Southeast Asia. Theories of development applied to migration, population growth, urbanization, class structure, revolution, and reform.

SOC 249 (MMS 244): Communication in Society.

3 hours, 3 credits. Role of media in the formation of identity, political opinion, subjectivity (racial, gender and sexual), celebrity, and ethics. Distinctions between interpersonal and mediated communication.

SOC 250: Racial and Ethnic Communities in the United States.

3 hours, 3 credits. May be taken for a maximum of 6 credits (two different topics). Sociological description and analysis of a specific racial or ethnic community. When the Puerto Rican community is the topic studied, the course will be jointly offered with the Department of Latin American and Puerto Rican Studies. When the Italian-American community is studied, the course will be jointly offered with the Department of Anthropology. PREREQ: PRS 211-212 (formerly PRS 166-167) for joint course on Puerto Rican community taken for PRS credit.

SOC 251: Special Studies in Sociology.

3 hours, 3 credits. May be taken for a maximum of 6 credits (two different topics). Investigation of theories, issues, and methods. Topic to be announced each semester.

SOC 252: Religious Groups.

3 hours, 3 credits. Sociological description and analysis of a specific religious group or groups in the United States or around the world: Catholics, Protestants, Jews, Muslims, or others. May be repeated, with permission of the Chair, when topic is different.

SOC 255: Selected Topics in Social Policy.

3 hours, 3 credits. May be taken for a maximum of 6 credits (two different topics). Analysis of one area of policy in the United States, as it has developed historically and as it compares with policies in other countries. Possible areas include immigration, adoption, and health care.

SOC 267: Social Statistics.

4 hours, 3 credits. Descriptive and inferential statistics; introduction to sampling and probability theory, non-parametric techniques, and experimental design. Extensive use of computer applications. PREREO: SOC (POL) 246.

SOC 281: Tutorial in Sociology.

3 hours, 3 credits. A course offering the beginning student interested in Sociology the opportunity to do individual reading and writing under the direction of a Sociology Department faculty member. Subject to be agreed upon between student and instructor.

SOC 300: The Sociological Imagination.

3 hours, 3 credits. Close analysis of exemplary sociological texts and empirical data. Genres of sociological expression examined include literature reviews, quantitative and qualitative data analyses and theoretical exegesis.

SOC 301 (POL 331): Methods of Social Research.

4 hours, 3 credits. Methods of data collection and interpretation; measures of central tendency, variation and change; preparation and reading of tables and graphs; and the use of quantitative data to evaluate hypotheses and draw conclusions about the social world. Extensive use of computer applications. PREREQ: Either SOC 166 or POL 166 or any 200-level Sociology or 200-level Political Science course.

SOC 302: Foundations of Modern Sociological Theories.

3 hours, 3 credits. Theories of nineteenth and early twentieth-century sociologists, including but not limited to Marx, Durkheim, and Weber. PREREQ: SOC 300.

SOC 303 (POL 346): Advanced Methods of Social Research.

4 hours, 3 credits. Systematic and scientific procedures for conducting social research. Consideration of the strategies of research design and elements of data-gathering techniques. PREREQ: SOC 301 (POL 331).

SOC 304: Collective Behavior.

3 hours, 3 credits. Analysis of the extraordinary behavior characteristic of such phenomena as fads, fashions, panics, the aftermath of disasters, riots, mass hysteria, and conversion experiences.

SOC 305: Sociology of Health Care.

3 hours, 3 credits. Analysis of health and illness as sociocultural phenomena; the structure and functioning of the health care system and the medical profession; the social role of the patient; and social factors in the incidence of illness.

SOC 306: Sociology of Work.

3 hours 3 credits. The assignment and organization of work in society. An examination of occupational roles, mobility, and work ideologies. Consideration of the social aspects of communication, moral, automation, and professionalization.

SOC 307: Mass Communication and Public Opinion.

3 hours, 3 credits. The function of communication in mass society, including media such as television, film, radio, and newspapers. Attention to the social process of public-opinion formation and the diffusion of ideas.

SOC 308: Modern Organizations.

3 hours, 3 credits. Theories and comparative analysis of the structure, functioning, and problems of organizations and bureaucracies, such as corporations, religious institutions, schools, and prisons.

SOC 309: Social Inequality.

3 hours, 3 credits. A comparative analysis of the inequalities of class, race, ethnicity, religion, and gender in contemporary societies.

SOC 310: Knowledge, Science, and Society.

3 hours, 3 credits. The social construction of reality. Relationships between culture, including knowledge, and social structure. The cultural and social bases of science. Science in totalitarian and democratic societies. Science in the university, industry, and government. The social process of scientific discovery. Selected ethical problems concerning science in modern society.

*SOC 314: Social Change and Social Planning.

3 hours, 3 credits.

*SOC 317: Comparative Analysis of Modern Industrial Societies.

3 hours, 3 credits.

SOC 319: Population and Society.

3 hours, 3 credits. Theoretical approaches to population studies and their empirical applications. Causes and consequences of births, deaths, and migration internationally and in the U.S. and their influences on population size, change, composition, and distribution.

SOC 320: Immigration and Adaptation.

3 hours, *3 credits*. Theories of migration and the empirical patterns of immigration in the United States and other leading receiving countries. Focus on immigrant

adaptation, intergenerational relationships, race/ethnic relations, and economic and policy consequences.

SOC 321: The Sociology of Food and Nutrition.

3 hours, 3 credits. Sociological perspectives on the production, distribution and consumption of food, cooking techniques, and the political-economy of food. Topics include food, society and culture; class, ethnicity and food; and trends and developments in the food industry.

SOC (WST) 322: Sociology of Gender and Reproduction.

3 hours, 3 credits. Reproductive issues from birth control and the medicalization of childbearing to fetal and neonatal health, infertility, and new reproductive and genetic technologies. Emphasis on the influence of gender and race on reproductive politics, ideologies, and practices.

SOC (POL) 324: Sociology of Politics.

3 hours, *3 credits*. An interdisciplinary course focusing on the substantive concerns of political science, which employs theoretical perspectives developed in sociology. PREREQ: POL 166 for POL 324.

SOC (POL) 326: Political Socialization.

3 hours, 3 credits. An examination of the agents and channels of political socialization, such as the family, schools and colleges, youth subcultures, peers, media, and life experiences from childhood to early adulthood. The impact of various forms of political socialization on conventional and unconventional political attitudes, opinions, and activities. Special problems of political socialization such as generational conflict; sexual differences in political orientations; impact of childhood learning on leaders and followers; and national, class, and other group differences. PREREQ: POL 166 for POL 326.

SOC (POL) (MES) 328: Gender and Society in Middle East and North African Societies.

3 hours, 3 credits. Norms, values, and the political and social institutions that shape the dynamics of gender relations in different MENA societies.

SOC 327: Sociology of American Policy-Making.

3 hours, 3 credits. Roles of social movements, interest groups, and the general public in determining which policy proposals are enacted into law. Emphasis on the influence of various racial and ethnic groups in the policy-making process.

SOC 332: Religion and Society.

3 hours, 3 credits. Religion as a social institution; its interrelation with the family, the economy, the polity, and social class. Social role of religious organizations and their impact on the functioning of the total society.

SOC (DST) 333: Sociology of Disability.

3 hours, 3 credits. The role of social, political, economic, and historical factors that have produced the condition of disability. Ways in which disability parallels and often overlaps with other minority statuses.

SOC 334: Urban Sociology in Global Perspective.

3 hours, 3 credits. Political-economic and socio-cultural dimensions of the global urban transformation.

SOC 335 (POL 320): Education, Politics, and Society: Global and Cross-Cultural Perspectives.

3 hours, 3 credits. Connections between education and society, including political and economic institutions from a global and comparative perspective. Analysis of systems of social inequality based on relevant data from the U.S. and other nations and cultures.

SOC (PHI)(AAS) 338: Race and Ethnicity in Society.

3 hours, 3 credits. Sociological perspectives on race and ethnic relations in the United States and other societies.

SOC 339: American Demography.

4 hours, 3 credits. A computer-based course organized around using United States census data to examine the causes and consequences of demographic change. PREREQ: SOC 301.

SOC 343: Sociological Theories of Aging.

3 hours, 3 credits. An in-depth overview of sociological theories of aging that address the roles and relationships of older adults within changing social structures in the United States. Reasons for variations and inconsistencies in addressing the diversity of experiences in aging also will be discussed.

SOC 344: Qualitative Methods.

3 hours, 3 credits. Design, collection and analysis of qualitative data in sociological research. Topics include participant observation, in-depth interviewing, biographical methods, content analysis, archival research, and ethnographic research. PREREQ: SOC 301(POL 331).

SOC 345: Statistics for Social Scientists.

4 hours, 3 credits (2, hours lecture; 2, hours lab). An elementary treatment of statistical concepts. Descriptive and inferential statistics; introduction to sampling and probability theory. Extensive use of computers. PREREQ: SOC 301.

SOC 350: Selected Topics in Race and Ethnicity.

3 hours, 3 credits. May be taken for a maximum of 6 credits (two different topics). Theories, issues, and methods in race and

SOC 402: Methods of Data Collection and Analysis.

4 hours, 3 credits. Collection and analysis of sociological data, with extensive use of computer applications. PREREQ: SOC 301 and SOC 303.

SOC 351: Issues and Problems in Sociology Theory.

3 hours, 3 credits. PREREQ: SOC 301 and SOC 302.

SOC (PHI)(CLT) 354: Philosophy of the Social Sciences.

3 hours, 3 credits. Study of some of the problems involved in the social sciences. Possible topics include the structure of theories in the social sciences, methods of inquiry, the nature of human action, and the relationship between knowledge in the social and natural sciences. PREREQ: One 200- level PHI (CLT) course or PHI (CLT) 354.

SOC 450: Seminar in Selected Problems of Sociology.

3 hours, 3 credits (maximum 6 credits). PREREQ: SOC 300, 301, at least 6 additional credits in SOC and Departmental permission.

SOC 460: Honors Seminar - Special Topics.

3 hours, 3 credits (maximum 6 credits). Special topics to be announced. PREREQ: 75 college credits, Departmental permission.

SOC (POL) 470: Seminar and Internship Program in New York Government.

1 or 2 semesters, each 4 credits. Students will attend weekly seminars on problems of New York City government and will serve from eight to ten hours a week as administrative assistants in New York City government offices and agencies. PREREQ: Chair's permission. Note: SOC (POL) 470 is offered in cooperation with the other senior colleges of the City University.

SOC 481: Advanced Tutorial in Sociology.

3 hours, 3 credits (maximum 6 credits). Subject to be agreed upon between student and instructor. PREREQ: SOC 300, SOC 301 and Departmental permission.

SOC 3520: Selected Topics in Social Research.

4 hours (2 hours lecture, 2 hours lab), 3 credits. May be taken for a maximum of 6 credits (two different topics). Issues and problems in social research. Extensive use of computer applications. PREREQ: SOC 301.

SOC 3530: Selected Topics on Race and Ethnicity.

3 hours, 3 credits. May be taken for a maximum of 6 credits (two different topics). Sociological perspectives on race and ethnic relations in the United States and other societies.

Speech-Language-Hearing Sciences

Chair: Stephen A. Cavallo (Speech Bldg., Room 227) Graduate Program Director: Liat Seiger-Gardner (Speech Bldg., Room 216)

Department Faculty: Professors: Mira Goral, John L. Locke; Associate Professors: Stephen A. Cavallo, Sandra Levey, Liat Seiger-Gardner, Joyce F. West; Assistant Professors: Cheryl Smith Gabig, Ryan Pollard; Lecturers: Diana Almodovar-Salinas, Jacqueline Aquilino-Jirak, Mary Boylan, Lynn Rosenberg, Christine Rota-Donahue. Clinical Director: Carolyn McCarthy

The Department of Speech-Language-Hearing Sciences offers students preprofessional coursework in typical and atypical communication processes within the context of a liberal arts education. The B.A. program prepares students for graduate study in Speech-Language Pathology or Audiology.

Speech Pathology and Audiology, B.A. (36 Credit Major)

All applicants to the program must first apply for admission to the College. After being admitted to the College, students apply to the Department of Speech-Language-Hearing Sciences to declare a major in Speech Pathology and Audiology. Applicants must maintain a minimum cumulative index of 2.7 (B-) in the following four courses in order to continue in the major: SPV 221 (LNG 230), SPV (LNG) 245, SPV (LNG) 247, and SPV 249. Students who do not achieve a cumulative GPA of 2.7 in these four courses may use them as a minor in Speech Pathology and Audiology.

Credits (36)

The required credits are distributed as follows:

12 courses required for continuation in the major: SPV (LNG) 245, SPV (LNG) 247, SPV 249, and SPV 221(LNG 230).

- 20 SPV 246 (LNG 160), SPV (LNG) 248, SPV (LNG) 212, SPV 326, SPV 327, SPV 328, and SPV 430.
- PSY 226 or ENW 201.

Speech-Language-Hearing Sciences Minor

The Department minor consists of 12 credits taken at the 200 level or higher.

Courses in Speech Pathology and Audiology

*Courses preceded by an asterisk are not expected to be offered in 2013-

SPV 101: Introduction to American Sign Language I.

4 hours, 4 credits. Elements of basic grammar, practice in signed receptive and expressive skills. A brief spoken orientation to the history of the deaf community and its culture will be given to offer an appropriate context in which to use the language. Students are expected to spend additional hours in the language lab. Note: If taken to fulfill the foreign language requirement, SPV 101 is not credited without SPV 102.

SPV 102: Elementary American Sign Language 2.

5 hours, 5 credits. Continuation of elementary American Sign Language 1, emphasizing vocabulary development and increasing fluency in the language structure: regional and stylistic variations in American Sign Language; advanced work in deaf culture, folklore, and literature. Students are expected to spend additional hours in the language lab. PREREQ: SPV 101. Note: If taken to fulfill the foreign language requirement, SPV 102 is not credited without SPV 101.

SPV 162: Language, Speech, and Hearing.

3 hours, 3 credits. An overview of the systems of language, speech, and hearing. The course will deal with the bases of normal communication, the roles of speech pathologists, audiologists, speech scientists, and professionals in allied areas in the study, diagnosis, and treatment of language, speech, and hearing problems.

SPV 221 (LNG 230): Language Acquisition.

3 hours, 3 credits. Study of speech, language, and communication skills in typically developing children. Exploration of gender, multicultural, multilinguistic, and socioeconomic variations in language development. Analysis of the processes involved in language learning and use and the foundations of language and literacy from infancy through the school-age years to complex language development over the lifespan.

*SPV 230: Survey of Speech and Hearing Problems.

3 hours, 3 credits. (Recommended to teachers, social workers, nurses, and psychologists. Not open to students qualifying for New York State teaching certification in speech and hearing handicapped or to students qualifying for positions as speech and hearing therapists in hospitals or speech centers.)

SPV (LNG) 245: Articulatory Phonetics.

3 hours, 3 credits. Fundamentals of articulatory phonetics; descriptive analysis of spoken forms of American English and other languages.

SPV 246: Introduction to Linguistics.

3 hours, 3 credits. Survey of linguistic science, with special attention to descriptive and applied linguistics.

SPV 247: Anatomy and Physiology of the Speech Mechanism.

3 hours, 3 credits. Anatomy, physiology, and neurophysiology of the speech and vocal mechanism; physiological studies of speech.

SPV 248: Acoustic Phonetics.

3 hours, 3 credits. Theoretical experimental approaches to speech acoustics. The analysis and synthesis of the speech wave. Acoustic cues for speech perception. PREREQ: SPV 245.

SPV 249: Hearing Science.

3 hours, 3 credits. Anatomy, physiology, and neurophysiology of hearing mechanism; physics of sound; and psychophysical studies of hearing.

SPV 300: Neurolinguistics of Aging.

3 hours, 3 credits. The speech, language, and communication changes, plus related cognitive changes, associated with healthy aging, as well as the communication disorders associated with atypical aging, including stroke, dementia of the Alzheimer's type,

and frontotemporal dementia. Review of the etiology and characteristics of these disorders in monolingual and multilingual / multicultural individuals.

SPV (LNG) 312: Bilingualism.

3 hours, 3 credits. The nature of bilingualism as a societal and individual human phenomenon; linguistic and applied linguistic issues; second language acquisition, psycholinguistic, sociolinguistic, neurolinguistic, educational aspects of bilingualism, and language policy. PREREQ: SPV 245 or LNG 160 (SPV 246), or BBE 171 and 301.

SPV 322 (LNG 321): Introduction to Syntax.

3 hours, 3 credits. Government Binding (GB) syntax for the study of linguistics minimalism and post-minimalism; structure of an uncommonly taught language; other syntactic theories. PREREQ: LNG 160 (SPV 246).

SPV (LNG) 323: Introduction to Phonology.

3 hours, 3 credits. The sound system of languages and underlying representation of the sound structure and lexicon. Analysis of data from different languages; investigation of the differences and similarities in the sound systems of different languages. Exploration of language universals. PREREQ: LNG (SPV) 245 and LNG 160 (SPV 246).

SPV (LNG) 324: Semantics.

3 hours, 3 credits. Linguistic meaning, including word and sentence meaning, reference, and truth; connections among language, thought, and the world; speech act theory and formal semantic theory; metaphor and meaning in practice. PREREQ: LNG 160 (SPV 246).

*SPV 325: The Contrastive Analysis of English with Other

3 hours, 3 credits. PREREQ: Either SPV 245 or 246.

SPV 326: Speech Pathology: Functional Disorders.

3 hours, 3 credits. Nature, etiology, assessment, and treatment of speech disorders (specifically articulation and fluency) and language disorders in preschool children, school-age children, and adolescents. Issues concerning multiculturalism and multilingualism are included. PREREQ: A minimum cumulative GPA of 2.7 in SPV (LNG) 245, SPV (LNG) 247, SPV 249, and SPV 221 (LNG 230).

SPV 327: Speech Pathology: Organic Disorders.

3 hours, 3 credits. Nature, etiology, assessment, and treatment of cleft palate, voice disorders, aphasia, cerebral palsy, and other neurological disorders. PREREQ: A minimum cumulative GPA of 2.7 in SPV (LNG) 245, SPV (LNG) 247, SPV 249, and SPV 221 (LNG 230).

SPV 328: Introduction to Audiology.

3 hours, 3 credits. Development, administration, and interpretation of hearing tests; disorders of hearing; and implications of hearing loss for communication. PREREQ: A minimum cumulative G.P.A. of 2.7 in SPV (LNG) 245, SPV (LNG) 247, SPV 249, and SPV 221 (LNG 230).

*SPV 329: Social and Regional Dialects of English.

3 hours, 3 credits. PREREQ: SPV 245.

SPV 429: Organization of Speech and Hearing Programs.

3 hours, 3 credits. (Required for New York State Teaching Certificate as teachers of students with speech-language disabilities.) Organizing and administering a program of rehabilitation in speech, language, and hearing in public systems. PREREQ: SPV 326, 327, and 328, and Departmental permission.

SPV 430: Clinical Observation in Speech-Language Pathology and Audiology.

4 hours, 2 credits. Clinical observation in speech-language pathology and audiology. Supervised observation of 25 hours of clinical practice. PREREO: SPV 326, 327, and 328.

*SPV 453: Special Studies in Speech and Hearing Sciences.

3 hours, 3 credits. PREREQ: Departmental permission.

SPV 487: Independent Study in Speech and Hearing Sciences.

One semester, 3 credits (maximum 6 credits). Independent study of special problems and independent research in speech and hearing sciences. PREREQ: Departmental permission.

SPV 491: Research Project in Speech and Hearing Sciences.

One semester, 3 credits (maximum 6 credits). Individual research and reading under direction of a faculty member of the Department. An honors essay or some other suitable presentation in speech and hearing sciences is required. PREREQ: Departmental permission.

Urban Studies (Interdisciplinary)

Coordinator: Professor Donna Kirchheimer (Carman Hall, Room 357)

Many students with majors in the social sciences wish to focus their course work on the problems of cities. Participation in the Urban Studies specialization enables these students to pursue their interests in a more structured way, while at the same time completing all course work requirements in their own majors. Participation in the Urban Studies specialization in no way replaces a major. Rather, it provides a setting for students to choose their elective courses around urban themes, to meet students and faculty from other majors who share these concerns, and to participate in interdisciplinary Urban Studies seminars and field research.

Urban Studies Program

Students wishing to specialize in Urban Studies should have taken at least one of the urban-related courses listed below as a prerequisite and be recommended by the instructor in that course to the Urban Studies Committee. The student should then apply to the Committee for admission to the specialization. The courses acceptable as prerequisites are as follows:

ANT 342: Anthropology of Urbanization

AAS 178: Introduction to the Urban Community

AAS 226: Community Organization

ECO 309: Public Finance

*ECO 314: Urban Economics

*FCS (WST) 180: Modern Housing

GEH 267: The New York Metropolitan Region

HIU 333: American Urban History

*HIU 334: American Urban Architecture

POL 211: Public Policy

POL 217: Criminal Justice

POL 305: Public Administration

POL 309: State and Local Politics

POL 310: Urban Politics and Government

POL 313: Political Issues in New York City

POL 317: The Politics of American Public Education

POL (SOC) 470: Seminar and Internship in New York City

Government

PSY 336: Psychology of Ethnicity

PSY 338: Community Psychology

SOC 234: Urban Sociology

Requirements of the Specialization

Students accepted for the specialization meet with a faculty committee to plan a sequence of four electives related to urban studies, in addition to the two courses URB 450: Urban Studies Seminar and URB 470: Field Research. The electives are to be chosen from existing course offerings in the social sciences outside the student's own major. They may be chosen from the list of prerequisites for entrance into the specialization, or they may be courses that receive specific approval from the faculty committee. URB 450 (Urban Studies Seminar) is open only to students in the specialization who have completed at least three electives in urban studies-related courses. The interdisciplinary field research course, URB 470, is also open only to participants in the Urban Studies specialization and may not be taken until URB 450 has been completed.

Courses in Urban Studies

URB 450: Urban Studies Seminar.

3 hours, *3 credits*. (Open only to students in the Urban Studies specialization.)

URB 470: Field Research.

1 or 2 1/2 days plus seminar, 3 credits. PREREQ: URB 450.

Women's Studies (Interdisciplinary)

Director: Bertrade B. Ngo-Ngijol Banoum (Carman Hall, Room 221)

Steering Committee:

Associate Professors: Carmen Esteves, Sharon Freedberg, Marie Marianetti, Milagros Ricourt; Assistant Professors: Dorothy Arthur (counselor/SEEK), Ka-Chuen Gee (Higher Education Assistant/Library), C. Alicia Georges, Bertrade B. Ngo-Ngijol Banoum, Anne Rice

The faculty of the Women's Studies Program is drawn from a number of different departments within the College. Integrating a wide array of courses from the humanities and social sciences, the program focuses on the histories and situations of women in different cultures, and on the ways in which social and economic factors have affected women's lives. As a result, students augment skills and knowledge acquired in other disciplines, and gain insight into issues related to gender that will be especially useful for careers in human services, health, education, and public policy advocacy. The program also provides the background needed for graduate study in the humanities and social sciences as well as in women's studies. Offered only as a minor field, the Women's Studies program is an option for students majoring in any discipline. Courses are open to all interested students.

