Provisional Courses

(Provisional courses for the School of Communication follows Hofstra College of Liberal Arts and Sciences)

The College of Liberal Arts and Sciences encourages departments to keep abreast of new advances in knowledge by incorporating this material in existing courses. Sometimes departments prefer to experiment with a different combination of material or in new approaches to a subject. Occasionally faculty try interdisciplinary approaches in which the course material is not associated completely with any existing department. These proposals can obtain "provisional approval." If the experiment succeeds, faculty authorization for regular inclusion with departmental offerings may follow.

Provisionally approved courses must meet all regular requirements for time-in-class, amount of student assignments and level of difficulty. The following are courses which received provisional approval.

Africana Studies (AFST)

119. Blacks and Jews: Interrelation in the Diaspora 3 s.h. An examination of the relations between African-American and Jewish-Americans in the United States from the period of the "Grand Alliance" (ca., 1910-1967) to the current moment of "crisis." Through the investigation of literature, sociological analysis, historical case studies, opinion pieces, and works of art, this course illuminates the complex and shifting relations between African-Americans and Jewish-Americans and their significance for questions of identity in the modern United States. (Same as HIST, JWST 119).

120. African Labor Economics 3 s.h. Work, working people, and working-class movements in modern Africa are the focus of this introductory course. Through contemporary and historical cross-country studies of workers in a wide variety of economic, political and institutional settings, we will evaluate rival perspectives on a host of interesting and controversial topics. These include: changing occupational and industrial formations, gender and racial gaps in jobs and income, poverty and inequality, immigration, urban informal employment, worker training and healthcare, labor unions, and government's regulatory and job creation roles. Prerequisite: one introductory economics course, or LABR 1, or instructor's permission. Credit given for this course or ECO 120, or LABR 120, not both.

122. Health and Disease in Africa: A Medical Anthropology

This course focuses on the myriad factors contributing to disease in Africa and the various ways in which African cultures respond behaviorally to disease and illness. We explore the etiology and clinical manifestations of disease and illness and the practices directed toward the alleviation of disease and the promotion of health against a backdrop of the political economy of African nations.

123. Life and Death in the Black Community

3 s.h. This course introduces students to the impact of race, class and gender on the health status of African Americans in the United States. It focuses on concepts of race, ethnicity and the perception of human differences; the biological basis of human variation; and the impact of state policies on patterns of disease, reproduction, and death among African Americans with an emphasis on the ethical questions these policies pose. Prerequisite: one of the following: HIST 115, 116; ANTH 108.

Anthropology (ANTH)

5. Archaeology: Living in the Material World# 3 s.h. This course provides a practical and theoretical introduction to archaeology. The class reviews field and laboratory methods as well as the practice of archaeological interpretation. The main

objective is to consider various ways to understand how material objects are containers and representations of culture meaning. The course considers theories of material culture and explicit studies that ground ideas in the archeological record as well as the contemporary material world around us. Readings, lectures, and assignment review these menthods and case studies show how past cultures are reconstructed through the analysis of the archaeological record.

33. Archaeological Field Methods

3 or 6 s.h.

An intensive hands-on introduction to the ideas, techniques, and methods used in archaeological field research. Students will participate in an archaeological excavation and be trained in the foundations of archaeological field testing and analysis. Students will learn the history of excavation techniques and theories, and receive a practical introduction to the development of archaeological research questions and the field and laboratory strategies used to answer these in fieldwork and analysis.

If the course is given during the January session, it will be offered for 3 s.h.; if the course is offered during the summer session, it will be offered for 3 or 6 s.h. depending on site access. Permission of instructor required. May not be taken on a Pass/D+D/Fail basis.

Arabic (ARAB)

3. Intermediate Arabic

3 s.h.

This course continues the introduction to the basic features of the Arabic language in the context of Arab culture at large. In learning about modern Arab culture and society, students acquire Modern Standard Arabic (fusha) skills in speaking, listening, writing and reading. They will also be exposed to the features of several Arabic dialects. Prerequisite: ARAB 2 or equivalent.

4. Intermediate Arabic

3 s.h.

Continuation of the introductory Arabic language courses introducing students to the basic features of Modern Standard Arabic (fusha). In addition to mastering elementary speaking, listening, writing and reading skills in MSA, students will be introduced to the features of several Arabic dialects. This is the last class in the intermediate sequence and students will have covered most of the basics of Arabic grammar and be able to conduct simple conversations. Prerequisite: ARAB 3 or equivalent.

101 through 106. Advanced Arabic Language 3 s.h. each (These courses may be taken in any order and will be geared to individualized instruction.) An integrated sequence of courses, rather than six individual courses, this language sequence gradually develops the student's proficiency in the spoken language, in writing (including grammar) and in reading. An Arabic reader will be used along with text material ranging from simple stories to more sophisticated language. These readings will include culture and civilization topics. The individual student's needs and wishes will determine the exact nature of each course. A detailed personal record will be maintained to assure the development of each students skills. Prerequisite: ARAB 4 or the equivalent.

Art History (AH)

5. Form in the Art-Work, I #

3 s.h.

Analytical study of form in painting, sculpture and architecture emphasizing by comparative method structural significance and expressive values. Emphasis on classicism and its alternatives. Prerequisite: sophomore standing or above. (Formerly AH 5,6.)

152. Venetian Art and Architecture

3 s.h.

Study of Venetian Art and Architecture from the 13th to the 18th centuries as a link between the Eastern and Western world. Course includes daily visits to museums, churches and various schools of art in and around Venice. Course is given in Venice, Italy.

168. Internship

6sh

Students work two days a week in a leading auction house, museum, or gallery and write a research paper. Pass/D+/D/Fail grade only. No liberal arts credit.

187. Landscape in Art

3 s.h.

The course will focus on European and American artists' interpretations of nature in painting. Representative artists and major styles will be emphasized and the paintings will be analyzed within the context of society. A general comparison will be made with Chinese landscape painting of the Sung Dynasty and Japanese painting of the Kamakura period.

188. Age of Rembrandt

3 s.h.

The art and life of Rembrandt as an artist beginning in Leyden through his later years in Amsterdam. In addition, other 17th-century Dutch painters who lived in Rembrandt's time are considered.

192. Workshop in Art History

2 c l

Focused study of a particular area of arts or crafts combining lecture, demonstration and the examination of original works. May be repeated for credit when topics vary.

Biochemistry (BCHM)

78. Mechanisms of Disease

2 s.h.

Basic principles of biochemistry applied to the study of diseases. Enzyme-based diseases, congenital metabolic disorders, cancer, diseases of organs and body systems, etc. (2 hours lecture.) Prerequisite: CHEM 71 or BCHM 162.

Biology (BIO)

7. First-Year Biology Seminar

1 s.h.

This course is recommended for all first-year biology majors and others who are considering majoring in biology. Seminar topics vary annually. Each section will cover a different topic that reflects the interest of the specific professor leading the seminar. Students will participate in group discussions. They will gain experience in objective analysis and in gathering and presenting information through short writing assignments and an oral presentation. Students will design the syllabus to reflect their collective interest in the specific topic. May not be taken on a Pass/D+/D/Fail basis.

10. Genetics and Society

3 sh

Fundamental laws of hereditary transmission, gene function and genes in populations. Impact of genetic knowledge on society as a whole and consideration of when application of this knowledge may be beneficial or harmful to society. (3 hours lecture.) Recommended for students in psychology, sociology, anthropology, philosophy, education, political science, etc. Not open to biology majors.

25. General Microbiology

4 s.h.

An introduction to the cell structure, metabolism and genetics of both procaryotic and eucaryotic microorganisms. Basic human immunology is also examined with emphasis on host/pathogen interactions. Laboratory experiments explore the growth requirements of variety of microbes as well as the control of microbial growth. Credit not awarded toward major in biology, nor will credit be given for both BIO 143 and BIO 25. Prerequisites: admission to the Physician Assistant Studies Program: BIO 1 & 2; CHEM 3A & 4A, 3B & 4B. May not be taken on a Pass/D+/D/Fail basis.

90A. Introduction to Laboratory Research

3 s.h.

The scanning electron microscope as a principle tool for biological data acquisition. Instruction in the use of the scanning electron microscope, as well as project design and project implementation in a faculty member's ongoing research program. This course may be substituted for BIO 90 if the student plans to participate in two semesters of undergraduate research, i.e., a student may enroll in BIO 90A one semester and BIO 91 or 92 the following semester. (2 hours lecture, 3 hours laboratory.) Prerequisites: BIO 1 & 2 and permission of instructors. May not be taken on a Pass/D+/D/Fail basis.

116. Terrestrial Vertebrate Natural History

 $9 \, \mathrm{s.h.}$

Lectures, laboratory, and field experiences are used to learn the natural history of local amphibians, reptiles, birds, and mammals: the tetrapods. Emphasis on learning species identification, habitat preferences, behavior, and field techniques. Course includes trips to local study sites; some Saturday field trips instead of some weekday meetings. (3 hours laboratory, 1 hour lecture/recitation.) Prerequisites: BIO 1 & 2, or permission of instructor.

117. Behavior

3 s.h.

Lecture and laboratory emphasizing the ecological, evolutionary, developmental, and physiological causes and consequences of behavior in invertebrates and vertebrates. Specific topics may include communication, neural substrates of learning, heritability of behaviors, reproductive behavior, and sociality. Laboratory exercises emphasize methods of measuring behavior during natural field observations and during controlled laboratory experiments. (2 hours lecture, 3 hours laboratory.) Occasional field trips may be required. Prerequisites: BIO 1 & 2. May not be taken on a Pass/D+/D/Fail basis.

123. Human Anatomy/Neuroanatomy

4 s.h.

Lectures and demonstrations designed to provide an understanding of the structural and functional anatomy of the human body. Sections covered are: general anatomical concepts; upper extremities and back; head and neck; thorax and abdomen; perineum, pelvis, and lower extremities. Neuroanatomy concepts are also included and provide an understanding of the basic structural and functional anatomy of the human nervous system. Prerequisites: BIO 103, 105 and acceptance in the Physician Assistant Studies Program. May not be taken on a Pass/D+/D/Fail basis.

125. Elements of Histology

1 s.h

Microscopic anatomy of human tissue and organ structure with an emphasis on the relationship to mechanisms of disease. (Lecture) Prerequisites: BIO 103, 105, and acceptance into the Physician Assistant Studies Program. May not be taken on a Pass/D+/D/Fail basis.

183. Fundamentals of Aquaculture/Mariculture 4 s.h. Introduction to scientific culture of marine and fresh water organisms such as fishes, oysters, clams, prawns, algae, etc. Theory behind intensive, semi-intensive, and open and closed systems are discussed as well as control of water quality and specialized diets. Students utilize the aquaculture facilities and water testing laboratory. (3 hours lecture, 3 hours laboratory.) Prerequisite: BIO 1 & 2; prerequisite or corequisite: BIO 147. May not be taken on a Pass/D+/D/Fail basis.

184. Advanced Aquaculture/Mariculture

3 s.h.

Advanced concepts in the theory and management of aquaculture/mariculture facilities. Evaluation of productivity; analysis of recent research papers. Survey of the potential of recently developed culture techniques and organisms. A project is required. Prerequisite: BIO 1 & 2, 147, 183. May not be taken on a Pass/D+/D/Fail basis.

185 & 186. Internship: Aquaculture/Mariculture 5 s.h. each Intensive experience involving practical on-site participation working at an aquaculture/mariculture facility. Students may choose from a large selection of participating commercial facilities and make a thorough analysis of all phases involved in aquaculture and mariculture. Prerequisite: BIO 1 & 2, 147, 183, 184; corequisite: BIO 187. May not be taken on a Pass/D+/D/Fail basis.

187. Analysis of Aquaculture/Mariculture Internship 2 s.h. Taken in conjunction with 185 & 186. Student receives assistance in analyzing all phases of the commercial establishments at which he/she is interning. The intern returns to campus once each week for an ongoing dialogue with Hofstra faculty regarding technical details of the operation he/she is studying. Classroom discussion between interns at different places facilitates comparison and evaluation. Prerequisite: BIO 1 & 2, 147, 183, 184. Corequisite: BIO 185 & 186. May not be taken on a Pass/D+/D/Fail basis.

