College of Liberal Arts and Sciences

Anthropology

ANTH 110 - Cultural Anthropology 4 hours. This introductory course surveys the human condition in anthropological perspective. Emphasis is on the nature of culture, sociocultural evolution, human ecology, theoretical strategies, kinship, descent, gender, language, and belief systems. (E)

ANTH 120 - Human Origins 4 hours. An introduction to physical anthropology surveying evolutionary theory as applied to humans. Special emphasis on non-human primates, fossil man (hominid evolution) and the diversity of modern human populations. (E)

ANTH 200, 300 - Special Topics 1-4 hours. An open course varying in content from year to year which allows concentration in specialized areas.

ANTH 301 - Africa and Africans 2 or 4 hours. This course surveys African cultures and nations in a broad anthropological perspective, focusing especially on sub-Saharan Africa. Students examine selected ethnic groups, countries and contemporary issues to develop a view of Africa and Africans in the modern world. ANTH 110 recommended as a prerequisite.

ANTH 302 - The Nacirema 4 hours. American culture and society in cross-cultural perspective. This course emphasizes themes observed by international visitors and by anthropologists in cross-national studies. ANTH 110 recommended as a prerequisite.

ANTH 303 - Health and Culture 4 hours. An examination of the interaction of culture and biology in the broad realm of physical and mental health and illness. Topics include non-Western healers and healing practices, theories of disease and healing, cultural psychiatry, and epidemiology. Prerequisite: ANTH 110.

ANTH 304 - Language and Culture 2 or 4 hours. An introduction to anthropological linguistics emphasizing the origin, nature and evolution of human language; the Sapir-Whorf hypothesis, sociolinguistics (especially the linguistic aspects of gender and class), and nonverbal behavior. Prerequisite: ANTH 110. Recommended: 200-level foreign language course.

ANTH 309 - Magic and Religion 4 hours. (See RLGS 309)

ANTH 310 - Culture, Ecology, and Disease 2 or 4 hours. Drawing from environmental studies, anthropology, and public health, this course examines contemporary and historic cultural practices which have had disease or disability consequences. The roles of changing ecological patterns as they relate to sociocultural practices, emergent and resurgent diseases, and relevant public policies are central to the course.

ANTH 312 - Anthropology of Violence 2 or 4 hours. Investigates violence in traditional and modern societies. Topics include ritualized violence, gender, the sociocultural construction and reinforcement of violent behavior in the United States, and programs aiming to reduce levels of violence. Prerequisite: ANTH 110 or SOCI 110 and junior or senior standing.
ANTH 320 - The Islamic World 4 hours. This course offers an overview of the Islamic World, broadly defined. Topics surveyed include tents of Islam, Islamic history, culture and society, gender, the arts, politics, and economics. Understanding Islam's spread and impact globally as well as the sources and nature of contemporary issues are important aspects of the course.

ANTH 400 - Special Problems in Anthropology 1-4 hours. An open course varying in content from year to year which allows concentration on such specialized areas as gender and society, anthropological theory and methods, native cultures of North America, demography, and the like. Prerequisites: SOCI 110 or ANTH 110 and junior or senior standing or permission of instructor. (Sufficient demand)

ANTH 450 - Independent Study 1-4 hours. Self-directed study. Permission of instructor and Plan of Study required.

ANTH 470 - Field Work 2-4 hours. Supervised on-site field work on an approved topic. Prerequisites: ANTH 110, junior or senior standing, and permission of instructor.

Arabic
ARAB 101 - Arabic I 4 hours. Beginning Arabic introduces students to the Arabic language and Arabic culture. Students will be introduced to the Arabic alphabet and will practice basic skills in speaking, listening, writing and reading. (II)

ARAB 102 - Arabic II 4 hours. Continuation of ARAB 101. Prerequisite: ARAB 101 or permission of instructor. (II)

ARAB 200 - Topics in Arabic 1-4 hours. Subject matter not covered in other courses. Topics vary from one semester to another.

ARAB 201 - Arabic III 4 hours. Continuation and further development of the skills learned in ARAB 102. Prerequisite: ARAB 102 or permission of the instructor.

ARAB 202 - Arabic IV 4 hours. Continuation and further development of the skills learned in ARAB 201. Prerequisite: ARAB 201 or permission of instructor.

Astronomy
ASTR 103 - Introductory Astronomy 4 hours. A general survey of astronomy including our solar system, the nature of stars, the structure of our galaxy, and finally, an examination of other galaxies, quasars and other cosmic objects. (F)

ASTR 107 - Elementary Astronomy Lab 2 hours. Observation, supplemented by discussion of topics such as types of telescopes and auxiliary equipment, use of the Observatory, celestial coordinates and the use of reference materials, astronomical photography. (F)

ASTR 200 - Special Topics in Astronomy 1-4 hours. Topics vary from year to year. (Sufficient demand)

ASTR 302 - Planetary Science 2 hours. A quantitative and comparative study of the nine known planets. Includes the physics of the interiors, surfaces, and atmospheres of the terrestrial planets/moons, and of the atmospheres and rings of the Jovian planets. Also includes the physics of planetary and solar system formation. Prerequisite: One year of college level physics. (Sufficient demand)
ASTR 303 - Stellar Astronomy 3 hours. Part of an astronomy sequence recommended for students in the physical sciences and area science teachers. Emphasis on the observational and theoretical basis for understanding stellar structure and evolution, beginning with the Sun. Prerequisite: One year of college level physics and MATH 151. (Sufficient demand)

ASTR 304 - Galactic Astronomy and Cosmology 4 hours. Part of an astronomy sequence recommended for students in the physical sciences and area science teachers. Emphasis on the observational and theoretical basis of our knowledge of the Universe on the large scale. Topics include the structure of the Milky Way Galaxy, active and passive galaxies, and Cosmology. Prerequisite: One year of college level physics and MATH 151. (Sufficient demand)

ASTR 307 - Observational Astronomy 2 hours. An introduction to astronomical observing techniques and data reduction. Emphasis placed on image acquisition and manipulation to determine things like the morphologies, distances, motions, and luminosities of various objects. This course is intended for students with interest in astronomy and some background in physics and mathematics. Prerequisite: One semester of college level physics; pre-or co-requisite: MATH 151. (Sufficient demand)

ASTR 450 - Independent Study 1-4 hours. Self-directed study. Permission of instructor and Plan of Study required.

ASTR 495 - ARGUS Project 3 hours. Undergraduate research project for ARGUS program students who are majoring in a natural science, including the natural science concentration in Environmental Studies. Prerequisites: minimum 2.8 GPA and 3.0 in major; proposal acceptance by faculty committee.

Athletic Training

ATHT 103 - Prevention and Care of Athletic Injuries 4 hours. An introduction to the athletic training profession, inflammation process, anatomy review, rehabilitation, recognition and prevention of common athletic injuries, taping, rehabilitation and evaluation skills in a laboratory portion, including fifty (50) clock hours of athletic training room observation, cleaning duties, and ACI assignments. Lab fee: $70.00.

ATHT 110 - Medical Sciences 2 hours. This course provides a general overview of career opportunities in athletic training and other health/wellness related fields. Emphasis is placed on the domains of athletic training and application of them with regard to health and wellness in active populations.

ATHT 200 - Special Topics 1-4 hours. Topics of interest in Athletic Training are explored. Topics vary from term to term.

ATHT 201 - Clinical Experience in Athletic Training I 1 hour. Practical experience supervised by a Certified Athletic Trainer in an athletic training environment at Alfred University. A minimum of 50 clock hours is required. Emphasis on clinical proficiencies of basic first aid, wound care, preventative taping and wrapping, record keeping, and ACI assignment during sports season. Prerequisites: PHED 311, ATHT 103.