18-Credit Women's Studies Option

Students complete 18 credit hours in Women's Studies, selected from List I (see accompanying chart). Six of these credits may be within the student's major field. Students must also complete, as background courses, 12 credits selected from List II (also on chart). Of these, 6 credits may be in the student's major field.

Requirements for the Minor in Women's Studies

Students complete 12 credit hours in Women's Studies from List I (see accompanying chart). These may not be in the student's major field.

Courses in Women's Studies

WST (ANT) 206: Anthropological Perspectives on Women and Men.

3 hours, 3 credits. The roles of females and males in both simple and complex societies. Exploration of some of the factors involved in differential allocation of work, roles, prestige, and power among females and males. Factors to be examined include economic structure, the distribution of power, the process of socialization, and ecological adaptation.

WST (PSY) 209: Psychology of Women.

3 hours, 3 credits. Survey of empirical and theoretical issues regarding the psychology of women, dynamics of personality, and inherent and learned factors influencing their behavior.

WST 218 (SOC 228): Gender and Society.

3 hours, 3 credits. Construction of gender at both the interpersonal and institutional levels. Topics include the intersection of gender with class, race, and sexuality in education, media, health, family, and work.

WST 220: Introduction to Women's Studies.

3 hours, 3 credits. Examination of women's experiences from the perspective of various disciplines, such as psychology, sociology, masculinity theory, and history. Ways in which gender intersects with ethnicity, race, and socio-economic class to form social constructs.

WST (AAS) 228: The African-American Family.

3 hours, 3 credits. A course examining the African-American family from slavery to the present. The family organization arising from the social structure of slavery. Current characteristics of the African-American family and possible suggestions for the improvement of the social structure of African-American families. PREREQ: Six credits in either AAS or an appropriate field.

WST (AAS) 239: Black Women in American Society.

3 hours, 3 credits. The experiences of and contributions made by women of African descent living in the United States. Emphasis on the effects of race, gender, socioeconomic status, sexuality, and spirituality in their lives.

WST (AAS) 240: Women in African Society.

3 hours, 3 credits. Roles and status of women in traditional, colonial, and contemporary African societies. Impact of international organizations and globalization.

WST 250: Topics in Women and Society.

3 hours, 3 credits. (May be repeated, when content is different, with permission of the Director for a maximum of 6 credits). Social science approaches to the study of sex, money, and power relationships between women and men of varying class, ethnic, and racial backgrounds in industrialized societies, especially the United States. Note: When the course focuses on sociological approaches to the gender gap, WST 250 will be cross-listed with SOC 228 (Women in Society).

WST 255: Topics in Women and Religion.

3 hours, 3 credits. (May be repeated, with permission of the Director and change in content, for a maximum of 6 credits.) Debates concerning women's nature, women's rights, and women's place in various sacred and secular religions, past and present. Note: When the course focuses on women in the Judeo-Christian tradition, WST 255 will be cross-listed with SOC 225: Women in Religion.

WST 260: Topics in the History of the Women's Movement.

3 hours, 3 credits. (May be repeated, with permission of the Director and change in content, for a maximum of 6 credits.) Perspectives on the history of the women's movement. Note: When the course focuses on sociological aspects of women's history in the United States, WST 260 will be cross-listed with SOC 222: The Women's Movement in the United States—Eighteenth Century to the Present.

WST (HEA) 302: Women and Health.

3 hours, 3 credits. Physiological, psychological, political, and social determinants of the health and healthcare of women. PREREQ: Two courses in the behavioral sciences.

WST (HIW) (MES) 304: History of Women and Society in the Islamic Middle East.

3 hours, 3 credits. Women in the Middle East from the advent of Islam to the present. Legal and cultural constructions and social dynamics of marriage, sexual morality, women's access to property, participation in production, and use of space.

WST (HIA) (ACU) 311: Women in Antiquity.

3 hours, 3 credits. Examination of the image, role, and status of women in both Ancient Greek and Roman society, as seen from the important literary works of antiquity.

WST (SOC) 322: Sociology of Gender and Reproduction.

3 hours, 3 credits. Reproductive issues from birth control and the medicalization of childbearing to fetal and neonatal health, infertility, and new reproductive and genetic technologies. Emphasis on the influence of gender and race on reproductive politics, ideologies, and practices.

WST (MMJ) 330: Women, Minorities, and the Media.

3 hours, 3 credits. Study of the institutional policies and practices of commercial media in the United States and their impact on minorities and women.

WST (LNG) 338: Women, Men, and Language.

3 hours, 3 credits. Review of major theoretical approaches to the field of language and gender from diverse cultural perspectives. Analysis of ways in which gender ideologies shape and are shaped by language use.

WST (HIU)(AAS) 340: History of African American Women.

3 hours, 3 credits. The social, political, and cultural history of African American women in the United States from an interdisciplinary perspective.

WST (ENG) 344: Women Writers in English.

3 hours, 3 credits. Fiction, poetry, drama, and essays by women writing in English. Focus on particular times, places, and writers may vary by semester. PREREQ: Departmental permission.

WST (ENG) 345: Topics in Gender and Sexuality.

3 hours, 3 credits. Constructions of gender and sexuality in literature, film, arts, and the media. Emphasis on theoretical literature and its interrogation of feminism, queerness, masculinities, and related forms of social identity. PREREQ: Departmental permission.

WST (AAS) 347: Black Feminisms.

3 hours, 3 credits. Contemporary Black feminist thought.

WST 348 (PSY 328): Family Psychology.

3 hours, 3 credits. Study of the psychological dynamics affecting contemporary families, including family structures, development, communication patterns, disorders, and treatment approaches.

WST 481: Senior Seminar in Women's Studies.

3 hours, 3 credits. (Open to upper juniors and seniors specializing in Women's Studies.) This seminar will be an interdisciplinary examination of recent research studies in the area of women's studies. Each student will be expected to pursue an individual research project making use of primary material, scholarly journals, and other library material. PREREQ: At least 6 credits in Women's Studies and 6 credits in related areas with the approval of the instructor.

List I: Women's Studies and Cross-Listed Courses

Courses	Credits
WST (HEA) 136: Family and Community Health	2
WST (ANT) 206: Anthropological Perspectives on	3
Women and Men	
WST (PSY) 209: Psychology of Women	3
WST (ANT) (LAC) 210: Women in Latin America	3
WST 220: Introduction to Women's Studies	3
WST 228: The African-American Family	3
WST (ENG) 234: Women in Literature	3
WST 237 (SOC 227): Sociology of the Family	3
WST (AAS) 239: Black Women in American	3
Society	
WST (AAS) 240: Women in African Society	3
WST 250: Topics in Women and Society	3
WST 255: Topics in Women and Religion	3
WST 260: Topics in the History of the Women's	3
Movement	
WST (ACU) 302: Women in Antiquity	3
WST (HEA) 302: Women and Health	3
WST (HEA) 307: Human Sexuality	3
WST (HEA) 308: Parenting and Child Health	3
WST 317 (FCS 307): Family Relationships	3
WST (HIU) 328: The Family in American History	3
WST (HIU) 329: History of Sexuality and Sex Roles	3
in America	
WST (HIU) 331: History of Women in America	3
WST (POL) 341: Women and Politics	3
WST 348 (PSY 328): Family Psychology	3
*WST (FCS) 372: Family Relationships—Field	2
Study and Seminar	
WST 481: Senior Seminar in Women's Studies	3

List II: Background Courses

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Courses	Credits
ANT (LNG) 228: Language and Culture	3
ANT 330: Dynamics of Cultural Change in a	3
Global Context	
ANT 332: Kinship, Marriage, and the Family	3
ANT 334: Mind and Culture	3
ACU 226: Greek Daily Life	3
ACU 227: Roman Daily Life	3
ECO 135: The Experience of Literature	3
ECO 326: Labor Economics	3
ECO 316: Economics of Inequality	3
FCS (WST)180: Modern Housing	3

FCS 317: Consumption Behavior	3
FCS 374: Consumer Advocacy	3
HIA 331: Life and Society in the Middle Ages	3
HIU 340: The Industrial Revolution in America	3
HIU 342: History of American Labor	3
PHI 232: Classical Ethical Theories	3
PHI 236: Social Philosophy	3
PHI 342: Capitalism and Its Critics	3
PHI 360: Philosophical Aspects of Liberation	3
Movements	
POL 303: Constitutional Law: Government	3
Structures and Powers	
POL 304: Constitutional Law: Personal Rights and	3
Liberties	
POL 316: Organizing an Election Campaign	3
POL 323: Marxism	3
PSY 320: Theories of Personality	3
PSY 330: Social Psychology	3
ESC 300: Human Relations	3
ESC 406: Sex Education, Cultural Values, & Family	3
Life	
SOC (NUR) 240: Death, Dying, and Bereavement	3
SOC 243: The Aged in Modern Society	3
SOC 309: Social Inequality	3

Each student registered for the Women's Studies Option is required to take a 3-credit Senior Seminar in Women's Studies (WST 481).

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Eileen Pretzel-Morales, Coord., Student Loan (Higher Ed. Asst.): B.A., M.S., Hunter Coll.

International Student Services

Ann O'Sullivan, Coord. of International Student Services (Higher Ed. Asst.): B.S., M.B.A., Iona Coll.

Student Disability Services

Merrill D. Parra, Dir., Student Disability Services (Higher Ed. Officer): B.A., Queens Coll.; M.S.W., Columbia Univ.

Jill Roter, Asst. Dir., Student Disability Services (Higher Ed. Asst.): B.A., Pennsylvania State Univ.; M.A., San Francisco State Univ.

Barbara Thompson, Asst. Dir., Student Disability Services (Higher Ed. Asst.): B.A., Park Coll.

Student Health Center

Cindy Kreisberg, Dir., Student Health Center: B.S., Syracuse Univ.; R.P.A.-C, Pennsylvania State Univ.

Student Life

Michael E. Sullivan, Dir., Campus Life: B.A., Stonehill Coll.; M.Ed., Fordham Univ.

OFFICE OF THE VICE PRESIDENT FOR INFORMATION TECHNOLOGY

Ronald M. Bergmann, Vice President of Information Technology and Chief Info. Officer: B.S., Union Coll.; M.S., The New School

Joseph A. Middleton, Dir. of Information Technology (Higher Ed. Officer): B.S., North Carolina State Univ.; M.A., Wake Forest Univ.; M.Div., Union Theol. Sem.

Jerold Barnard, Mgr., User, Media, and Program Support Serv. (Higher Ed. Officer): B.A., Lehman Coll.

Brendan McGibney, Tech. Dir., Multimedia Cent. (Higher Ed. Assoc.): B.A., Iona Coll.

Joseph A. Medved, *Database Administrator (Higher Ed. Officer):* B.S., M.S., Moscow Inst. of Economics & Statistics; Ph.D., Moscow Tech. Inst.

Safiul Roni, Supervisor, Instructor/Help Desk (Higher Ed. Asst.): B.S., M.S., State Univ. of New York at Buffalo

Faculty

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William J. Collins

Distinguished Professor, English

John P. Corigliano

Distinguished Professor, Music

Joseph W. Dauben

Distinguished Professor, History

Adam Koranyi

Distinguished Professor, Mathematics & Computer Science

Victor Pan

Distinguished Professor, Mathematics & Computer Science

Permanent Instructional Staff (Teaching)

The faculty listing contains the names of the full-time instructional staff as of June 2013.

Ackerman, Evelyn B., Prof., Hist.: A.B., Radcliffe Coll.; M.A., Ph.D., Harvard Univ.

Ahmed, Siraj, Asst. Prof., Engl.: B.A., Univ. of Penn.; A.M., Ph.D., Columbia Univ.

Aguirre-Molina, Marilyn, *Prof., Health Sci.:* B.S., Hunter Coll.; M.S., Ed.D., Columbia Univ.

Aisemberg, Gabriel, Asst. Prof., Biol. Sci.: M.Sci., Ph.D., Univ. of Buenos Aires (Argentina)

Akan, Alice, Lect., Nurs.: B.S., Univ. of Washington; M.A., New York Univ.

Alborn, Timothy, Prof., Hist.: B.A., Ph.D., Harvard Univ.

Alex, Jonathan, Lect., Soc. Wk.: B.A., Lehman Coll.; M.S.W., New York Univ. School of Soc. Wk.

Alexanderson, Peter, Lect., Econ. & Bus.: B.A., M.S., State Univ. of New York at Albany; J.D., Albany Law School

Alexander-Street, Ayanna, Lect., Biol. Sci.: B.S., Univ. of Connecticut; Ph.D., CUNY Grad. Cent.

Almodovar, Diana, Lect., Speech-Lang.-Hearing Sci.: B.A.,

Lehman Coll.; M.A., Queens Coll., M.Phil., City Univ. of New York Grad. Center

Alonso, Orlando, Asst. Prof., Middle & High School Ed.: B.S., High Institute of Pedagogy Felix Varela; M.A., The City Coll. of New York; Ed.D., Columbia Univ.

Anderson, James, Assoc. Prof., Engl.: A.B., Washington Univ.; M.S., Columbia Univ.

Amend, Allison, Asst. Prof., Engl.: B.A, Stanford Univ.; M.F.A., Univ. of Iowa.

Aquilino-Jirak, Jacqueline, Lect., Speech-Lang.-Hearing Sci.: B.A., M.A., Lehman Coll.

Arzola, Rebecca, Asst. Prof., Libr.: M.L.S., Pratt Inst.

Avidon, Elaine, Lect., Early Childh. & Childh. Ed.: B.A., Univ. of Vermont: M.S., Bank Street Coll.

Bacarella, Flavia, Asst. Prof., Art: B.A., State Univ. of New York at Albany; M.A., New School for Soc. Research; M.F.A., Brooklyn Coll.

Bacon, Jessica, Asst. Prof., Cslg., Ldrshp., Lit. & Sp. Ed.: B.A., Coll. of Wooster; M.S.Ed., Syracuse Univ.

Bacon, Michael, Dist. Lect., Journalism, Com., & Theatre: B.S., Lehman Coll.

Badillo, David A., Assoc. Prof., Lat. Amer. & Puerto Rican Studies: B.A., Univ. of California at Berkeley; Ph.D., CUNY Grad. Center

Bamshad-Alavi, Maryam, Asst. Prof., Biol. Sci.: B.S., M.S., Ph.D., Univ. of Mass.

Bard, Anne B., Lect., Journalism, Com. & Theatre: B.A., M.A., New York Univ.

Battipaglia, Diana M., Prof., Mus.: B.S., M.S., Juilliard School; D.M.A., Eastman School of Music

Baumrin, Bernard H., Prof., Philos.: B.A., Ohio State Univ.; Ph.D., Johns Hopkins Univ.; J.D., Columbia Univ.

Bautista, Daniel., Asst. Prof., Engl.: Ph.D., Brown Univ.

Baxter, Michael J., Sr. Coll. Lab. Tech., Biol. Sci.: B.A., Lehman Coll.

Bayne, Gillian, Asst. Prof., Middle & High School Ed.: B.S., Coll. of New Rochelle; M.A., New York Univ.; Ph.D., CUNY Grad.

Becker, Stefan, Prof., Earth, Env. & Geo. Spat. Sci.: State Exam, Univ. of Giessen, Germany; Dr. Rer. Nat.; Dr. habil., Univ. of Giessen, Germany.

Bejtja, Darina, Coll. Lab. Tech., Music: B.A., Academy of Arts, Tirana, Albania; M.A.T., Lehman Coll.

Belardo, John, Sr. Coll. Lab. Tech., Art: M.F.A., New York Academy of Art

Benefo, Kofi, Assoc. Prof., Soc.: B.A., Univ. of Ghana; M.A., Univ. of Iowa; Ph.D., Univ. of Mich.

Bergad, Laird W., Dist. Prof.. Amer. & Puerto Rican Studies: B.A., Univ. of Wisc. M.A., Ph.D., Univ. of Pittsburgh.

Blanco, Walter, Prof., Engl.: A.B., Columbia Univ.; A.M., Ph.D., Harvard Univ.

Bloom, Ira, Prof., Pol. Sci.: B.A., City Coll. of New York; J.D., Harvard Univ.

Blot, Richard, Assoc. Prof., Journalism, Com., & Theatre: A.B., Fordham Univ.; M.A., Ph.D., New School for Soc. Research

Bonastia, Christopher, Assoc. Prof., Soc.: B.A., Univ. of Virginia; M.A., Ph.D., New York Univ.

Bonnick, Karen, Lect., Afr. and Afr. Am. Studies: B.A., Univ. of West Indies; M.A., Lehman Coll.

Borrell, Luisa, Prof., Health Sci.: D.D.S., M.P.H., Columbia Univ.; Ph.D., Univ. of Michigan.

Boston, Nicholas, Asst. Prof., Journalism, Com. & Theatre: B.A., McGill Univ.; M.S., Columbia Univ.

Bouknight, Tamisha, Asst. Prof., Cslg., Ldrshp., Lit. & Sp. Ed.: B.A., Mahattan Coll.; M.A., Univ. of Conn.

Boyar, Andrea, Assoc. Prof., Health Sci.: B.S., M.N.S., Ph.D., Cornell Univ.

Boylan, Mary, Lect., Speech-Lang.-Hearing Sci.: B.A., M.A., Lehman Coll.

Bradshaw, Russell P., Assoc. Prof., Middle & H.S. Ed.: B.A., Wesleyan Univ.; M.Ed., Ed.D., Harvard Univ.

Bresnahan, Jean L., Assoc. Prof., Psych.: A.B., Smith Coll.; M.A., Univ. of Houston; Ph.D., Emory Univ.; J.D., Columbia Univ.

Broderick, Herbert R., III, Assoc. Prof., Art: A.B., Columbia Coll.; M.A., M.Phil., Ph.D., Columbia Univ.

Brown, Marcia, Senior Coll. Lab Tech., Nurs.: B.A., M.S., Lehman Coll.

Brown, Mellisa C., Assoc. Prof., Art: B.F.A., Rhode Island School of Design; M.F.A., Yale Univ.

Bryant, Salita S., Asst. Prof., Engl.: B.S., Georgia Southern Univ.; M.F.A., New York Univ.; M.A., M.Ed., Ph.D., Univ. of Miss.

Buckley, Michael, Asst. Prof., Philos.: B.B.A., Baruch Coll.; B.A., Hunter Coll.; Ph.D., Emory Univ.

Bullaro, Grace, Prof., Engl.: B.A., The City Coll. of New York; M.A., Ph.D., State Univ. of New York at Stony Brook

Burke, Martin, Assoc. Prof., Hist.: B.A., The City Coll. of New York; M.A., Ph.D., Univ. of Michigan

Campbell, Eleanor, Asst. Prof., Nurs.: B.S., Alfred Univ.; M.A., M.Ed., Ed.D., Teachers Coll., Columbia Univ.

Carey, Rosalind, Assoc. Prof., Philos.: B.A., Assumption Coll.; Ph.D., Boston Univ.

Carney, James T., Lect., Journalism, Com., & Theatre: B.A., Fordham Univ.; M.A., Coll. of New Rochelle.

Caroleo, Orazio, Asst. Prof., Health Sci.: B.F.A., School of Visual Arts; M.A., Ph.D., New York Univ.

Carrellas, Paul, Lect., Art: B.F.A., Swain School of Design; M.F.A., Queens Coll.

Case, Claudia W., Asst. Prof., Journalism, Com. & Theatre: B.A., Auburn Univ., Montgomery; M.F.A., D.F.A., Yale Univ.

Castex, Graciela M., Assoc. Prof., Soc. Wk.: B.S.W., Florida International Univ.; M.S.W., Virginia Commonwealth Univ.; Ed.D., Columbia Univ.

Cavallo, Stephen A., Assoc. Prof., Speech-Lang.-Hearing Sci.: B.S., State Univ. Coll. of New York, Oneonta; M.S., Teachers Coll., Columbia Univ.; Ph.D., Columbia Univ.

Chatha, Jaspal, Asst. Prof., Econ. & Bus.: B.S., M.A., Louisiana State Univ.; Ph.D., New School for Soc. Research.

Cheng, Hai-ping, Assoc. Prof., Biol. Sci.: B.S., M.S., Fudan Univ.; Ph.D., Univ. of Massachusetts at Amherst.

Cheng, Terrence, Assoc. Prof. Engl.: B.A., State Univ. of New York, Binghamton; M.F.A., Univ. of Miami.

Chen-Hayes, Stuart F., Assoc. Prof., Cslg., Ldrshp., Lit., & Sp. Ed.: B.A., M.Ed., Indiana Univ.; Ph.D., Kent State Univ.

Christian, Mark, Prof., Afr. and Afr. Am. Studies: B.A., Liverpool Hope Univ.; M.A., Ohio State Univ.; Ph.D., Univ. of Sheffield,

Choudhary, Amod, Asst. Prof., Econ. & Bus.: B.A., State Univ. of New York at Stony Brook; M.B.A., Fairleigh Dickinson Univ.; J.D., Univ. of Buffalo.

Chudnovsky, Eugene, Dist. Prof., Phys. & Astron.: B.S.-M.S., Ph.D., Kharkov Univ. (Ukraine).

Chung, Kuk-Soo, Lect., Econ. & Bus.: B.A., Seoul Natl. Univ., Korea; A.B., Dartmouth Coll.; M.A., Yale Univ.

Cirace, John, Prof., Econ. & Bus.: B.A., Harvard Coll.; LL.B., Stanford Univ.; M.A., Ph.D., Columbia Univ.

Claman, David, Asst. Prof., Mus.: B.A., Wesleyan Univ.; M.M. Univ. of Colorado at Boulder; M.F.A., Ph.D., Princeton Univ.

Cleland, Jane., Lect., Engl.: B.A., Univ. of Denver; M.B.A., Babson Coll.; M.F.A., Western CT. State Univ.

Cohen, Shirlee, Lect., Nurs.: B.S.N., Coll. of New Jersey; M.S., Columbia Univ.

Colburn, Forrest D., Prof., Lat. Amer. & Puerto Rican Studies: B.A., Univ. of California, Santa Cruz; M.A., Ph.D., Cornell Univ.

Coller, Alexandra, Asst. Prof., Langs. & Lits: B.A., Hunter Coll., M.A., Ph.D., New York Univ.

Collins, William J., Dist. Prof., Engl.: B.S., Coll. of the Holy Cross; M.A., Ph.D., Univ. of Calif. at Riverside

Conroy, Thomas, Lect., Soc.: B.A., St. Peter's Coll.; M.A., Univ of Wisconsin at Madison; Ph.D., Boston Univ.

Corigliano, John P., Dist. Prof., Mus.: B.A., Columbia Coll.

Cutler, Cecelia, Asst. Prof., Middle & H.S. Ed.: B.A., Barnard Coll.; M.A., Ph.D., New York Univ.

Cypress, Brigitte, Asst. Prof., Nurs.: B.S., Far Eastern Univ. Manila; M.S., Lehman Coll.

Danna, Ethan, Asst. Prof., Health Sci.: B.A., Franklin & Marshall Coll.; M.S.W., New York Univ.; M.A., Ed.D., Teachers Coll., Columbia Univ.

Dauben, Joseph W., *Dist. Prof., Hist.:* A.B., Claremont Coll.; M.A., Ph.D., Harvard Univ.