Chemistry (CHEM)

2A. Introduction to Chemistry

2 s.h. Fundamental principles of chemistry including classification of matter, the periodic table, atomic structure, nomenclature, chemical reactions and molecular structures. Problem-solving skills are stressed. Recommended for students who either did not take high school chemistry or earned a grade of C or below in high school chemistry. Prerequisite or corequisite: MATH 11 or placement into MATH 19 or higher. Not for major or minor credit. May not be taken after successful completion of any higher numbered chemistry course.

71. Organic and Biological Chemistry 4 s.h. Basic principles of organic and biochemistry for allied health majors. Organic chemical nomenclature, mechanisms of organic reactions, organic polymers. Biochemistry of enzymes, carbohydrate metabolism, protein synthesis. (4 hours lecture) No credit for this course and CHEM 131A, 132A, or BCHM 162. Prerequisites: CHEM 3A & 4A.

Comparative Literature and Languages (CLL)

54. The Oedipus Theme# 3 s.h. A comparative analysis of the evolution of the Oedipus theme from its origins in Greek culture to its modern deployment as both a literary motif and an interpretative figure.

75. Women Writers in the Romantic Tradition # 3 s.h. Traces elements of Romanticism and its development in the works of major women writers of the 19th and early 20th century (1810-1932). Includes works by Germaine de Stael, Mary Shelley, George Sand, Edith Wharton and Colette.

173. Sentiment to Sadism in the Early European Novel 3 s.h. Study of the European novel from the end of the 17th to the end of the 18th century. Focus on the development and decadence of feelings, sentiments, and emotions and how they reflect political and social events of the period.

190. World Literature and the Anatomy of

Cultural Difference# 3 s.h. Introduces students to the notion of world literature by presenting works from different countries and cultures, languages and traditions in a comparative context, with emphasis primarily on cross-cultural comparisons between Western and non-Western literatures. Prerequisite: ENGL 2.

198. Advanced Seminar 3 s.h. Advanced discussion of literary analysis, literary history and literary theory. Topic varies according to semester and professor. Substantial research paper is required. This seminar is open to senior majors and minors, and to qualified advanced junior

students by permission. Students need to have completed the majority of their course work for the major before this seminar, which satisfies the Senior Essay requirement of the major. May not be taken on a Pass/D+/D/Fail basis. Note: CLL 196, 197, 198 satisfy the same major requirement.

Computer Science (CSC)

50. Fundamentals of Object-Oriented Programming 3 s.h. Familiarize students with essential concepts of object-oriented programming using the Java language. Course covers basic systems concepts, including hardware architecture and software. The notion of an object and class design are discussed. Applets and applications are explored. Coverage of Java syntax, including fundamental language components, selection structures, repetition structures, and data structures. Hands-on exposure to the Java development environment. Some HTML syntax coverage. Course requirements include homework exercises and completion of several programming projects. Prerequisite: CSC 5 or equivalent. May not be taken on a Pass/D+/D/Fail basis.

52. Fundamentals of Systems Analysis 3 s.h. Provides students with an overview of the issues and methodologies relevant to systems analysis and design. Lectures focus on the five phases of the system development life cycle: planning, analysis, design, implementation, and operation and support. Laboratories focus on learning software tools available for systems analysis and design. Students work in teams on all phases as they explore a variety of realistic case studies. Other topics include rapid prototyping, CASE tools, client/server systems, software engineering and project management tools. Requirements include completion of in class and homework laboratory projects as well as presentation of a complete analysis report to the class. Prerequisite: CSC 5 or equivalent. May not be taken on a Pass/D+/D/Fail basis.

54. Fundamentals of Data Communications 3 s.h. Introduction to data communications. History, evolution and current trends. Hardware issues including signals, media, terminals, communications backbones, and transmission methods. Protocols, including OSI, TCP/IP, LANs. Course includes an introduction to networking, including WANs, the Internet, and distributed systems. Course requirements include homework exercises, a programming project, and a research paper on a topic of interest and presentation of findings. Prerequisite: CSC 50. May not be taken on a Pass/D+/D/Fail basis.

56. Fundamentals of Database Management Systems 3 s.h. Introduction to database management systems (DBMS). Familiarize students with the fundamental issues and terminology of DBMS. Relational models, SQL, normalization. Design methodologies are covered in lectures and through a series of laboratory experiments. Typical functions of a DBM and DEMs administration are covered. Advanced topics include distributed systems, client/server systems, and object-oriented systems. Course requirements include several laboratory exercises. Prerequisites: CSC 5 (or equivalent), CSC 50. May not be taken on a Pass/D+/D/Fail basis.

58. Fundamentals of JavaScript Programming 3 s.h. JavaScript is a powerful programming tool that facilitates the use of multimedia—graphics, animation, and sound—in Web page design. This course familiarizes students with the essential concepts of Web programming using the JavaScript language. Cover basic systems concepts, including network protocols and software. Coverage of JavaScript syntax, including fundamental language components, object-oriented programming concepts, event handlers, frames, images, HTML, control structures, and

[#]Core course

relevant data structures. Hands-on exposure to the JavaScript developer environment. Course requirements include completion of homework exercises and several laboratory programming projects. Prerequisites: CSC 50, 54. May not be taken on a Pass/D+/D/Fail basis.

60. Fundamentals of Networking 3 s.h. Introduction to networking. Peer-to-peer, LANs, and WANs. History and evolution of networking. Current applications. Communication protocols, Open Systems Interconnection, secure communications. Hardware and software issues. Structure of the Internet: protocols, services, the World Wide Web, and HTML. Course requirements include homework exercises and a research paper on a topic of interest and presentation of findings. Prerequisite: CSC 54. May not be taken on a Pass/D+/D/Fail basis.

62. Ecommerce 3 s.h. Provide students with an overview of the issues and technologies relevant to electronic commerce. Students design and implement a prototype ecommerce web site. Topics include communications, networking and the Internet; programming, scripting languages and authoring tools; security; databases and archiving; multimedia; transaction processing; search engines; and data mining. Students work in teams on the design and implementation of their web sites and present a report and demonstration to the class. Prerequisites: CSC 50, 52, 54, 56, 58, and 60. May not be taken on a Pass/D+/D/Fail basis.

153. Advanced Computer Architecture 3 s.h. Study of computer architecture from classical to advanced perspectives. Explores architectural characteristics of modern computer systems such as performance, instruction sets, assemblers, datapaths, pipelining, caching, memory management, I/O considerations, and multiprocessing. Prerequisite: CSC 110 or ENGG 35 and senior standing. Same as ENGG 153. May not be taken on a Pass/D+/D/Fail basis.

154. Advanced Computer Architecture Laboratory 1 s.h. Experiments provide laboratory experience in the designs and operations of different types of computer architecture, memory architectures, I/O and bus subsystems, special purpose architectures, parallel processing, and distributed systems. Explore hardware and software issues and tradeoffs in the design, implementation, and simulation of working computer systems. Prerequisite: CSC 153 or ENGG 153 and CSC 110A or ENGG 32B with permission of instructor. Same as ENGG 154. May not be taken on a Pass/D+/D/Fail basis. No liberal arts credit.

155. UNIX and C++

3 s.h.
This course advances beyond the principles learned in CSC 15 and CSC 16 to practical programming skills. Object-oriented software design, designing using patterns; techniques for building robust programs; inheritance, polymorphism; parametric polymorphism through templates; systematic approaches to coding and testing; code-reuse; standard-template libraries; I/O issues. Prerequisites: CSC 14, 16.

163. Computing, Ethics, and Society 1 s.h. Critical examination of ethical problems associated with computer technology. Discussion of these problems is conducted within the framework of classical philosophical ethical theories. Legal and quasi-legal (i.e., policy and regulative) issues are also considered. Topics addressed include the process of ethical decision-making, privacy and confidentiality, computer crime, professional codes and responsibilities, software piracy, the impact of computers on society. Prerequisite: sophomore class standing. No liberal arts credit.

Dance (DNCE)

A study of rhythmic concepts as they apply to making, performing, viewing and teaching dance. The course will also include practice in percussive accompaniment, rhythmic notation, use of computer technology for the development of accompaniment, and the analysis and use of music from varied cultures. Open only to dance majors and minors, or by permission of instructor.

Drama (DRAM)

110. Special Topics in Drama
1-3 s.h. Seminars on selected aspects of theater: study of movements, ideas, individual artists and playwrights or exploration of significant performance or production techniques such as mime, Commedia dell'arte, constructivism, touring theater. May be repeated for credit when topics vary.

Economics (ECO)

of international trade.

101. Introduction to Economics

3 s.h.

This course is an intensive and combined study of undergraduate micro- and macro-economics. It assumes no prior knowledge of economics and starts with an introduction of basic economic concepts. The first part of the course focuses on the way in which prices and distribution are determined in a free market economy. Short and long-run costs of firms, pricing, in competitive, monopolistic and oligopolistic markets are among the issues discussed. The second part of the course then turns to the economy as a whole, focusing on the Keynesian revolution and the role of government in a free market economy. Banking system, central banking, money creation are among the issues discussed in this part along with economic growth and problems

117. Women and Development in the Middle East# 3 s.h. Examination of the impact of economic development on gender in contemporary Middle Eastern countries. Factors such as social in contemporary Middle Eastern countries. Factors such as social division of labor in the family, fertility, education, employment, occupational segregation, and discrimination are studied within the broader socioeconomic and culture context of the Middle East. Prerequisite: at least two semesters of social sciences and/or women' studies, or instructor's approval.

118. Political Economy of Turkey 3 s.h. Periodically

This is an interdisciplinary course focusing on the nation of Turkey, and exploring the conflicts in Turkish society between modern and traditional, secular and religious, and rich and poor. Particular attention is paid to the young and dynamic nature of the country, and classes cover a broad range of topics examining Turkey's history and its modern political structure. Among the topics to be studied are, the attempts over the past two hundred years to modernize Turkey, the social and political conflicts these attempts have generated, the domestic and international political difficulties the country is faced with, and the nature of its recent economic problems. Required readings are drawn from a variety of sources and disciplines in the social sciences. Same as PSC 118.

120. African Labor Economics 3 s.h. Work, working people, and working-class movements in modern Africa are the focus of this introductory course. Through contemporary and historical cross-country studies of workers in a wide variety of economic, political and institutional settings, we will evaluate rival perspectives on a host of interesting and controversial topics. These include: changing occupational and industrial formations, gender and racial gaps in jobs and income, poverty and inequality, immigration, urban informal employment, worker training and healthcare, labor unions, and government's regulatory and job creation roles. Prerequisite: one intro-

ductory economics course, or LABR 1, or instructor's permission. Credit given for this course or ECO 120, or LABR 120 not both.

133. Health Economics#

Health Economics provides a broad overview of the economics of health care delivery and finance systems, and explores the growing role of economic theory in health-related research and in national health care debate. Basic tools used to analyze the allocation of scarce health care resources are introduced. Health Economics explores the explicit and implicit rationing of health care through market and non-market mechanisms in a rapidly changing health care environment. Alternative health care systems are compared and contrasted with the existing system. Prerequisite: one introductory course in economics.

141C. Labor Economics

3 s.h.

The centrality of work in most people's lives has made labor issues like job growth, unemployment, skills training, pay and benefits, occupational safety, work force diversity and inequality, immigration, trade unions, labor-management relations, and government employment and labor market programs subjects of great importance and debate around the world. This course introduces students to the main theoretical perspectives and empirical tools used by economists to explain and analyze the multifaceted interactions of workers, employers, labor unions, regulatory agencies, and other institutions. Through both historical and current cross-country studies, the course develops a comparative global framework for analyzing earnings and employment problems and policies. Prerequisite: ECO 1 or 2 or LABR 1, or instructor's permission. Same as LABR 141C. Credit given for this course or LABR 141C but not both. Not open to students who have taken ECO 141.

169. Industrial Economics

An introduction to the economic analysis of the evolution of industries, this course focuses on the origins of specific economic sectors and the factors influencing their evolution. A review of historical evidence motivates the development of theoretical models concentrating on various aspects of market competition, business strategy and structure, and innovation. Prerequisite: ECO 2.

Engineering (ENGG)

47. Environmental Engineering

3 s.h.

Definition of environmental problems, their sources, impacts on society and health management. Introduction to the applicable scientific basis of pollution control including chemistry, microbiology, climatology and epidemiology. Survey of water quality parameters, water resources, water pollution, air pollution, solid and hazardous wastes engineering. Prerequisites: CHEM 3A & 4A, 3B, MATH 19. No liberal arts credit. (Formerly ENGG 144.)