ATHT 202 - Clinical Experience in Athletic Training II 1 hour. Practical experience supervised by a Certified Athletic Trainer in an athletic training environment at Alfred University.
A minimum of 100 clock hours is required. Emphasis on clinical proficiencies pertaining to, etiology, pathology, treatment and management of athletic injuries and illnesses and ACI assignments during sports season. Prerequisites: ATHT 201, ATHT 210.

**ATHT 205 - Structural Kinesiology** 2 hours. This course focuses on the anatomical and mechanical components of human movement. An emphasis will be placed on the functional anatomy of the musculoskeletal and articular systems. Additional focus will be placed on examining the neuromuscular system and basic biomechanical principles associated with human movement. Prerequisite: BIOL 103.

**ATHT 210 - Advanced Athletic Training** 3 hours. The study of specific concerns related to the field of athletic training in order to develop a thorough understanding of the etiology, pathology, treatment and management of athletic injuries and illnesses. Prerequisites: PHED 311, ATHT 103.

**ATHT 301 - Clinical Experience in Athletic Training III** 1 hour. Practical experience supervised by a Certified Athletic Trainer in an athletic training environment at Alfred University. A minimum of 100 clock hours is required. Emphasis on clinical proficiencies of advanced taping and bracing techniques, medication record keeping, the asthmatic athlete, skin conditions, and nutritional consideration, ACI assignment during sports season. Prerequisites: ATHT 103, 110, 201, 202, and 210.

**ATHT 302 - Clinical Experience in Athletic Training IV** 1 hour. Practical experience supervised by an Approved Clinical Instructor (ACI)/Certified Athletic Trainer in an athletic training environment at Alfred University or affiliated site. A minimum of 150 clock hours is required. Emphasis on clinical proficiencies to advanced understanding of the etiology, pathology, treatment and management of athletic injuries and illnesses. Clinical assignment to ACI during season. Prerequisites: Formal retention within ATEP, ATHT 103, 210, 301, 334, and 356.

**ATHT 334 - Physical Evaluation of the Lower Extremity** 4 hours. This course is designed to provide students with an intensive, thorough study of orthopedic evaluation techniques used within the clinical and on-field environments to assess athletic related injuries to the lower extremity sustained by physically active individuals. Normal joint kinematics and subsequent pathomechanics will also be discussed. Prerequisites: ATHT 103, 201, 202, 210; or permission of instructor.

**ATHT 348 - Physical Evaluation of the Upper Extremity** 4 hours. This course is designed to provide students with an intensive, thorough study of orthopedic evaluation techniques used within the clinical and on-field environments to assess athletic related injuries to the upper extremity sustained by physically active individuals. Normal joint kinematics and subsequent pathomechanics will also be discussed. Prerequisites: ATHT 103, 201, 202, 210; or permission of instructor.

**ATHT 356 - Theory and Techniques of Therapeutic Modalities** 4 hours. This course presents therapeutic modality theory as well as application of techniques necessary in their planning and implementation. Prerequisites: Formal retention within ATEP, ATHT 103, 201, 202, 210, and 301.
ATHT 367 - Theory and Techniques of Therapeutic Exercise 4 hours. This course is designed to provide students with treatment theories and techniques necessary in the planning and implementation of therapeutic exercise for prevention, care, and rehabilitation of athletic injuries. Prerequisites: Formal retention within ATEP, ATHT 103, 201, 202, 210, 301, and 302.

ATHT 392 - Biomechanics 3 hours. The study of skeletal, joint, and muscular systems in the human body, including analysis of muscular-skeletal movement applied to exercise, sports, and dance-related skills. Emphasis will be placed on the principle of rigid body mechanics (statics and dynamics), Newton's Laws and how they govern human movement in sport and exercise. Prerequisites: ATHT 103, 110, 201, 202, and 210.

ATHT 393 - Physiology of Exercise 3 hours. The study of physiological changes in the body with exercise, sports, and dance activities. Emphasis on neuromuscular, cardiovascular, and respiratory systems, and their adaptations to training. Prerequisite: BIOL 104.

ATHT 401 - Clinical Experience in Athletic Training V 1 hour. Practical experience supervised by a Certified Athletic Trainer in an athletic training environment at Alfred University. A minimum of 150 clock hours is required. Emphasis on clinical proficiencies of advanced assessment and management of injuries to the lower extremity, as well as therapeutic modalities. ACI assignment during sports season. Prerequisites: ATHT 103, 110, 201, 202, 301, 302, 334, 348, 356, and 367.

ATHT 402 - Clinical Experience VI 1 hour. Development of end of season injury report utilizing injury tracking software and practical experience supervised by a Certified Athletic Trainer in an athletic training environment at Alfred University. A minimum of 200 clock hours is required. Emphasis on clinical proficiencies of advanced assessment and management of injuries to the upper extremity, as well as therapeutic exercises and rehabilitative techniques. ACI assignment during sports season. Prerequisites: ATHT 103, 110, 201, 202, 301, 302, 334, 348, 356, 367, and 401.

ATHT 403 - Medical Aspects of Athletic Training 1 hour. This is a course for senior athletic training students. It is designed to expose the athletic training student to the necessary recognition, evaluation and treatment skills needed to assess a variety of medical conditions affecting athletes and physically active individuals. Emphasis will be on developing clinical proficiencies of advanced assessment related to pathologies and disorders affecting the endocrine, exocrine, respiratory and autonomic nervous systems. Prerequisites: ATHT 201, 202, 210, 301, 302, 334, 348, 356, 367, 401, and 485.

ATHT 420 - Pharmacology in Athletic Training 2 hours. This course is designed as an introduction to pharmacology. Pharmacodynamics, pharmacokinetics, drug interactions and reactions will be discussed. Extra attention will be given to drugs commonly used in sports medicine. This course is offered primarily for athletic training majors. Prerequisites: CHEM 105, BIOL 201, and admission to ATEP, or permission of instructor.

ATHT 432 - Administrative Aspects of Athletic Training 3 hours. An in-depth study of administrative techniques including budgeting, personnel, and the use of computers in the athletic training setting. Prerequisite: Formal retention within the ATEP.
ATHT 450 - Independent Study 1-4 hours. Self-directed study. Permission of instructor and Plan of Study required.

ATHT 459 - Research Design in Athletic Training 3 hours. This course is for junior or senior athletic training majors. It is designed to introduce students to current research topics within the field of athletic training/sports medicine. Prerequisite: Formal retention within the ATEP.

ATHT 485 - Clinical Internship in Athletic Training 4 hours. Provides seniors with an opportunity for off-campus affiliated clinical experience related to the field of athletic training and sports medicine. Emphasis on the clinical proficiencies pertaining to administrative responsibilities. Practical experience supervised by a Certified Athletic Trainer. A minimum of 200 clock hours is required. Prerequisites: ATHT 210, 334, 348, 356, and 367.

ATHT 495 - Current Topics in Athletic Training 2 hours. This course is designed to serve as a culmination of the athletic training curriculum. This capstone course addresses current prevention, assessment, and rehabilitation of the most common conditions found in an athletic training work environment. Pharmacological and professional development topics will also be addressed. Additional material will be presented pertaining to the contemporary issues affecting the current state of the athletic training profession. Prerequisites: ATHT 334, 348, 356, 367, 393, 420, and 432. (Spring)

Biology

BIOL 103 - Basic Human Anatomy 4 hours. A study of the gross to microscopic bases of human structure and function. Students dissect the cat, examine charts, models and selected human and other mammalian materials. Required of sophomore Biology-Med Lab Tech majors and athletic training majors. Three lectures and one three-hour laboratory. (F)

BIOL 104 - Basic Human Physiology 4 hours. Primary concepts of human physiology with emphasis on the chemical bases for cellular activity, tissue function, organs, and organ systems. Required of sophomore Biology/Med Lab Tech majors and Athletic Training majors. Three lectures and one two-hour laboratory. Prerequisite: BIOL 103 recommended. (F)

BIOL 106 - Field Botany 4 hours. Introduction to the taxonomy and adaptations of native and introduced plants in western New York ecosystems. Students will learn identification of species through laboratory and field studies. Biodiversity of natural ecosystems will be investigated and compared. Biology majors may receive Biology elective credit by fulfilling additional requirements. (F)

BIOL 107 - Human Anatomy and Physiology I 4 hours. This course examines the bases of the human body in health and disease. Dissection of the cat and other mammalian organs, and a series of physiology exercises investigate structure and function from cell to organ system of the integumentary, skeleto-muscular, nervous-sensory and endocrine systems. Three lecture/discussions and one three-hour laboratory.