DelaCruz, Juan, Asst. Prof., Econ. & Bus.: B.A., National Autonomous Univ. of Mexico; M.A., M.Phil., Ph.D., New School for Social Research.

DelliCarpini, Margo, Assoc. Prof., Middle & H.S. Ed.: B.A., M.A., Ph.D., SUNY at Stony Brook.

Delson, Eric, Prof., Anthro.: A.B., Harvard Coll.; Ph.D., Columbia

Demmer, Craig, Prof., Health Sci.: B.S.S., Univ. of Natal (South Africa); M.A., Brooklyn Coll.; Ed.D., Columbia Univ.

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DeSimone, Janet, Assoc. Prof., Cslg., Ldrshp., Lit., & Sp. Ed.: B.A., Marist Coll.; M.A., SUNY-New Paltz; P.D., Ed.D., St. John's Univ.

Deveaux, Faith, Assoc. Prof., Cslg., Ldrshp., Lit., & Sp. Ed.: B.A., Skidmore Coll.; M.A., Ph.D., New York Univ.

DiCicco-Bloom, Barbara, Dist. Lect., Nurs.: B.A., Northeastern Univ.; B.S., M.A., Ph.D., New York Univ.

DiGangi, Mario, Prof., Engl.: A.B., A.M., M. Phil., Ph.D., Columbia Univ.

DiPaolo, Maria Grazia, Prof., Langs. & Lits.: B.A., Hunter Coll.; M.A., Ph.D., Columbia Univ.

Dobson, Cassandra, Asst. Prof., Nurs.: B.S., M.S., Lehman Coll.; D.N.S., Columbia Univ.

Doyran, Mine, Asst. Prof.: B.A., Bogazici Univ., Turkey; Ph.D., State Univ. of New York, Albany

Dubetz, Nancy, Asst. Prof., Early Childh. & Childh. Ed.: B.A., Kent State Univ.; M.A., Ohio State Univ.; Ed.D., Teachers Coll., Columbia Univ.

Duran-Urrea, Evelyn, Lect., Lang. & Lit.: B.A. Univ. of Sonora (Mexico); M.A., Univ. of Arizona; Ph.D., Penn State Univ.

Eschenauer, Robert, Asst. Prof., Cslg., Ldrshp., Lit., & Sp. Ed.: B.A., St. Francis Coll., M.S., Ph.D., St. John's Univ.

Espinosa, Cecilia, Assoc. Prof., Early Childh. & Childh. Ed.: B.A., M.Ed., Ph.D., Arizona State Univ.

Esteves, Carmen C., Assoc. Prof., Langs. & Lits.: B.A., Univ. of Puerto Rico; Ph.D., CUNY Grad. Center.

Ethan, Danna, Asst. Prof., Health Sci.: B.A., Franklin and Marshall Coll.; M.S.W., New York Univ.; M.A., Ed.D., Columbia Univ.

Farrell, Robert, Asst. Prof., Libr.: B.A., Columbia Univ.; M.L.S., State Univ. of New York at Buffalo; M.A., CUNY Grad. Center.

Fayne, Harriet, Prof., Cslg., Ldrshp., Lit., & Sp. Ed.: B.A., Barnard Coll.; M.A.T., Harvard Univ.; M.A., M.Ed., Teachers Coll., Columbia Univ.; Ph.D., Columbia Univ.

Feinerman, Robert P., Prof., Math. & Computer Sci.: B.A., M.A., Ph.D., Yeshiva Univ.

Fendelman, Earl B., Assoc. Prof., Engl.: B.A., Univ. of Chicago; M. Phil., Ph.D., Yale Univ.

Fenton, Dana, Lect., Soc.: B.A., M.S., New York Univ.

Fernández, Daniel R., Asst. Prof., Langs. & Lits: B.A., Univ. of California at Los Angeles.; M.A., M. Phil., Ph.D., Columbia Univ.

Fernández, Ricardo R., Pres. and Prof., Langs. & Lits.: B.A., M.A., Marquette Univ.; M.A., Ph.D., Princeton Univ.

Ferraro, Michael, Assoc. Prof., Art: B.F.A., Syracuse Univ.; M.F.A., Univ. of Mass. at Amherst

Fields, Judith, Asst. Prof., Econ., Acct., & Bus. Adm.: B.A., M.U.P., Ph.D., New York Univ.

Fiol-Matta, Licia, Assoc. Prof., Lat. Amer. & Puerto Rican Studies: B.A., Princeton Univ.; M.A., Ph.D., Yale Univ.

Fisch, Oscar, Prof., Econ. & Bus.: M.A., Univ. of Buenos Aires; M.C.P., Harvard Univ.; Ph.D., Univ. of Calif. at Berkeley

Fisher, William G., Assoc. Prof., Engl.: B.A., Vanderbilt Univ.; M.A., Ph.D., Univ. of Penn.

FitzGerald, Judith, Lect., Biol. Sci.: B.S., M.A., Lehman Coll.;

Ph.D., CUNY Grad. Center

Flam, Louis, Assoc. Prof., Anthro.: B.A., Rutgers Univ.; M.A., Ph.D., Univ. of Pennsylvania

Fleitas, Joan, Assoc. Prof., Nurs.: B.S., Florida State Univ., M.N., Emory Univ., Ed.D., Teachers Coll., Columbia Univ.

Fletcher, David, Asst. Prof., Middle & H.S. Ed.: B.A., Appalachian State Univ.; M.A., Univ. of Michigan; Ph.D., New York Univ.

Folsom, Christy, Assoc. Prof., Early Childh. & Childh. Ed.: B.S., Brigham Young Univ.; M.S., Oregon Coll. of Ed.; Ed.M., Ed.D., Teachers Coll., Columbia Univ.

Ford, Madeline, Asst. Prof., Libr.: B.B.A, Baruch Coll.; M.L.S, Rutgers Univ.; M.S. Ed., Baruch Coll.

Frederickson, Keville, Prof., Nurs.: B.S., Columbia Univ.; M.Ed., Ed.D., Teachers Coll., Columbia Univ.

Freedberg, Sharon, Assoc. Prof., Soc. Wk.: B.A., The City Coll. of New York; M.S.W., State Univ. of New York at Buffalo; Ph.D., Columbia Univ.

Gabig, Cheryl Smith, Asst. Prof., Speech-Lang.-Hearing Sci.: Ph.D., Univ. of Conn.

Gafur, Bibi. N., Sr. Coll. Lab Tech., Chem.: B.S., Lehman Coll.; M.S., The City Coll. of New York

Gálvez, Alyshia, Asst. Prof., Lat. Amer. & Puerto Rican Studies: B.A., Columbia Univ.; M.A., Ph.D., New York Univ.

Ganjian, Iraj, Prof., Chem.: Pharm.D., Tehran Univ.; M.S., Ph.D., Columbia Univ.

Garanin, Dmitry, Assoc. Prof., Phys. & Astron.: B.S., M.S., Moscow Inst. of Physics & Tech., USSR; Ph.D., Moscow State Univ., USSR.

Gargalas, Vassilios, Assoc. Prof., Econ. & Bus.: B.Sc., Athens Univ., Greece; M.Phil., Ph.D., New York Univ.

Gee, Ka-Chuen, Higher Ed. Assoc., Libr.: B.A., New York Univ; M.L.S., Columbia Univ.; M.S. Ed., Lehman Coll.

Georges, Catherine Alicia, Prof., Nurs.: B.S.N., Seton Hall Univ.; M.A., New York Univ.; Ed.D., Univ. of Vermont.

Gerry, Christopher C., Prof., Phys. & Astron.: B.A., M.S., Univ. of Maine; Ph.D., State Univ. of New York at Albany.

Gerson, Jill, Lect., Soc. Wk.: B.A., Univ. of Chicago; M.S.W., Hunter Coll.; D.S.W., CUNY Grad Center.

Ghezzo, Marta, Prof., Mus.: Ph. D., City Univ. of New York Grad. Center.

Gillison, David A., Prof., Art: M.F.A., Natl. Gallery of Art, Victoria School of Art, Australia.

Glover, Barbara, Lect., Afr. and Afr. Am. Studies: B.A., Hunter Coll.; M.S.Ed., Columbia Univ.; M.S.Ed., Univ. of Bridgeport

Gningue, Serigne M., Assoc. Prof., Middle & H.S. Ed.: B.S., Univ. of Dakar; M.A., Lehman Coll.; M.Phil., Ph.D., Columbia Univ.

Gonzales, Alfonso, Asst. Prof., Pol. Sci.: B.A., Univ. of California at Los Angeles; M.A., Stanford Univ.; M.A, Ph.D., Univ. of Calif. at Los Angeles.

Gonzales-Corzo, Mario, Assoc., Prof.: B.A., M.A., Ph.D., Rutgers

Goral, Mira, Assoc. Prof., Speech-Lang.-Hearing Sci.: B.A., Tel-Aviv Univ.; M.A., Queens Coll.; Ph.D., CUNY Grad. Center.

Gorokhovich, Yuri, Asst. Prof., Earth, Env. & Geo. Spat. Sci.: M.S., Odessa State Univ.; M.A., Ph.D., City Univ. of New York Grad. Center

Gottlieb, Barbara, Prof., Cslg., Ldrshp., Lit., & Sp. Ed.: B.A., Univ. of Pittsburgh; M.Ed., Lesley Coll.; Ed.D., Northern Illinois Univ.

Graulau, Jeannette, Asst. Prof., Pol. Sci.: B.A., Univ. of Puerto Rico; Ph.D., Syracuse Univ.

Greenberg, Joy, Asst. Prof., Soc. Wk.: B.A., Tufts Univ.; M.S.W., M.B.A., New York Univ.; Ph.D., Columbia Univ.

Gross, Carol, Asst. Prof., Early Childh. & Childh. Ed.: B.S., Columbia Univ.; M.S. Ed., Bank Street Coll.; Ed.D., Teachers Coll., Columbia Univ.

Guiñazú, María, Assoc. Prof., Langs. & Lits.: M.S., Southern Conn. State Coll.; M.A., Ph.D., Yale Univ.

Gulla, Amanda N., Asst. Prof., Middle & H.S. Ed.: B.A., M.A., Ph.D., New York Univ.

Haghighat, Elhum, Assoc. Prof., Soc.: B.A., Rutgers Univ.; M.A., Univ. of Texas; Ph.D., Univ. of Maryland

Halliday, Wayne, Lect., Libr.: B.S., Lehman Coll.

Handel, Michael, Prof., Math. & Computer Sci.: B.A., Brandeis Univ.; Ph.D., Univ. of Calif. at Berkeley

Hanges, Nicholas, Prof., Math. & Computer Sci.: B.S., The City Coll. of New York; M.S., Ph.D., Purdue Univ.

Happaney, Keith R., Asst. Prof., Psych.: B.A., Lehman Coll.; M.A., Ph.D, Univ. of Calif. at Santa Barbara

Harcourt-Smith, William E., Asst. Prof., Anthro.: B.Sc., Kings Coll., London; MS.c., Ph.D., Univ. Coll. London.

Harushimana, Immaculee, Asst. Prof., Middle & H.S. Ed.: B.A., Univ. of Burundi; M.A., Ph.D., New York Univ.

Hattori, Tomohisa, Asst. Prof., Pol. Sci.: B.A., Sarah Lawrence Coll.; M.A.L.D., Fletcher School of Law & Dipl., Tufts Univ.; Ph.D., Yale Univ.

Havelka, Stefanie, Inst., Asst. Prof., Libr.: B.S., Univ. of Applied Sciences, Stuttgart, Germany; M.S., Syracuse Univ.

Hernandez, Jessica, Inst., Libr.: B.A., Lehman Coll.; M.L.S., Long Island Univ.

Hoffman, William M., Prof., Journalism, Com., & Theatre: B.A., The City Coll. of New York

Hollander, Alan, Assoc. Prof., Music: B.S., Hofstra Univ.; M.A., Long Island Univ.

Honig, Susan, Asst. Prof., Econ. & Bus.: B.S., Lehman Coll.; M.S., Pace Univ.

Hosay, Cynthia K., Assoc. Prof., Health Sci.: B.A., M.A., Univ. of Michigan; M.A., Ph.D., New York Univ.

Hurley, Dene, Assoc. Prof., Econ. & Bus.: B.S., City Univ. of London; M.S., Univ. of Bath; Ph.D., Northeastern Univ.

Huynh, Mary, Asst. Prof., Health Sci.: B.S., George Washington Univ.; Ph.D., Univ. of Pittsburgh.

Hyatt, Jack H., Prof., Mus.: B.F.A., Univ. of New Mexico; M.Mus., D.M.A., Boston Univ.

Hyman, David, Asst. Prof., Middle & H.S. Ed.: B.A., Vassar Coll.; M.A., Manhattanville Coll.; Ph.D., CUNY Grad Center.

Ihde, Thomas, Assoc. Prof., Langs. & Lits.: B.A., St. Mary's Univ., Texas; M. Phil., Ph.D., Univ. of Dublin (Trinity Coll.); Dip., Univ. of Ireland, Galway

Jacobson, Barbara, Asst. Prof., Soc.: B.A., De Pauw Univ.; M.A., Yale Univ. Div. School; Ph.D., Northwestern Univ.

Jafari, Marzie, Asst. Prof., Earth, Env. & Geo. Spat. Sci.: B.A., M.A., Hunter Coll.; Ph.D., CUNY Grad Center.

Jarroll, Edward L., Prof., Biol. Sci.: B.S., M.S., Ph.D., West Virginia Univ.

Jayadeva, Rajeev, Inst. Lib.: M.A., M.L.S., Queens Coll.

Jervis, James A., Assoc. Prof., Afr. and Afr. Am. Studies: A.B., Hunter Coll.; Ph.D., Columbia Univ.

Jia, Xiangdong, Asst. Prof., Psych.: B.A., M.A., Beijing Univ.; M.A., Ph.D., New York Univ.

Jiménez, Elpidio, Sr. Coll. Lab. Tech., Phys. & Astron.: A.S., Broward Comm. Coll.; B.S., M.S., Lehman Coll.

Jitianu, Andrei, Asst. Prof., Chem.: B.Sc., M.Sc., Ph.D., Univ. of Bucharest.

Johnson, Glen, Assoc. Prof., Health Sci.: B.S., SUNY Coll. of Env. Sci. & Forestry; M.S., M.A., Ph.D., Penn State Univ.

Jones, Joi, Coll. Lab. Tech., Middle & H.S. Ed.: B.A., Univ. of Alabama at Tuscaloosa; M.A. Univ., of Alabama at Birmingham

Jones, Liesl, Assoc. Prof., Biol. Sci.: B.S., Fordham Univ.; Ph.D., Medical Coll. of Pennsylvania and Hannemann Univ.

Jordan, Sharon, Asst. Prof., Art: B.A., Boston Univ.; Ph.D. The City Univ. of New York Grad. Center

Joseph, Gerhard J., Prof., Engl.: A.B., M.A., Univ. of Connecticut; Ph.D., Univ. of Minnesota

Jung, Gwang, Assoc. Prof., Math. & Computer Sci.: B.E., M.E., Kyungpook Nat. Univ.; Ph.D., Univ. of Louisiana, Lafayette

Kabat, Daniel, Assoc. Prof., Phys. & Astron.: B.S., California Polytechnic State Univ.; Ph.D., Mass. Inst. of Tech.

Kahn, Jessica, Asst. Prof., Soc. Wk.: B.A., Davidson Coll.; M.S.W., Washington Univ.; Ph.D., Columbia Univ. School of Soc. Wk.

Kamen-Friedman, Michele, Asst. Prof., Econ. & Bus.: B.A., Queens Coll.; M.B.A., St. John's Univ.

Karabali, Dimitra, Prof., Phys. & Astron.: B.S., Univ. of Athens, Greece; Ph.D., Yale Univ.

Karp, Leon, Prof., Math. & Computer Sci.: B.A., Yeshiva Univ.; M.S., Ph.D., New York Univ.

Kayaalp, Emine, Lect., Econ. & Bus.: B.S., M.S., Fairleigh Dickinson Univ.; Ed.D., Rutgers Univ.

Kayaalp, Orhan, Prof., Econ. & Bus.: B.A., Ankara Univ.; M.B.A., Fairleigh Dickinson Univ.; M.A., Hunter Coll.; M.Phil., Ph.D., CUNY Grad. Center.

Keen, Linda, Prof., Math. & Computer Sci.: B.S., The City Coll. of New York; M.S., Ph.D., New York Univ.

Kelly, Angela, Asst. Prof., Middle & H.S. Ed.: B.A., La Salle Univ.; M.A., Ed.M., Teachers Coll., Columbia Univ.; M. Phil., Ph.D., Columbia Univ.

Kennelly, Edward, Prof., Biol. Sci.: B.A., Colby Coll.; Ph.D., Washington Univ.

Kim, Young Kun, Assoc. Prof., Pol. Sci.: A.B., Bucknell Univ.; Ph.D., Columbia Univ.

Kincaid, Dwight T., Prof., Biol. Sci.: B.A., Pfieffer Coll.; M.A., Ph.D., Wake Forest Univ.

King, Jennifer, Lect., Libr.: B.S., State Univ. of New York at Genesco; M.L.J., Queens Coll.

Kirchheimer, Donna Wilson, Assoc. Prof., Pol. Sci.: B.A., Univ. of Chicago; M.I.A., Ph.D., Columbia Univ.

Klein, Nancy, Asst. Prof., Early Childh. & Childh. Ed.: B.A., Case Western Univ.; M.S., Bank Street Coll.; Ed.D., Teachers Coll., Columbia Univ.

Kluger, Alan, Prof., Psych.: B.A., M.A., Queens Coll.; Ph.D., CUNY Grad. Center.

Kolb, Patricia, Assoc. Prof., Soc. Wk.: B.A., Butler Univ.; M.S.S.A., Case Western Reserve Univ.; M.A., Ph.D., New School for Soc. Research.

Koranyi, Adam, Dist. Prof., Math. & Computer Sci.: Diploma, Univ. of Szegad (Hungary); Ph.D., Univ. of Chicago.

Kraus, James A., Asst. Prof., Econ. & Bus.: B.S., Cornell Univ.; J.D., Columbia Univ. School of Law.

Kremenitzer, Janet Pickard, Asst. Prof., Early Childh. & Childh. Ed.: B.A., Queens Coll.; M.A., Ed.M., Ed.D., Teachers Coll., Columbia Univ.

Kunstler, Robin, Prof., Health Sci.: B.A., State Univ. of New York at Albany; M.S., Northeastern Univ.; D. Rec., Indiana Univ.

Lado, Beatriz, Asst. Prof., Langs. & Lits.: Licenciatura, Univ. of Valencia (Spain); M.A., Northwestern State Univ.; M.A., Louisiana State Univ.; M.S., Ph.D., Georgetown Univ.

Lakic, Nikola, Prof., Math. & Computer Sci.: B.S., Univ. of Belgrade; Ph.D., CUNY Grad. Center

Larimer, Amy, Asst. Prof., Journalism, Com. & Theatre: B.A., Connecticut Coll.; M.F.A., Univ. of Wisc. at Milwaukee

Lawrence, Alexandria, Asst. Prof., Early Childh. & Childh. Ed.: B.A., Skidmore Coll.; M.A., M.Ed., Ed.D., Teachers Coll., Columbia Univ.

Lazarus, Marc S., Prof., Chem.: B.S., The City Coll. of New York; M.A., Ph.D., Princeton Univ.

Lebbon, Angela, Asst. Prof., Eco. & Bus.: B.S., M.A., Ph.D., Western Mich. Univ.

Lee, James, Coll. Lab. Tech., Biol. Sci.: B.S., Univ of Calif. at Riverside; M.P.M., Simon Fraser Univ.

LeGall, Dina, Assoc. Prof., Hist.: B.A., Tel Aviv Univ.; M.A., Ph.D., Princeton Univ.

Lehner-Quam, Alison, Instr., Lib.: B.A., Univ. of Washington; M.L.S., Columbia Univ.

Lerzundi, Patricio, Prof., Journalism, Com., & Theatre: B.A., Columbia Univ.; Ph.D., CUNY Grad. Center

Leung, Irene S., Prof., Earth, Env. Geo. Spat. Sci.: B.A., Univ. of Hong Kong; M.A., Ohio State Univ.; Ph.D., Univ. of Calif. at

Levey, Sandra K., Assoc. Prof., Speech-Lang.-Hearing Sci.: B.A., M.A., Wayne State Univ.; M.A., Stanford Univ.; Ph.D., CUNY Grad. Center

Levitt, Jane E., Assoc. Prof., Health Sci.: B.A., Barnard Coll.; M.P.A., Ph.D., New York Univ.

Levy, Teresita, Asst. Prof., Lat. Amer. & Puerto Rican Studies: B.A., Rollins Coll.; M.S., Long Island Univ.; M.Phil., Ph.D., CUNY Grad. Center

Lieberman, Katherine, Sr. Coll. Lab. Tech., Biol. Sci.: B.A., M.A., Lehman Coll.

Lizardi, Humberto, Asst. Prof., Psych.: B.A., State Univ. of New York at Binghamton; M.A., Ph.D., State Univ. of New York at Stony Brook.

Locke, John L., Prof., Speech-Lang.-Hearing Sci.: B.A., Ripon Coll.; M.A., Ph.D., Ohio Univ.

Lopez, Gustavo E., Prof., Chem.: B.S., Univ. of Humacao; Ph.D., Univ. of Mass. at Amherst.

Loscocco, Paula, Assoc. Prof., Engl.: B.A., Smith Coll.; Ph.D., Boston Coll.

Lundy, Theresa, Lect., Nurs.: B.S., M.S., Lehman Coll.

Maantay, Juliana, Prof., Earth, Env. Geo. Spat. Sci.: B.S., Cornell Univ.; M.U.P., New York Univ.; M.A., Hunter Coll.; M. Phil., Ph.D., Rutgers Univ.

Magaldi-Dopman, Danielle, Asst. Prof., Cslg., Ldrshp., Lit., & Sp. Ed.: B.S., Quinnipiac Univ.; M.S., Fordham Univ.; Ph.D., Fordham Univ.

Mak, Wingyun, Asst. Prof., Psych.: B.A., Univ. of Calif.; M.A., Ph.D., Washington Univ.

Maldonado, Nancy, Assoc. Prof., Early Childh. & Childh. Ed.: B.A., M.S.Ed., Lehman Coll.; Ed.D., Teachers Coll., Columbia Univ.

Mallikaratchy, Prabodhika, Asst. Prof., Chem.: M.S., Univ. of Louisiana at Monroe; Ph.D., Univ. of Florida.

Manier, David, Asst. Prof., Psych.: B.A., Univ. of Chicago; M. Div., Harvard Univ.; Ph.D., New School for Soc. Research.

Markens, Susan, Asst. Prof., Soc.: B.A., Brandeis Univ.; Ph.D., Univ. of Calif. at Los Angeles.

Marianetti, Marie, Assoc. Prof., Hist.: B.A., M.A., Calif. State Univ., Los Angeles; M.A., Ph.D., Univ. of Southern Calif.

Maroko, Andrew, Asst. Prof., Health Sci.: B.A., Rutgers Univ.; M.Phil, Ph.D., CUNY Grad. Center.

Marshall, Anne Marie, Asst. Prof., Early Childh. & Childh. Ed.: B.A., M.S., Ph.D., Univ. of Wisc.