60. Water Quality for Environmental Engineers Study of the chemical, physical and biological water quality parameters necessary for the design of water and wastewater treatment processes and operations. Basic physical and chemical parameters of pH, turbidity, alkalinity, suspended solids, hard-

ness, chlorine residual, dissolved oxygen and metal analyses are examined in laboratory exercises. Prerequisites: CHEM 3A, 3B,

62. Environmental Unit Operations Laboratory Measurement of engineering properties of soils and bench scale laboratory exercises for the control and operation of selected environmental treatments for water and wastewater. Prerequisite: ENGG 47; Corequisite: ENGG 147. May not be taken on a Pass/D+/D/Fail basis. No liberal arts credit.

63. Biochemical Process Dynamics

3 sh

Chemical kinetics for application to natural and engineered systems investigated through the relationship of rate, energy and

mass. Examination of several aspects of chemical kinetics: equilibrium, rate expressions for chemical reactions, effect of physical parameters on reaction rates and specific reaction examples relevant to environmental and bioengineering. Fundamentals of reactor theory and principles of mass balance to derive dynamic process models. Special consideration is given to kinetics of enzyme catalyzed reactions and microbial processes for application to process design. Prerequisite: CHEM 4A, ENGG 47 or 81 or permission of instructor, MATH 131.

117. Environmental Unit Processes and Operations Theory and design of the physical, chemical, and biological unit operations of filtration, sedimentation, coagulation, flocculation, adsorption, ion exchange, disinfection, gas transfer, biological degradation, and sludge handling as applied to water and wastewater treatment. Prerequisites: ENGG 60, 47; corequisite: ENGG 115. May not be taken on a Pass/D+/D/Fail basis. No liberal arts credit.

136. Hydraulic Engineering and Water Resources

3 s.h.

Introduction to hydrology. Population and water demand projections, design of water transport systems. Applications of principles of fluid mechanics to typical civil engineering systems; pipe networks, pumping stations, open channel flow and measuring devices. Prerequisite: ENGG 115. No liberal arts credit.

143G. Engineering Design B

Integration of physical principles with mathematical analysis and/or experimental techniques as basis for an individually required design project in engineering science. Prerequisite: senior standing in Engineering Science.

153. Advanced Computer Architecture

Study of computer architecture from classical to advanced perspectives. Explores architectural characteristics of modern computer systems such as performance, instruction sets, assemblers, datapaths, pipelining, caching, memory management, I/O considerations, and multiprocessing. Prerequisite: CSC 110 or ENGG 36 and senior standing. Same as CSC 153. May not be taken on a Pass/D+/D/Fail basis.

154. Advanced Computer Architecture Laboratory Experiments provide laboratory experience in the designs and operations of different types of computer architecture, memory architectures, I/O and bus subsystems, special purpose architectures, parallel processing, and distributed systems. Explore hardware and software issues and tradeoffs in the design, implementation, and simulation of working computer systems. Prerequisite: CSC 153 or ENGG 153 and CSC 110A or ENGG 32B with permission of instructor. Same as CSC 154. May not be taken

180. Digital Signal Processing

Analysis, filtering, and modeling of discrete-time signals. Sampling and quantization. Z transforms, discrete Fourier transforms, digital filters. Sampling-rate conversion by interpolation and decimation. Linear prediction, system modeling, lattice filters. Prerequisite: ENGG 177. No liberal arts credit.

on a Pass/D+/D/Fail basis. No liberal arts credit.

187. Medical Imaging

Introduction to the fundamental principles of Image Analysis in Biological Sciences and Medical Imaging. Emphasis on analysis techniques useful in scientific research. Topics include impulse response, transfer function, signal-to-noise ratio (SNR), image display, 2-D convolution, 2-D Fourier Transforms, and linear and nonlinear filters. Theory formulations of major medical imaging modalities (X-ray CT, Ultrasonic, MRI, Radionuclide) are derived from basic principles. Knowledge of a programming language (Fortran, C, or C++) and the ability to use existing computer programs (MATLAB) are recommended. Prerequi-

sites: ENGG 177 or 166B, MATH 144, PHYS 12A or permission of instructor. May not be taken on a Pass/D+/D/Fail basis. No liberal arts credit.

189. Random Signal Analysis

3 s.h. Laws and methods of probability are introduced. Concepts such as random variables, probability distributions for discrete-time and continuous-time signals, and averages are developed. Random processes and random signals are defined and examined

through temporal correlation functions and Fourier spectral characteristics. The techniques of linear system analysis, filtering and optimization with random signal and noise inputs are developed using power spectral density functions. Practical applications, using compute mthods such as FFT, are explored. Prerequisite or corequisite: ENGG 177 or MATH 144.

198. Honors Thesis

3 s.h.

Advanced research in the student's area of specialization, culminating in written report and oral defense. Open only to senior engineering majors who are eligible for departmental honors and who secure, prior to registration, the written approval of an honors adviser and of the departmental chairperson. Can substitute for any other engineering course with adviser's approval, except senior design courses.

English (ENGL)

5. Technical Communications

3 s.h.

Examines the use of language in settings that require technical reports and presentations. Study and practice of the basic principles of technical communications with attention to style, audience, research, visual aids, major report forms and oral presentations. May not be used to satisfy the general University humanities requirement. Credit given for this course or ENGL 30, not both.

30A. Business Writing for Accountants

Theory and application of the principles of effective writing within the field of accounting. Emphasis on the psychology and ethics of persuasion, the logic of argument, and clarity of style. Application of critical thinking skills to writing tasks typical of the accounting profession. Use of primary and secondary accounting sources. Concludes with a critical essay. Required of all accounting majors; open only to juniors and seniors. Prerequisites: ENGL 1-2; junior class standing or above. May not be used to satisfy the general University humanities requirement. May not be taken on a Pass/D+/D/Fail basis.

139. The African Novel* #

Introduces selected African novelists of the 20th century such as Chinua Achebe, Sembene Ousmane, Ayi Kwei Armah, Ngugi wa Thiong'o, Bessie Head, Buchi Emecheta and Solomon Mutswairo. Analysis of African literary themes, such as traditional and modern conflicts, resistance to colonialism, effects of independence, neocolonial dilemmas and images of the African

150. Native American Literature* #

3 s.h.

Examination of the development of native American literature. Emphasis on narrative genres, such as autobiography and fiction, with some attention to poetry. The reading consists primarily of indigenous materials (to be read in English). Credit for this course or ENGL 192U, not both.

167. Post-Colonial Literature of South Asia* #

An exploration of the literature of South Asia (Bangladesh, Bhutan, India, Myanmar, Nepal, Pakistan, Sri Lanka) in the 20th century, focusing on the ways in which this literature deals with the concerns of national, religious, or gender-based loyalties and identities. Prerequisites: ENGL 1-2.

168. Caribbean Experience in Literature* #

An exploration of the literature of the English-speaking Caribbean (Antigua, Barbados, Belize, Guyana, Jamaica, St. Kitts, St.

Lucia, and Trinidad). Emphasis is placed on the ways in which this literature deals with the experience of slavery, colonization, and independence and the ways in which it treats such issues and themes as regional identity, color, race, class, gender, and family relations. Attention is also given to the ways in which the literature and culture of the Caribbean makes use of such cultural elements as Carnival and vernacular Africanized English known as patois and creole. Prerequisites: ENGL 1-2.

178D. Desktop Publishing for Book Publishing*

Offers instruction in design, layout, and computerized production skills for books and book promotion. Explores the design and content of trade, professional, and educational books in terms of form and function. Introduces the Macintosh Operating System as used in a graphic environment. Design and production of sample materials are required as part of the course and of the final examination. No liberal arts credit. Credit given for this course or ENGL 197V, not both.

English Language Program (ELP)

16A. Introductory Reading and Writing

Development of reading and writing skills following a grammatical syllabus. Reading and writing tasks are designed to provide opportunity for practice and application of relevant grammatical items and structures presented at this level. No degree credit.

17A. Introductory Conversation, Language

Laboratory and Tutorial

Development of verbal communication and listening comprehension skills following a grammatical syllabus. Verbal and listening tasks are designed to provide opportunity for practice and application of relevant grammatical items and structures presented at this level. Tutorial work on specific weaknesses of individual students. No degree credit.

Fine Arts (FA)

102B. New Media II, Intermediate Web Design 3 s.h. Intermediate techniques and aesthetics of website creation. Using image manipulation, web layout and web animation software, students learn to conceive, develop, design and produce websites. Opportunity for individual experimentation with the design and content of the websites developed during the course. Students are encouraged to develop a personal directorial style based on the fundamentals of design. Assignments, critiques and discussions on historically related artists, designers and technological issues. Prerequisites: FA 102A, 51 and 27, or with permission of instructor.

102C. New Media III, Intermediate Motion Graphics and Sound Design

3 s.h.

Motion Graphic Design is the use of typography, digitally manipulated images and sounds, to produce multimedia spots and Web-based movies in linear, time-based media. Students learn the planning and production tools necessary for motion graphics and sound design, including treatments, storyboards and software prototypes. Because motion graphics is closely associated with telling stories, an awareness of the nature of people's lives and the methods they use to communicate among themselves and to others, is central to this course. Within the assignment structure, there is the opportunity for the development of an individual creative style. This course covers the technical, aesthetic and practical aspects of planning, creating and producing motion graphics and sound for high and low-resolution digital media. Prerequisites: FA 102A, 102B, 51, and 27, or with permission of instructor.

^{*}Open only to students who have fulfilled the English Proficiency Exam requirement.

[#]Core course

102D. New Media IV: Advanced Screen-based Design Projects 3 s.h. Comprehensive new media projects exploring advanced areas of digital design, including design research, proposal writing, presentation and convergence of media. For majors interested in pursuing individual, self-created projects. Emphasis on individual creativity, developing and refining a personal style. Students are expected to produce a professional-level project for their portfolio. Individualized reading assignments. Class discussion of contemporary issues. Workshop course for advanced students working to continue the development of their own new media work on a professional level. Prerequisites: FA 102A, 27, 51 and either 102B or 102C, or with permission of the instructor.

158. Graphic Design III

3 ch

Comprehensive design projects exploring specific areas of graphic design including design research, proposal writing and presentation. Internships inside and outside the University are encouraged in this and all further graphic design courses. Prerequisites: FA 51, 51A or permission of the instructor.

170F. Color Printing from Color Negatives

9 . 1.

Course in basic color printing from color negatives. Students learn how to process color negatives and make color prints. Emphasis is placed on the understanding of color filtration and the ability to produce good color prints. Examples of historical and contemporary color photography are discussed in relationship to student assignments. In addition to class lectures and laboratories, one museum or gallery visit and a written critique is required. Prerequisites: FA 170, 170A. Lab fee \$100.

French (FREN)

102A. Practical Translation

1 s.h.

Intermediate translation skills, with exercises moving from French to English and from English to French. Structure of French and English is compared through translation exercises. Prerequisite: FREN 4; may be taken concurrently with other mini-courses and FREN 105; 101 is strongly recommended; may not be taken concurrently with or after FREN 160.

104A. Readings in Business II

3 s.l

Study of France's current economic, political, legal and social practices with emphasis on its business sector. Prerequisite: FREN 105 or 111 or 112. No credit toward major in French.

121. The Francophone Experience in Sub-Saharan Africa 3 s.h. An introduction to African cultures from the colonial era to post-colonialism through an analysis of literature and film. Prerequisite: FREN 111 or 113.

122. The Francophone Experience in North Africa 3 s.h. An introduction to Algerian, Moroccan and Tunisian cultures from the colonial era to post-colonialism through an analysis of literature and film. Prerequisites: FREN 111 or 113.

123. The Francophone Experience in the Caribbean 3 s.h. An introduction to Caribbean cultures from the colonial era to post-colonialism through an analysis of literature and film. Prerequisites: FREN 111 or 113.

124. Culture at Littérature Québécoises

(Culture and Literature of Quebec) 3 s.h. Students of French become familiar with the basic components of Québécois culture and literature through a study of its history, geography, and examples of its literary tradition. Discovery of the political, cultural, and social aspects of the language issue so

much a part of Québécois life. Prerequisite: FREN 4.