BIOL 108 - Human Anatomy and Physiology II 4 hours. A continuation of Biology 107 with a focus on the 'internal' organ systems, including the circulatory, lymphatic, respiratory, digestive, urinary and reproductive. Three lecture/discussions and one three-hour laboratory.
BIOL 109 - Health in History 4 hours. An examination of how human health and disease has changed the course of history. This course will describe many prominent diseases from each of the major disease categories (bacterial, viral, genetic, and environmental) and will explore how human disease has affected different societies. Four hours lecture. (F)

BIOL 110 - Scientific Terminology 2 hours. Understanding scientific terminology is approached through a focus on Greek and Latin word elements and work-building strategies for learning to spell, pronounce, interpret and use terminology properly in scientific literature, college and graduate school, professions, and increasingly in the public press.

BIOL 111 - Modern Biology with Human Implications 4 hours. A consideration of yourself as a living organism with emphasis on how your body functions, your genetics and evolutionary legacies, and your ecological relationship to other organisms that inhabit this planet. Three lectures and one two-hour laboratory. This is an introductory course primarily for students majoring in areas other than Biology who wish to fulfill a general education requirement in the natural sciences with laboratory. (F)

BIOL 119 - Physiology of Aging 4 hours. Examines both the expected changes in normal human aging as well as the pathologies of the aging process. Topics covered include digestive, cardiovascular, sensory, hormonal, musculoskeletal and urogenital systems as well as cellular metabolism and drug absorption. Required of Gerontology majors. Four lectures. (F) (Alternate years)

BIOL 120 - The Hidden World of Microbes 4 hours. This course is an introduction to the hidden microbial world, with an emphasis on bacteria and viruses, and the relationship they have with humans. We will discuss basic aspects of microbial structure, physiology, ecology and metabolism. We will then use this information as our foundation to discuss relevant and interesting microbial topics such as infectious disease, food microbiology, and environmental and applied microbiology. Students will gain an understanding of how microbes cause disease, how we preserve our food, bioremediation, waste treatment and other relevant environmental topics. Laboratory activities will support lecture material by providing hands-on experience, as well as allow students to design and carry out their own experiment. Three hours lecture and two hours laboratory. (F)

BIOL 126 - How Your Body Works 4 hours. A multimedia introduction to human biology at the level of the "person on the street". Students will identify their questions and concerns. We will then perform experiments to explain the functional, structural and developmental relationships. Three lectures and one 2 hour lab. (F).

BIOL 130 - Introduction to Human Genetics 4 hours. A look at human genetics from the human genome project and biotechnology to inheritance of traits. Emphasis will be placed on understanding current and past discoveries in genetics, how those discoveries may impact our lives, and what they mean for the non-scientist. Class will meet for 3 lectures and one two-hour lab per week. (F)

BIOL 140 - Global Ecology 4 hours. Ecology of natural environments especially in developing areas of the world, with a focus on how conditions affect humans' use of those environments. (F)

BIOL 201 - Biology I 4 hours. An introduction to the fundamentals of biological organization and processes with an emphasis on diversity of organisms, the variety
of ways they have adapted to meet the requirements for living, and how they interact with their environment and other organisms. This is the first semester introductory biology course for biology majors and is recommended for students interested in biology who have not made a decision about a major. Concurrent enrollment in CHEM 105 is recommended. (F)

**BIOL 202 - Biology II** 4 hours. This course is an introduction to the fundamentals of biological organization at the cellular level. Topics include the chemical basis of life, cell structure and function, and genetics. Required of all biology majors. BIOL 201 is recommended as prerequisite; concurrent enrollment in CHEM 106 is recommended. (F)

**BIOL 203 - Fast-Track Biology I and II** 6 hours. Fast-Track BIO, as a combination of BIOL 201 and BIOL 202, covers an introduction to the fundamentals of biological organization and processes with an emphasis on diversity of organisms, the variety of ways they have adapted to meet the requirements for living, and how they interact with their environment and other organisms. Biological organization is then introduced at the cellular level by covering the chemical basis of life, cell structure and function, and genetics. The course approaches these topics through active, hands-on learning. (F) (Summer)

**BIOL 225 - Research Methods in Biology** 2 hours. Introduction to basic skills of biological research, including lab safety, experimental designs, and scientific writing and presentation. Prerequisites: BIOL 201/202.

**BIOL 226 - Biostatistics** 3 hours. Application of statistics to experimental design, data analysis, and decision making in the biological sciences. Prerequisites: BIOL 201/202. (III)

**BIOL 230 - Nutrition in Health and Disease** 2 hours. A consideration of the fundamentals of nutrition to help understand the relationship of nutrition to growth, health and disease. Emphasis is placed on students acquiring the ability to critically read and evaluate consumer nutritional information and to develop effective health promoting skills. Required of junior Athletic Training majors. Four lectures. (F)

**BIOL 252 - Molecular Cell Biology** 4 hours. This course is intended to help the student develop an understanding of the cell as a basic biological unit. Emphasis is placed on ultrastructure, organization, and function of cellular organelles, and the regulation of selected cell activities. Laboratories reinforce theoretical concepts and provide hands-on experience with modern molecular cell biology methods. Three lectures and one three-hour laboratory. Prerequisites: BIOL 202 and CHEM 106; CHEM 106 recommended.

**BIOL 300 - Topics in Biology** 1-4 hours. This course provides opportunities for examining areas not covered in the regular offerings. Topics vary each semester.

**BIOL 302 - General Microbiology** 4 hours. This course surveys the microbial world, with an emphasis on bacteria and viruses. The student will gain an understanding of how the study of microorganisms has paved the way for important advances in human health, agriculture, and food science. Major topic areas include structure/function, metabolism, genetics, biotechnology, and host-parasite relationships. The laboratory offers experience in aseptic handling of bacterial cultures as well as applications of classical and modern techniques for microbial identification and characterization. Three lectures and one three-hour laboratory. Prerequisites: BIOL 201/202, CHEM 105/106; 310 or 315 pre- or co-requisite.
**BIOL 304 - Microbial Ecology** 4 hours. Microbial ecology examines microorganisms in their natural environment. Although microorganisms are too small for us to view without aid, they are significant enough to define every ecosystem on earth, from subterranean depths to the upper atmospheres. In this course we will examine how microorganisms interact with biotic and abiotic factors in their environment. We will then use this knowledge as a basis to study microbial diversity, nutrient cycling, bioremediation, environmental management, energy recovery and production and human applications of microorganisms in industry and agriculture. In laboratory we will learn classic and modern techniques for handling and studying pure and mixed microbial communities, including current metabolic and genomic fingerprinting technologies. Finally students will use their new understanding of the microbial world to design and conduct an individual project. Three lectures and one three-hour laboratory. Prerequisite: BIOL 201/202 or ENVS 101; CHEM 105/106.

**BIOL 311 - Invertebrate Zoology** 4 hours. An extensive study of selected species to illustrate invertebrate structure, biological relationships and adaptations to their habitats. Three lectures and one two-hour laboratory. Prerequisite: BIOL 201/202. (Alternate years)

**BIOL 322 - Botany** 4 hours. A phylogenetic exploration of plants, with emphasis on adaptation of structure and function to different environments. Topics include anatomy, physiology, evolution, ecology, and economic botany. Three lectures and one two-hour laboratory period. Prerequisites: BIOL 201/202.