Martin, Oscar, Asst., Prof., Langs. & Lits.: B.A., Universidad de Deusto-Bilbao; M.A., Ph.D., Univ. of Wisc.

Martinez, Herminio, Prof., Middle & H.S. Ed.: B.A., Manhattan Coll.; M.S., St. John's Univ.; Ph.D., CUNY Grad. Center

Massa, Janis, Assoc. Prof., Engl.: B.A., M.A., San Francisco State Univ.; M.A., Ph.D., New York Univ.

Maybee, Julie, Assoc. Prof., Philos.: B.J., B.A., Carleton Univ.; Ph.D., Cornell Univ.

Mazza, Carl, Assoc. Prof., Soc. Wk.: B.A., Dowling Coll.; M.S.W., D.S.W., Yeshiva Univ.

Mibenge, Chiseche, Asst. Prof. Pol. Sci.: Ph.D., Univ. of Utrecht School of Law.

McCarthy, Sean, Asst. Prof., Art: B.F.A., Univ. of Texas at Austin;

M.F.A., Yale Univ.

McDonald, John P., Assoc. Prof., Psych.: B.S., Rutgers Univ.; M.A., Seton Hall Univ.; Ph.D., State Univ. of New York at Stony Brook

McElligott, Joseph, Lect., Eng.: B.A., M.A., Lehman Coll.

McKenna, Christine, Lect., Journalism, Comm. & Thtr.: B.A., Univ. of Calif. Berkley; M.S., Columbia Grad. School of Journalism.

McNamee, Abigail S., Prof., Early Childh. & Childh. Ed.: B.A., M.Ed., Westminister Coll.; M.S., M. Phil., Ph.D., CUNY Grad. Center; Ed.D., Univ. of Pittsburgh

McNeil, Cameron L., Asst. Prof., Anthro.: A.B., Occidental Coll.; M.A., Univ. of Conn.; Ph.D., CUNY Grad. Center

Mendelsohn, Richard L., Prof., Philos.: B.A., Cornell Univ.; Ph.D., Mass. Inst. of Tech.

Menéndez, Barbara, Assoc. Prof., Health Sci.: B.A., Univ. of Wisc.; M.P.H., Ph.D., Univ. of Pittsburgh

Mibenge, Chiseche, Assoc. Prof. Pol. Sci.: LL.B., Univ. of Zambia; LL.M., Ph.D., Univ.of Utrecht in the Netherlands

Mifflin, Margot, Assoc. Prof., Engl.: B.A., Occidental Coll.; M.A., New York Univ.

Molnar, Allan, Lect.., Music: B.A., Univ. of Mary, Bismarck. Montano, Francisco, Lect., Lang. & Lit.: B.A., Princeton Univ.; M.A., Indiana Univ.

Montero, Oscar, Prof., Langs. & Lits.: B.A., M.A., Ph.D., Univ. of N. Carolina

Moran, Madeline H., Prof., Soc.: B.A., Barnard Coll.; M.A., Ph.D., Fordham Univ.

Morkoski, Molly, Assoc. Prof., Mus.: B.A., Univ. of N. Carolina; M.A., Indiana Univ.; Ph.D., State Univ. of New York at Stony

Morgan, Brian, Coll. Lab. Tech., Earth, Env. & Geo. Spat. Sci.: B.A., Lehman Coll.

Morrobel-Sosa, Anny, Prof., Chem.: B.Sc., Univ. of Puerto Rico; M.Sc., State Univ. of New York, Stony Brook; Ph.D., Univ. of Southern Calif.

Munch, Janet Butler, Assc. Prof., Libr.: B.A., Mercy Coll.; M.L.S., Pratt Inst.; D.L.S., Columbia Univ.

Munoz, Mañuel, Lect., Soc. Wk.: M.S.W., CUNY Hunter Coll. Muñoz-Millanes, José, Prof., Langs. & Lits.: Ph.D., Johns Hopkins Univ.

Muntzel, Martin, Assoc. Prof., Biol. Sci.: B.S., Lewis & Clark Coll.; M.A., Ph.D., Oregon Health Sci. Univ.

Murillo, Christina, Sr. Coll. Lab. Tech., Biol. Sci.: B.A., Lehman Coll.

Murphy, Brian, Asst. Prof.., Math. & Computer Sci.: B.S., M.S., Lehman Coll.

Murrell, Anthony, *Lect., Econ., & Bus.:* B.S., Lehman Coll.; M.B.A., Univ. of Phoenix; C.P.A., New York State

Nadeem, Shehzad, Asst. Prof., Soc.: B.A., James Madison Univ.; Ph.D., Univ. of Calif. at San Diego

Nathanson, Melvyn B., Prof., Math. & Computer Sci.: B.A., Univ. of Penn.; M.A., Ph.D., Univ. of Rochester

Navarro, Alberto, *Lect., SEEK Advisement and Counsel.:* A.A., New York City Com. Coll.; B.A., M.A., The City Coll. of New York; M.S., Lehman Coll.; Ph.D., New York Univ.

Newman, Zelda, *Asst. Prof., Langs. & Lits.*: B.A., Brooklyn Coll., M.A., Ph.D., Univ. of Mich.

Ngo-Ngijol Banoum, Bertrade B. *Asst. Prof., Afr. & Afr. Am. Studies*: B.A., Univ. of Yaoundé (Cameroon); M.Litt., Univ. of Edinburg (Scotland); Ph.D., Univ. of Essex (Engl.)

Noueihed, Salah, Coll. Lab. Tech., Anthro.: B.A., Lehman Coll. O'Boy, Deirdre, Lect., Eng.: B.A., Pace Univ., M.A., Fordham Univ

O'Connor, Naphtali, *Asst. Prof., Chem.:* B.Sc., State Univ. of New York at Stony Brook; Ph.D., Univ. of Calif.

O'Dowd, Matthew, *Asst. Prof., Phys. & Astron.*: B.A., Ph.D., Univ. of Melbourne.

O'Hanlon, Thomas, Asst. Prof., Journalism, Com. & Theatre: B.A., Fordham Univ.

Pacsi, Alsacia, *Asst. Prof., Nurs.*: B.S., Long Island Univ.; M.S., Coll. of Mount Saint Vincent; D.N.S, CUNY Grad. Cent.

Paget, Timothy, *Prof.*, *Chem.*: Ph.D., Univ. Coll. of Cardiff Pan, Victor, *Dist. Prof.*, *Math. & Computer Sci.*: Ph.D., Moscow State Univ. (Russia)

Pant, Hari, Asst. Prof., Earth, Env. & Geo. Spat. Sci.: B.Sc., Tribhuvan Univ. (Nepal); M.Sc., Univ. of Aberdeen (Scotland); Ph.D., Dalhousie Univ. (Canada).

Peloso, Jeanne, *Asst. Prof., Early Childh. & Childh. Ed.*: B.A., M.Ed., M.A., Ph.D., Boston Coll.

Pérez, Miguel, *Prof., Journalism, Com. & Theatre*: B.A., Florida International Univ.; M.S., Columbia Univ.

Perl, Sondra, *Prof., Engl.*: B.A., Simmons Coll.; M.A., Ph.D., New York Univ.

Petkov, Rossen, Asst. Prof., *Eco. & Bus.*: B.A., Univ. of Rochester; M.P.A., Univ. of Texas at Austin; Ph.D., Univ. of National and World Economy.

Pettipiece, Deirdre, *Prof.*, *Engl.*: B.A., Calif. State Univ., San Bernardino; M.A., Calif. State Univ., Pomona; Ph.D., Arizona State Univ., Tempe.

Phelps, Fred D., *Prof., Psych.*: B.A., M.A., Eastern New Mexico Univ.; Ph.D., Northwestern Univ.

Philipp, Manfred H.W., *Prof., Chem.:* B.S., Mich. Tech. Univ.; Ph.D., Northwestern Univ.

Phillips, Esther R., *Prof., Math. & Computer Sci.*: B.S., Brooklyn Coll.; M.A., Ph.D., New York Univ.

Phillips, Norma K., *Prof., Soc. Wk.*: B.A.; M.S.W., Hunter Coll.; D.S.W., Yeshiva Univ.

Phillips, Ruby, *Asst. Prof., Psych.:* B.A., Pomona Coll.; M.A., Ph.D., Univ. of Ill.

Piccolomini, Manfredi, *Prof., Langs.* & *Lits.:* Laurea, Univ. of Florence (Italy); Ph.D., Harvard Univ.

Pigliucci, Massimo, *Prof. Philos.:* B.A., M.S., Univ. of Rome; Ph.D., Univ. of Ferrara; Ph.D., Univ. of Conn.; Ph.D., Univ. of Tennessee.

Piña-Rosales, Gerardo, *Assoc. Prof., Langs. & Lits.*: B.A., Queens Lehman College Undergraduate Bulletin 2013-2015

Coll.; Ph.D., CUNY Grad. Center.

Pinhasi-Vittorio, Limor, Assoc. Prof., Cslg., Ldrshp., Lit., & Sp. Ed.: M.A., New York Univ.; Ph.D., Hofstra Univ.

Pitts, Wesley, *Asst. Prof., Middle & H.S. Ed.:* B.A., M.A., City Coll. of New York; M.Phil., Ph.D., CUNY Grad. Center.

Pollard, Ryan, *Asst. Prof., Speech-Lang.-Hearing Sci.*: B.A., Univ. of Northern Colorado; Ph.D., Univ. of Colorado.

Porter-Morgan, Holly, Sr. Coll. Lab. Tech., Env., Geog., & Geol. Sci.: B.A., Ohio State; M.A., New York Univ.; Ph.D., CUNY Grad. Center.

Prince, Penny, *Asst. Prof., Mus.*: B.M., M.M., Manhattan School of Mus.; Ph.D., New York Univ.

Prohaska, Vincent, *Assoc. Prof., Psych.:* B.S., Adelphi Univ.; Ph.D., Univ. of Chicago.

Qian, Gaoyin, *Prof.*, *Cslg.*, *Ldrshp.*, *Lit.*, & *Sp. Ed.*: B.A., East China Norman Univ.; M.A., Shanghai International Studies Univ.; M.S.Ed., Southwest Missouri Univ.; Ph.D., Univ. of Georgia.

Quinby, Lee, *Dist. Lect., Engl.*: B.A., Univ. of North Florida; M.A., Ph.D., Purdue Univ.

Raaum, Ryan, *Asst. Prof. Anthro.:* B.S., Univ., of Calgary; M.A., M.Phil., Ph.D., New York Univ.

Rachlin, Joseph W., *Prof., Biol. Sci.:* B.S., The City Coll. of New York; M.S., Ph.D., New York Univ.

Redenti, Stephen, *Asst. Prof., Biol. Sci.*: B.S., Southern Connecticut State Univ.; M.A., Ph.D., Hunter Coll.

Reid, Anne, *Assoc. Prof., Psych.*: B.S., Univ. of Toronto; M.A., Ph.D.,CUNY Grad. Center.

Rénique, José Luis, *Assoc. Prof., Hist.:* B.A., Universidad Católica del Perú; Ph.D., Columbia Univ.

Renshon, Stanley A., *Prof., Pol. Sci.*: B.A., Rutgers Univ.; M.A., American Univ.; Ph.D., Univ. of Penn.

Rice, Anne, *Asst. Prof., Afr. and Afr. Am. Studies*: A.B., Smith Coll., M.A., Lehman Coll., Ph.D., CUNY Grad. Center.

Richards, John L., *Assoc. Prof., Chem.:* B.S., Yale Univ.; Ph.D., Univ. of Chicago

Ricourt, Milagros, Assoc. Prof., Lat. Amer. & Puerto Rican Studies: B.A., Universidad Autonoma de Santo Domingo; M.A., Univ. of Florida; Ph.D., CUNY Grad. Center.

Rivera, Elaine, Dist. Lect. Journalism, Comm. & Thtr.: B.A., Kent State Univ.

Rivera-McCutchen, Rosa, *Asst. Prof., Cslg., Ldrshp., Lit., & Sp. Ed.*: B.A., Univ. of Rochester; M.A., Univ. of Rochester; Ph.D., New York Univ.

Roberts, Laura, Asst. Prof., Cslg., Ldrshp., Lit., & Sp. Ed.: B.S., Indiana Univ. of Penn.; M.S., Baruch Coll.; M.S. Mercy Coll.; Ph.D., Univ. of Mich.

Robertson, Andrew W., *Assoc. Prof., Hist.*: B.A., Franklin and Marshall Coll.; Ph.D., Oxford Univ.

Robinson, Ivreen, *Asst. Prof., Nurs.:* A.D., Univ. of West Indies; B.S., M.S., Coll. of New Rochelle; Ph.D., Walden Univ.

Rodiguez, Ada, *Lect., Econ. & Bus.*: B.S., Lehman Coll.; M.B.A., Columbia Univ.

Rodríguez, M. Victoria, Asst. Prof., Early Childh. & Childh. Ed:

B.A., Univ. of Barcelona; M.A., The City Coll. of New York; Ed.D., Teachers Coll., Columbia Univ.

Rofrano, Frances, Asst. Prof., Early Childh. & Childh. Ed.: B.S., Seton Hall Univ.; M.S. Ed., State Univ. of New York at New Paltz; Ed.D., Teachers Coll., Columbia Univ.

Roh, Chul-Young, Assoc. Prof., Health Sci.: B.A., M.A., InHa Univ., Korea; M.P.A., New York Univ.; Ph.D., Univ. of Colorado.

Rosen, Marjorie, Assoc. Prof., Journalism, Com., & Theatre: B.A., Univ. of Mich.; M.S., New York Univ.

Rosenberg, Lynn, Lect., Speech-Lang.-Hearing Sci.: B.S., M.S., Buffalo State Coll.

Rosholt, Rhys, Lect., Math. & Computer Sci.: A.A., Miss. Gulf Coast Jr. Coll.; B.A., M.S., Lehman Coll.

Ross, Alexandra, Asst. Prof., Early Childh. & Chldh. Ed.: B.A., Skidmore Coll.; M.A., M.Ed., Ed.D., Teachers Coll., Columbia Univ.

Ross, Marshall, Lect., Econ. & Bus.: B.S., Hunter Coll.; M.B.A., Long Island Univ.; C.P.A., New York State

Rota-Donahue, Christine, Lect., Speech-Lang.-Hearing Sci.: M.S., Hunter Coll.; Dual Certification, Hofstra Univ.

Rothstein, Anne L., Dir. of School/Coll. Collaboratives and Prof., Early Childh. & Childh. Ed.: B.S., Brooklyn Coll.; M.A., Ed.D., Teachers Coll., Columbia Univ.

Ruiz, Philip Anthony, Lect., Journalism, Com., & Theatre: B.A., Fordham Univ.; Cert., Film Prod., New York Univ.; M.A., New York Univ.

Rupp, Stephanie, Asst. Prof., Anthro.: A.B., Dartmouth Coll.; M.Ed., Harvard Univ.; M.Phil., Ph.D., Yale Univ.

Saccamano, Scott, Asst., Prof., Nurs.: B.A., Adelphi Univ.; B.S.N. The City Coll. of New York; M.S.N., Hunter Coll.; Ph.D., Seton Hall Univ.

Saen-de-Casas, Maria del Carmen, Assoc. Prof., Langs. & Lits.: B.A., Univ. Seville, Spain; M.A., Univ. of Michigan; Ph.D., CUNY Grad. Center.

Sailor, Kevin, Assoc. Prof., Psych.: B.A., Univ. of Calif. at Berkeley; M.A., Ph.D., Univ. of Ill.

Salamandra, Christa, Assoc. Prof., Anthro.: B.A., M.A., New York Univ.; D. Phil., Univ. of Oxford.

Samuel, Lalitha, Asst., Prof., Health Sci.: B.S., Delhi Univ.; M.S., Ph.D., G.B., Pant Univ.

Sanders, Deborah, Lect., Econ. & Bus.: B.S., Univ. of Delaware; M.B.A., Columbia Univ.

Sanford, Victoria, Prof., Anthro.: B.A., Calif. State Univ. at Sacramento; M.A., San Franc. State Univ.; A.M., Ph.D., Stanford

Sankaran, Renuka, Asst. Prof., Biol. Sci.: B.Sc., M.Sc., Univ. of Madras, India; M.S., Ph.D., Southern Illinois Univ.

Sapadin, Rosa, Lect., Nurs.: B.S., M.S., Lehman Coll.

Saravia-Shore, Marietta, Assoc. Prof., Early Childh. & Childh. Ed.: B.A., Barnard Coll.; M.A., New School for Soc. Research; M.A., Teachers Coll., Columbia Univ.; M.Phil., Ph.D., Columbia Univ.

Sauane, Moira, Asst. Prof., Biol. Sci.: M.S.c., Ph.D., National University of Bueno Aires.

Scheetz, Linda, Assoc. Prof., Nurs.: B.S.N., Trenton State Coll.; M.A., New York Univ.; Ed.D., Columbia Univ., Teachers Coll.

Schlesinger, Kenneth, Chief Librarian & Prof.: B.A., Univ.of Calif. at Berkely; M.F.A., Yale Univ.; M.L.S., Pratt Inst.

Schmidt, Tyler, Asst. Prof., Engl.: B.S., Univ. of Wisc. at Madison; M.A., Teachers Coll., Columbia Univ.; Ph.D., CUNY Grad. Center.

Schneider, Robert B., Asst. Prof., Math. & Computer Sci.: B.S., Mass. Inst. of Tech.; Ph.D., Stanford Univ.

Schroder, Barbara, Asst. Prof., Middle & H.S. Ed.: M.A., New York Univ.; Ph.D., Rutgers Univ.

Schwartz, Gary S., Dir., Macaulay Honors Coll. at Lehman Coll., Lehman Scholars Prog., and Prof., Langs. & Lits.: A.B., Columbia Coll.; B.A., M.A., Jesus Coll., Cambridge Univ.; Ph.D., Columbia Univ.

Schwittek, David, Coll. Lab Tech., Art: B.A., State Univ. of New York at New Paltz; M.F.A., Parsons School of Design.

Seiger-Gardner, Liat, Assoc. Prof., Speech-Lang.-Hearing Sci.: B.A., Tel-Aviv Univ.; M.A., Queens Coll.; Ph.D., CUNY Grad. Center

Sembenu, Sekhem, Lect. Econ. & Bus.: B.A., M.A., Ph.D., Columbia Univ.

Senreich, Evan, Asst. Prof., Soc. Wk.: B.A., D.D.S., M.S.W., Ph.D., New York Univ.

Seplowin, Charles J., Assoc. Prof., Art: B.F.A., New Hampshire Univ.; M.F.A., Rhode Island School of Design.

Sharav, Itzhak, Prof., Econ. & Bus.: B.A., New School for Soc. Research; M.B.A., Baruch Coll.; Ph.D., CUNY Grad. Center; C.P.A., New York State.

Shockett, Bernard, Prof., Mus.: B. Mus., Manhattan School of Mus.; M.A., Brooklyn Coll.; Ph.D., New York Univ.

Shreiber, Chanoch, Prof., Econ. & Bus.: LL.B., Hebrew Univ. (Israel); LL.M., Ph.D., Columbia Univ.

Skolnik, Janet, *Lect., Art:* B.A., Brooklyn Coll.; M.F.A., Pratt Inst. Sloan, Heather, Assoc. Prof., Earth, Env. & Geo. Spat. Sci.: B.Sc., State Univ. of New York at Albany; M.A., Univ. of Calif. at Santa Clara; Ph.D., Univ. of Paris 6.

Slugocki, Lillian, Lect., Engl.: B.A., Florida Atlantic Univ.; M.A., New York Univ.

Smith, Constance Joye, Asst. Prof., Middle and H.S. Ed.: B.S., Univ. of N. Carolina; M.A., Ed.D., Teachers Coll., Columbia Univ.

Smith Gabig, Cheryl, Asst. Prof., Speech-Lang.-Hearing Sci.: B.S., Miami Univ.; M.S., Emerson Coll.; Ph.D., Univ. of Conn.

Soetart, Susan, Coll. Lab. Tech., Journalism, Com. & Thtr: B.S., Univ. of Kansas; M.A., New York Univ.

Sokol, Marilyn, Dist. Lect., Journalism, Com., & Theatre: B.A., New York Univ.

Sormani, Christina, Prof., Math. & Computer Sci.: B.A., New York Univ.; Ph.D., Courant Inst. of Mathematical Sci.

Soto, Adelaide, Lect., Libr.: B.A., Lehman Coll.; M.L.I.S., Long Island Univ.

Spear, Thomas, Prof., Langs. & Lits.: B.A., Lawrence Univ.; M.A., Univ. of Calif. at Santa Barbara; Ph.D., New York Univ.

Spence, Naomi, Asst. Prof., Soc.: B.A., Univ. of New Orleans; M.S.,

Lehman College Undergraduate Bulletin 2013-2015

Ph.D., Florida State Univ.

Spencer, Robyn C., Asst. Prof., History: B.A., State Univ. of New York at Binghamton; M.A., M.Phil., Ph.D., Columbia Univ.

Stefan, Vincent H., Assoc. Prof., Anthro.; B.A., Univ. of Wyoming.; M.S., Ph.D., Univ. of New Mexico.

St. John, Katherine, Prof., Math. & Computer Sci.: B.A., Smith Coll.; M.A., Johns Hopkins Univ.; Ph.D., Univ. of Calif. at Los Angeles.

Sullivan, David, Assoc. Prof. Journalism, Comm. & Thtr.: B.A., Providence Coll.; M.A., Brown Univ.; M.A.T., M.F.A., Boston

Sutliff, Robert, Higher Ed. Assoc., Math. & Computer Sci.: B.A., Queens Coll.; M.A., City Univ. of New York Grad. Center.

Szabo, Zoltan, Prof., Math. & Computer Sci.: Ph.D., Szeged Univ. (Hungary)

Tallier, Peggy, Asst. Prof., Nurs.: B.S., Kean Coll.; M.P.A, Fairleigh Dickinson Univ.; Ed.D., Teachers Coll., Columbia Univ.

Tananbaum, Duane, Assoc. Prof., Hist.: B.A., Cornell Univ.; M.A., M.Phil., Ph.D., Columbia Univ.

Tauber, Linda, Lect., Econ. & Bus.: B.A., New York Univ.; M.B.A., Baruch Coll.; C.P.A., Texas.

Tegeder, Dannielle, Assoc. Prof., Art: B.F.A., State Univ. of New York at Purchase; M.F.A., Art Institute of Chicago.

Tesoro, Mary Gay, Lect., Nurs.: A.A.S., Queensborough Comm. Coll.; B.A., M.S., Lehman Coll.

Tilley, Janette, Assoc. Prof., Mus.: B. Mus., M.A., Univ. of British Columbia; Ph.D., Univ. of Toronto.

Tiryaki-Sonmez, R. Gul, Assoc. Prof., Health Sci.: B.S., Gazi University (Turkey); M.S., Oklahoma State Univ.; Ph.D., Univ. of New Mexico

Tobias, Alice, Assoc. Prof., Health Sci.: B.S., Ohio State Univ.; M.S., Ed.D., Teachers Coll., Columbia Univ.

Tochika, Asako, Lect., Langs. And Lits.: B.A., Lehman Coll., M.A., Columbia Univ.