130A. Aspects of French Culture 1 s.h. Detailed investigation of some aspect of contemporary French life, e.g. film, music, television, comics, newspaper, architecture,

etc. Topics vary. Emphasis on spoken and written expression. Prerequisite: FREN 4.

145. French Transformational Grammar

1 s.h.

A five-week intensive course in transformational grammar for the advanced French student. Prerequisite: FREN 111 or 101 or 112 or permission of instructor.

198. Littérature Québécoise (Literature of Quebec) 3 s.h. A discovery of the cultural and literary traditions of Quebec through a close analysis of several texts by Québécois authors (prose fiction, poetry, theater, and cinema), leads to an understanding of 1) Quebec's ties to France, 2) its distancing from France, 3) the association with English-speaking Canada/North America, and finally 4) the identity crises of a people of French heritage with a deep-rooted sense of being North American. Prerequisite: FREN 114A.

French Literature in Translation (FRLT)

50. Reconstructing French

Caribbean Identities #

3 s.h.

Exploration of literary works from French Caribbean islands including Guadeloupe, Martinique and Haiti. Readings include works by Cesaire, Damas, Tirolien, Clitandre, Conde, Schwarz-Bart, Roumain, and others. Topics covered include colonialism, decolonization, racism, and the African heritage. All works are read and discussed in English.

52. Sovereignty and Quebec: A Literary and

Cultural Perspective #

3 s.h.

Examination of the French presence in North America, with specific focus on the culture and literature of Quebec. The cultural and social struggle to maintain both a French and a North American identity as seen through the analysis of Québécois texts leads to a better understanding of the current political and cultural plight that faces Quebec citizens as they ponder the pros and cons of sovereignty and unity within Canada. American students come to a more discriminating sense of their own identity as North Americans. All works are read and discussed in English. Sophomore standing or above.

Geography (GEOG)

60. Introduction to Geographic Information Systems

 $3 \, \mathrm{s.h.}$

This course introduces students to Geographic Information Systems (GIS) foundations, concepts, and application techniques. GIS are used to encode, store, analyze, and report spatial data and provide a repository, which can be constructed, maintained, edited and analyzed. By linking different information technologies such as mapping and database management systems, spatial information can be used to facilitate management and decisions in a wide array of fields. These include marketing, industrial and commercial location, resource inventory and management, environmental impact assessment, urban planning, transportation, tracking crime data. Same as TPP 60.

80. Transport Geography

3 s.h.

Contemporary economic processes, such as the globalization of trade and the emergence of economic blocs, have been accompanied by significant growth in the movements of people, freight and information. Transport geography is concerned about these movements along with the infrastructures, institutions and corporations supporting them. It tries to link spatial constraints and attributes with the origin, the destination, the extent, and the nature and purpose of movements. Transportation, therefore, has varied and complex impacts of over populations, economies and geography.

104. Special Topics in Geography

This course provides a study of a particular subject or problem in geography, with the specific topic for the course varying from semester to semester. Possible course topics include an introduction to geographical information systems (GIS), transportation geography, urbanization in the developing world, the economic geography of China, and environmental geography. Students should consult with the particular instructor each time the course is offered to determine if prior preparation for the topic to be covered is recommended. Such consultation may take place prior to registration or on the first day of class. May be repeated for credit when topics vary.

106. Urbanization in the Developing World #

Coping with rapid urbanization and the uncontrolled growth of cities, poses one of the greatest geographical challenges facing the nations of the developing world. This course introduces students to the study of urbanization in the developing world and explores the urban problems such as insufficient infrastructure, unemployment, lack of housing and inadequate social services that occur in these cities. The course has a regional focus and looks at the development of cities in Latin America, Asia, Sub-Saharan Africa, and North Africa and the Middle East, highlighting each regions distinctive urban patterns and problems. The last section of the course looks at possible solutions and policies that could be adopted to help alleviate the problems of rapid urbanization and poverty in the cities of the developing world.

113C. The Geography of East and Southeast Asia #

3 s.h.

This course examines East and Southeast Asia, commonly known as Pacific Asia. Pacific Asian societies have experienced various phases of development since the end of World War II. Topics include socioeconomic features of: Japan, China, South Korea, Hong Kong, Taiwan, Singapore and other countries such as Malaysia, Thailand, Indonesia, Vietnam and the Philippines. Problems and prospects of development in the region as well as issues related to urbanization, transportation, agriculture and resource development are covered. Credit given for this course or GEOG 113, not both.

140. Geography of Latin America #

3 s.h.

Study of the physical and human geographic roots of Latin American societies, from Mexico to the southern cone of South America. Explores the forces that shaped this unique region and considers its role in the contemporary world. Impact of historical geography since pre-Columbian period on modern Latin America. Economic and political geography in relation to other world regions. Changing human landscapes and social transformations currently affecting many of the area's inhabitants.

141. Geography of the Caribbean

3 s.h.

An exploration of the physical and human forces that have shaped the landscape of the Caribbean Basin. Attention focuses on a variety of social, population, development, and geopolitical issues of importance to the region and on the role played by the Caribbean in today's world.

160. Intermediate Geographic Information Systems

3 s.h.

Geographic Information Systems (GIS) are used to encode, store, analyze, and report spatial data. This multimedia course expands the GIS foundations, concepts, and application techniques already acquired to the introductory course (GEOG 60: Introduction to Geographic Information Systems). It mainly focuses upon the professional applications of the GIS technology as well as the understanding of more advanced spatial analysis functions such as geocoding, classification, statistical surfaces, overlay and network analysis. The student is expected to become proficient in applying GIS for the analysis of problems in a wide array of fields. Prerequisite: GEOG 60 or approval of instructor.

Geology (GEOL)

133F. Field Trips in Petrology

1 s.h.

This two-day course, taken in conjunction with GEOL 133, is a field-based study of igneous and metamorphic rocks of the Appalachian orogenic belt. The first trip is to examine igneous rocks, the second trip is to examine metamorphic rocks. A map-based report, together with notes and descriptions of field observations and measurements, is required. (Two full days in the field.) Prerequisite: GEOL 1C or 2C. Corequisite: GEOL 133.

German (GERM)

160. Translation

3 s.h.

Analysis and study of techniques and problems inherent to the translation process. Intensive exercises from German into English and English into German. Literary, journalistic and editorial texts are used. Prerequisite: 6 semester hours of 100-level German courses.

History (HIST)

73. The Modern Middle East #

An overview of Modern Middle Eastern social, political and religious history from 1500 to the present. Topics include the rise of the Ottoman Empire, the expansion of European imperialism, the discovery of oil, the Arab-Israeli conflicts, and the Iranian Revolution (Formerly 70.)

119. Blacks and Jews: Interrelation in the Diaspora

An examination of the relations between African-American and Jewish-Americans in the United States from the period of the "Grand Alliance" (ca., 1910-1967) to the current moment of "crisis." Through the investigation of literature, sociological analysis, historical case studies, opinion pieces, and works of art, this course illuminates the complex and shifting relations between African-Americans and Jewish-Americans and their significance for questions of identity in the modern United States. (Same as MFST, JWST 119.)

170. The Middle East and the West

An examination into the diverse aspects and the complexity of cultural and religious interactions between the Islamic Middle East and the Western World in pre-modern and modern times. Topics include the evolving Western images of the East and Islam, mutual scientific and religious influence and the current attitudes towards Western culture, particularly the United States, in the Middle East.

199. Internship in History

This course is designed for history majors and minors. It gives students an opportunity to apply academic knowledge and skills gained in the classroom in practical work situations. For three credits, students must be present at an approved off-campus site for six hours a week and devote an additional three hours a week towards related academic work, which includes weekly meetings with an adviser, completion of a journal and a research paper. Students wishing to take the course for six credits are expected to double the on-site and academic obligations for the three credit course. Prerequisite: permission of the chairperson.

Italian (ITAL)

2R. Review of Elementary Italian

Intended for students who have had two years of Italian in high school, but who need review of the basics of ITAL 1 and 2 before enrolling in ITAL 3. No credit for either ITAL 1 or ITAL 2, if credit received for 2R.

111. Advanced Italian Grammar

Thorough review and refinement of the student's knowledge of Italian grammar and structure. Systematic exercises, compositions and illustrative analysis of reading passages. Prerequisite: $ITAL\ 4$ or permission.

157. Contemporary Italian Women's Fiction 3 s.h Readings of representative works including both short stories and novels. Exploration of recurrent themes such as sisterhood, violence against women, misogyng, female desire, female agency, the language of emotion, subjectivity and the body. We analyze how the bildingsroman, the historical novel and the postmodern novel are impacted (some more, some less) by the gender of the author

Italian Literature in Translation (ITLT)

50. Writing Women in Early Modern Italy

3 s.h. Students are introduced to the classics of early modern Italian literature (Ariosto, Boccaccio, Castiglione, Machiavelli, Tasso et al) under the unifying perspective of how these authors constructed a dialogue about the nature and status of women. With this critical orientation, woman as subject and object of representation emerges as the focus of an intertextual conversation among authors both male and female. Boccaccio's Famous Women is read in conjunction with Fonte's The Worth of Women, the courtier with the courtesan, the recognized masters of pastoral, epic and comedy with lesser known examples by Campiglia and Andreini. Representations of women in painting and sculpture, early modern female artists, and cinematic representations of Franco and Gentileschi are also considered.

90. Lifelines: Italian Women's 20th-Century Prose Fiction#

An investigation of various modes of self-expression in 20th-century Italian prose fiction (autofictions, regional novel, bildungsroman). The texts, read in English, represent an overview of literature written by Italian women from the early 20th century to the present and include contributions from both peninsular and insular authors. In addition to the relevant literary and sociopolitical contexts of writing, the course explores themes such as the negotiation of the right to write, motherhood and authoring, representation of gender roles, female social transgression, rebellion, and self-awareness.

Italian Studies (IT ST)

131. Italian Civilization: the Middle

Ages to the Renaissance 3-4 s.h. Main currents in the cultural development of the period with emphasis on literature, philosophy and the arts. No knowledge of Italian is required. An extra hour is given for those planning to major in Italian.

132. Italian Civilization: the Age of

Baroque to the Present

3-4 s.h

 $3 \, \mathrm{sh}$

Main currents in the cultural development of the period with emphasis on literature, philosophy and the arts. Some attention is given to the opera and the cinema.

Japanese (JPAN)

5. Intermediate Japanese

3 s.h

Continuation of JPAN 4. Continuation of intermediate Japanese language, for increased communicative competence at a high intermediate level of proficiency, in the four language areas (speaking, listening, reading, and writing). Students cover approximately 50 kanji, and read a variety of materials. Prerequisite: JPAN 4 or equivalent. May not be taken on a Pass/D+/D/Fail

101-102. Advanced Japanese 1-3 s.h

Continuation at the high intermediate level the study of the Japanese language. Students continue oral communication work, as well as develop more advanced reading skills. In this level, students learn approximately 70 kanji. Prerequisite: JPAN 5 or equivalent. These courses in this cycle may be taken in any order, one each semester. May not be taken on a Pass/D+/D Fail basis.

Jewish Studies (JW ST)

11. Judaic Perspectives on the Hebrew Bible #

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An examination of Jewish Biblical interpretation from antiquity to the present with special focus on continuities and contrasts in exegetical method. Starting with an examination of "inner biblical exegesis" the course proceeds to scrutinize major forms of Jewish biblical interpretation from the period of the great Rabbinic sages in late antiquity, to Eastern centers of Medieval Jewish scholarship (e.g., Babylon, Islamic Spain), to the emergence of Western European forms of interpretation in the Renaissance to the period of Jewish Enlightenment, to the present.

107. Women in the Hebrew Bible

3 s.h.

A literary analysis of the many representations of women found in the Hebrew Bible. Through a close reading of biblical literature and in dialogue with various forms of feminist scholarship, this course examines issues such as patriarchy and its relation to the production of Old Testament literature; gender relations; goddess worship; violence against women; the political, legal, economic and religious standing of ancient Israelite women.

108. Modern Jewish Intellectuals #

3 s.h

An examination of major Jewish intellectuals from the period of the Jewish Enlightenment (ca. late 18th century) to the present. An initial inquiry as to the definition of the term "intellectual" leads us to the larger question of the Jewish intellectual and his or her relation to the Jewish and non-Jewish world. Among the figures to be read are Karl Marx, Theodor Herzl, Emile Durkheim, Franz Kafka, Georg Simmel, Sigmund Freud, Anzia Yezierska, Rosa Luxemburg, Simone Weil, George Steiner, Hannah Arendt, Philip Roth, Amos Oz, Cynthia Ozick, and Saul Bellow.