**BIOL 332 - Histology** 4 hours. Study of the basic organization of the tissues of the vertebrate body. Emphasis on the derivation of cells and tissues from undifferentiated precursors and development of specialization for functional activity. Principles of tissue preparation for microscopic examination included in lecture and laboratory. Two lectures, one three-hour lab and one hour additional preparation. Prerequisite: BIOL 201/202.

**BIOL 340 - Virology** 4 hours. An introduction to bacterial, animal, and plant viruses with emphasis on viral structure, replication, host-cell interaction and the use of viruses as gene therapy delivery tools. 4 hours lecture. Prerequisite: BIOL 252 or permission of instructor.

**BIOL 345 - Vertebrate Natural History** 4 hours. A study of the systematics, adaptations and ecological relationships of representative species of living fish, amphibians, reptiles, birds and mammals. Laboratory includes examination of living and prepared specimens as well as field identification of animals in their natural habitats. Optional all-day field trip to Buffalo Museum, Zoo and Niagara Aquarium. Three lectures, one three-hour lab. Prerequisite: BIOL 201. (Alternate years)

**BIOL 346 - Animal Nutrition** 4 hours. Basic principles of animal nutrition, emphasizing characteristics and metabolism of nutrients, these nutrients in terms of feedstuffs, anatomy and physiology of gastrointestinal tracts, and nutritional lifecycles of various animals. Four lectures. Prerequisites: BIOL 201/202.

**BIOL 348 - Animal Behavior** 4 hours. A look at the study of animal behavior to interpret genetic, environmental, and physiological influences on development, control, adaptation and evolution of behavior. 4 lectures and 1 hour reserved for acquiring techniques and implementation of a project. Prerequisites: BIOL 201/202; BIOL 225 and BIOL 376 recommended.
BIOL 352 - Developmental Biology 4 hours. Descriptive and functional study of gamete formation, fertilization and progressive development and differentiation of plants and animals. Laboratory examination of prepared materials with additional exercises using live specimens to demonstrate developmental principles and experimental techniques. Two lectures and two two-hour laboratory periods. Prerequisites: BIOL 201/202. (Alternate years)

BIOL 354 - Ecology 4 hours. Interactions of organisms and their environment with emphasis on populations, communities, and ecosystems. Three lectures and one three-hour laboratory. Prerequisite: BIOL 201 or ENVS 101. (Fall, alternate years)

BIOL 356 - Aquatic Ecology 4 hours. Introduction to ecology of lakes, streams, and wetlands. Three lectures and one three-hour laboratory. Prerequisite: BIOL 201 or ENVS 101. (Fall, alternate years)

BIOL 358 - Biogeography and Landscape Ecology 4 hours. Biogeography looks at patterns of living things in space and time. By combining ecological, evolutionary, and geographic points of view, we will see how life has evolved around the globe to exploit physical differences such as soils and climate. Landscape ecology quantifies spatial structure, especially as affected by humans, in regions comprising one or more ecosystems. Relating the two approaches helps us to appreciate how populations have survived geographical constraints in the past and to predict how they might fare in the future. Geographic information systems will be demonstrated as an important contemporary tool in spatial ecology. Prerequisite: BIOL 201 or ENVS 101.

BIOL 365 - Genetics 4 hours. Principles of classical, molecular and population genetics; including Mendelian and cytoplasmic inheritance; DNA recombination, linkage, and mapping; structure and replication of genetic material; the control of gene expression; mutation; Hardy-Weinberg theorem; and quantitative genetics. Application of concepts through investigative laboratories. Three lectures and one three-hour laboratory. Required for all biology majors. Prerequisites: BIOL 201/202, CHEM 106/CHEM 310 or CHEM 315 as co- or prerequisite.

BIOL 372 - Advanced Cell Biology 4 hours. Designed to build on BIOL 252, this course focuses on integrative and specialized cellular activities. Integrative cell functions include; cell-to-cell signaling, programmed cell death, mechanical and structural properties, motility, and differentiation via specific interactions between cells. Specialized cellular activities include: molecular immunology, neuron structure and function, and the cellular bases of cancer. Three hours lecture plus two hours laboratory. Prerequisite: BIOL 252.

BIOL 374 - The Biology of Cancer 2 hours. A detailed examination of the biological basis for cancer and anti-tumor therapies. Specific topics include: viral and chemical oncogenesis; disruption of the cell cycle; angiogenesis; metastasis; chemotherapy; epidemiology of cancer; and host-tumor interactions. 2 hours lecture. Prerequisite: BIOL 252.

BIOL 375 - Comparative Vertebrate Biology 4 hours. A comprehensive review of the structure, taxonomy, evolution, and biological relationships of vertebrates. Two lectures and two two-hour laboratories. Prerequisites: BIOL 201/202. (Alternate years)
BIOL 376 - Animal Physiology 4 hours. Principles and problems concerned with the physiochemical responses and functioning of animal tissues and organs. Three lectures and one three-hour laboratory period. Prerequisites: BIOL 201/202, CHEM 310 or 315.

BIOL 390 - Junior Seminar 1 hour. Development of writing and interviewing skills critical in applying to graduate and professional schools, internships, and for employment. Students write and critique cover letters, resumes, essays and sample applications, take sample entrance examinations, interview a professional in a career of interest, and receive phone and face-to-face mock interviews with feedback on appropriate dress, mannerisms, and ability to respond to questions. Emphasis on professionalism.

BIOL 402 - Immunology 4 hours. During this course you will learn what makes up the immune system, and how it works in keeping us healthy. We'll also take a look at some of the more complex issues surrounding the immune system such as vaccination, autoimmune disease and transplantation. Upon completion of the course you will be able to name and describe the cells and organs of the immune system, and understand the function of each. You will also be able to describe the normal processes of immunity, and regulatory controls, explain the results of immune component deficiencies and understand how normal immune function can cause disease. Prerequisite: BIOL 252; BIOL 302 recommended.

BIOL 404 - Mechanisms of Microbial Pathogenesis 4 hours. This course examines the host-parasite interaction and the mechanisms by which microbes evade the host response and cause disease. The emphasis is on an understanding at the molecular level of microbial pathogenesis, including colonization, invasion, antigen variation, and toxin production and mode of action. Case-study and problem based exercises will support material presented in lecture and allow students an opportunity for inquiry based learning. Four hours per week, with one hour reserved for case-study discussion. Prerequisite: BIOL 252.

BIOL 410 - Endocrinology 4 hours. A study of endocrinology from molecular to organismal levels. Emphasis is placed on categories of hormones and receptors, regulation of physiological responses, and mechanisms of endocrine dysfunction. Four lectures. Prerequisites: BIOL 201/202; BIOL 376 or BIOL 252 recommended.

BIOL 415 - Genetics and Evolution of Populations 4 hours. This course investigates modern evolutionary theory at the macro- and micro-evolutionary scale. Topics include historical perspectives, basic principles of evolution, mechanisms of evolution, genetics of populations, quantitative genetics and phylogenetics. 4 hours of lecture per week. Prerequisites BIOL 201/202; BIOL 365 recommended.