Torres, Andrés, Dist. Lect., Lat. Amer. & Puerto Rican Studies: B.B.A., Manhattan Coll.; M.A., New York Univ.; Ph.D., The New School.

Totti, Xavier, Lect., Lat. Amer. & Puerto Rican Studies: B.A., Univ. of Puerto Rico; M.A., Hunter Coll.; M.Phil., CUNY Grad.

Towery, Terry, Assoc. Prof., Art: B.S., Florida State Univ.; M.F.A., Univ. of Florida.

Trimboli, Steven J., Sr. Coll. Lab. Tech., Biol. Sci.: B.A., Lehman Coll.

Tree, Susan, Lect., Health Sci.: B. Pharm., M.Sc., Chelsea Coll., Univ. of London; M.S., New York Univ.; Ed.D., Teachers Coll., Columbia Univ.

Troy, Robert, Prof., Chem.: B.S., Univ. of Hartford; Ph.D., Purdue Univ.

Tsui, Emma, Asst. Prof., Health Sci.: B.A., Yale Coll.; M.P.H., Ph.D., Johns Hopkins.

Valentine, Robert T., Lect., History: B.A., The Citadel; M.A., Fordham Univ.; Ph.D., Univ. of S. Carolina.

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Valgemae, Mardi, Prof., Engl.: B.A., Rutgers Univ.; Ph.D., Univ. of Calif. at Los Angeles

Van Voorhis, Lynne, Lect., Langs. & Lits.: A.B., Hunter Coll.; M.A., Middlebury Coll.; M.Phil., Columbia Univ.; J.D., Brooklyn Law School

Velasco-Whetsell, Martha, Assoc. Prof., Nurs.: B.S.N., M.S., Ph.D., Univ. of South Carolina.

Villafane, Alicia, Lect., SEEK Advisement and Couns.: A.B., Hunter Coll.; M.S.Ed., Richmond Coll.

Voge, Susan, Assoc. Prof., Libr.: B.A., Brooklyn Coll.; M.S.L.S., Columbia Univ.; M.B.A., Fordham Univ.

Wallace, Edwin, D., Higher Ed. Asst., Libr.: A.A., Queensborough Community Coll.; B.A., Hunter Coll.; M.L.S., M.F.A., Queens

Warde, Bryan, Asst. Prof., Soc. Wk.: B.S., York Coll.; M.S.W., Columbia Univ.; Ph.D., CUNY Grad. Center

Waring, Elin, Prof., Soc.: B.A., Swarthmore Coll.; M.A., Ph.D., Yale Univ.

Washington, Valerie M., Assoc. Prof., Early Childh. & Childh. Ed.: A.B., M.S., Hunter Coll.; Ed.D., Univ. of Mass.

Watson, Karl, Sr. Coll. Lab. Tech., Music: B.A., Univ. of Rhode Island; M.A.T., Lehman Coll.

Watson, James, Asst. Prof., Libr.: B.S., State Univ. of New York at Albany; M.S., Long Island Univ.; M.P.S., New York Univ.

Watson-Turner, Susan, Asst. Prof., Journalism, Com. & Theatre: B.F.A, Ohio Univ., M.F.A., Columbia Univ.

West, Joyce F., Assoc. Prof., Speech-Lang.-Hearing Sci.: B.S., Central Mich. Univ.; M.A., Ohio State Univ.; Ph.D., Univ. of

Whittaker, Robert T., Prof., Journalism, Com., & Theatre: B.A., M.A., Ph.D., Indiana Univ.

Wilder, Esther, Prof., Soc.: B.A., Univ. of Mass. at Amherst; M.A., Ph.D., Brown Univ.

Williams-Gray, Brenda, Asst. Prof., Soc. Wk.: B.S.W., Adelphi Univ.; M.S.W., Fordham Univ.; D.S.W., CUNY Grad. Center.

Windbiel, Robert, CLT, Mus.: B.S., M.A.T., Lehman Coll.

Wooldridge, William, Asst. Prof., History: B.A., Swarthmore Coll.; M.A., Univ. of Washington; Ph.D., Princeton Univ.

Wunder, Amanda, Asst. Prof., History: B.A., Wesleyan Univ.; M.A., Ph.D., Princeton Univ.

Wurtzel, Eleanore, Prof., Biol. Sci.: B.S., Ph.D., State Univ. of New York at Stony Brook.

Yard, Margaret, Asst. Prof., Nurs.: B.S. Columbia Univ.; M.S., Long Island Univ.; M.S., Hunter Coll.; M.A., M.S., Ph.D., CUNY Grad. Center.

Yates, Suzanne, Assoc. Prof., Psych.: B.A., State Univ. of New York at New Paltz; M.A., Ph.D., Univ. of Calif. at Santa Cruz.

Yavuz, Devrim, Lect., Soc.: B.S., Middle East Technical Univ., Ankara, Turkey; M.A., Ph.D., McGill Univ., Montreal, Canada.

Yood, Jessica, Assoc., Prof., Engl.: B.A., Barnard Coll., Columbia Univ.; Ph.D., State Univ. of New York at Stony Brook.

Young, Thomas P., Asst. Prof., Chem.: B.A., Univ. of Calif. at Santa Cruz; M.S., Ph.D., Stanford Univ.

Zakin, Andrea, Asst. Prof., Early Childh. & Childh. Ed.: B.A., Earlham Coll.; M.A., Hunter Coll.

Zarin, Eve, Lect., Engl.: A.B., Swarthmore Coll.; A.M., Columbia

Zheng, Zhi-Liang, Assoc. Prof., Biol. Sci.: Ph.D., Ohio State Univ.; Postdoc., Univ. of Calif. at Riverside

Zuss, Mark, Assoc. Prof., Cslg., Ldrshp., Lit. & Sp. Ed.: B.A., Empire State Coll., State Univ. of New York; M.A., Ph.D., CUNY Grad. Center.

Emeriti

Allman, Eileen, Assoc. Prof. Emer., Engl.: A.B., Hunter Coll.; M.A., Ph.D., Syracuse Univ.

Backer, Barbara, Prof. Emer., Nurs.: B.S., Keuka Coll.; M.S., Univ. of Rochester; M.A., New York Univ.; D.S.W., CUNY Grad Center

Bady, David M., Assoc. Prof. Emer., Engl.: A.B., Columbia Coll.; A.M., Ph.D., Columbia Univ.

Bailey, Nathalie, Assoc. Prof., Engl.: M.A., Hunter Coll.; Ph.D., City Univ. of New York Grad. Center

Bank, Stanley, Prof. Emer., Secondary, Adult, and Business Ed.: A.B., Clark Univ.; M.A., Ph.D., Columbia Univ.

Basile, Dominick V., Prof., Emer., Biol. Sci.: B.S., Manhattan Coll.; M.A., Ph.D., Columbia Univ.

Bastos, María L., Prof. Emer., Rom. Lang.: B.A., Escuela Normal, Buenos Aires; M.A., Univ. of Buenos Aires; Ph.D., Univ. of La Plata, Argentina

Baumgarten, Reuben L., Prof. Emer., Chem.: B.S., The City Coll. of New York; M.S., Ph.D., Univ. of Michigan

Beaton, Sarah, Assoc. Prof. Emer., Nurs.: B.S., Fairleigh Dickinson Univ.; M.A., Ph.D., New York Univ.

Berger, Charles, Prof., Math & Computer Sci.: B.E., Ph.D., Cornell

Bergman, Edward F., Prof. Emer., Geol. & Geog.: B.A., Univ. of Wisconsin; M.A., Ph.D., Univ. of Washington

Bermel, Albert, Prof. Emer., Speech & Theatre: B.Sc., London Schl. of Econ.

Beye, Charles R., Dist. Prof. Emer., Langs. and Lits.: B.A., State Univ. of Iowa; M.A., Ph.D., Harvard Univ.

Bitton-Jackson, Livia E., Prof. Emer., Class., Orient., Germ., & Slav. Lang.: B.A., Brooklyn Coll.; M.A., Ph.D., New York Univ.

Blecher, George, Assoc. Prof. Emer., Engl.: A.B., Harvard Univ.

Blum, Antoinette, Prof. Emer., Langs. & Lit.: A.B., Univ. of California, Berkeley; Ph.D., Yale Univ.

Boissevain, Ethel W., Assoc. Prof. Emer., Anthro.: A.B., Vassar Coll.; Ph.D., Univ. of Prague

Borodkin, Thelma, Assoc. Prof. Emer., Acad. Skills/SEEK: B.A., Brooklyn Coll.; M.A., New York Univ.; Ph.D., Union Grad. Schl.

Bradley, A. Day, Prof. Emer., Math. & Computer Sci.: A.B., Penn. State Univ.; A.M., Teachers Coll., Columbia Univ.; Ph.D., Columbia Univ.

Bronstein, Arthur J., Prof. Emer., Speech & Theatre: B.A., The City Coll. of New York; M.A., Columbia Univ.; Ph.D., New York Univ.

Bronzaft, Arline L., Prof. Emer., Psych.: A.B., Hunter Coll.; M.A., Ph.D., Columbia Univ.

Bruni, James V., Prof. Emer., Early Childh. & Childh. Ed.: A.B., Columbia Coll.; M.A., Ed.D., Teachers Coll., Columbia Univ.

Bucchioni, Eugene, Prof. Emer., Early Childh. & Elem. Ed.: B.A., M.A., Queens Coll.; Ph.D., New School for Soc. Research

Bush, Robert B., Prof. Emer., Engl.: A.B., Princeton Univ.; M.A., Columbia Univ.; Ph.D., Univ. of Iowa

Carnicelli, Domenick D., Prof. Emer., Engl.: B.A., Brooklyn Coll.; M.A., Ph.D., Columbia Univ.

Cavalchini, Mariella, Assoc. Prof. Emer., Rom. Lang.: Laurea di Dottore in Materie Letterarie, Univ. of Rome; Ph.D., New York Univ.

Corbin, George A., Prof., Art: B.A., Oakland Univ.; M.A., Bucknell Univ.; M.A., Ph.D., Columbia Univ.

Costinescu, Gheorghe, Prof. Emer., Mus.: M.S., Bucharest Mus. Conservatory; Post Grad. Diploma, Juilliard School of Music; Ph.D., Columbia Univ.

Danzger, M. Herbert, Prof., Soc.: B.A., Yeshiva Univ.; M.A., Ph.D., Columbia Univ.

Davis, Allan, Prof. Emer., Mus.: B. Mus., M. Mus., Syracuse Univ. Dayan, Jean, Prof. Emer., Chem.: B.A., Brooklyn Coll.; M.S., Ohio State Univ.; Ph.D., Columbia Univ.

DellaCava, Frances A., Dir. of Adult Degree Prog. and Asst. Prof., Soc. & Soc. Wk.: A.B., Hunter Coll.; M.A., Columbia Univ.; Ph.D., Fordham Univ.

DeMinco, Sandrea, Assc. Prof., Libr.: B.A., State Univ. of New York at Oneonta; M.A., Hunter Coll.; M.S.L., C.W. Post Coll. of Long Island Univ.

Diamond, Harold, Prof. Emer. (Active), Mus. Librarian: B.A., Hunter Coll.; M.S., Columbia Univ.; M.A., New York Univ.

DiBennardo, Robert, Prof. Emer., Anthro.: A.B., M.A., Hunter Coll.; Ph.D., CUNY Grad. Center

Dickman, Ronald, Prof. Emer., Phys. & Astron.: B.A., Hunter Coll.; Ph.D., Univ. of Texas

DiGennaro, Joseph, Prof. Emer., ExSL: A.B., Hunter Coll.; M.S., Univ. of Illinois; Ed.D., Teachers Coll., Columbia Univ.

Donleavy, Mary Rita, Prof. Emer., Sp. Serv. In Ed.: A.B., A.M., Hunter Coll.; Ph.D., Fordham Univ.

Donnelly, Margaret E., Assoc. Prof. Emer., Soc. & Soc. Wk.: B.A., Russell Sage Coll.; M.A., Ph.D., Fordham Univ.

Dougherty, Charles M., Assoc. Prof. Emer., Chem.: A.B., Williams Coll.; Ph.D., Pennsylvania State Univ.

Downs, Frederick, Prof. Emer., Chem.: A.B., Hunter Coll.; M.S., Ph.D., New York Med. Coll.

Duberman, Martin B., Dist. Prof. Emer., Hist.: B.A., Yale Univ.; M.A., Ph.D., Harvard Univ.

Dubler, Walter, Assoc. Prof. Emer., Engl.: B.A., Yeshiva Univ.; M.A., Tulane Univ.; Ph.D., Harvard Univ.

Ebel, Harvey C., Assoc. Prof. Emer., ExSL: B.A., The City Coll. of New York; M.S., Ph.D., Penn. State Univ.

Edel, Wilbur, Prof. Emer., Pol. Sci.: B.S., New York Univ.; A.M., Ph.D., Columbia Univ.

Elftman, Alice G., Prof. Emer., Biol. Sci.: A.B., New York State Coll. for Teachers; A.M., Ph.D., Cornell Univ.

Engelke, Charles E., Assoc. Prof. Emer., Phys. & Astron.: B.S., Queens Coll.; M.A., Ph.D., Columbia Univ.

Fitting, Melvin C., Prof., Math. & Computer Sci.: B.S., Rensselaer Polytech. Inst.; M.S., Ph.D., Yeshiva Univ.

Fleischer, Michael M., Prof. Emer., ExSL: B.S., The City Coll. of New York; M.A., Ed.D., Teachers Coll., Columbia Univ.

Fletcher, Angus, Dist. Prof. Emer., Engl.: B.A., Yale Univ.; Dipl. d'Etudes, Univ. of Grenoble (France); M.A., Yale Univ.; Ph.D., Harvard Univ.

Flint, Shirley H., Assoc. Prof. Emer., Early Childh. & Elem. Ed.: B.A., New York Univ.; M.A., Hunter Coll.; Ed.D., Teachers Coll., Columbia Univ.

Frankel, Edward, Prof. Emer., Early Childh. & Elem. Ed.: B.S., The City Coll. of New York; M.A., Columbia Univ.; Ph.D., Yeshiva Univ.

Freedman, Philip I., Prof. Emer., Secondary, Adult, and Bus. Ed.: B.S.S., City Coll. of New York; M.A., Ph.D., Columbia Univ.

Fuchs, Morton, Assoc. Prof. Emer., Phys. & Astron.: B.S.E.E., City Coll. of New York; Ph.D., Univ. of Mich.

Galli, Nicholas A., Prof., Health Sci.: B.S., M.S., Brooklyn Coll.; Ph.D., Univ. of Illinois

Gavurin, Edward I., Prof. Emer., Psychol.: B.A., Brooklyn Coll.; M.A., Ph.D., New York Univ.

Geehern, Margaret K., Assoc. Prof. Emer., Phys. & Astron.: B.S., M.S., Ph.D., Fordham Univ.

Gillespie, John R., Prof. Emer., Phys. & Astron.: B.S., Univ. of Rochester; Ph.D., Univ. of Calif. of Berkeley

Gitterman, Martin, Prof., Speech-Lang.-Hearing Sci.: B.A., Hunter Coll.; M.A., Lehman Coll.; Ph.D., CUNY Grad. Center

Goldfarb, Robert, *Prof. Emer.*, *Speech-Lang.-Hearing Sci.*: B.A., M.S., Brooklyn Coll.; Ph.D., CUNY Grad. Center

Goodwin, M. Beatrice, Prof. Emer., Nurs.: B.S.N., Vanderbilt Univ.; M.A., Ph.D., New York Univ.

Gottesfeld, Harry, Prof. Emer., Psych.: B.A., Brooklyn Coll.; Ph.D., New York Univ.

Gottsegen, Gloria Behar, Prof. Emer., Sp. Serv. in Ed.: B.A., New York Univ.; M.A., The City Coll. of New York; Ph.D., New York

Griffin, Alice, *Prof. Emer., Engl.:* A.B., George Wash. Univ.; A.M., Ph.D., Columbia Univ.

Guelich, Ernestine D., Assoc. Prof. Emer., Engl.: A.B., Hunter College; A.M., Columbia Univ.; Ph.D., Fordham Univ.

Guthwin, Hyman, Assoc. Prof. Emer., Biol. Sci.: B.A., M.S., Ph.D., New York Univ.

Haas, Ann Pollinger, Prof. Emer., Health Serv.: B.A., Wheeling Coll.; M.A., Ph.D., Fordham Univ.

Haboucha, Reginetta, Prof. Emer., Rom. Lang.: B.A., Queens Coll.; M.A., Ph.D., Johns Hopkins Univ.

Hammond, Dorothy, Assoc. Prof. Emer., Biol. Sci.: A.B., Wellesley Coll.; A.M., Ph.D., Columbia Univ.

Hannes, Martin, Assoc. Prof. Emer., Psych.: B.S., The City Coll. of Lehman College Undergraduate Bulletin 2013-2015

New York; M.A., Ph.D., Columbia Univ.

Harris, Gilbert J., Assoc. Prof. Emer., Psychol.: B.S., The City Coll. of New York; Ph.D., State Univ. of New York at Buffalo

Hayden, Seymour, Prof. Emer., Math. & Computer Sci.: B.A., Univ. of Wisconsin; M.A., Ph.D., Harvard Univ.

Herdt, Beryl, Prof. Emer., ExSL: A.B., M.S., Hunter Coll.; Ph.D., St. John's Univ.

Hoffmann, Ursula F., Assoc. Prof. Emer., Langs. & Lits.: A.B., Smith Coll.; M.A., Ph.D., Yale Univ.

Hughes, Charles W., Prof. Emer., Mus.: B.S., M.A., Ph.D., Columbia Univ.

Humpherys, Anne, Prof., Engl.: B.A., Stanford Univ.; M.A., Ph.D., Columbia Univ.

Isaac, Richard E., Prof. Emer., Math. & Computer Sci.: B.A., Cornell Univ.; Ph.D., Univ. of Calif. at Berkeley

Isaacs, Godfrey, Prof. Emer., Math & Computer Sci.: B.S., M.S., Univ. of Capetown; Ph.D., Univ. of London

Jackson, Joseph L., Assoc. Prof. Emer., Acad. Skills/SEEK: B.S., N Carolina Agric. & Tech. Univ.; M.S.W., Adelphi Univ.; Ed.D., Univ. of Mass.

James, Alice G., Assoc. Prof. Emer., Anthro.: A.B., Hunter Coll.; M.A., Ph.D., Columbia Univ.

Jensen, Thomas E., Prof., Biol. Sci.: B.A., Wartburg Coll.; M.A., Dakota State Univ.; Ph.D., Iowa State Univ.

Johnston, Helen, Assoc. Prof. Emer., Chem.: B.S., Howard Coll.; Ph.D., Columbia Univ.

Jones, C. Robert, Prof. Emer., Biol. Sci.: B.S., Univ. of Scranton; M.S., Ph.D., Fordham Univ.

Judd, Jacob, Prof. Emer., Hist.: A.B., M.A., Ph.D., New York Univ. Kay, Ulysses, Dist. Prof. Emer., Mus.: B.A., Univ. of Arizona; M. Mus., Eastman School of Mus.

Kravitt, Edward F., Prof. Emer., Mus.: A.B., A.M., Ph.D., New York Univ.

Kane, Margaret O'Shea, Prof. Emer., Bus. Ed.: A.B., Hunter Coll.; A.M., Ed.D., New York Univ.

Kearns, Francis E., *Prof. Emer., Engl.*: A.B., New York Univ.; M.A., Univ. of Chicago; Ph.D., Univ. of N. Carolina

Kiesler, Rose, Assoc. Prof. Emer., Geol. & Geog.: B.A., Hunter Coll.; M.A., Columbia Univ.

Kligerman, Jack M., Prof. Emer., Engl.: B.A., M.A., Syracuse Univ.; Ph.D., Univ. of Calif. at Berkeley

Knehr, Charles A., Prof. Emer., Psych.: A.B., A.M., Ph.D., Columbia Univ.

Kravetz, Nathan, Prof. Emer., Early Childh. & Elem. Ed.: B.Ed., M.A., Ed.D., Univ. of Calif. at Los Angeles

Laderman, Julian D., Assoc. Prof., Math. & Computer Sci.: B.A., M.S., Ph.D., New York Univ.

Lagos, Maria, Assoc. Prof. Emer., Anthro.: B.A., M.A., M.Phil., Ph.D., Columbia Univ.

Lahey, Miriam P., Assoc. Prof. Emer., Health Serv.: B.A., Mt. St. Vincent Univ., Halifax; Ed.M., Ed.D., Teachers Coll., Columbia Univ.

Lampen, Dorothy, Prof. Emer., Econ., Acct., & Bus. Adm.: A.B., Carleton Coll.; Ph.D., Johns Hopkins Univ.

LaRuffa, Anthony L., Prof. Emer., Anthro.: B.A., The City Coll. of New York; M.A., Ph.D., Columbia Univ.

Lavin, David E., Prof., Soc.: B.A., Colby Coll.; M.A., Ph.D., New York Univ.

Lebowitz, Aaron, Assoc. Prof. Emer., Math. & Computer Sci.: A.B., A.M., Ph.D., Yeshiva Univ.

Lehmann, Margaret Grennan, Prof. Emer., Engl.: A.B., Hunter Coll.; A.M., Ph.D., Columbia Univ.

Levi, Howard, Prof. Emer., Math. & Computer Sci.: B.A., Ph.D., Columbia Univ.

Lewittes, Joseph, Prof., Math. & Computer Sci.: B.A., M.A., Ph.D., Yeshiva Univ.

Losada, Luis A., Prof. Emer., Langs. and Lits.: A.B., Hunter Coll.; M.A., Ph.D., Columbia Univ.

Lundberg, Robert, *Prof. Emer.*, *Second.*, *Adult, and Bus. Ed.:* B.Ed., Wisc. State Coll.; M.A., Ed.D., Teachers Coll., Columbia Univ.

McKenna, Anna Brohmer, Prof. Emer., Art: A.B., Hunter Coll.; A.M., Columbia Univ.

McLaughlin, Andrew C., Prof. Emer., Philos.: B.A., Union Coll.; Ph.D., State Univ. of New York at Buffalo

Mencher, Joan P., Prof. Emer., Anthro.: B.A., Smith Coll.; Ph.D., Columbia Univ.

Messing, Janet K., Prof. Emer., Econ., Acct., & Bus. Adm.: A.B., Hunter Coll.; M.S., Columbia Univ.; Ph.D., New York Univ.; C.P.A., New York State

Meyer, Paul R., Prof. Emer., Math. & Computer Sci.: B.A., Dartmouth Coll.; M.S., Thayer School of Engr.; M.A., Ph.D., Columbia Univ.

Meyer, Ursula, Prof. Emer., Art: B.A., New School for Soc. Research; M.A., Columbia Univ.

Meyersohn, Rolf B., Prof. Emer., Soc. & Soc. Wk.: B.A., Harvard Coll.; M.A., Ph.D., Columbia Univ.

Moffitt, Brenda P., Assoc. Prof., Biol. Sci.: B.Sc., Bedford Coll. (U.K.); M.Sc., Univ. Coll., Univ. of London; Ph.D., Columbia Univ.

Morgan, Kathleen E., Prof. Emer., Langs. & Lits.: B.A., Stanford Univ.; M.A., M.Phil., Ph.D., Yale Univ.