119. Blacks and Jews: Interrelation in the Diaspora

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An examination of the relations between African-American and Jewish-Americans in the United States from the period of the "Grand Alliance" (ca., 1910-1967) to the current moment of "crisis." Through the investigation of literature, sociological analysis, historical case studies, opinion pieces, and works of art, this course illuminates the complex and shifting relations between African-Americans and Jewish-Americans and their significance for questions of identity in the modern United States. (Same as AFST, HIST 119.)

Labor Studies (LABR)

1. Introduction to Labor Studies

3 s.h.

This course examines life as it was lived inside factories, corporations, and other work places, within communities, during leisure time, and in families and homes from the middle of the eighteenth century to the present. Special attention is paid to the processes by which working classes are created cross-culturally; the way in which gender categories are structured; the role of race and ethnicity; and the recent global restructuring of industry and work; and unionization. We are also interested in literary, theoretical and political views of work and labor.

120. African Labor Economics

3 s.h

Work, working people, and working-class movements in modern Africa are the focus of this introductory course. Through contemporary and historical cross-country studies of workers in a wide variety of economic, political and institutional settings, we will evaluate rival perspectives on a host of interesting and controversial topics. These include: changing occupational and industrial formations, gender and racial gaps in jobs and income, poverty and inequality, immigration, urban informal employment, worker training and healthcare, labor unions, and government's regulatory and job creation roles. Prerequisite: one intro-

ductory economics course, or LABR 1, or instructor's permission. Credit given for this course or AFST 120, or ECO 120 not both.

141C. Labor Economics

s.h

The centrality of work in most people's lives has made labor issues like job growth, unemployment, skills training, pay and benefits, occupational safety, work force diversity and inequality, immigration, trade unions, labor-management relations, and government employment and labor market programs subjects of great importance and debate around the world. This course introduces students to the main theoretical perspectives and empirical tools used by economists to explain and analyze the multifaceted interactions of workers, employers, labor unions, regulatory agencies, and other institutions. Through both historical and current cross-country studies, the course develops a comparative global framework for analyzing earnings and employment problems and policies. Prerequisite: ECO 1 or 2 or LABR 1, or instructor's permission. Same as ECO 141C. Credit given for this course or ECO 141C but not both. Not open to students who have taken ECO 141.

180 Senior Seminar in Labor Studies

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The Latino population of the United States grew to over 30 million by the late 1990s, making it likely to soon become the country's largest minority group. The main source of this rapid growth is the half million immigrants arriving here each year from Spanish-speaking nations. This course explores the labor market implications of this historic trend, both for the newcomers themselves and for indigenous workers. We make use of a variety of interdisciplinary readings, guest lectures, and seminar discussions. Part of the course is devoted to developing the qualitative and quantitative skills needed to complete a major research paper.

Latin American and Caribbean Studies (LACS)

199. Senior Seminar in Latin American and

Caribbean Studies 3 s.h.

The Senior Seminar is an interdisciplinary capstone course that focuses on a changing series of issues fundamental to Latin American and Caribbean societies. Students are required to produce a substantial research paper by the end of the course, reflecting consultation with two Latin American and Caribbean Studies faculty members as well as the reading of primary and secondary source materials. Prerequisite: open to seniors only.

Library Information and Technology (LIBR)

 $1. \ \, Introduction \,\, to \,\, Technology \,\, and \,\,$

Information Literacy

1 s.ł

The Technology and Information Literary course traces the information/knowledge continuum to illustrate the ways in which individuals gain access to knowledge and scholarship via library resources. The course is designed to assist students in acquiring the critical thinking and information literacy skills needed to gather information independently, to evaluate and organize what is collected, and to apply these skills in completing course assignments and in functioning in the workplace or in graduate school. With an emphasis on electronic resources, these objectives are examined within the context of the American library tradition and the role that libraries fulfull in the dissemination of information and knowledge.

Linguistics (LING)

71. Language and Society in Africa, Asia and Latin America #

3 s.h.

Examination of the relation between language and society with emphasis on Africa, Asia and Latin America. Language as a cognitive system, repository of culture and constructor of reality. Conflict between nationalist languages and former colonial world languages. Language as an indicator of societal identity, group and status. Diglossia. Language planning in government, industry and education. Language attitudes, change and maintenance. Case studies of language situations in countries around the world.

103. The Classical Roots of English Words

3 s.h.

A systematic study of the foreign, primarily Greek and Latin, elements of the vocabulary of contemporary English, especially the vocabulary of the humanities and the sciences. The influence of other languages, both European and non-Western, are also considered. The study of word roots and families are set against the background of Greco-Roman civilization as it lives on in the classical heritage of the English language. This course may be used to fulfill the special foreign language option for the B.A., and is recommended for students in the Hofstra English Language Program. Credit given for this course or New College HGG 7, not both.

111. Scientific Terminology and Etymology

3 s.h.

Basic course for students planning to major in the biological, medical and pyschological sciences. The derivation of scientific terms studied enables students to analyze and more easily acquire a vocabulary of technical terms. May not be used to satisfy the language requirement.

Literature in Translation (LIT)

88. Self and Society in Chinese Literature #

3 s.h.

This course explores the concept of self in relation to society in Chinese literature from Confucius to the post-Mao era. How does ideology mold individual identity in the successive phases of Chinese cultural history? How does the self react against conventions? How do writers resolve their dual allegiance both to self and society during transitional periods when aging conventions, individual conscience and nascent ideology compete for one's loyalty. This course incorporates major works by some of the most celebrated Chinese writers and uses literature to examine the shaping of Chinese identity in its cultural, historical, social and philosophical contexts.

89. Beauty and Sadness in Japanese Literature and Culture

3 s.h.

Examination of the main genres and developments of Japanese literature from its origins in the 7th and 8th centuries, to the *Tale of Genji* (circa 1010), through the post-World War II period to the present, and describes the sensibility and modes of perception that inform these works. This inquiry into Japanese culture extends beyond literature to include the graphic arts, painting, and film in their relation to literary expression.

90. Modern Arabic Literature

3 s.h

Introduces students to modern Arabic literature as it relates to the different human factors which make up modern Arabic culture. Course not only recognizes main themes and works, but also examines the recurring patterns and the peculiar characteristics of the various nations and/or groups, divided by religion, epoch, circumstances, movement, gender or ideology. Focuses on the correlation between thematic and structural considerations in literature and the various phases in the process of acquiring a modern cultural self-identity.

Mathematics (MATH)

13C. Elementary Mathematical Models Through Computers # 3 s.h.

Through the use of calculators and computers, students are introduced to a variety of mathematical functions and their application as models for describing events and predicting outcomes in business, the sciences and the liberal arts. Models include sequences and the linear, polynomial, rational and exponential functions. Mathematical basics are reviewed and no prior experience with computing is assumed. Prerequisite: 2 years of high school mathematics.

19B. Bridge to Calculus II

For students who have taken MATH 10E and wish to take MATH 20. Course covers topics dealt with in MATH 19 but not in MATH 10E; some theoretical background, derivatives of trigonometric functions and further applications. Prerequisite: MATH 10E with a grade of C- or better.

114. Introduction to Higher Mathematics

An introduction to advanced mathematics through the study of proof techniques using topics in mathematics such as logic, set theory, number theory and graph theory. Prerequisites: MATH 20 (with a grade of C- or better). It is recommended that math majors take this course concurrently with MATH 29.

190. Departmental Honors

Individual research project in an area of mathematics under supervision of a departmental faculty member. Open only to majors in the Department of Mathematics who are eligible according to the criteria listed on page 74, and who desire to graduate with departmental honors. Permission of the department chairperson, prior to registration, is required.

198, 199, A-Z. Special Studies in Mathematics 3 s.h. each Each course covers a preannounced topic in mathematics. The topics chosen for 198 have little or no advanced mathematics course prerequisites; the topics for 199 often have one or more advanced mathematics course prerequisites. May be repeated for credit when topics vary.

Middle Eastern and Central Asian Studies (MECA)

1. Introduction to Middle East and

3 s.h.

Central Asia # An interdisciplinary course highlighting major themes in the academic study of the Middle East and Central Asia. This course draws on approaches and methods applied in the humanities and social sciences for interpreting culture history and change in the region. The course is framed by the ongoing debate over the history of "Orientalism" as a Western style for interpreting the region's cultures alongside presentation of indigenous voices and the contemporary postcolonial critique of Western academic analysis of the region. A major goal of the course is to foster appreciation for the region's cultural diversity, as well as its continuing relevance in global society. The course prepares students for more discipline-specific courses on the region and serves as a foundational course for the MECA minor.

Modern Greek (MGRK)

1 & 2. Modern Greek

3 s.h. each

1) Fundamentals of grammar and modern vocabulary. Oral and written drills; 2) Continuation of 1; selected readings. Prerequisite: MGRK 1 or equivalent.

5. Advanced Modern Greek-Level 5

3 s.h.

The emphasis will be on contemporary Greek culture. It will include advanced grammar review, acquisition of idiomatic conversational practice, and familiarity with diverse aspects of Greek culture through readings from contemporary print media. The course will at times be offered on site in Greece through the Hofstra Study Abroad in Greece Program. May not be taken on a Pass/D+/D/Fail basis.

Music (MUS)

25. University Chorale

½ s.h.

The Hofstra Chorale is a select choral ensemble of 45-55 skilled singers, chosen by audition. The Chorale performs repertoire from all styles and eras of choral literature, with a particular emphasis on contemporary, avant garde, and world music. The Chorale rehearses two hours per week, and offers performances on and off-campus. Audition required. Prerequisite: permission of instructor. Credit on Pass/D+/D/Fail basis only. See Notes 4, 5.

35B. Intermediate Piano Class

This course provides students with opportunities to advance their piano performance skills, enabling them to make use of keyboards while teaching children. This course also aids students' abilities to utilize sequencing programs needed in music technology. Prerequisite: MUS 35A. Not for liberal arts credit.

35C. Advanced Piano Class

This course is intended to reinforce and extend course work offered in MUS 35B. Students will be provided with work offered in MUS 35B. Students will be provided with opportunities to improve their piano performance abilities and complete the Piano Proficiency Requirement. Prerequisite: MUS 35B. No liberal arts credit.

69A. Music Fundamentals and Species Counterpoint

3 s.h.

May be substituted for MUS 69 as the first required course for music majors in the music theory sequence, and should be taken concurrently with MUS 61 or 61A. It is intended for students who, on the basis of a placement examination, have demonstrated a need for intensive training in music fundamentals beyond that normally covered in MUS 69. It is organized in two parts: 1) an intensive and comprehensive survey of the fundamentals of music theory; 2) training in the writing and analysis of two-part species counterpoint in the manner of Fux. Emphasis is given to the development of a general understanding of fundamental principles of music theory and to the principles of voice leading and melodic structure that is most useful in the study of tonal harmony. Enrollment limited to music majors or prospective music majors. May not be taken on a Pass/D+/D/Fail basis.

107A. Instrumental Conducting

3 s.h.

This course is designed to provide students with an overview of techniques using the common misunderstandings and errors made by conductors, offering practical ideas to solve these problems. Prerequisite: MUS 72. Credit will not be given for both this course and MUS 30, 107. No Liberal Arts credit.

160B. Advanced Jazz and Contemporary Scoring 3 s.h. Arranging and scoring for big bands, studio and recording orchestras and vocal groups. Prerequisite: MUS 160A or permission of instructor.

172A. Choral and General Music Methods in the Secondary School

This course is designed to provide music students the opportunity to investigate current philosophies of teaching choral and general music at the secondary level. Lessons focus on developing choral performance skills and assessment techniques. Students also have opportunities to explore and develop creative music strategies appropriate for the secondary general music setting. These strategies support and reflect local, state and national music education standards. May not be taken on a Pass/D+/D/Fail basis. No liberal arts credit.

175. Vocal Pedagogy

Study of the problems encountered in the teaching of vocal technique such as breathing, resonance, tone color, dynamic control and diction. Sessions of supervised teaching are included.