BIOL 420 - Biochemistry: Proteins and Metabolism 4 hours. Properties, biosynthetic pathways, and metabolism of carbohydrates, lipids, and nitrogenous compounds with related units on physical biochemistry, protein structure, bioenergetics and enzyme kinetics. Laboratories reinforce theoretical concepts and provide hands-on experience with modern biochemistry techniques and instrumentation. Three lectures and one three-hour laboratory. Prerequisite: Either [BIOL 252 and CHEM 315/316] or [BIOL 202, (CHEM 343 or CEMS 235), and (CHEM 310 or CHEM 315)]. (Cross-listed as CHEM 420)

BIOL 422 - Biochemistry: Nucleic Acids 4 hours. This course surveys the biochemistry of the gene, with an emphasis on protein/nucleic acid interactions.
Topics include nucleic acid structure, regulation of DNA replication and transcription, post-transcriptional modification of RNA, recombinant DNA techniques, and genetic engineering methods. Three hours lecture and one three-hour laboratory. (Students who wish to take only one semester of Biochemistry should take BIOL/CHEM 420.) Prerequisite: BIOL 252; BIOL 372 recommended. (Cross-listed as CHEM 422)

**BIOL 425 - Physiological Plant Ecology** 4 hours. An exploration of plant function from the tissue to the whole organism level, with emphasis on interactions with the environment. Topics include plant-water relations, nutrition, energy and carbon cycling, development, and stress physiology. Three lectures and one three-hour laboratory. Prerequisites: BIOL 201/202, CHEM 106; CHEM 310 or CHEM 315 recommended. (Alternate years)

**BIOL 450 - Independent Study** 1-4 hours. Intensive inquiry into a specific problem with an approved plan of study under the guidance of a faculty member. Required of all students who are candidates for graduation with honors in Biology.

**BIOL 485 - Internship in Biology** 1-16 hours. Off-campus research in consultation with faculty and project advisors. Open to junior, senior and graduate biology students.

**BIOL 490 - Biology Research Seminar** 1 hour. An advanced topics seminar held once a week, conducted by enrolled students, local speakers, and outside speakers. Weekly topics and discussion will represent current research in a wide range of biological sciences. Prerequisite: Biology or BMES major; senior standing.

**BIOL 495 - ARGUS Project** 2-4 hours. Funded undergraduate research project in biology. Maximum 8 credit hours for two semesters of research. Prerequisites: Consult with the chair of the ARGUS committee or chair of the Division of Biology.

**Chemistry**

**CHEM 103 - Basic Chemistry** 4 hours. Elementary chemistry covering the basic theories and techniques of inorganic chemistry and an introduction to organic and biochemical principles. Illustrated examples and experimental work are taken largely from life experiences. This is not intended to be a prerequisite for further work in the field. Two lectures, one demonstration, one laboratory, and one quiz per week. (F)

**CHEM 105 - General Chemistry I** 4 hours. A systematic study of the fundamental principles, theories and calculations involved in chemistry. Basic concepts of bonding, chemistry of selected elements and their compounds, states of matter, stoichiometry, solution reactions, equilibrium, kinetics, electrochemistry, thermodynamics, nuclear chemistry, and an introduction to organic chemistry. Laboratory work includes experiments in stoichiometry, qualitative and quantitative analysis. Required for pre-health professionals and engineering, biology, and chemistry majors. Two lectures, one demonstration, one laboratory and one quiz per week. CHEM 105 is a prerequisite for CHEM 106. (F)

**CHEM 106 - General Chemistry II** 4 hours. CHEM 106 is a continuation of CHEM 105. Two lectures, one demonstration, one laboratory and one quiz per week. Prerequisite: CHEM 105 or CHEM 115. (F)
CHEM 310 - Basic Organic Chemistry 3 hours. A descriptive study of the structure and reactions of common aliphatic and aromatic compounds of carbon. For students interested in ceramics, materials science, environmental science, or ecology, but not suitable for chemistry majors or those interested in biochemistry, molecular biology, or the health professions. Prerequisite: CHEM 106 or CHEM 116 or permission of instructor.

CHEM 315 - Organic Chemistry I 4 hours. An introduction to the chemistry of carbon compounds, including the preparation of typical compounds and a study of their properties, reactions, and uses. Required of all pre-health professionals, some biology majors, and chemistry majors. Prerequisite: CHEM 106 or CHEM 116.

CHEM 316 - Organic Chemistry II 4 hours. Continuation of CHEM 315. Prerequisite: CHEM 315.

CHEM 321 - Introduction to Analytical Chemistry 4 hours. A study of classical analytical techniques involving equilibria of aqueous systems as well as simple modern analytical techniques involving the methods and instrumentation of spectrophotometry and separation science will be presented. Laboratory exercises will include inorganic synthesis, "traditional wet methods of analysis," and instrumental methods of analysis. Two lectures and two three-hour laboratories per week. Prerequisite: CHEM 106 or CHEM 116.

CHEM 343 - Physical Chemistry I 3 hours. Introductory physical chemistry. Gas laws, laws of thermodynamics, phase changes, multicomponent systems, chemical equilibrium. Three lectures and one discussion session per week. Prerequisites: CHEM 106 or CHEM 116, MATH 152 and PHYS 112 or 126.

CHEM 346 - Physical Chemistry II 3 hours. Intermediate physical chemistry. Kinetics, electrochemistry and quantum mechanics and spectroscopy. Three lectures and one discussion session per week. Prerequisite: CHEM 343 or CEMS 235.

CHEM 372 - Inorganic Chemistry 3 hours. Principles of inorganic chemistry with emphasis on periodicity, symmetry and group theory, molecular orbital theory, bonding, acid/base chemistry, coordination chemistry, organometallic compounds, and catalysis. Prerequisite: CHEM 343 or CES 235.

CHEM 390 - Junior Seminar 0 or 1 hour. A special topics course with a varied format of outside speakers, faculty and student presentations, and discussion groups. Junior majors must register for one credit during one semester and for 0 credit the other semester. An "In Progress" (IP) grade will be converted to a normal grade after a formal talk on a topic from current chemical literature is presented to the class during the final semester. Attendance is mandatory.

CHEM 400 - Advanced Chemistry Topics 1-4 hours. Special topics not covered by regular course work. One or more special topic courses will be offered most years. Students in consultation with a faculty member may design their own special topics courses. All special topics courses must have the written approval of the Division Chair and should in general meet the criteria of the American Chemical Society's requirements for an advanced course. Prerequisite: CHEM 346, although this can be waived at the discretion of the Division Chair.

CHEM 420 - Biochemistry: Proteins and Metabolism 4 hours. (See BIOL 420)

CHEM 422 - Biochemistry: Nucleic Acids 4 hours. (See BIOL 422)
CHEM 423 - Instrumental Analysis 3 hours. The theory and practice of modern instrumentation techniques and methods used in chemistry are presented. An in-depth look at spectroscopic, separation, and electrochemical methods and their associated instrumentation follow an introduction to instrumentation; interpretation of results is also covered. Required for chemistry majors. Prerequisites: CHEM 321 and CHEM 346 or equivalent.

CHEM 450 - Independent Study 1-4 hours. Original chemical research under faculty guidance. An approved plan of study and a written final report are required. Oral reports may also be required. The work must represent original research in chemistry and have the potential to be published. Prerequisites: Permission of instructor, a study plan approved by the Division Chair and, in general, CHEM 343 although this can be waived by the Division Chair.

CHEM 457 - Advanced Organic Chemistry 2 hours. Organic reaction mechanisms and stereochemistry. Other topics may be included, depending upon the interests of those enrolled. Prerequisite: CHEM 316 (Alternate years)

CHEM 485 - Internship in Chemistry 2-6 hours. Off-campus research in consultation with faculty and an off campus project advisor. An approved plan of study and a written final report are required. Oral reports may also be required. The work must represent original research in chemistry and have the potential to be published. Open to juniors and seniors. Prerequisites: Permission of instructor, a study plan approved by the Division Chair and, in general, CHEM 343 although this can be waived by the Division Chair.

CHEM 490 - Senior Seminar 0 or 1 hour. The seminar is an advanced special topics course with a varied format of outside speakers, faculty and student presentations, and discussion groups. Senior majors must register for one credit during one semester and for 0 credit the other semester. They will receive an "In Progress" (IP) grade which will be converted to a normal grade after presenting a formal talk on a topic from current chemical literature during their last semester. Attendance is mandatory.

CHEM 495 - ARGUS Project 3 hours. Undergraduate research project for ARGUS program students who are majoring in Chemistry. Maximum 6 credit hours for two semesters of research. An approved plan of study and a written final report are required. Oral reports may also be required. The work must represent original research in chemistry and have the potential to be published. Prerequisites: Permission of instructor, a study plan approved by the Division Chair and, in general, CHEM 343 although this can be waived by the Division Chair.