Morgan-Cato, Charlotte T., Assoc. Prof. Emer., Black Studies: B.A., Univ. of Chicago; M.I.A., Columbia Univ.; M.Ed., Ed.D., Teachers Coll., Columbia Univ.

Movesian, George, Prof. Emer., Early Childh. & Elem. Ed.: B.A., Univ. of Buffalo; M.S., Ed.D., State Univ. of New York at Buffalo

Murgatroyd, Dorothy, Assoc. Prof. Emer., Psych.: B.A., Barnard Coll.; M.A., Ph.D., Univ. of Penn.

Murphy, Daniel B., Prof. Emer., Chem.: B.S., M.S., Fordham Univ.; Ph.D., Penn. State Univ.

Newman, Charlotte, Assoc. Prof. Emer., Biol. Sci.: A.B., A.M., Univ. of Mich.; A.M., Ph.D., Radcliffe Coll.

Norris, Nilan, Prof. Emer., Econ., Acct., & Bus. Adm.: A.B., A.M., Ph.D., Stanford Univ.

Ostrow, Rona, Prof. Emer., Chief Lib.: B.A., City Coll. of New York; M.S.L.S., Columbia Univ.; M.A., Hunter Coll.; Ph.D., Rutgers Univ.

Patti, Anthony V., Prof. Emer., Second., Adult, and Bus. Ed.: B.S., M.A., New York Univ.; Ed.D., Teachers Coll., Columbia Univ.

Phillips, Esther R. Prof. Emer., Math. & Computer Science: B.S., Brooklyn Coll.; M.A., Ph.D., New York Univ.

Polirstok, Susan, Prof., Sp. Serv. in Ed.: B.A., M.S., The City Coll. of New York; Ed.D., Teachers Coll., Columbia Univ.

Proskauer, Paul, Assoc. Prof. Emer., Class., Orient., Germ. & Slav. Lang.: B.B.A., The City Coll. of New York; M.A., Hunter Coll.; Ph.D., Columbia Univ.

Raphael, Lawrence J., Prof. Emer., Speech & Theatre: B.A., M.A., Queens Coll.; Ph.D., CUNY Grad. Center

Reed, Victor, Assoc. Prof. Emer., Engl.: A.B., M.A., Harvard Univ.; Ph.D., Columbia Univ.

Ritter, Walter P., Prof. Emer., Psychol.: B.A., The City Coll. of New York; Ph.D., Teachers Coll., Columbia Univ.

Roberts, Edgar V., Jr., Prof. Emer., Engl.: B.A., M.A., Ph.D., Univ. of Minn.

Robinson, Chester H., Prof. Emer., Spec., Serv., Ed.: B.A., Union Coll.; Ph.D., Stamford Univ.

Romano, Salvatore, Prof. Emer., Art

Rowley-Rotunno, Virginia, Prof. Emer., Second. Adult, and Bus. Ed.: A.B., Hunter Coll.; M.A., Fordham Univ.; Ph.D., Columbia Univ.

Schoengood, George J., Prof. Emer., Second., Adult, and Bus. Ed.: A.B., Brooklyn Coll.; M.P.A., Ed.D., New York Univ.

Seeman, Howard, Prof. Emer., Middle & H.S. Ed.: B.A., Albany State Teachers Coll.; M.A., Ph.D., New School for Soc. Research

Seraile, William, Prof. Emer., Afr. and Afr. Am. Studies: B.A., Central Washington State Univ.; M.A., Teachers Coll., Columbia Univ.; Ph.D., CUNY Grad. Center

Shannon, Michael, Prof. Emer., Libr.: B.A., Manhattan Coll.; M.L.S., Columbia Univ.

Shaw, Frederick C., Prof. Emer., Geol. & Geog.: A.B., Harvard Coll.; M.S., Univ. of Cincinnati; Ph.D., Harvard Univ.

Shechter, Yaakov, Prof. Emer., Biol. Sci.: B.Sc., Ph.D., Univ. of Calif. at Los Angeles

Sicherman, Carol, Prof. Emer., Engl.: B.A., Barnard Coll.; B.Litt., Oxford Univ.; M.A., Ph.D., Univ. of Wisc.

Silverman, Helene, Prof., Early Childh. & Childh. Ed.: B.A., M.S., Queens Coll.; Ph.D., Fordham Univ.

Smullyan, Raymond M., Prof. Emer., Math. & Computer Sci.: M.S., Univ. of Chicago; Ph.D., Princeton Univ.

Spielholtz, Gerald I., *Prof. Emer., Chem.:* B.S., The City Coll. of New York; M.S., Univ. of Michigan; Ph.D., Iowa State Univ.

Stolnitz, M. Jerome, Prof. Emer., Philos.: B.S.S., The City Coll. of New York; Ph.D., Harvard Univ.

Stuart, Irving R., *Prof. Emer., Psych.:* B.S.S., M.S.Ed., The City Coll. of New York; Ph.D., New York Univ.

Stuart, Meriwether, Prof. Emer., Class., Orient., Germ., & Slav. Lang.: A.B., William Jewel Coll.; A.M., Indiana Univ.; Ph.D.,

Swartz, Karyl B., *Prof. Emer., Psych.*: B.A., Coll. of Wooster; M.A., George Peabody Coll.; Ph.D., Brown Univ.

Taback, Stanley F., *Prof., Middle & H.S. Ed.:* A.B., A.M., Columbia Univ.; Ph.D., Teachers Coll., Columbia Univ.

Taylor, James V., *Prof. Emer.*, *Anthro.:* B.S., Ph.D., Columbia Univ.

Taus, Esther R., *Prof. Emer., Econ., Acct., & Bus. Adm.:* A.B., Hunter Coll.; A.M., Ph.D., Columbia Univ.

Teitelbaum, Blanche R., Assoc. Prof. Emer., ExSL: A.B., Hunter Coll.; M.S., The City Coll. of New York

Thompson, Patricia J., *Prof.*, *Cslg. Ldrshp.*, *Lit.*, & *Sp. Ed.*: A.B., Barnard Coll.; M.S., Lehman Coll.; M.A., M.Ed., Ed.D., Teachers Coll., Columbia Univ.

Toralballa, Gloria C., *Prof. Emer., Chem.:* B.S., M.S., Univ. of Philippines; Ph.D., Univ. of Mich.

Tuller, Annita, *Prof. Emer., Math. & Computer Sci.*: A.B., Hunter Coll.; A.M., Ph.D., Bryn Mawr Coll.

Tusiani, Joseph, *Prof. Emer., Rom. Lang.:* Dottore in Lettere, Univ. of Naples; Litt. D., Coll. of Mt. St. Vincent

Ullman, Jack D., *Prof. Emer., Phys. & Astron.*: B.S., M.S., Ph.D., Univ. of Ill.

Valdovinos, Jack G., *Prof. Emer., Biol. Sci.:* B.S., M.S., Winona State Coll.; Ph.D., Univ. of Iowa

Villa, Juan F., Prof., Chem.: B.S., M.S., Ph.D., Univ. of Miami.

Voge, Susan, *Assoc. Prof. Emer., Libr.:* B.A., Brooklyn Coll.; M.S.L.S., Columbia Univ.; M.B.A., Fordham Univ.

Walker, Ruth A., Prof. Emer., Chem.: B.A., Vassar Coll.; Ph.D., Yale Univ.

Webster, Sara, Prof. Emer., Art: B.A., Barnard Coll.; M.A., Univ. of Cincinnati; Ph.D., CUNY Grad. Center

Weiss, John, *Prof. Emer.*, *History*: B.A., Wayne State Univ.; M.A., Ph.D., Columbia Univ.; Ph.D., Yale Univ.

Wells, Carl F., *Prof. Emer.*, *Psych.*: B.S.S., The City Coll. of New York; M.A., Columbia Univ.; Ph.D., New York Univ.

Wille, Rosanne, *Prof. Emer., Nurs.*: B.S., B.S.N., William Patterson Coll.; M.P.A., Rutgers Univ.; M.A., Ph.D., New York Univ.

Woodcock, Wilson W., Assoc. Prof. Emer., Phys. & Astron.: A.B., Sc.M., Vanderbilt Univ.

Young, Frederick F., *Assoc. Prof. Emer., Geol. & Geog.:* A.B., Amherst Coll.; A.M., Ph.D., Columbia Univ.

Zerner, Ruth, *Assoc. Prof. Emer., Hist.*: A.B., Hunter Coll.; M.A., Stanford Univ.; Ph.D., Univ. of Calif. at Berkeley

Ziemann, Richard C., Prof. Emer., Art: B.F.A., M.F.A., Yale Univ.

Zulueta, Carmen de, *Prof. Emer., Rom. Lang.*: M.A., Radcliffe Coll.; Ph.D., New York Univ.

Appendix

Board of Trustees Rules and Regulations on Campus Conduct

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 freedoms: the rights of professors to teach, of scholars to engage in the advancement of knowledge, of students to learn and 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 subordinate 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 Trustees provide that:

"The president, with respect to his education unit, shall:

Have the affirmative responsibility of conserving and enhancing the educational standards of the college and schools under his jurisdiction;

Be the advisor and executive agent of the Board and of his respective College Committee and as 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 the several faculties;

Exercise general superintendence over the concerns, officers, employees, and students of his educational unit."

I. Rules

- 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 rights 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.
- 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 provoke or encourage physical violence by demonstrators, 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 in the workplace 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 (5) 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 of conduct prohibited under substantive Rules 1 to 11 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 other member of the instructional staff, or member of the classified staff engaging in any manner in conduct prohibited under substantive Rules 1 to 11 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 City University of New York, or suspension with/without pay pending a hearing before an appropriate College authority, dismissal after a hearing, ejection, and/or arrest by the civil authorities, and, for engaging in any manner in conduct prohibited under substantive rule 10, may, in the alternative, be required to participate satisfactorily in an appropriately licensed drug treatment or rehabilitation program. A tenured or non-tenured faculty member, or other member of the instructional staff, or member of the classified staff engaging in any manner in conduct prohibited under substantive Rules 1 to 11, shall be entitled to be treated in accordance with applicable provisions of the Education Law, or the 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 invitee engaging in any manner in conduct prohibited under substantive Rules 1 to 11 shall be subject to ejection, and/or arrest by the civil authorities.
- 4. Any organization which authorizes 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 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 be 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 extracurricular 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.Bylaw Section 15.6

Suspension or Dismissal.

The Board of Trustees reserves full power to dismiss or suspend a student, or suspend a student organization for conduct which impedes, obstructs, or interferes with the orderly and continuous administration and operation of any college, school, or unit of the university in the use of its facilities or in the achievement of its purposes as an educational institution.

The Chancellor or Chancellor's designee, a president or any dean may in emergency or extraordinary circumstances, temporarily suspend a student, or temporarily suspend the privileges of a student organization or group for cause, pending an early hearing as provided in bylaw section 15.3 to take place within not more than seven (7) school days. Prior to the commencement of a temporary suspension of a student, the College shall give such student oral or written notice of the charges against him/her and, if he/she denies them, the College shall forthwith give such student an informal oral explanation of the evidence supporting the charges and the student may present informally his/her explanation or theory of the matter. When a student's presence poses a continuing danger to person or property or an ongoing threat of disrupting the academic process, notice and opportunity for denial and explanation may follow suspension, but shall be given as soon as feasible thereafter.

Statement of Nondiscrimination

Statement of Principles

The City University of New York, located in a historically diverse municipality, is committed to engendering values and implementing policies that will enhance respect for individuals and their cultures. The University believes that, in order truly to benefit from this diversity, the University must foster tolerance, sensitivity, and mutual respect among all members of its community. Efforts to promote diversity and to combat bigotry are an inextricable part of the educational mission of the University. Diversity among the University's many members strengthens the institution, promotes the exchange of new ideas, and enriches campus life.

The University does not condone and will not tolerate discrimination in employment or in its educational programs and activities.

The City University of New York continues to recognize the important need to maintain at each campus equal access and opportunity for qualified students, faculty, and staff from all ethnic and racial groups and from both sexes.

Policy Statement

It is the policy of The City University of New York and the constituent colleges and units of the University to recruit, employ, retain, promote, and provide benefits to employees and to admit and provide services for students without regard to race, color, national or ethnic origin, religion, age, sex, sexual orientation, gender identity, marital status, disability, genetic predisposition or carrier status, alienage, citizenship, military or veteran status, or status as a victim of domestic violence.

Sexual harassment, a form of sex discrimination, is prohibited under the University's Policy Against Sexual Harassment.

The City University of New York, as a public university system, adheres to Federal, State and city laws and regulations regarding non-discrimination and affirmative action, including among others, Executive Order 11246, as amended, Titles VI and VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Sections 503 and 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, Section 402 of the Vietnam Era Veterans Readjustment Assistance Act of 1974, as amended, the Equal Pay Act of 1963, the Age Discrimination in Employment Act of 1967, as amended, and the Age Discrimination Act of 1975, the New York State Human Rights Law, and the New York City Human Rights Law. The "protected classes" as delineated in Executive Order 11246 (Black, Hispanic, Asian/Pacific Islander, American Indian/Alaskan Native, and Women) were expanded on December 9, 1976 by the Chancellor of the City University of New York to include Italian-Americans.

Responsibility for Compliance

The President of each constituent college of the University, the Senior Vice 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.

Discrimination Complaints

The City University of New York is committed to addressing discrimination complaints promptly, consistently, and fairly. There shall be an employment discrimination complaint procedure administered by each unit of the University.

A job applicant, employee, or former employee of Lehman College who wishes to make a complaint related to equal employment opportunity or affirmative action should consult with Dawn Ewing Morgan, the Director of Compliance and Diversity. Mrs. Morgan can be reached at 718-960-8111. Her office is in Shuster Hall, Room 352.

Students who believe they have been discriminated against in violation of this policy should bring their complaints to the Chief Student Affairs Officer for investigation by the officer or his or her designee in accordance with this policy.

Retaliation against any member of the University community who has made a complaint of discrimination is prohibited.

The City University Of New York Policies And Procedures Concerning Sexual Assault, Stalking, And Domestic And Intimate Partner Violence Against Students

I. Policy Statement

The City University of New York seeks to create and maintain a safe environment in which all members of the University community-students, faculty and staff-can learn and work free from the fear of sexual assault and other forms of violence. The University's policies on Workplace Violence and Domestic Violence and the Workplace apply to all acts of violence that occur in the workplace or that may spill over into the workplace. The University's Sexual Harassment Policy prohibits many forms of unwelcome conduct, including but not limited to, physical conduct of a sexual nature. This policy is specifically directed towards sexual assault, domestic and intimate partner violence and stalking committed against students on and off-campus.

CUNY wants all victims of sexual assault, stalking and domestic and intimate partner violence to know that the University has professionals and law enforcement officers who are trained in the field to assist student victims in obtaining help, including immediate medical care, counseling and other essential services. If the alleged perpetrator is also a member of the CUNY community, the college will take prompt action to investigate, and, where appropriate, to discipline and sanction the alleged perpetrator. CUNY urges all victims to seek immediate help in accordance with the guidelines set forth in this policy with the assurance that all information received from a complaint will be handled as confidentially as possible.

In order to eliminate sexual assaults and other forms of violence perpetrated against students, and to create a safe college community, it is critical to provide an appropriate prevention education program and have trained professionals to provide vital supportive services.

Accordingly, CUNY is committed to the following goals:

- Providing clear and concise guidelines for students to follow in the event that they or someone they know have been the victim of a sexual assault, domestic/intimate partner violence, or stalking.
- Assisting victims of sexual assault or abuse in obtaining necessary medical care and counseling, whether on or offcampus.

- Providing the most informed and up-to-date education and information to its students about how to identify situations that involve sexual assault, domestic and intimate partner violence, or stalking, and ways to prevent these forms of violence.
- Educating and training all staff members, including counselors, public safety officers and student affairs staff and faculty, to assist victims of sexual assault, domestic/intimate partner violence, or stalking.
- Ensuring that disciplinary procedures are followed in the event that the alleged perpetrator is a CUNY student or employee.

II. Procedures For Reporting Incidents of Sexual Assault And Other Forms of Violence

Obtaining assistance after a student is sexually assaulted, stalked or is in an abusive relationship is extremely important and can involve different points of on-campus contact for students, faculty and staff, including the Public Safety Department, Women's/Men's Centers and Counseling Departments, and/or the Dean of Student Development/Student Affairs. Each provides different forms of assistance which together address many of the needs of survivors.

Contact Law Enforcement Personnel Immediately

CUNY urges any student who has been the victim of a sexual assault or other act of violence or abuse, or any student or employee who has witnessed a sexual assault or other act of violence against a student, to immediately report the incident to the college Public Safety Department if the attack occurred oncampus, or to call 911 or go to the local NYPD precinct if the incident took place off-campus. Each college shall be provided with a list of emergency contact numbers as part of its orientation and training programs.

Seek Immediate Medical Attention

It is critical that victims of a physical assault receive comprehensive medical attention as soon as possible. For a sexual assault in particular, immediate treatment and the preservation of evidence of the attack (i.e. retain the clothing worn during the attack and do not shower) is crucial to a criminal investigation. If a student believes that she/he may be the victim of date rape by being drugged, she/he should go directly to a hospital to receive a toxicology examination since such drugs only remain in a person's system for a short period of time. In all other circumstances, public safety and police personnel can assist the victim in obtaining medical care. Each college shall be provided with a list of local hospitals, some of which are designated as SAFE (Sexual Assault Forensic Examiner) hospitals that are specially equipped to handle sexual assaults and are trained to gather minute evidence from such assaults. Rape crisis advocates at emergency rooms are also trained to handle domestic violence. EMS will be directed to bring victims to a SAFE hospital at their request. Medical attention is critical not only to treat internal and external injuries and to combat the possibilities of sexually transmitted infections and/or pregnancy, but also to collect evidence that can be used against the alleged perpetrator. It is also vital to ongoing

safety and recovery that victims receive emotional support and professional counseling as soon as possible after the attack.

Seek On-Campus Assistance

CUNY encourages student victims to contact the Dean of Student Affairs/Student Development to obtain assistance in accessing medical and counseling services, or to make any necessary changes to the student's academic program or residential housing situation. Public Safety can assist victims getting to and from campus safely, filing a police report and obtaining an order of protection against the alleged perpetrator. Victims can also file a complaint with the College against an alleged perpetrator who is a student or employee of the University with the Dean of Student Affairs/Student Development and the Public Safety Office.

Obtaining an On-Campus Advocate

Student victims of a sexual assault, stalking or domestic or intimate partner violence shall be provided with on-campus support in the form of an advocate from the Women's/Men's Center (if there is one on campus) or an appropriately trained counselor to assist them in handling the various aspects of their ordeal, such as: 1) explaining to victims their options of whether or not to report the incident to campus or law enforcement authorities; 2) providing guidance if they require medical attention; 3) providing guidance in obtaining crisis intervention and/or ongoing counseling services (or a referral to obtain the necessary services if such services are not available on campus); and 4) assisting victims throughout the College's disciplinary process if they choose to file a complaint against another student in connection with the incident.

Handling Sexual Assault, Stalking and Domestic and Intimate Partner Violence Complaints On-Campus

The Colleges shall act promptly in response to information that a student has been sexually assaulted, or has been the victim of domestic or intimate partner violence or stalking by another member of the CUNY community. Upon receipt of a complaint, the College shall undertake an appropriate investigation. If it appears that there is sufficient evidence to warrant disciplinary charges against a student or staff member, such charges shall be brought pursuant to the appropriate University procedures or collective bargaining agreement. If the alleged perpetrator is a student and the matter is brought before a hearing, the victim and alleged perpetrator are entitled to the same opportunities to have others present and to be informed of the outcome of the proceedings. The victim is entitled to a report of the results of the proceeding at her/his request. If a student is found guilty of committing a sexual assault or other act of violence against another CUNY student or employee after a disciplinary hearing, the penalties may include suspension, expulsion from residence halls, or permanent dismissal from CUNY.

In addition, if during the course of the investigation and/or disciplinary process the alleged perpetrator, or anyone on his/her behalf, seeks to contact the victim so as to harass, intimidate, threaten or coerce the victim in any way, the College reserves the right to bring additional disciplinary action against the actor. Such

conduct by any member of the CUNY community will not be tolerated.

Confidentiality

The University recognizes that confidentiality is particularly important to victims of sex crimes, domestic and intimate partner violence and stalking. If the victim seeks counseling with a licensed professional and/or works with an advocate from the campus, those communications will be confidential. CUNY encourages victims in all circumstances to seek counseling in order to speak about her/his options and to begin the recovery

While complete confidentiality cannot be guaranteed, every effort will be made to maintain confidentiality on a "need to know" basis. Generally, the wishes of a victim not to report a sexual assault or incident of domestic/intimate partner violence or stalking to the police will prevail, though the College reserves the right to notify the police when it believes that such reporting is necessary for the protection of the College community. Such notification, however, will generally be done without divulging the victim's identity and for the purpose of providing a campus-wide safety alert. In addition, the College must adhere to legal mandates such as Title IX, medical reporting laws, and the Campus Security Act. For example, CUNY is required to make an annual report documenting the occurrences of violent crimes on campus, including sexual assault. However, this report does not include any information identifying the individuals (including the victims) linked to these crimes.

III. Implementation of The Policies and Procedures Concerning Sexual Assault And Other Forms of **Violence Against Students**

The President and Vice President for Student Affairs/Student Development of each college shall be responsible for implementing this policy in accordance with the most up-to-date information and resources pertaining to sexual assault, stalking and domestic/intimate partner violence education and prevention, and victim assistance. The following steps must be taken to implement this policy:

- 1. Publication: A copy of this policy shall be easily accessible on the CUNY website and on the website administered by each College. A summary shall also be incorporated into every College student handbook. In addition, copies of the policy and procedures shall be made available in student centers, residence halls, student affairs/student development offices, women's/men's centers, counseling centers, health clinics and public safety departments, and shall be distributed to all new students during orientations.
- 2. Prevention/Risk Reduction Education: Each College shall develop materials and programs to educate its students, faculty and staff on the nature, dynamics, common circumstances and effects of sexual assault, domestic/intimate partner violence and stalking, and the means to reduce their occurrence and prevent them. Prevention education should provide up-to-date and

relevant information, such as education pertaining to bystander intervention, the importance of peer networks and the significance of fostering a community of responsibility.

Prevention education materials and programs shall be incorporated into campus orientation activities for all incoming undergraduate and graduate students (including transfers), and shall be made available to all student activity groups, clubs and athletic teams. In addition, all residence halls shall have a mandatory orientation on sexual assault, stalking and domestic/intimate partner violence prevention. Colleges are encouraged to assist in the organization of peer education groups and to provide resources to such groups so that the groups can provide training and outreach to other students throughout the academic year. Since the abuse of alcohol is frequently involved in occurrences of sexual assault and other forms of violence, it is important that the education program include education about the deleterious effects of alcohol abuse.

3. Professional Training: Each College shall provide periodic training relating to the prevention and handling of sexual assaults, stalking and domestic/intimate partner violence for all relevant personnel, including public safety officers, counselors, student affairs staff and residence hall assistants by experts trained in the field. Education and training shall also be made available to any interested faculty and staff member. Each campus must have at least one qualified staff or faculty member serve as a designated liaison and trainer.