May not be taken on a Pass/D+/D/Fail basis. No liberal arts credit

Natural Science (NSC)

13, 14. Our Physical Universe

3 s.h. each

Exploration of the basic concepts of our physical universe in the areas of physics, chemistry, nuclear energy, geology and astronomy. The historical development of science and the role scientists play. Laboratory constitutes about fifty percent of the course work. No previous experience in physics, chemistry or higher mathematics required. Credit given for these courses or NSC 11, 12 or New College NPG 1/QTG 005.

13: physics and nuclear energy. 14: chemistry, astronomy and geology.

Philosophy (PHI)

60. Introduction to Chinese Philosophical

and Religious Traditions

3 51

Course introduces students to the major concepts and metaphors in Chinese Confucianism and Taoism. Students engage in close readings of texts from the classical and medieval periods. The goal is to arrive at a sympathetic understanding of the major themes in Chinese thought. Periodically, the students compare questions raised in China to questions raised within the western philosophic and religious traditions. Prerequisite: consent of instructor.

103. Life, Death and Immortality #

3 sh

Examination of the concepts of life, death and immortality as represented in religious and literary texts from a range of cross-cultural sources: western and nonwestern monotheistic traditions, eastern traditions (e.g., Tibetan and Indian), middle eastern (e.g., Turkish), African, and Native American. Further examination of the encounter between a native tradition and a western colonial, typically Judeo-Christian presence. Discussion as well, of the implications of these concepts for such issues as abortion, euthanasia, suicide. Original texts in translation. Same as RELI 80. Credit given for this course or RELI 80, not both. (Formerly PHIL 70.)

130. Bioethics: Medicine and Morality

3 sh

An investigation of moral theory and applied ethics as to the traditional and modern practices of medicine, including techniques informed by recent developments in biological science. Meaning and value of health and disease, life and death will be explored. The course will be especially helpful to philosophy majors concentrating on ethics and to any students preparing to become healthcare professionals. PHI 14 recommended.

146. Modernity and Post-Modernity

3 s.h.

Since the early 20th century, philosophers and other thinkers have argued that modernity has come to an end and that we now live under conditions of post-modernity. This course is an investigation of what this means and involves studying leading modern philosophers such as Descartes and Kant as well as more recent thinkers such as Heidegger, Derrida, Irigaray and Lyotard. Because post-modernity challenges disciplinary boundaries, the course also involves studying examples of modern and post-modern architecture, art and/or literature. Prerequisite: PHI 10 or permission of the instructor. PHI 143 recommended.

166. Contemporary Social and Political Philosophy

3 s.h

Concepts of the autonomous self and agency (developed during the modern period, Descartes—Kant), have been central to modern, liberal social and political philosophy. This course examines the critiques of those concepts and explores changing conceptions of community, civil society, and selfhood offered by feminist and postmodern philosophers. These issues have immediate interdisciplinary relevance for legal, political and psychological inquiries. Some attention is given to contemporary social problems, such as race and gender. Readings from contemporary

philosophy (e.g., Foucault and critical theory) and some interdisciplinary sources. Prerequisite: PHI 10, 14, or 20. (Formerly PHIL 143.)

170. Ethical Theory: Values, Relativism and Pluralism

3 s.h.

A detailed examination of some specific issue in contemporary ethical theory. Possible topics include the nature and objectivity of morality, the relationship between moral philosophy and theories of the self, the rival of a virtue-theory approach to ethics, and pluralism about values. Prerequisite: PHI 14, or permission of instructor. (Formerly PHIL 149; Ethical Theory.)

173. Philosophy of Nature: Environmental

Ethics and Ecophilosophy

3 s.h.

Exploration of environmental morality—theoretical and applied—as based on metaphysics of ecology. Chief aim is to clarify and enrich conceptions of the (inter) relationship between nature and culture. Prerequisite: PHI 10 or 14, or permission of instructor.

180. Theories of Knowledge and Being

3 s.h.

An investigation of theories of being, which state the most general characteristics of reality; and theories of knowledge, which state what knowledge is and how, if at all, we know things; and the ways that theories of being and knowledge are related. Prerequisite: PHI 10 or 14. (Formerly PHIL 150.)

181. Topics in Philosophy

3 s.h.

This course provides an in-depth study of a problem in philosophy, the specific topic for the course varies from semester to semester. Examples of possible course topics are free will versus determinism, the nature of truth, philosophical approaches to issues in psychology, space and time. Students should consult with the particular instructor each time the course is offered to determine if prior preparation for the topic to be covered is recommended. Such consultation may take place prior to registration or on the first day of class. May be repeated for credit when topics vary. (Formerly PHIL 100.)

182. Selected Philosophers

3 s.h.

This course provides an in depth study of a major philosophical figure; the figure to be studied varies from semester to semester depending on the instructor. Prerequisite: PHI 10 or 3 s.h. in philosophy, or a history of philosophy course, or permission of instructor. May be repeated twice for credit when topics vary. (Formerly PHIL 155.)

194. Seminar

3 s.h.

For juniors and seniors who have previously taken at least three philosophy courses in logic: (PHI 150, 154, 156). May not be taken on a Pass/D+/D/Fail basis. (Formerly PHIL.)

Physician's Assistant Studies (PHA)

1. Clinical Experience

1 s.h.

Consists of 100 hours of exposure to a healthcare environment such as volunteer work in a healthcare facility such as a hospital, clinic or rehabilitation center. The experience will include observation of a clinically practicing physician assistant. PA program faculty advisers will approve and monitor the experience. Emphasis will be placed on understanding the physician assistant role, practice characteristics, professional acceptance, and current issues pertaining to physician assistant practice. Open only to students enrolled in the Physician Assistant Program. May not be taken on a Pass/D+/D/Fail basis. No liberal arts credit.

2. Physician Assistant Profession

1 s.h.

Introduction to the role of the PA, with an emphasis on the history, training, practice characteristics and certification pro-

[#]Core course

cess. Physician Assistant credentialing and employment. Analysis of current issues affecting PA practice. Introduction to medical terminology and the health care system. Open only to students enrolled in the Physician Assistant Program. May not be taken on a Pass/D+/D/Fail basis. No liberal arts credit.

112. Physiology 4 s.h.

This course provides an understanding of the physiological mechanisms by which the human body functions in health and disease. Emphasis is given to the concepts that will be most frequently encountered in primary care clinical practice. Open only to students enrolled in the Physician Assistant Program. May not be taken on a Pass/D+/D/Fail basis. No liberal arts credit.

113. Pathology

This course covers concepts of disease, including degeneration and necrosis, inflammation and repair, fluid and coagulation disturbances. Disease entities of each organ system are studied with regard to causation, evaluation and morphological changes. Open only to students enrolled in the professional phase of the Physician Assistant Program. May not be taken on a Pass/D+/ D/Fail basis. No liberal arts credit.

114. Microbiology/Immunology

3 s.h. Anatomy, physiology and relationships of bacteria, protozoa, viruses, rikettsiae and helminths. Included are lectures on the systemic diseases caused by these organisms, control of microorganisms, antibiotics, the host-parasite relationship and the establishment of disease. The immune system is discussed in detail, including topics on resistance to disease, immunity and serology, and immune disorders. Open only to students enrolled in the professional phase of the Physician Assistant Program. May not be taken on a Pass/D+/D/Fail basis. No liberal arts credit.

115. Physical Diagnosis I

This course has both lecture and laboratory components. The lecture component introduces the student to the concepts and techniques of medical interviewing, obtaining an accurate history and performing a complete and thorough physical examination. The laboratory sessions emphasize the theory and practical skills necessary to perform a complete physical examination. The sessions are taught in small group format. Open only to students enrolled in the professional phase of the Physician Assistant Program. May not be taken on a Pass/D+/D/Fail basis. No liberal arts credit.

116. Health Psychology and Behavioral Medicine

Review and analysis of the current trend toward the integration of behavioral methodologies with diagnosed medical problems. Topics include the origins, theory and treatment regarding alcohol and chemical dependency, smoking, obesity, and stressrelated disorders, as well as headache and other pain disorders. Same as PSY 89. Open only to students enrolled in the professional phase of the Physicians Assistant Studies Program.

117. Pharmacology I

1 s.h. Presents the principles underpinning pharmacokinetics and pharmacodynamics and introduces the influences of drugs upon the autonomic and central nervous systems. Open only to students enrolled in the professional phase of the Physician Assistant Program. May not be taken on a Pass/D+/D/Fail basis. No liberal arts credit.

118. Epidemiology

Fundamentals necessary to evaluate health programs from the perspective of the population rather than the individual patient. This includes terminology, basic measurements, and theory and methods of the most commonly used epidemiologic study as they relate to causality and prevention of disease. Emphasis is on practical applications such as critical reading of medical literature. Open only to students enrolled in the professional phase of

the Physician Assistant Program. May not be taken on a Pass/ D+/D/Fail basis. No liberal arts credit.

119. Diagnostic Modalities

2 s.h.

This course encompasses diagnostic imaging modalities, clinical laboratory medicine and basic clinical procedural skills. The student learns basic clinical laboratory determinations and values and their correlation with normal and disease states. Practical sessions are given in urinalysis, hematology and microbiology. The student is introduced to various imaging modalities and their role in clinical medicine. An emphasis on conventional radiography with discussion of ultrasound, computerized axial tomography, magnetic resonance imaging and nuclear medicine. Practical sessions in sterile technique, phlebotomy, intravenous catheterization, insertion of nasogastric catheters, urinary catheterization and injections. Open only to students enrolled in the professional phase of the Physician Assistant Program. May not be taken on a Pass/D+/D/Fail basis. No liberal arts credit.

120. Physical Diagnosis II

3 s.h.

A continuation of Physical Diagnosis I, with both lecture and laboratory components, encompassing examination techniques regarding the peripheral vascular, musculoskeletal and neurological systems. Supervised visits to health care facilities to elicit medical histories and perform physical examinations on patients. Open only to students enrolled in the professional phase of the Physician Assistant Program. May not be taken on a Pass/D+/ D/Fail basis. No liberal arts credit.

121. Pharmacology II

3 s.h.

1 s.h.

A continuation of PHA 117. Provides an in-depth understanding of major drug category's mechanism of action, therapeutic uses, major side effects, warnings and precautions. Classification of drugs is covered extensively. Clinical case studies and problem solving sessions are also utilized. Practical prescription writing and legalities of prescriptions as they pertain to physician assistant practice. Open only to students enrolled in the professional phase of the Physician Assistant Program. May not be taken on a Pass/D+/D/Fail basis. No liberal arts credit.

122. Pediatrics

The physiological and psychological fundamentals of normal growth and development as they pertain to the pediatric and adolescent patient. Topics include pediatric nutritional requirements, preventive immunization schedules and common childhood illnesses and their signs, symptoms and treatments. Open only to students enrolled in the professional phase of the Physician Assistant Program. May not be taken on a Pass/D+/ D/Fail basis. No liberal arts credit.

123. Obstetrics/Gynecology

 $9 \, \mathrm{s.h.}$

Review of the normal anatomy and physiology of the female reproductive tract. Complete obstetrical history and physical examination, management of pregnancy, labor and delivery. Clinical manifestations and treatment of common gynecological problems. Open only to students enrolled in the professional phase of the Physician Assistant Program. May not be taken on a Pass/D+/D/Fail basis. No liberal arts credit.

124. Medicine I

4 s.h.

This course encompasses three major areas of clinical medicine-cardiology, pulmonary medicine, and hematology. Students study the dynamics and physiology of the heart, including the signs and symptoms, diagnosis and treatment of various cardiac abnormalities. A portion of this section covers the principles and interpretation of electrocardiographic tracings. Students are taught the examination and diagnosis of the chest and lungs. Respiratory physiology, and common pulmonary disorders

are considered. In the hematology portion, students learn the principles of normal hematology and study the clinical approach to the evaluation and treatment of common hematological disorders. Open only to students enrolled in the professional phase of the Physician Assistant Program. May not be taken on a Pass/D+/D/Fail basis. No liberal arts credit.

125. Medicine II

This course is system-oriented and includes the etiology, recognition and treatment of common disease, in the following areas of clinical medicine: dermatology, rheumatology and ophthalmology. The anatomy, physiology and concepts of physical diagnosis relating to each system are reviewed. The pathophysiology of disease states, differential diagnosis of problems and interpretation of laboratory and radiographic tests appropriate to each system are discussed. Open only to students in the professional phase of the Physician Assistant Program. May not be taken on a Pass/D+/D/Fail basis. No liberal arts credit.