Chinese

CHIN 101 - Chinese I 4 hours. This course is an introduction to the Mandarin Chinese language and cultures of the People's Republic of China. (II)

CHIN 102 - Chinese II 4 hours. The further development of basic language skills introduced in CHIN 101. A continuation of the study of the cultures of the People's Republic of China. Prerequisite: CHIN 101 or permission of the instructor. (II)

Communication Studies

COMM 101 - Introduction to Communication Studies 4 hours. An introduction to communication studies in a variety of contexts: intrapersonal, interpersonal, small group, and public. The class improves the student's understanding of communication as a process and facilitates day-to-day interactions.
COMM 110 - Mass Media and American Life 4 hours. An examination of the evolution of American mass media and their cultural, economic, and social implications. Students analyze varied media vehicles (including newspapers, books, magazines, sound recordings, films, and television programs) with regard to content, form, and demographic impact.

COMM 200, 400 - Special Topics in Communication 1-4 hours. This course provides opportunities for examining communication studies areas not covered in the regular offerings. Topics vary each semester.

COMM 205 - Introductory Newswriting and Reporting 4 hours. An introductory journalism course emphasizing news gathering and reporting a variety of basic news stories, including hard news, features, and enterprise stories. Basic newswriting skills covered, including developing news judgment, style, structure, sources, and interviewing techniques.

COMM 301 - Broadcasters, Advertisers, and Audiences 4 hours. An overview of television and radio broadcasting and advertising in the United States. The course examines how a variety of factors—historical, cultural, political, legal, economic, and technological— affect the content and character of American broadcasting.

COMM 305 - Popular Music and Society 4 hours. An exploration of popular music as both influenced by and an influence on society. Students will examine a range of cultural issues related to the production and consumption of popular music, including violent lyrics, censorship, and depictions of sexuality. Prerequisite: junior or senior standing.

COMM 306 - Gender and Communication 4 hours. This course offers a broad introduction to gender communication. Topics covered include the impact of sex, race, class, ethnicity, and sexuality upon communication style and social behavior. (Cross-listed as WMST 306)

COMM 309 - Persuasion: Reception and Responsibility 4 hours. This course provides majors in communication studies and related areas with a foundation for rhetorical thinking. Critical issues in persuasion are addressed, along with a historical survey of rhetorical philosophy and theory. Students successfully completing the course will know expert opinions on issues concerning face-to-face persuasive communication. (Cross-listed as CRIT 309)

COMM 311 - Advanced Public Speaking 4 hours. This course provides an opportunity for students to build on the public speaking skills they first learn in COMM 101 - Introduction to Communication Studies. Concepts covered include the history of rhetorical theory, ethics, and methods of analyzing public address. Students also write and present a variety of speeches.

COMM 385 - Internship in Communication 1-4 hours. An off-campus independent study project. Students gain experience in the field of communications by serving as interns in either the print or broadcast areas of the media. When completed, a journal and final report is submitted to the appropriate faculty sponsor. May be taken during the summer. Prerequisite: junior standing.
COMM 401 - Technology and Communication 4 hours. An exploration of questions raised by the introduction of new communication technologies with particular emphasis on the social, economic, and aesthetic impact of these emerging technologies, and their roles in education and national development. Prerequisite: junior/senior standing, or permission of instructor.

COMM 404 - Media Criticism 4 hours. An exploration of the communicative dimensions of media artifacts: magazines, newspapers, films, television programs, and popular music recordings. Analyses are conducted from rhetorical, semiotic, genre, auteur, feminist, psychoanalytic, and Marxist perspectives. Prerequisite: junior/senior standing, or permission of instructor. (Cross-listed as CRIT 404)

COMM 405 - Television Criticism 4 hours. TV Criticism examines the medium by analyzing its industrial purposes, narrative structures, and the application of mise-en-scene, videography, editing, and sound. Students will familiarize themselves with several critical approaches such as semiotics, genre study, ideological criticism, gender and race studies. Prerequisite: COMM 110. (Cross-listed as CRIT 405)

COMM 409 - Organizational Communication 4 hours. This course introduces students to major concepts regarding communication in organizations, including the professional environment.

COMM 410 - Communication Ethics 4 hours. An exploration of ethical perspectives that pertain to communication in a variety of contexts, including interpersonal, small group, organizational, public and mass. Students learn to become more responsible senders and receivers of communication. Prerequisites: COMM 101 and COMM 110. (Cross-listed as CRIT 410)

COMM 425 - Public Affairs Reporting 4 hours. An introduction to public affairs reporting. Students report on topics drawn from government, business, science, environment and minority issues. Emphasis on improving news gathering skills in order to create more informative, accurate, and balanced news stories and features. Prerequisite: COMM 205.

COMM 450 - Independent Study 1-4 hours. Self-directed study. Permission of instructor and Plan of Study required.

COMM 465 - Women, Minorities and the Media 4 hours. Investigates how women and minorities (including sexual minorities) are covered/portrayed by the news and entertainment media and how underlying economic, political and sociological factors affect such coverage. It explores how media portrayals influence the public's views regarding women and minorities and how women and minorities view themselves. And it examines critics' charges that the media portray women and minorities in a negative light and strategies used to counteract possible resulting harm. Prerequisite: COMM 110 or permission of instructor. (Cross-listed as WMST 465)

COMM 470 - Communication Practicum in Journalism 1-4 hours. A lab course giving students practical experience in print journalism, broadcasting, or the Internet under the supervision of a faculty member. Credit value assigned according to the extent of involvement. Prerequisite: Permission of instructor.

COMM 475 - Specialized Reporting 4 hours. A workshop course in which students select and pursue an area of interest. Students, working in a simulated newsroom environment, will cover beats ranging from the courts to the Arts.
Courses of Instruction: College of Liberal Arts and Sciences

Emphasis on developing quality beat coverage. Prerequisite: COMM 205 or permission of instructor.

COMM 485 - Internship in Communication 1-4 hours. An off-campus independent study project. Students gain experience in the field of communications by serving as interns in either the print or broadcast areas of the media. When completed, a journal and final report is submitted to the appropriate faculty sponsor. May be taken during the summer. Prerequisite: junior standing.

Criminal Justice Studies
CRIM 322 - Juvenile Justice 2 hours. This course analyzes the philosophies that have influenced juvenile justice policy implementation. The course uses a text and supplemental readings to illustrate the processing system that funnels juveniles from the time of their arrest to their release.

CRIM 332 - Focusing on Police 2 hours. This course gives students an in-depth analysis of police operations. Discussions are centered on police operations and the social process involved in police-citizen contacts.

CRIM 340 - Concepts of Penology 4 hours. A survey of correctional concepts and philosophy with emphasis on the correctional institution as a community and the sociology of confinement. Additional focus on penal reform, correctional administration and innovation. Prerequisite: SOCI 110.

CRIM 351 - Seminar in Criminal Behavior, Etiology, Control, and Rehabilitation 4 hours. Specific problems and issues concerning criminal behavior are examined in depth. The area of investigation varies with the disciplinary orientation of the instructor. Includes analysis of the causes of particular kinds of behavior, examination of methods of control, and consideration of current approaches to rehabilitation. Prerequisite: junior or senior standing.

CRIM 400 - Special Topics 1-4 hours. An open course varying in contents from years to year, which allows concentration on such special topics as terrorism, white-collar crime, drugs and crime.

CRIM 450 - Independent Study 1-4 hours. Individual research by the Criminal Justice Studies major into an area of interest. Research topics are chosen to complement material covered in other courses and to provide the student with additional information relevant to career or graduate interests. Prerequisite: Senior Criminal Justice Studies major and permission of instructor.

CRIM 470 - Field Work in Criminal Justice Studies 4 hours. Students work with criminal justice related agencies, normally in the Alfred area, and are expected to apply their theoretical knowledge to the practical experience gained from field work. Prerequisite: Senior Criminal Justice Studies major and permission of instructor.