4. Oversight by CUNY Central Administration: The University Vice Chancellor for Student Affairs shall monitor compliance with this policy at all of the campuses, shall review the policies and procedures on an annual basis, and shall make recommendations in the event that updates to prevention and education information are necessitated. In addition, the Office of the Vice Chancellor for Student Affairs shall provide educational materials that may be needed to ensure full implementation of this policy on every campus. Liaisons will be identified from each campus who will receive standardized training in order to fulfill their responsibilities on their campuses. The policies, procedures and outreach materials and programs will be subject to a periodic process of assessment in order to maintain efficacy.

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 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 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;
- inquiries or discussions 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.

Consensual Relationships

Amorous, 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 unwanted 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 coworker 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 awards or other remuneration, or that may impact upon other academic or employment opportunities.

Academic Freedom

This policy shall not be interpreted so as to constitute interference with academic freedom.

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.

Procedures

The University has developed procedures to implement this policy. The President of each constituent college of the University, the Senior Vice 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 the individual or individuals designated in the procedures. All members of the University community are required to cooperate in any investigation of a sexual harassment complaint.

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/or student expulsion from the University.

Sexual Harassment Awareness and Intake Committee

The Sexual Harassment Awareness and Intake Committee is responsible for educating the Lehman College community about sexual harassment and its potential consequences to the University community. The members of the Sexual Harassment Awareness and Intake Committee are available to respond to inquiries, receive complaints alleging sexual harassment from any member of the college community, and to refer individuals and/or the complaint to the Sexual Harassment Coordinator. The members of the Sexual Harassment Awareness and Intake Committee are:

Annecy Baez, Counseling Center

(718-960-8761)

Chelsea Campbell, Paralegal Studies Program/Continuing Education

(718-960-1159)

Vanessa Gonzalez, Campus Life

(718-960-8468)

Joette Reaves, Health Programs/Continuing Education (718-960-8998)

Maritza Rivera, Office of Compliance and Diversity (718-960-8111)

Michael Sullivan, Campus Life (718-960-8535)

Sexual Harassment Coordinator

Dawn Ewing Morgan, Office of Compliance and Diversity (718-960-8111)

Sexual Harassment Deputy Coordinators

Graciela Castex, Sociology and Social Work (718-960-7864)

John Cirace, Economics & Accounting (718-960-8388)

Vincent Zucchetto, Student Affairs (718-960-8242)

Lehman College Records Policy

Prohibition on Submission of Fraudulent Admission **Documents:**

The submission of documents in support of applications for admission such as transcripts, diplomas, test scores, references, or the applications themselves, that are forged, fraudulent, altered from the original, materially incomplete, obtained under false pretenses, or otherwise deceptive (collectively referred to as fraudulent documents) is prohibited and is punishable by a fiveyear bar on applying for admission or five year suspension from CUNY. A second violation is punishable by a lifetime ban on applying for admission or expulsion from CUNY.

When fraudulent admissions documents are discovered prior to an applicant's enrollment, sanctions will be imposed centrally. A first offense will be punishable by a five-year bar on applying for admission and a second offense will result in a lifetime ban. The accused applicant will have the opportunity to appeal to the Vice Chancellor for Student Development.

If the fraudulent admissions document is discovered after the student completes registration or begins classes at a college, the student shall be suspended for five years with the right to appeal through the college student disciplinary process. A second offense results in expulsion.

If the fraudulent admissions document is discovered after the student has already graduated, the graduate shall be notified in writing and shall be entitled to a disciplinary hearing under Article 15 of the Board Bylaws. If the disciplinary committee sustains the charges, the committee may impose a five-year suspension and in addition recommend the revocation of the degree. A second violation results in expulsion. Any recommendation to revoke a degree is subject to the approval by the Board of Trustees after considering the recommendation of the faculty of the college.

Family Educational Rights and Privacy Act (F.E.R.P.A)

The Family Educational Rights and Privacy Act (F.E.R.P.A.) affords students certain rights with respect to their education records. They are:

- 1. The right to inspect and review the student's 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 15 days of receipt. If the request is granted, the student will be notified of the time and place where the records may be inspected. If the request is denied or not responded to within 15 days, the student may appeal. Additional information regarding the appeal procedures will be provided to the student 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. Students may ask the College to amend a record that they believe is inaccurate or misleading. They should write to the College official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading.
 - If the College decides not to amend the record as requested by the student, the College will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.
- 3. The right to consent to disclosure of personally identifiable information contained in the student's education records, except to the extent that F.E.R.P.A. authorizes disclosure without consent.

One exception which permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school 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 school official in performing his or her tasks. A school 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 school in which a student seeks or intends to enroll.

- You may appeal the alleged denial of F.E.R.P.A. rights to the: General Counsel and Vice Chancellor for Legal Affairs The City University of New York
 535 East 80th Street New York, NY 10075
- 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 F.E.R.P.A.

The name and address of the Office that administers F.E.R.P.A. are:

Family Policy Compliance Office U.S. Department of Education 600 Independence Avenue, SW Washington, DC 20202-4605

6. The College may make the following "directory information" concerning current and former students available to those parties having a legitimate interest in the information: a student's name, attendance dates, telephone listing, home address, present address, date of birth, place of birth, photograph, E-mail address, full-or part-time status, class schedule, class roster (list), participation in officially recognized activities other than sports, participation in sports (teams), height if member of an athletic team, weight if member of an athletic team, previous schools attended, major and minor fields of study, and degrees and awards received. By filing a form with the Registrar's Office, a student or former student may request that any or all of the above information not be released without his or her prior written consent. This form may be completed, withdrawn, or modified at any time.

New York State Education Law Section 224-A

Students unable because of religious beliefs to register or attend classes on certain days:

- No person shall be expelled from or be refused admission as a student to an institution of higher education for the reason that he is unable, because of his religious beliefs, to register or attend classes or to participate in any examination, study, or work requirements on a particular day or days.
- Any student in an institution of higher education who is unable, because of his religious beliefs, 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 religious beliefs, an equivalent opportunity to register for classes or make up any examination, study, or work requirements which he 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, work requirements, or opportunities 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, or work requirements, or registration 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 availing himself of the provisions of this section.
- 6. Any student, who is aggrieved by the alleged failure of any faculty or administrative officials to comply in good faith 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 rights under this section.

College Policies, Procedures & Regulations

Lehman College, like most institutions of higher learning, has regulations and policies governing academic standards and procedures, class attendance, final examinations, grade records, personal health, and conduct. They have been established in accordance with the *Bylaws* of the Board of Trustees, and on recommendation of the College's governance body—the Lehman College Senate. Specific policies and regulations are enumerated in this *Bulletin* and in the *Student Guide*, available in the Office of the Vice President of Student Affairs, the Division of Adult and Continuing Education, and the Office of Academic Advisement.

Conduct

Article XV, Section 15.1 (Conduct Standard Defined) of the *Bylaws* of the Board of Trustees of The City University of New York reads as follows:

Each student enrolled or in attendance in any college, school, or unit under the control of the Board and every student organization, publication, club, or chapter shall obey the laws of the City, State, and Nation, and the published rules, regulations, and orders of the Board of Higher Education and the duly established college authorities. Application to Lehman College constitutes acceptance of the foregoing provisions as well as of the detailed rules set forth in the Appendix.

The City University of New York Computer User Responsibilities

NOTE: The city University of New York Computer User Responsibilities is a statement originally prepared by the University's Computer Policy Committee. It underwent review by the University Faculty Senate and the CUNY Office of the Vice Chancellor for Legal Affairs.

Introduction

CUNY's computer resources are dedicated to the support of the university's mission of education, research, and public service. In furtherance of this mission, CUNY respects, upholds, and

endeavors to safeguard the principles of academic freedom, freedom of expression, and freedom of inquiry.

CUNY recognizes that there is a concern among the university community that because information created, used, transmitted, or stored in electronic form is by its nature susceptible to disclosure, invasion, loss, and similar risks, electronic communications and transactions will be particularly vulnerable to infringements of academic freedom. CUNY's commitment to the principles of academic freedom and freedom of expression includes electronic information. Therefore, whenever possible, CUNY will resolve doubts about the need to access CUNY computer resources in favor of a user's privacy interest.

However, the use of CUNY computer resources, including for electronic transactions and communications, like the use of other university-provided resources and activities, is subject to the requirements of legal and ethical behavior. This policy is intended to support the free exchange of ideas among members of the CUNY community and between the CUNY community and other communities, while recognizing the responsibilities and limitations associated with such exchange.

Applicability

This policy applies to all users of CUNY computer resources, whether affiliated with CUNY or not, and whether accessing those resources on a CUNY campus or remotely. This policy supersedes the CUNY policy titled "CUNY Computer User Responsibilities" and any college policies that are inconsistent with this policy.

Definitions

"CUNY Computer resources" refers to all computer and information technology hardware, software, data, access and other resources owned, operated, or contracted by CUNY. This includes, but is not limited to, personal computers, handheld devices, workstations, mainframes, minicomputers, servers, network facilities, databases, memory, and associated peripherals and software, and the applications they support, such as e-mail and access to the Internet. "E-mail" includes point-to-point messages, postings to newsgroups and listservs, and other electronic messages involving computers and computer networks.

Rules for Use of CUNY Computer Resources

1. Authorization. Users may not access a CUNY computer resource without authorization or use it for purposes beyond the scope of authorization. This includes attempting to circumvent CUNY computer resource system protection facilities by hacking, cracking, or similar activities, accessing or using another person's computer account, and allowing another person to access or use the user's account. This provision shall not prevent a user from authorizing a colleague or clerical assistant to access information under the user's account on the user's behalf while away from a CUNY campus or because of a disability. CUNY computer resources may not be used to gain unauthorized access to another computer system within or outside of CUNY. Users are responsible for all actions performed from their computer account that they

- permitted or failed to prevent by taking ordinary security precautions.
- 2. **Purpose.** Use of CUNY computer resources is limited to activities relating to the performance by CUNY employees of their duties and responsibilities. For example, use of CUNY computer resources for private commercial or not-for-profit business purposes, for private advertising of products or services, or for any activity meant solely to foster personal gain, is prohibited. Similarly, use of CUNY computer resources for partisan political activity is also prohibited. Except with respect to CUNY employees other than faculty,
 - where a supervisor has prohibited it in writing, incidental personal use of computer resources is permitted so long as such use does not interfere with CUNY operations, does not compromise the functioning of CUNY computer resources, does not interfere with the user's employment or other obligations to CUNY, and is otherwise in compliance with this policy.
- 3. Compliance with Law. CUNY computer resources may not be used for any purpose or in any manner that violates CUNY rules, regulations, or policies, or federal, state, or local law. Users who engage in electronic communications with persons in other states or countries or on other systems or networks may also be subject to the laws of those other states and countries, and the rules and policies of those other systems and networks. Users are responsible for ascertaining, understanding, and complying with the laws, rules, policies, contracts, and licenses applicable to their particular use. Examples of applicable federal and state laws include the laws of libel, obscenity, and child pornography, as well as the following:

Family Educational Rights and Privacy Act

Electronic Communications Privacy Act

Computer Fraud and Abuse Act

New York State Freedom of Information Law

New York State Law with respect to the confidentiality of library records

Examples of applicable CUNY rules and policies include the following:

Sexual Harassment Policy

Policy on Maintenance of Public Order

Web Site Privacy Policy

Gramm-Leach-Bliley Information Security Program

University Policy on Academic Integrity

Information Security policies

4. Licenses and Intellectual Property. Users of CUNY computer resources may use only legally obtained, licensed data or software and must comply with applicable licenses or other contracts, as well as copyright, trademark, and other intellectual property laws.

Much of what appears on the internet and/or is distributed via electronic communication is protected by copyright law, regardless of whether the copyright is expressly noted. Users of CUNY computer resources should generally assume that

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- material is copyrighted unless they know otherwise, and not copy, download, or distribute copyrighted material without permission unless the use does not exceed fair use as defined by the federal Copyright Act of 1976. Protected material may include, among other things, text, photographs, audio, video, graphic illustrations, and computer software.
- 5. False Identity and Harassment. Users of CUNY computer resources may not employ a false identity, mask the identity of an account or computer, or use computer resources to engage in abuse of others, such as sending harassing, obscene, threatening, abusive, deceptive, or anonymous messages within or outside CUNY.
- 6. Confidentiality. Users of CUNY computer resources may not invade the privacy of others by, among other things, viewing, copying, modifying, or destroying data or programs belonging to or containing personal or confidential information about others, without explicit permission to do so. CUNY employees must take precautions to protect the confidentiality of personal or confidential information encountered in the performance of their duties or otherwise.
- 7. Integrity of Computer Resources. Users may not install, use, or develop programs intended to infiltrate or damage a computer resource, or which could reasonably be expected to cause, directly or indirectly, excessive strain on any computing facility. This includes, but is not limited to, programs known as computer viruses, Trojan horses, and worms. Users should consult with the IT director at their college before installing any programs that they are not sure are safe.
- 8. Disruptive Activities. CUNY computer resources must not be used in a manner that could reasonably be expected to cause or does cause, directly or indirectly, unwarranted or unsolicited interference with the activity of other users. This provision explicitly prohibits chain letters, virus hoaxes, or other intentional e-mail transmissions that disrupt normal e-mail service. Also prohibited are spamming, junk mail or other unsolicited mail that is not related to CUNY business and is sent without a reasonable expectation that the recipient would welcome receiving it, as well as the inclusion on e-mail lists of individuals who have not requested membership on the lists, other than the inclusion of members of the CUNY community on lists related to CUNY business. CUNY has the right to require users of CUNY computer resources to limit or refrain from other specific uses if, in the opinion of the IT director at the user's college, such use interferes with efficient operations of the system, subject to appeal to the President or, in the case of central office staff, to the Chancellor.
- 9. CUNY Names and Trademarks. CUNY names, trademarks, and logos belong to the university and are protected by law. Users of CUNY computer resources may not state or imply that they speak on behalf of CUNY or use a CUNY name, trademark, or logo without authorization to do so. Affiliation with CUNY does not, by itself, imply authorization to speak on behalf of CUNY.
- 10. Security. CUNY employs various measures to protect the security of its computer resources and of users' accounts. However, CUNY cannot guarantee such security. Users are Lehman College Undergraduate Bulletin 2013-2015

responsible for engaging in safe computing practices, such as guarding and not sharing their passwords, changing passwords regularly, logging out of systems at the end of use, and protecting private information, as well as for following CUNY's Information Security policies and procedures. Users must report incidents of Information Security policy noncompliance or other security incidents to CUNY's Chief Information Officer and Chief Information Security Officer, and the IT director at the affected user's college.

11. Filtering. CUNY reserves the right to install spam, virus, and

spyware filters and similar devices if necessary in the judgment of CUNY's Office of Information Technology or a college IT director to protect the security and integrity of CUNY computer resources. Notwithstanding the foregoing, CUNY will not install filters that restrict access to e-mail, instant messaging, chat rooms, or websites based solely on content. Confidential Research Information. Principal investigators and others who use CUNY computer resources to store or transmit research information that is required by law or regulation to be held confidential or for which a promise of confidentiality has been given, are responsible for taking steps to protect confidential research information from unauthorized access or modification. In general, this means storing the information on a computer that provides strong access controls (passwords) and encrypting files, documents, and messages for protection against inadvertent or unauthorized disclosure while in storage or in transit over data networks. Robust encryption is strongly recommended for information stored electronically on all computers, especially portable devices such as notebook computers, Personal Digital Assistants (PDAs), and portable data storage (e.g., memory sticks) that are vulnerable to theft or loss, as well as for information transmitted over public networks. Software and protocols used should be reviewed and approved by CUNY's Office of Information Technology.

12. CUNY Access to Computer Resources.

CUNY does not routinely monitor, inspect, or disclose individual usage of its computer resources without the user's consent. In most instances, if the university needs information located in a CUNY computer resource, it will simply request it from the author or custodian. However, CUNY IT professionals and staff do regularly monitor general usage patterns as part of normal system operations and maintenance and might, in connection with these duties, observe the contents of web sites, e-mail, or other electronic communications. Except as provided in this policy or by law, these individuals are not permitted to seek out contents or transactional information, or disclose or otherwise use what they have observed. Nevertheless, because of the inherent vulnerability of computer technology to unauthorized intrusions, users have no guarantee of privacy during any use of CUNY computer resources or in any data in them, whether or not a password or other entry identification or encryption is used. Users may expect that the privacy of their electronic communications and of any materials contained in computer storage in any CUNY electronic device dedicated to their use

will not be intruded upon by CUNY except as outlined in this policy.

CUNY may specifically monitor or inspect the activity and accounts of individual users of CUNY computer resources, including individual login sessions, e-mail, and other communications, without notice, in the following circumstances:

- a. when the user has voluntarily made them accessible to the public, as by posting to Usenet or a web page;
- b. when it is reasonably necessary to do so to protect the integrity, security, or functionality of CUNY or other computer resources, as determined by the college chief information officer or his or her designee, after consultation with CUNY's chief information officer or his or her designee;
- c. when it is reasonably necessary to diagnose and resolve technical problems involving system hardware, software, or communications, as determined by the college chief information officer or his or her designee, after consultation with CUNY's chief information officer or his or her
- d. when it is reasonably necessary to protect CUNY from liability, or when failure to act might result in significant bodily harm, significant property loss or damage, or loss of significant evidence, as determined by the college president or a vice president designated by the president, after consultation with the Office of General Counsel and the Chair of the University Faculty Senate (if a CUNY faculty member's account or activity is involved) or Vice Chair if the Chair is unavailable;
- e. when there is a reasonable basis to believe that CUNY policy or federal, state, or local law has been or is being violated, as determined by the college president or a vice president designated by the president, after consultation with the Office of General Counsel and the Chair of the University Faculty Senate (if a CUNY faculty member's account or activity is involved) or Vice Chair if the Chair is unavailable;
- f. when an account appears to be engaged in unusual or unusually excessive activity, as indicated by the monitoring of general activity and usage patterns, as determined by the college president or a vice president designated by the president and the college chief information officer or his or her designee, after consultation with CUNY's chief information officer or his or her designee, the Office of General Counsel, and the Chair of the University Faculty Senate (if a CUNY faculty member's account or activity is involved) or Vice Chair if the Chair is unavailable; or
- g. as otherwise required by law. In those situations in which the Chair of the University Faculty Senate is to be consulted prior to monitoring or inspecting an account or activity, the following procedures shall apply: (i) the college president shall report the completion of the monitoring or inspection to the Chair and the CUNY employee affected, who shall also be told the reason for the monitoring or inspection, except where

specifically forbidden by law; and (ii) if the monitoring or inspection of an account or activity requires physical entry into a faculty member's office, the faculty member shall be advised prior thereto and shall be permitted to be present to observe, except where specifically forbidden by law.

A CUNY employee may apply to the General Counsel for an exemption from some or all of the circumstances under which CUNY may inspect and monitor computer resource activity and accounts, pursuant to subparagraphs (a)-(f) above, with respect to a CUNY computer resource used solely for the collection, examination, analysis, transmission, or storage of confidential research data. In considering such application, the General Counsel shall have the right to require the employee to affirm in writing that the computer resource will be used solely for the confidential research. Any application for exemption should be made prior to using the computer resource for the confidential research. CUNY, in its discretion, may disclose the results of any general or individual monitoring or inspection to appropriate CUNY personnel or agents, or law enforcement or other agencies. The results may be used in college disciplinary proceedings, discovery proceedings in legal actions, or otherwise as is necessary to protect the interests of the University.

In addition, users should be aware that CUNY may be required to disclose to the public under the New York State Freedom of Information Law communications made by means of CUNY computer resources in conjunction with University business.

Any disclosures of activity of accounts of individual users to persons or entities outside of CUNY, whether discretionary or required by law, shall be approved by the General Counsel and shall be conducted in accordance with any applicable law. Except where specifically forbidden by law, CUNY employees subject to such disclosures shall be informed promptly after the disclosure of the actions taken and the reasons for them.

The Office of General Counsel shall issue an annual statement of the instances of account monitoring or inspection that fall within categories (d) through (g) above. The statement shall indicate the number of such instances and the cause and result of each. No personally identifiable data shall be included in this statement.

See CUNY's Web Site Privacy Policy for additional information regarding data collected by CUNY from visitors to the CUNY website at www.cuny.edu.

13. Enforcement. Violation of this policy may result in suspension or termination of an individual's right of access to CUNY computer resources, disciplinary action by appropriate CUNY authorities, referral to law enforcement authorities for criminal prosecution, or other legal action, including action to recover civil damages and penalties.

Violations will normally be handled through the university disciplinary procedures applicable to the relevant user. For example, alleged violations by students will normally be

investigated, and any penalties or other discipline will normally be imposed, by the Office of Student Affairs.

CUNY has the right to temporarily suspend computer use privileges and to remove from CUNY computer resources material it believes violates this policy, pending the outcome of an investigation of misuse or finding of violation. This power may be exercised only by the President of each college or the Chancellor.

- 14. Additional Rules. Additional rules, policies, guidelines and/or restrictions may be in effect for specific computers, systems, or networks, or at specific computer facilities at the discretion of the directors of those facilities. Any such rules which potentially limit the privacy or confidentiality of electronic communications or information contained in or delivered by or over CUNY computer resources will be subject to the substantive and procedural safeguards provided by this policy.
- 15. Disclaimer. CUNY shall not be responsible for any damages, costs, or other liabilities of any nature whatsoever with regard to the use of CUNY computer resources. This includes, but is not limited to, damages caused by unauthorized access to CUNY computer resources, data loss, or other damages resulting from delays, non-deliveries, or service interruptions, whether or not resulting from circumstances under the CUNY's control.

Users receive and use information obtained through CUNY computer resources at their own risk. CUNY makes no warranties (expressed or implied) with respect to the use of CUNY computer resources. CUNY accepts no responsibility for the content of web pages or graphics that are linked from CUNY web pages, for any advice or information received by a user through use of CUNY computer resources, or for any costs or charges incurred by a user as a result of seeking or accepting such advice or information.

CUNY reserves the right to change this policy and other related policies at any time. CUNY reserves any rights and remedies that it may have under any applicable law, rule, or regulation. Nothing contained in this policy will in any way act as a waiver of such rights and remedies.

Freedom of Speech

Freedom of speech is an essential tradition of any academic community. All members of the Lehman community must be vigilant in exercising their rights of expression so as not to preclude other persons' guaranteed right to give and receive expression as part of the deliberative process of the academic community. Preservation of this right on campus requires the scrupulous use of means of communication. Public-address systems and all other amplification devices are prohibited.

Smoking

Smoking is prohibited in all buildings owned, leased, or operated by the City University of New York. Effective no later than September 4, 2012, the following shall be prohibited at The City University of New York: (1) the use of tobacco on all grounds and facilities under CUNY jurisdiction, including indoor locations and outdoor locations such as playing fields; entrances and exits to buildings; and parking lots; (2) tobacco industry promotions, advertising, marketing, and distribution of marketing materials on campus properties; and (3) tobacco industry sponsorship of athletic events and athletes.

Drug and Alcohol Usage

The use of illegal drugs will subject the individual to the penalties provided by law. Individual problems with drugs may be discussed in strict confidence with the counseling faculties of the College. The use of legal drugs that are nevertheless injurious to the health is not condoned. The use of alcohol by anyone under 21 years of age is illegal and prohibited.