126. Introduction to Surgery

Provides students with a basic understanding of surgical topics such as wound healing, surgical techniques, and pre and postoperative management. Includes a surgery lab where students have hands-on sessions in suturing, surgical techniques and gowning/ gloving. Open only to students enrolled in the professional phase of the Physician Assistant Program. May not be taken on a Pass/D+/D/Fail basis. No liberal arts credit.

127. Medicine III 4 s.h.

This course is system-oriented and includes the etiology, recognition and treatment of common diseases, in the following areas of clinical medicine: gastroenterology, nephrology, neurology, and clinical psychiatry. The anatomy, physiology and concepts of physical diagnosis relating to each system are reviewed. The pathophysiology of disease states, differential diagnosis of problems and interpretation of laboratory and radiographic tests appropriate to each system are discussed. Open only to students enrolled in the Physician Assistant Program. May not be taken on a Pass/D+/D/Fail basis. No liberal arts credit.

128. Medicine IV

2 s.h. The etiology, recognition, and treatment of common diseases in the areas of endocrinology, infectious diseases, and a component in correlative medicine. The Correlative Medicine component allows the students to fully assimilate and utilize their medical and basic science knowledge along with physical diagnosis skills to address the types of patient health care problems they may encounter in a clinical environment. Open only to students enrolled in the professional phase of the Physician Assistant Program. May not be taken on a Pass/D+/D/Fail basis. No liberal arts credit.

129. Surgery

Encompasses General Surgery and it subspecialities Orthoedics and Otolaryngology. General Surgery is a continuation of PHA 126—Introduction to Surgery, and covers diseases of the esophagus, stomach, intestines, circulatory system, and urogenital system. The Orthopedics section considers the diagnosis and treatment of sprains, fractures, and dislocations, preparation and application of bandages, splints, and casts. Common orthopedic problems of the hand, knee, shoulder, and back are covered. Included is a practical session in casting. The Otolaryngology unit reviews the structure and functions of the ears, nose, parotid glands, oral cavity, and larynx. Emphasis is placed on the recognition, diagnosis and treatment of common ENT disorders. Normal growth patterns, abnormalities and the special senses (hearing, taste and smell) are presented as each unit is presented. Lectures will also cover the use of such basic diagnostic modalities as audiograms, tympanograms, direct and indirect nasopharyngoscopy. Open only to students in the professional phase of the Physician Assistant Program. May not be taken on a Pass/D+/D/Fail basis. No liberal arts credit.

130. Medical Ethics

1 s.h.

Introduction to issues of medical ethics. Topics discussed include ethical decisions at the beginning and at the end of life, risk/ benefit decision making, allocation of scarce resources as well as discussion concerning where the decision making responsibility should lie. Open only to students enrolled in the professional phase of the Physician Assistant Program. May not be taken on a Pass/D+/D/Fail basis. No liberal arts credit.

131. Emergency Medicine

This course emphasizes initial life-saving procedures on the critically ill and seriously injured. Trauma, shock, burns, cardiovascular and G.I. and other emergencies are studied. Open only to students enrolled in the professional phase of the Physician Assistant Program. May not be taken on a Pass/D+/D/Fail basis. No liberal arts credit.

150. Primary Care Clerkship

3 s.h.

Students are assigned to an outpatient department and participate in activities related to health care maintenance and restoration. They are placed at a location which provides integrated health care provided by clinicians who are responsible for most of a patients personal health needs and who work in a sustained partnership with their patients. The primary health care provider assumes ongoing responsibility for health maintenance and therapy for illness, including consultation with specialists. Open only to students enrolled in the professional phase of the Physician Assistant Program. May not be taken on a Pass/D+/ D/Fail basis. No liberal arts credit.

155. Internal Medicine Clerkship

3 s.h.

The student is assigned to the department of medicine and works directly under the supervision of the house staff. The student should medically evaluate patients and follow their daily progress. The student must develop the ability to elicit a history and complete physical examination. They must be able to correlate their physical findings along with the patients physiological and biochemical data to develop a database for patient management. The student is given opportunities to develop skills and demonstrate competency in performing and interpreting certain medical procedures and tasks. Participation in daily rounds and orientation to the intensive care unit and medical conferences and grand rounds are required. In most settings working in the outpatient clinic setting is also available. Open only to students enrolled in the professional phase of the Physician Assistant Program. May not be taken on a Pass/D+/D/Fail basis. No liberal arts credit.

160. Obstetrics/Gynecology Clerkship

This rotation takes place in a hospital setting, in which the students are a part of the health care team. Students are responsible for care of the patients on the obstetrical and gynecological floors and the clinics within the hospital. Students are involved in the management and care of patients ante- and postpartum, and also acquire delivery experience. The student also learns routine physical examinations as well as care and management of patients with a wide variety of various gynecological and obstetrical problems. Open only to students enrolled in the professional phase of the Physician Assistant Program. May not be taken on a Pass/D+/D/Fail basis. No liberal arts credit.

165. Surgery Clerkship

The student is assigned to the department of surgery, where, under supervision, they engage in a wide variety of activities in each of the different phases of surgical intervention: preoperative, operative and postoperative care. The student is given the opportunity to manage fluids and electrolytes as well as nutritional requirements of the surgical patient. The student participates in the daily rounds, attends conferences and is educated in management and treatment of infections and wound care. Open only to students enrolled in the professional phase of the

Physician Assistant Program. May not be taken on a Pass/D+/D/Fail basis. No liberal arts credit.

170. Emergency Medicine Clerkship

2 ch

This rotation exposes the PA student to the various components of the hospital emergency room, including: medicine, surgical and pediatric areas. The student works along with the attending physicians and house staff and manages patients under their supervision. Students also present cases on rounds and attend daily conferences. Open only to students enrolled in the professional phase of the Physician Assistant Program. May not be taken on a Pass/D+/D/Fail basis. No liberal arts credit.

175. Long Term Care Clerkship

3 s.h.

Practical clinical experience in working with elderly patients and those with multiple medical problems and chronic diseases. Students will be able to recognize the normal aging process and deviation from the norm. Open only to students enrolled in the professional phase of the Physician Assistant Program. May not be taken on a Pass/D+/D/Fail basis. No liberal arts credit.

180. Pediatrics Clerkship

3 sh

Students rotate in an inpatient and/or outpatient pediatric department and under supervision participate in a variety of activities aimed at providing the student with a comprehensive picture of a child's growth and development, as well as his/her care and health problems at various developmental states. Only open to students enrolled in the professional phase of the Physician Assistant Program. May not be taken on a Pass/D+/D/Fail basis. No liberal arts credit.

185. Psychiatry Clerkship

3 sh

Rotation through a mental health care facility. Involvement in evaluation and management of patients on the psychiatry service. Initial assessment, mental status examination, and final disposition are handled by students under the supervision of attending physicians. Open only to students enrolled in the professional phase of the Physician Assistant Program. May not be taken on a Pass/D+/D/Fail basis. No liberal arts credit.

190. Elective Clerkship

3 s.l

Repeat of a mandatory clerkship, or in an approved sub-specialty. Course objectives for sub-speciality experiences will be developed in collaboration with the clinical faculty. Open only to students enrolled in the professional phase of the Physician Assistant Program. May not be taken on a Pass/D+/D/Fail basis. No liberal arts credit.

Physics (PHYS)

17, 18. Elements of Physics for Engineers

1 s.h. e

Fundamental laws and principles of mechanics, electricity and magnetism, and selected topics in light. Designed for engineering majors. Corequisite for 17: PHYS 11B. Prerequisite or corequisite for 17: MATH 19. Prerequisite or corequisite for 18: MATH 90

Political Science (PSC)

2. Comparative Politics

3 s.

This course introduces students to the major concepts and issues in comparative politics, using a variety of case studies from different regions of the world. Topics examined include: political institutions, political culture, and political participation. Issues relating to regime types, political economy, and political development will also be examined.

118. Political Economy of Turkey

3 s.h.

This is an interdisciplinary course focusing on the nation of Turkey, and exploring the conflicts in Turkish society between modern and traditional, secular and religious, and rich and poor. Particular attention is paid to the young and dynamic nature of the country, and classes cover a broad range of topics examining Turkey's history and its modern political structure. Among the topics to be studied are, the attempts over the past two hundred years to modernize Turkey, the social and political conflicts these attempts have generated, the domestic and international political difficulties the country is faced with, and the nature of its recent economic problems. Required readings are drawn from a variety of sources and disciplines in the social sciences. Same as ECO 118.

Psychology (PSY)

180. Work Motiviation: Theory and Applications

3 s.h

Examination of modern developments in motivational psychology as they pertain to individual behavior in organizational settings and their practical applications. Four approaches are examined. The first approach focuses upon need-motive-value strategies such as need fulfillment theories, intrinsic motivation and equity/justice theories. The second approach attends to expectancy-value formulations of behavior with attention directed toward VIE theory. A third approach involves an examination of the self-regulation-cognitive approach embodied in goal setting theory. The final theoretical perspective involves an analysis of the behavioral (operant) and social learning views of work motivation. The course focuses on the practical implications of motivational theory, with an emphasis upon job satisfaction, work design and reward systems.

181. Leadership and Group Processes

3 s.h

Presents a broad review and analysis of leadership in organizations and groups. Examines organizational work groups within the perspective of the organization as a system. Topics include functions, history, theories, and styles of leadership. Gender issues, cross-cultural perspectives, leader-member relations, group development, communication, conflict, decision making and self-managed teams are also examined. Prerequisites: PSY 34; SOC 81 or PSY 141.

183. Capstone Research Integration Course

3 s.h.

Provides a capstone experience in which students integrate the knowledge and understanding of organizational behavior and leadership that they acquire in other courses in the concentration. Students work together in small groups on a single project throughout the term. Each group selects a research topic in consultation with the instructor. The project requires that data be collected from an industrial, public, voluntary, or non-profit organization. Using valid diagnostic procedures, students examine the psychological, structural, envionmental, political, and cultural factors that affect organization systems.

Religious Studies (RELI)

50. Islam #

3 s.h.

A study of the rise of Islam within the context of the cultural social and religious conditions of pre-Islamic Arabia, Muhammad's religious message and the Koran, development of theology, law, and consolidation of Sunnism. Attention given to the concept of nonseparation of state and religion in Muslim thought, to the experience of women, and to themes in comparative art, architecture, and ritual. (Formerly PHIL 68.)

80. Life, Death and Immortality

3 s.h.

Examination of the concepts of life, death and immortality as represented in religious and literary texts from a range of cross-cultural sources: western and nonwestern monotheistic traditions, eastern traditions (e.g., Tibetan and Indian), middle eastern (e.g., Turkish), African, and Native American. Further examination of the encounter between a native tradition and a western colonial, typically Judeo-Christian presence. Discussion as well, of the implications of these concepts for such issues as abortion, euthanasia, suicide. Original texts in translation. Same as PHI 103. Credit given for this course or PHI 103, not both. (Formerly PHIL 70.)

85. Comparative Religious Ethics

An exploration of the ways in which three religious traditions attempt to guide their adherents' conduct by appealing to rules of action. Course begins by clarifying the notions of "ethics" and "religion." We then turn to three traditions-for example, the Navaho, the Gospel of Matthew, and to Theravada Buddhism, asking how each tradition conceives of the relation between religious and moral rules (we also ask whether that distinction is even helpful). While the student is asked to master a body of historical materials, the emphasis is philosophical throughout; we mainly want to understand how each tradition understands such basic notions as action, obligation, the moral authority of persons, deity or deities, and institutions, and the status of other religious and moral frameworks. (Formerly PHIL 71.)

120. Religious Traditions of Ancient India

This course explores some of the central traditions, scriptures and ideas generated by the religions of Ancient India (2500 BCE to 1000 CE): Buddhism, Jainism and Hinduism, with particular emphasis on Vaisnavism, and Saivism. Themes to be considered include the history of these traditions, their contribution to the philosophical tradition of India as a whole, and comparisons with Western religious and philosophical traditions. Prerequisite: RELI 15 or permission of instructor.

140. Special Topics in Religion

3 s.h.

Studies in such special topics as psychology of religion, religion in America, new religious movements, and religion, media and American culture. May be repeated for credit when topics vary.