Critical Discourse Studies
CRIT 120 - Introduction to Linguistics 4 hours. (See LING 120)

CRIT 201 - Introduction to Critical Discourse Studies 2 hours. The introductory course investigates Critical Discourse as a practice. We will examine the ways that critical discourse has operated in various academic disciplines as well as the effects it has had on methodology. Each week the discussion will be led by a professor in the field being studied.
These include English literature, philosophy, psychology, and history. Through surveying specific manifestations of Critical Discourse, we will arrive at a general conception of the theoretical perspective.

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Credits</th>
<th>Notes</th>
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<tbody>
<tr>
<td>CRIT 240</td>
<td>Language and Society</td>
<td>2 hours</td>
<td>(See LING 240)</td>
</tr>
<tr>
<td>CRIT 256</td>
<td>Multicultural Literature</td>
<td>2 or 4 hours</td>
<td>(See ENGL 256) (A)</td>
</tr>
<tr>
<td>CRIT 281</td>
<td>Literature and Science</td>
<td>2 or 4 hours</td>
<td>(See ENGL 281) (A)</td>
</tr>
<tr>
<td>CRIT 300</td>
<td>Topics in Critical Discourse Studies</td>
<td>1-4 hours</td>
<td>Subject matter not covered in other courses. Topics vary from one semester to another.</td>
</tr>
<tr>
<td>CRIT 303</td>
<td>Women, Knowledge and Reality</td>
<td>2-4 hours</td>
<td>(See PHIL 303)</td>
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<tr>
<td>CRIT 304</td>
<td>Language and Culture</td>
<td>2-4 hours</td>
<td>(See ANTH 304)</td>
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<tr>
<td>CRIT 305</td>
<td>History of the English Language</td>
<td>4 hours</td>
<td>(See ENGL 305)</td>
</tr>
<tr>
<td>CRIT 308</td>
<td>Postmodern Theory: Hermeneutics and Poststructuralism</td>
<td>4 hours</td>
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<tr>
<td>CRIT 309</td>
<td>Persuasion: Reception and Responsibility</td>
<td>4 hours</td>
<td>(See COMM 309)</td>
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<tr>
<td>CRIT 313</td>
<td>19th Century Philosophy</td>
<td>4 hours</td>
<td>(See PHIL 313)</td>
</tr>
<tr>
<td>CRIT 314</td>
<td>20th Century Philosophy</td>
<td>4 hours</td>
<td>(See PHIL 314)</td>
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<tr>
<td>CRIT 321</td>
<td>Nietzsche</td>
<td>4 hours</td>
<td>(See PHIL 321)</td>
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<tr>
<td>CRIT 324</td>
<td>Gay American History</td>
<td>4 hours</td>
<td>(See HIST 324)</td>
</tr>
<tr>
<td>CRIT 329</td>
<td>Freud, Jung, and Religion</td>
<td>4 hours</td>
<td>(See RLGS 329)</td>
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<tr>
<td>CRIT 332</td>
<td>20th Century American Visions</td>
<td>4 hours</td>
<td>(See ENGL 332)</td>
</tr>
<tr>
<td>CRIT 341</td>
<td>Modern Political Theory</td>
<td>4 hours</td>
<td>(See POLS 341)</td>
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<tr>
<td>CRIT 359</td>
<td>Literary Criticism and Theory</td>
<td>2 or 4 hours</td>
<td>(See ENGL 359)</td>
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<tr>
<td>CRIT 383</td>
<td>Philosophy of the Arts II</td>
<td>4 hours</td>
<td>(See PHIL 383)</td>
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<tr>
<td>CRIT 389</td>
<td>Birth of Modernism</td>
<td>4 hours</td>
<td>(See HIST 389)</td>
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<tr>
<td>CRIT 404</td>
<td>Media Criticism</td>
<td>4 hours</td>
<td>(See COMM 404)</td>
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<td>CRIT 405</td>
<td>Television Criticism</td>
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<tr>
<td>CRIT 410</td>
<td>Communication Ethics</td>
<td>4 hours</td>
<td>(See COMM 410)</td>
</tr>
<tr>
<td>CRIT 420</td>
<td>Social Theory: A Survey</td>
<td>4 hours</td>
<td>(See SOCI 420)</td>
</tr>
<tr>
<td>CRIT 450</td>
<td>Independent Study</td>
<td>1-4 hours</td>
<td>To be arranged with instructor. Plan of Study required.</td>
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</tbody>
</table>
Dance

DANC 120 - Fundamentals of Dance 2 hours. Introduces new and continuing dance students to the art of dance with an emphasis on alignment, strength, and flexibility of the whole body. Dancers are challenged to develop their physical intelligence and artistic expression in center and across the floor combinations using a wide range of dynamics and rhythms. (C) (PE Requirement)

DANC 200 - Special Topics in Dance 1-4 hours. Courses offered according to students’ interests. Topics vary from year to year. (Sufficient demand)

DANC 221 - Ballet I 2 hours. An elementary course in ballet technique including a ballet barre, with the traditional adagio tournament and allegro center floor work. Emphasis on placement and correct turn-out. (C) (PE Requirement)

DANC 222 - Modern Dance I 2 hours. An introductory course in various modern dance techniques including some improvisational work. Prerequisite: DANC 120 or permission of instructor. (C) (PE Requirement)

DANC 223 - Jazz Dance I 2 hours. An introductory course in jazz dance technique incorporating performing aspects of the jazz medium. Prerequisite: DANC 120 or permission of instructor. (C) (PE Requirement)

DANC 224 - Contact Improvisation 2 hours. Students learn to use the physical properties of weight, momentum, countertension and speed to provoke spontaneous, fully-embodied dancing. This studio class introduces basic principles and patterns, such as exchanging weight with a partner, that lead to increasingly complex and daring movement. Working individually, with partners, and in groups, students learn to make alert and intelligent movement decisions as they improvise. Prerequisite: DANC 120 or permission of instructor. (C) (PE)

DANC 230 - Improvisation/Composition I 3 hours. A laboratory for developing skills as a choreographer and improviser. Emphasis on generating movement vocabulary through improvisation and understanding of dance elements (time, space, energy) for composition. Dance studios are created and performed throughout the semester. Note: Required for DANC 270 - AU Dance Theatre. Prerequisite: DANC 120.

DANC 270 - Alfred University Dance Theatre 2 hours. The AU Dance Theatre presents students with the opportunity to engage in learning and performing a variety of dance works choreographed by faculty, guest artists and fellow students. Dance Theatre presents one work-in-progress "showing" and one concert each year. Participation is open to all students and will not be included in determining course overload. Prerequisites: DANC 230 and DANC 330.

DANC 311 - Dance History 4 hours. A study of the historical development of dance from mid-eighteenth century to the twenty-first century with an investigation of the dance works, artists, and the historical context in which the works were created. Course will include discussion, viewings of live performance and videos, lectures, and experiential activities.

DANC 312 - Philosophy of Dance 4 hours. Dance as an art form: meaning, socio-cultural, historical and aesthetic perspectives and the relationship with other arts. Lectures, films, demonstrations and practical dance experience. Prerequisite: junior standing or permission of instructor.
DANC 321 - Ballet II 2 hours. A continuation of the beginning course for the student who has experience in this traditional form and is capable of more complex combinations. May be repeated 4 times for credit to a maximum of 10 credit hours. Prerequisite: DANC 221 or permission of instructor. (PE Requirement)

DANC 322 - Modern Dance II 2 hours. An extension of the beginning course, continued instruction is given in dance forms, movement, awareness, technique and patterns. May be repeated 4 times for credit to a maximum of 10 credit hours. Prerequisite: DANC 222 or equivalent experience to be judged by the instructor. (PE Requirement)

DANC 323 - Jazz Dance II 2 hours. A continuation of the beginning course for students already able to move within the jazz idiom. It includes more advanced work in jazz technique as well as combinations. May be repeated 4 times for credit to a maximum of 10 credit hours. Prerequisite: DANC 223. (PE Requirement)

DANC 330 - Improvisation/Composition II 3 hours. A laboratory for developing skills as a choreographer. Dance compositions are created and performed at the end of the semester. Emphasis on development of the individual “voice” of the choreographer and the ability to “see” dance. The “how to” of making a dance for performance. Note: Required for DANC 270. Prerequisites: DANC 230 or 330 and one of: DANC 120, 221, 222, 223, or permission of instructor.