Identification Cards

Identification cards, issued by the College, must be carried at all times. Students are required to present their I.D. cards upon the request of any College official. Any guest of a student visiting the campus must obtain a pass from Campus Security (The APEX, Room 109) and must present it upon request.

Attendance and Absences

Students in basic skills courses are required to attend classes. Students in all other courses are expected to attend classes regularly, and instructors are required to record attendance for grading and counseling purposes. Individual instructors, as well as departments or degree programs, may establish specific attendance requirements. Instructors have the right to weigh attendance and class participation in determining grades. It is the student's responsibility to ascertain the effect attendance may have on the grade in a course. Students receiving financial aid must be certified as attending classes regularly for continuing eligibility.

Petitioning

For a petition to be circulated by any student or student group, two copies shall be filed with the Office of Student Activities. All copies of the petition must bear the name of the group or groups circulating the petition.

Solicitation on Campus

No student or nonstudent may use any part of the College buildings and grounds (including Bulletin boards) for soliciting or selling any merchandise or service without the express permission of the Vice President of Student Affairs. Lehman College and the City University of New York do not sponsor any products, merchandising schemes, or tours. Advertising appearing in student publications does not imply the sponsorship of the

Representing the College

No student or student organization may be a self-appointed representative of Lehman College or any division thereof, nor of The City University of New York.

Extracurricular Activities and Programs

Group Activities

The College offers a wide range of extracurricular activities and programs. These include departmental, religious, social, political, and athletic activities; creative events, such as art displays and literary, musical, and dramatic performances; and extracurricular lectures on varied topics. Students publish newspapers and other publications and have the opportunity to join a variety of clubs.

Policy on Guest Speakers

Student groups have the right to hear speakers of their choice in accordance with the rules set by the College. It may not, however, be assumed that speakers invited by students represent the views of the College.

Student Government

Student government consists of The Campus Association for Student Activities (C.A.S.A.), which plans and administers programs and allocates funds for student groups, and the Student Conference, which represents students' interests in the Lehman College Senate.

Participation in College Governance

Students shall comprise a permanent one-third of the total membership of the Senate, based upon combining the total number of voting faculty and voting administration representatives. Senate meetings are open to all students and staff at the College. Students are also represented on College committees. The student senators comprise the Student Conference.

Notification of Student Immunization Requirements

Students who do not submit proof of measles, mumps, and rubella (M.M.R.) immunization or who fail to return the meningococcal meningitis response form within a statutory grace period shall be prohibited from attending the institution. For additional information, contact the Student Health Center located in the T-3 Building, Room 118 at the following phone number: 718-960-8900.

Public Health Law 2165 requires that postsecondary students be immunized against measles, mumps, and rubella (M.M.R.).

All registered full-time students and part-time students born on or after January 1, 1957 who are enrolled for at least six, but fewer than twelve semester hours (or equivalent) per semester in an approved degree program or registered certificate program must submit proof of M.M.R. immunization. Students may be exempt from the required M.M.R. immunizations for religious or medical reasons. To qualify for a religious exception, students must submit a signed statement, or in the event the student is a minor (under 18), a signed statement from their parent or guardian, that they hold sincere and genuine religious beliefs that prohibit immunization. To qualify for a medical exception, students must submit a written statement from a licensed physician or nurse

practitioner indicating that such immunization may be detrimental to their health.

Public Health Law 2167 requires that postsecondary institutions provide written information about meningococcal meningitis to its students and that students complete, sign, and return a meningococcal meningitis response form. Public Health Law 2167 does not require that students be immunized against meningitis.

Public Health Law 2167 requires colleges to distribute written information about meningococcal meningitis disease and vaccination and students to complete, sign, and return to the college, a meningococcal meningitis response form that: (a) confirms that the college has provided the information about meningococcal meningitis; and (b) indicates that either: (1) the student has received immunization against meningococcal meningitis within the 10 years preceding the date of the response form; or (2) the student has decided against receiving the vaccination. This law applies to students who are enrolled in at least six semester hours (or the equivalent) per semester. No student may be exempt from receiving information or returning the response form.

Freedom of Information Law Notice

Requests to inspect public records at the college should be made to the Records Access Officer, Esdras Tulier, special counsel to the President, who is located in Shuster Hall, Room 376 (718-960-8559). Public records are available for inspection and copying by appointment only at a location to be designated. You have a right to appeal a denial of a request for access to records to the CUNY General Counsel and Vice Chancellor for Legal Affairs. Copies of the CUNY Procedures for Public Access to Public Records Pursuant to Article 6 of the Public Officers Law and the appeal form are available at the Reference Desk of the Library and on the College website.

CUNY Policy on Academic Integrity

Academic Dishonesty is prohibited in The City University of New York and is punishable by penalties, including failing grades, suspension, and expulsion, as provided herein.

Definitions and Examples of Academic Dishonesty

Cheating is the unauthorized use or attempted use of material, information, notes, study aids devices, or communication during an academic exercise.

The following are some examples of cheating, but by no means is it an exhaustive list:.

- Copying from another student during an examination or allowing another to copy your work.
- Unauthorized collaboration on a take-home assignment or examination.
- Using notes during a closed-book examination.
- Taking an examination for another student, or asking or allowing another student to take an examination for you.
- Changing a graded exam and returning it for more credit.

- Submitting substantial portions of the same paper to more than one course without consulting with each instructor.
- Preparing answers or writing notes in a blue book (exam booklet) before an examination.
- Allowing another to research and write assigned papers or do assigned projects, including use of commercial term paper services.
- Giving assistance to acts of academic misconduct/dishonesty.
- Fabricating data (all or in part).

research or writings as your own.

- Submitting someone else's work as your own.
- Unauthorized use during an examination of any electronic devices, such as cell phones, palm pilots, computers, or other technologies to retrieve or send information.
 Plagiarism is the act of presenting another person's ideas,

The following are some examples of plagiarism, but by no means is it an exhaustive list:

- Copying another person's actual words without the use of quotation marks and footnotes attributing the words to their source.
- Presenting another person's ideas or theories in your own words without acknowledging the source.
- Using information that is not common knowledge without acknowledging the source.
- Failing to acknowledge collaborators on homework and laboratory assignments.

Internet Plagiarism includes submitting downloaded term papers or parts of term papers, paraphrasing or copying information from the Internet without citing the source, and "cutting & pasting" from various sources without proper attribution.

Obtaining Unfair Advantage is any activity that intentionally or unintentionally gives a student an unfair advantage in his/her academic work over another student.

The following are some examples of obtaining an unfair advantage, but by no means it is an exhaustive list:

- Stealing, reproducing, circulating, or otherwise gaining advance access to examination materials.
- Depriving other students of access to library materials by stealing, destroying, defacing, or concealing them.
- Retaining, using, or circulating examination materials which clearly indicate that they should be returned at the end of the exam.
- Intentionally obstructing or interfering with another student's work.

Falsification of Records and Official Documents

The following are some examples of falsification, but by no means is it an exhaustive list:

- Forging signatures of authorization.
- Falsifying information on an official academic record.

 Falsifying information on an official document, such as a grade report, letter of permission, drop/add form, ID card, or other College document.

Procedures for Imposition of Sanctions for Violations of CUNY Policy on Academic Integrity

Introduction

As a legal matter, in disciplining students for violations of policies of academic integrity, CUNY, as a public institution, must conform to the principles of due process mandated by the Fourteenth Amendment to the United States Constitution generally speaking, to provide notice of the charges and some opportunity to be heard. In the context of court-litigated violations, questions as to how much and what kind of process was "due" turn on the court's judgment whether the decision on culpability was "disciplinary" (a question of fact) or "academic" (a question of the instructor's expert judgment). This distinction has proved difficult to apply on campus. Accordingly, these procedures provide for alternative approaches depending on the severity of the sanction(s) being sought. If the instructor desires solely an "academic" sanction, that is, a grade reduction, less process is due than if a "disciplinary" sanction, such as suspension or expulsion, is sought.

A faculty member who suspects that a student has committed a violation of the CUNY or the College Academic Integrity Policy shall review with the student the facts and circumstances of the suspected violation whenever possible. The decision whether to seek an academic sanction only, rather than a disciplinary sanction or both types of sanctions, will rest with the faculty member in the first instance, but the college retains the right to bring disciplinary charges against the student. Among the factors the College should consider in determining whether to seek a disciplinary sanction are whether the student has committed one or more prior violations of the Academic Integrity Policy and mitigating circumstances, if any. It is strongly recommended that instance of suspected violation should be reported to the Academic Integrity Official on a form provided by the College. Among other things, this reporting will allow the College to determine whether it wishes to seek a disciplinary sanction even where the instructor may not wish to do so.

Procedures in Cases Where the Instructor Seeks an Academic Sanction Only

- Student Accepts Guilt and Does Not Contest the Academic Sanction
 - If the faculty member wishes to seek only an academic sanction (i.e., a reduced grade¹ only), and the student does not contest either his/her guilt or the particular reduced grade the faculty member has chosen, then the student shall be given the reduced grade, unless the College decides to seek a disciplinary sanction. The reduced grade may apply to the particular assignment as to which the violation occurred or to the course grade, at the faculty member's discretion.
- 2. Student Denies Guilt and/or Contests the Academic Sanction

If the student denies guilt or contests the particular grade awarded by the faculty member, then the matter shall be handled using the College's grade appeals process, including departmental grading committees where applicable, or the Academic Integrity Committee. In either case, the process must, at a minimum, provide the student with an opportunity to be heard and to present evidence.

Procedures in Cases Where a Disciplinary Sanction Is Sought

If a faculty member suspects a violation and seeks a disciplinary sanction, the faculty member shall refer the matter to the College's Academic Integrity Official using the Faculty Report form, to be adjudicated by the College's Faculty-Student Disciplinary Committee under Article 15 of the CUNY Bylaws. As provided for therein, the Faculty-Student Disciplinary Committee may, among other things, investigate, conciliate, or hear evidence on cases in which disciplinary charges are brought.2 Under certain circumstances, College officials other than the Academic Integrity Official may seek disciplinary sanctions following the procedures outlined above. If a reduced grade is also at issue, then that grade should be held in abeyance, pending the Faculty-Student Disciplinary Committee's action.

Procedures in Cases in Which Both a Disciplinary and an Academic Sanction Are Sought

If a faculty member or the College seeks to have both a disciplinary and an academic sanction imposed, it is not advisable to proceed on both fronts simultaneously lest inconsistent results ensue. Thus, it is best to begin with the disciplinary proceeding seeking imposition of a disciplinary sanction and await its outcome before addressing the academic sanction. If the Faculty-Student Disciplinary Committee finds that the alleged violation occurred, then the faculty member may reflect that finding in the student's grade. If the Faculty-Student Disciplinary Committee finds that the alleged violation did not occur, then no sanction of any kind may be imposed. The decision whether to pursue both types of sanctions will ordinarily rest with the faculty member.

Reporting Requirements

1. By the Faculty Member to the Academic Integrity Official In cases where a violation of academic integrity has been found to have occurred (whether by admission or a fact-finding process), the faculty member should promptly file with the Academic Integrity Official a report of the adjudication in writing on a Faculty Report form provided by the College as described above. The Academic Integrity Official shall maintain a confidential file for each student about whom a suspected or adjudicated violation is reported. If either the grade appeals process or the Faculty-Student Disciplinary Committee finds that no violation occurred, the Academic Integrity Official shall remove and destroy all material relating to that incident from the student's confidential academic integrity file. Before determining what sanction(s) to seek, the faculty member or the Academic Integrity Official may consult the student's confidential academic integrity file, if any, to determine whether the student has been found to have

- previously committed a violation of the Academic Integrity Policy, the nature of the infraction, and the sanction imposed or action taken.
- 2. By the Academic Integrity Official to the Faculty Member Where a matter proceeds to the Faculty-Student Disciplinary Committee, the Academic Integrity Official shall promptly report its resolution to the faculty member and file a record of the resolution in the student's confidential academic integrity file, unless, as indicated above, the suspected violation was held to be unfounded, in which case all reporting forms concerning that suspected violation shall be destroyed.

Procedures for Handling Student Complaints about Faculty Conduct in Academic Settings

- 1. Introduction. The University and its Colleges have a variety of procedures for dealing with student-related issues, including grade appeals, academic integrity violations, student discipline, disclosure of student records, student elections, sexual harassment complaints, disability accommodations, and discrimination. One area not generally covered by other procedures concerns student complaints about faculty conduct in the classroom or other formal academic settings. The University respects the academic freedom of the faculty and will not interfere with it as it relates to the content or style of teaching activities. Indeed, academic freedom is and should be of paramount importance. At the same time the University recognizes its responsibility to provide students with a procedure for addressing complaints about faculty treatment of students that are not protected by academic freedom and are not covered by other procedures. Examples might include incompetent or inefficient service, neglect of duty, physical or mental incapacity, and conduct unbecoming a member of the staff.
- 2. **Determination of Appropriate Procedure.** If students have any question about the applicable procedure to follow for a particular complaint, they should consult with the chief student affairs officer. In particular, the chief student affairs officer should advise a student if some other procedure is applicable to the type of complaint the student has.
- 3. Informal Resolution. Students are encouraged to attempt to resolve complaints informally with the faculty member or to seek the assistance of the department chairperson or campus ombudsman to facilitate informal resolution.
- 4. Formal Complaint. If the student does not pursue informal resolution, or if informal resolution is unsuccessful, the student may file a written complaint with the department chairperson or, if the chairperson is the subject of the complaint, with the academic dean or a senior faculty member designated by the college president. (This person will be referred to below as the "Fact Finder.")
- 5. The complaint shall be filed within 30 calendar days of the alleged conduct unless there is good cause shown for delay, including but not limited to delay caused by an attempt at informal resolution. The complaint shall be as specific as possible in describing the conduct complained of.

- 6. The Fact Finder shall promptly send a copy to the faculty member about whom the complaint is made, along with a letter stating that the filing of the complaint does not imply that any wrongdoing has occurred and that a faculty member must not retaliate in any way against a student for having made a complaint. If either the student or the faculty member has reason to believe that the department chairperson may be biased or otherwise unable to deal with the complaint in a fair and objective manner, he or she may submit to the academic dean or the senior faculty member designated by the college president a written request stating the reasons for that belief; if the request appears to have merit, that person may, in his or her sole discretion, replace the department chairperson as the Fact Finder.
- 7. The Fact Finder shall meet with the complaining student and faculty member, either separately or together, to discuss the complaint and to try to resolve it. The Fact Finder may seek the assistance of the campus ombudsman or other appropriate person to facilitate informal resolution.
- 8. If resolution is not possible, and the Fact Finder concludes that the facts alleged by the student, taken as true and viewed in the light most favorable to the student, establish that the conduct complained of is clearly protected by academic freedom, he or she shall issue a written report dismissing the complaint and setting forth the reasons for dismissal and send a copy to the complaining student, the faculty member, the chief academic officer, and the chief student affairs officer. Otherwise, the Fact Finder shall conduct an investigation. The Fact Finder shall separately interview the complaining student, the faculty member, and other persons with relevant knowledge and information and shall also consult with the chief student affairs officer and, if appropriate, the college ombudsman. The Fact Finder shall not reveal the identity of the complaining student and the faculty member to others except to the extent necessary to conduct the investigation. If the Fact Finder believes it would be helpful, he or she may meet again with the student and faculty member after completing the investigation in an effort to resolve the matter. The complaining student and the faculty member shall have the right to have a representative (including a union representative, student government representative, or attorney) present during the initial meeting, the interview, and any post-investigation meeting.
- 9. At the end of the investigation, the Fact Finder shall issue a written report setting forth his or her findings and recommendations, with particular focus on whether the conduct in question is protected by academic freedom, and send a copy to the complaining student, the faculty member, the chief academic officer, and the chief student affairs officer. In ordinary cases, it is expected that the investigation and written report should be completed within 30 calendar days of the date the complaint was filed.
- 10. **Appeals Procedure.** If either the student or the faculty member is not satisfied with the report of the Fact Finder, the student or faculty member may file a written appeal to the chief academic officer within 10 calendar days of receiving the report. The chief academic officer shall convene and serve as

- the chairperson of an Appeals Committee, which shall also include the chief student affairs officer, two faculty members elected annually by the faculty council or senate, and one student elected annually by the student senate. The Appeals Committee shall review the findings and recommendations of the report, with particular focus on whether the conduct in question is protected by academic freedom. The Appeals Committee shall not conduct a new factual investigation or overturn any factual findings contained in the report unless they are clearly erroneous. If the Appeals Committee decides to reverse the Fact Finder in a case where there has not been an investigation because the Fact Finder erroneously found that the alleged conduct was protected by academic freedom, it may remand to the Fact Finder for further proceedings. The committee shall issue a written decision within 20 calendar days of receiving the appeal. A copy of the decision shall be sent to the student, the faculty member, the department chairperson, and the president.
- 11. Subsequent Action. Following the completion of these procedures, the appropriate college official shall decide the appropriate action, if any, to take. For example, the department chairperson may decide to place a report in the faculty member's personnel file or the president may bring disciplinary charges against the faculty member. Disciplinary charges may also be brought in extremely serious cases even though the college has not completed the entire investigative process described above; in that case, the bringing of disciplinary charges shall automatically suspend that process. Any action taken by a college must comply with the bylaws of the University and the Collective bargaining agreement between the University and the Professional Staff Congress.
- 12. **Campus Implementation.** Each campus shall implement these procedures and shall distribute them widely to administrators, faculty members, and students and post them on the college website.
- 13. **Board Review.** During the spring 2009 semester, the Chancellery shall conduct a review of the experience of the colleges with these procedures, including consultation with administrators, faculty, and students, and shall report the results of that review to the Board of Trustees, along with any recommended changes.
- ¹ A reduced grade can be an "F," a "D-," or another grade that is lower than the grade that would have been given but for the violation.
- ² Typically, disciplinary sanctions would be sought in cases of the most egregious, or repeated, violations, for example: infraction in ways similar to criminal activity (such as forging a grade form; stealing an examination from a professor or a university office; or forging a transcript); having a substitute take an examination or taking an examination for someone else; sabotaging another student's work through actions designed to prevent the student from successfully completing an assignment; dishonesty that affects a major or essential portion of work done to meet course requirements. [These examples have been taken from a list of violations compiled by Rutgers University.]

The City University of New York Campus and Workplace Violence Policy

Policy Statement

The City University of New York (the "University" or "CUNY") is committed to the prevention of workplace violence and will respond promptly to any threats and/or acts of violence. For purposes of this Policy, Workplace Violence is defined as any physical assault or acts of aggressive behavior occurring where an employee performs any work-related duty in the course of his or her employment, including but not limited to:

- (i) An attempt or threat, whether verbal or physical, to inflict physical injury upon an employee;
- (ii) Any intentional display of force which would give an employee reason to fear or expect bodily harm;
- (iii) Intentional and wrongful physical contact with an employee without his or her consent that entails some injury;
- (iv) Stalking an employee in a manner which may cause the employee to fear for his or her physical safety and health when such stalking has arisen through and in the course of employment.

Workplace Violence presents a serious occupational safety hazard to CUNY and its employees. The University will respond promptly to threats and/or acts of violence. All employees are responsible for helping to create an environment of mutual respect and for assisting in maintaining a safe and secure work environment and will participate in the annual Workplace Violence Prevention Training Program. . Individuals who violate this Policy may be removed from University property and are subject to disciplinary and/or personnel action up to and including termination, consistent with University policies, rules and collective bargaining agreements, and/or referral to law enforcement authorities for criminal prosecution

Complaints involving Workplace Violence will not be ignored and will be given the serious attention they deserve. ² Employees are responsible for reporting any incidents of Workplace Violence of which they become aware. Such reports should be made to the employee's immediate supervisor or the Director of Public Safety on their campus.

The University, at the request of an employee or student, or at its own discretion, may prohibit members of the public, including family members, from seeing an employee or student on University property unless necessary to transact Universityrelated business. This policy particularly applies when an employee or student anticipates that an act of violence may result from an encounter with said individual(s).3

Employee participation in the implementation of this Policy will be provided through their authorized employee representatives, who will be invited to participate in: (1) the annual physical risk assessment site evaluation(s) to determine the presence of risk factors which may place employees at risk of workplace violence; (2) the development and annual review of a Workplace Violence Prevention Program promulgated by each College for the implementation of the Policy; (3) the annual review of the Campus Workplace Violence Incidents Report prepared annually by each College; and (4) as appropriate, following a serious incident of Workplace Violence.

2 Complaints of sexual harassment are covered under the University's Policy Against Sexual Harassmen

3 Students are not directly covered by this Policy, but they should contact the Department of Public Safety to report concerns about workplace violence.

Notice of Access to Campus Crime Statistics, the Campus Security Report, and Information on Registered Sex Offenders

The College Advisory Committee on Campus Safety will provide upon request all campus crime statistics as reported to the U.S. Department of Education, as well as the annual campus security report. The campus security report includes:

- 1. the campus crime statistics for the most recent calendar year and the two preceding calendar years;
- 2. campus policies regarding procedures and facilities to report criminal actions or other emergencies on campus;
- 3. policies concerning the security of and access to campus facilities;
- 4. policies on campus law enforcement;
- 5. a description of campus programs to inform students and employees about campus security procedures and practices and to encourage students and employees to be responsible for their own security and the security of others;
- 6. campus crime prevention programs;
- 7. policy concerning the monitoring through the police of criminal activity at off-campus locations of students organizations officially recognized by the college;
- 8. policies on illegal drugs, alcohol, and underage drinking;
- 9. where information provided by the State on registered sex offenders may be obtained (also see below); and
- 10. policies on campus sexual assault programs aimed at the prevention of sex offenses and procedures to be followed when a sex offense occurs. This information is maintained pursuant to the federal Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act.

The campus crime statistics and the annual campus security report are available at the Reference Desk of the library and the College website at www.lehman.edu. If you wish to be mailed copies of the campus crime statistics and the annual campus security report, contact Alicia Cruz, assistant director of public safety, at 718-960-8593, and copies will be mailed to you within 10 days. The U.S. Department of Education's website address for

campus crime statistics is: www.ed.gov/security/InstDetail.asp (then input the name of the school).

In accordance with the federal Campus Sex Crimes Prevention Act, registered sex offenders now are required to register the name and address of any college at which he or she is a student or employee. The New York State Division of Criminal Justice maintains a registry of convicted sex offenders and informs the college's chief security (public safety) officer of the presence on campus of a registered sex offender as a student or employee. You may contact Alicia Cruz, assistant director of public safety, in Room 109 of the APEX (718-960-8593) to obtain information about Level 2 or Level 3 registered sex offenders on campus. To obtain information about Level 3 offenders, visit the Division's registry website at

www.criminaljustice.state.ny.us/nsor/sor_about.htm and then click on "Search for Level 3 Sex Offenders" or access the directory at the College's public safety department or police precinct. To obtain information about Level 2 offenders, contact the public safety department, the local police precinct in which the offender resides or attends college, or the Division's sex offender registry at 800-262-3257.

Athletic Program Participation Notice

Lehman College files an annual report with the U.S. Secretary of Education on intercollegiate athletics that includes information on the participation of males and females on its teams, and the expenditures and revenues of those teams. Copies of the annual report on intercollegiate athletics are available at the reference desk of the Library.

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