155. Sikhism

An introduction to the forms and ideas of Sikh culture and religion. The course explores the Sikh textual and interpretive traditions, the development and construction of the major beliefs, practices and festivals of Sikhism, and the possibility of a cross-cultural dialogue between Sikh teachings and central concepts of Western philosophy and religion. Prerequisite: RELI 15 or permission of instructor.

Sociology (SOC)

9. Youth, Crisis, and American Culture

This course explores the period in human development we call "youth." The "Beat Generation," "Love Generation," "Me Generation," "Generation X": the concept of youth differs depending on social, economic, and political contexts. Accordingly, this course offers an understanding of youth that is grounded in historical development, social structure and a changing youth culture (e.g., music, dress, work and leisure). The course examines the prevailing attitudes and conditions confronting youth today, with an eye towards future developments.

37. Parenting, Poverty and Social Policy

Can social policies be effective against poverty? What are the consequences of aiding, or not aiding, poor families? This course addresses these questions by focusing on the process and consequences of social policy, with an emphasis on the United States. In particular, the course explores the politics of poverty and the development, implementation and effects of social welfare policies aimed at impoverished families. There is a consistent focus on how class, gender, race, and the normative functions of the nuclear family intersect with the process of constructing social policy for the poor.

107. Organizational Structure and Process

3 s.h.

Most people spend the majority of their active lives in the context of some organizational setting. Organizations are such a dominant component of contemporary life that we take their presence for granted. At the same time, most people have only a vague understanding of organizational relations. This course focuses on

the nature of organizations and the social, economic, technological, and political factors that shape them. Topics include the relationships among organizational size, technology and structure; power within and between organizations; the politics of decision-making and leadership; the impact of environmental factors; and organizational goals and effectiveness.

142. Global Cities: Politics and Social Change in Comparative Perspective

3 sh

This course compares the impact of global economic change on the world's most powerful cities in the last fifteen years. The first half of the course focuses on how economic change has affected the social and political lives of the residents of New York and London. The second half looks at the way other cities (e.g., Paris, Berlin, Tokyo, Hong Kong, Singapore, and Los Angeles) handle the challenges of globalization and assesses what lessons their fate holds for New York and London. Course is designed to introduce students to the problems and opportunities created by the growth of a world economy and its consequences for the people, politics, and social structures of large cities.

180A. Computing and Statistical Analysis in Sociology 1 s.h. This course introduces the student to the basics of using a computing program such as the Statistical Package for the Social Sciences (SPSS). It covers such topics as data file construction and management, variable construction and transformations, statistical procedures (including descriptive, correlation, t-test, regression, and ANOVA). Basic elements of reporting results in tabular and graphic forms are discussed. This course is designed for those students who have completed a statistics course that did not include a computer component. Prerequisite: one course in elementary statistics. Credit given for this course or SOC 180, but not both.

Spanish (SPAN)

2R. Review of Elementary Spanish Intended for students who have had two years of Spanish in high school, but who need review of the basics of SPAN 1 and 2 before enrolling in SPAN 3. No credit for either SPAN 1 or SPAN 2, if credit received for 2R.

111B. Spanish for Spanish Speakers

Intended for students who have an oral knowledge of the language (e.g., speak Spanish at home), or scored above SPAN 4 on the placement test, but have never had formal instruction in the language. The course offers rigorous immersion in the structure of Spanish; slips in usage (fossilized grammatical errors, use of so-called Spanglish, word separation, and orthographic mistakes) are addressed with appropriate methodology. Equally important is the cultural goal, i.e., to broaden students' knowledge of the twenty-one countries (including the United States) making up the Spanish-speaking world.

113A. Culture and Civilization of Spain

3 s.h.

The peoples of the Iberian Peninsula: its geography, history, socio-political and religious heritage, as well as its literature, music, and visual arts. Credit given for this course or SPAN 113, not both.

113B. Culture and Civilization of Latin America

The peoples of Latin America: its geography, history, sociopolitical and religious heritage, as well as its literature, music, and visual arts. Credit given for this course or SPAN 113, not both.

129. Contemporary Spanish Literature

3 s.h.

An overview of Spanish literature from the end of the dictatorship to the present. Covering a variety of genres (novel, poetry, short story), the course pays attention to the socio-political background, as well as to the literary and cultural context. It also addresses questions of gender and nationalism as they relate to literary production. The works studied represent the major trends in the Spanish cultural and literary scene from the emergence of democracy to the present. Prerequisites: SPAN 5, 111, 112 or permission of instructor.

190. Senior Seminar in Hispanic Literatures and Cultures 3 shThis capstone seminar course rounds out the student's preparation in Hispanic literatures and cultures through an in-depth exploration of a changing series of topics fundamental to both Peninsular and Latin American literatures and cultures. It exposes the student to key concepts of literary theory and provides training in the completion of a complex research project. Students produce a substantial research paper by the end of the course, which may function as a chapter of the senior departmental honors thesis. If the student is qualified to pursue departmental honors. Prerequisite: senior standing.

Spanish Literature in Translation (SPLT)

52. Interpreting the Hispanic Legacy # 3 s.h. Spain's legacy to Hispanic America and their respective values and idea, as expressed in their literary and traditional myths. Matters of origin, the assessments of the modern dilemma, and projections of Hispanic politics and art are discussed. Readings are interpretative as well as historical. Prerequisite: one of the following courses: HIST 11, 12; CLL 39, 40; SPLT 51; or permission of Chairperson of the Department of Romance Languages and Literatures in consultation with the instructor.

58. The Empire Writes Back: Autobiography and Resistance in Colonial Spanish America

3 s.h. The course provides a new interpretation of Spanish American Colonial experience, examining resistance and subversion in the imperial context through the prism of autobiography. Themes include intellectual, ideological and spiritual subversion; resistance to slavery; gender transgression; and re-negotiation of power within the patriarchal family and nation. Students examine the role of memoirs, travel accounts, private and public letters, and other autobiographical resources as part of a history of self-exploration and awareness.

59. Farewell to Columbus: Rethinking the Latin American

This course reexamines Latin American cultures from pre-Columbian times to independence, 'decolonizing' our understanding of Latin America and using under-explores sources such as private letters, sermons, travel accounts, business treaties and indigenous literature, as well as carved stones, maps, textiles, and art. It also reexamines classic texts (including the diaries and letters of Columbus, Cortes' writings to the king of Spain, and accounts of Pizarro's role in the conquest of the Inka Empire)

from a new perspective, questioning received colonial myths. May not be taken on a Pass/D+/D/Fail basis.

Speech-Language-Hearing Sciences (SPCH)

10. Sociocultural Influences on Spoken and Written Communication

3 s.h.

Sociocultural factors affect written and spoken communication. In this course we investigate individuals' communication abilities in relation to sociocultural variables. Variables that are discussed include regional differences, and ethnic and socioeconomic factors. In addition through the medium of novels and films, we examine language variation that arises as a result of various communication disorders.

Technology and Public Policy (TPP)

60. Introduction to Geographic Information Systems 3 s.h. This course introduces students to Geographic Information Systems (GIS) foundations, concepts, and application techniques. GIS are used to encode, store, analyze, and report spatial data and provide a repository, which can be constructed, maintained, edited and analyzed. By linking different information technologies such as mapping and database management systems, spatial information can be used to facilitate management and decisions in a wide array of fields. These include marketing, industrial and commercial location, resource inventory and management, environmental impact assessment, urban planning, transportation, tracking crime data. Same as GEOG 60.

130. Media Technologies and Public Policy Provides an interdisciplinary examination of new technologies, their impact on the media, global communication systems, and the international information society. Considers and analyzes who are the new media players, the legal and personal implica-

tion of media ownership patterns, fragmentation of society, and the controversial shaping nature of telecommunication and information technologies on the dimensions of our culture, social structure, economy, and politics. Prerequisite: MASS 11 or approval of instructor. Same as MASS 130.

Women's Studies (WST)

150, A-Z. Topics in Women's Studies

This course will offer an in depth study of major issues in Women's and Gender Studies. Topics will reflect current developments in the field and will address issues such as women's roles in work, family, sexuality, and reproduction; language, representation and performance; feminist politics and policies; transnational and cross-cultursal perspectives of gender; and the impact of science and technology on women's lives. Subjects will change from semester to semester and the course may be repeated for credit when topics vary. Prerequisites: WST 1 or permission of instructor.

Provisional Courses

The School of Communication acknowledges that departments need to keep up-dated on new advances made in their various disciplines. Toward this end, departments may propose to experiment with a different combination of material or an interdisciplinary approach to a subject. These proposals may obtain "provisional approval." If the experiment is successful, faculty authorization for regular inclusion with departmental offerings may follow.

Provisionally approved courses must meet all regular requirements for time in class, amount of student assignments and level of difficulty. The following are courses which received provisional approval.

Audio/Video/Film (AVF)

152. The Radio Industry

3 s.h.

A study of current principles and practices of radio programming, marketing and sales, promotions, and radio management for commercial and public radio. The course highlights organizational, technological, and ethical issues facing the radio industry today. Prerequisites: AVF 111 and 131. Not for liberal arts credit.

174. Advanced Video/Television Internship 3 s.h. An advanced video/TV production internship in which students apply concepts and knowledge acquired in the classroom to "real-world" production settings as chosen by the department. Each student works with an assigned faculty sponsor and an on-site supervisor as determined by the host organization. In addition, each student is expected to devote a requisite number of hours per week at the internship site, keep a weekly journal, attend bi-weekly classes on campus, and write regular reports, including a culminating final term paper. Student interns are also expected to create a sample production reel of projects or assignments worked on in the field and to make presentations to other students concurrently enrolled in the course. Students must obtain approval by the department before registering. Applications, with information about deadlines, are available in the AVF department office. AVF 170 and AVF 174 can be taken in combination for no more than 6 credits. Prerequisites: 1) junior class standing; 2) the successful completion of at least

6 s.h. of AVF classes in residence; 3) GPA of 2.7 or better in the

major; and 4) AVF 164. (Note: AVF 164 may be taken concur-

Journalism (JRNL)

57. Graphic Design for Publication

rently.) No liberal arts credit.

3 s.l

This is a course in graphics and design for newspapers, magazine, newsletters, other publications, and Web sites. Students will learn to apply basic principles of visual communication, design and composition and study how to use photography, illustration, typography and color to add interest and convey information in diverse publications. The effect of emerging technologies will also be discussed. Prerequisite: JRNL 56 or permission of instructor.

64. Public Relations Case Studies

3 s.h.

This course encompasses study of several important cases—historical and current—which examine how public relations professionals deal with situations and crises. Through readings, discussions and projects, students explore their own perceptions of the profession and its impact on society. Emphasis is placed on ethical courage, values, audience sensitivity and media reaction. Prerequisite: JRNL 63.

67. Public Relations Campaigns

3 s.h.

Capstone course for advanced public relations students combining theory and experiential components and enabling students to develop their own public relations campaigns for a client assigned by the instructor. Working with clients on a probono basis, students develop a greater understanding of public relations needs in a world where social responsibilities, ethics, values and community service are stressed. Emphasis placed on strategic planning, objectives, and identification of appropriate techniques. Prerequisite: JRNL 64. No liberal arts credit.

76. Advanced Broadcast Journalism

3 s.h.

This course provides those concentrating in broadcast journalism with the opportunity to produce an in-depth, long-form project of journalistic significance. Working as a team, participants research, write, shoot, and edit a news documentary for broadcast. Participants also analyze and critique selected works produced by news organizations. Outside community research and reporting time is required. Prerequisite: JRNL 17. No liberal arts credit.

Mass Media Studies (MASS)

130. Media Technologies and Public Policy

3 s.ł

Provides an interdisciplinary examination of new technologies, their impact on the media, global communications systems, and the international information society. Considers and analyzes who are the new media players, the legal and personal implications of media ownership patterns, fragmentation of society, and the controversial shaping nature of telecommunication and information technologies on the dimensions of our culture, social structure, economy, and politics. Prerequisites: MASS 11 or TPP 149 or approval of instructor. Same as TPP 130.

Speech Communication and Rhetorical Studies (SPCM)

43. Fundamentals of Organizational Communication 3 s.h. Introduces students to the general theories of organizational communication. Specifically, the course emphasizes the social and cultural dimensions of communication practices which sustain or challenge organizational ideas, values and beliefs. The course adopts an interpretive approach to the study of organizational communication by considering how stories, myths and narratives are used to create meaning among members.