DANC 340 - New and Existing Repertory 3 hours. In this course students will learn existing dance repertory and be involved in creating new dance works. Through the rehearsal process, informal performances and research students will explore a variety of rehearsal techniques, explore the varying roles of the dancer in the creative process, develop performing skills, and deepen their understanding of the choreography and the choreographers who created the work. Students will be required to perform these works for the AU community throughout the semester. Prerequisite: Two dance courses or permission of instructor.

DANC 370 - Choreographic Practicum 1-3 hours. This course provides the advanced student with the opportunity to choreograph new dance works under faculty supervision. Prerequisites: DANC 230 and permission of instructor. Repeatable up to six credits.

DANC 385 - Dance Internship 4 hours. An off-campus, independent study project in which the student gains insight from experiencing actual tasks and responsibilities undertaken and performed by persons in the dance field. At completion, a journal and final report is submitted to the faculty sponsor. Prerequisites: junior standing and permission of instructor.

DANC 430 - Choreography II 2 hours. This course defines the selective process of compositional skills with emphasis placed on movement phrasing and ordering. Prerequisite: Advanced technical level in one dance form.

DANC 450 - Independent Study 1-4 hours. Specialized pursuit of a subject within an area of dance of particular interest to the student. Permission of instructor and Plan of Study required.

DANC 495 - Senior Project 2 hours. Students prepare a major dance concert as a culmination of their choreographic work. Production, promotion and coordination are each student's responsibility with support and guidance from the Performing Arts Division. Prerequisites: DANC 430 and senior standing.
Economics
(Courses offered by the College of Business. See pg. 295 for course descriptions.)

Education
EDUC 230 - Psychological Foundations of Education 3 hours. Mental, social and emotional development with primary reference to human theories and principles of learning. Special emphasis is given to exceptional students. Includes drug abuse education. School observation and participation are required.

EDUC 231 - Social Foundations of Education 3 hours. An introductory course discussing the function of education in society, and, in particular, the organization of the American school system, the influences affecting our schools, and present practice and trends. School observation and participation are required.

EDUC 300, 400 - Special Topics 1-4 hours.

EDUC 345 - Education Fieldwork 3 hours. Designed for those students seeking New York State certification in the Middle Childhood and Adolescence areas. Includes observation, projects and activities related to the New York State teaching standards. Requirements for the course may be completed in any New York State public school.

EDUC 374 - Integrated Methods: Social Studies, Science, Mathematics, and Computer Application 6 hours. The integrated methods course combines the teaching of Social Studies, Mathematics and Computer Application into one six credit course and is taught in conjunction with classroom practicum experiences in Early Childhood/Childhood Education. Through these integrated experiences, practicum students will develop the initial ability and skill to: plan and implement appropriate learning experiences; become familiar with the purpose and contents of New York State Learning Standards in content areas and demonstrate the ability to relate these standards with the ongoing process of instructional planning; distinguish among and apply a variety of teaching approaches to accommodate differing developmental needs and learning styles of students and engage students in active learning; become familiar with appropriate strategies to assess the diverse needs of students and develop professional teacher communication and interpersonal skills. Prerequisite: Admission into the Early Childhood/Childhood Education Program.

EDUC 375 - Early Childhood/Childhood Practicum 3 hours. The practicum provides opportunities for students to observe actual classroom settings, gaining "hands on" experience while taking concurrent course work. This four full days a week field experience in three difference grade level placements in a local school system is an opportunity for students to blend theory with practice and experiential application.

EDUC 405 - Literacy in the Content Area 3 hours. The course shows teachers how to apply reading methodology to subject area learning. It takes a balanced approach, providing a realistic and practical treatment of reading and methodology issues, theory and research.

EDUC 413 - Using Literature in Intermediate and Adolescent Classrooms 3 hours. A practical approach to the study and selection of children's books. The riches of classical and contemporary writings for classroom use are overviewed. Various approaches to working with children and books are introduced as well as how literature can be integrated into the intermediate and adolescent curriculum.
EDUC 450 - Independent Study 1-4 hours. To be arranged with instructor. Plan of Study required.

EDUC 460 - Seminar in Teaching and Professional Development 3 hours. Taken concurrently with EDUC 461, this course addresses general issues of professional development of educators. Topics will include, but are not limited to, advanced uses of technology in the classroom, classroom management, teaching learning process, and issues of professionalism.

EDUC 461 - Student Teaching 12 hours. Cooperating schools make it possible for student teachers to practice teach under typical public school conditions. The Division of Education, the major department, and cooperating teacher supervises observation, teaching, and discussion. Open only to students who are approved by the Division of Education.

EDUC 471 - Methods of Teaching Literacy 6 hours. A study of the current trends and innovative methods in teaching literacy in the elementary school. The areas of word identification, comprehension, and process writing for all students, including those with special needs, will be covered. Prerequisite: Admission into the Early Childhood/Childhood Education Program.

EDUC 472 - Competency Skills in Teaching Literacy 3 hours. This course gives students an opportunity to demonstrate achieved competency skills for teaching literacy at the Early Childhood/Childhood level. Attention will be given to the current New York State Learning Standards and how to incorporate these standards into the curriculum. Prerequisite: EDUC 471 and admission into Student Teaching in Early Childhood/Childhood Education.

EDUC 473 - Assessment in the Early Childhood/Childhood Classroom 3 hours. This course examines assessment procedures, strategies, and techniques used and constructed for early childhood/childhood classroom teaching and learning purposes. Traditional and nontraditional means of assessment will be explored and an emphasis is placed on the alignment of assessment, instruction and content.

EDUC 474 - Orientation to the Early Childhood/Childhood Classroom 3 hours. This course helps students focus on problems, opportunities and challenges of the early childhood/childhood curriculum and classroom. It covers such issues as teacher awareness, teacher expectations, modeling, classroom management and grouping, as well as the socialization process within the early childhood/childhood classroom.

EDUC 489 - Current Teaching Methods: Adolescent Subjects 3 hours. Discussion of goals, methods, and materials used to successfully teach middle/adolescence and special subjects. Classroom observation required. Prerequisite: Permission of instructor.

Special Education
SPED 456 - Human Development: Exceptionality 3 hours. This course covers the range of physical, cognitive, communication, and social/emotional exceptionalities in human development from childhood to early adulthood. One focus is on the commonalities, not just the differences, between children and youth with disabilities and their nondisabled peers. A second focus is on understanding the different contexts of disability.
English Writing

**ENGL 101 - Writing I** 4 hours. Study and application of the basic principles of written communication: correctness, clarity, concreteness, effective organization, and accepted forms of documentation. (I)

**ENGL 102 - Writing II** 4 hours. This course offers intensive experience in essay writing. Through the close reading of literature and the practical experience of writing, students explore rhetorical strategies, learn accepted forms of documentation, develop a sense of voice, and deepen their responses to the written word. (ENGL 102 is prerequisite to 300 and 400-level studies in English.)

**ENGL 200 - Special Topics in Writing** 2 or 4 hours. A series of introductory writing courses, each being a study of a subject not covered in other 200-level courses. Topics may include feature writing, magazine writing, or writing in other specialized areas.

**ENGL 201 - The Language of Literary Art** 4 hours. This course introduces students to the elements of literary art. Through a sequence of readings and problems, students gain an understanding of diction, figuration, genre, point of view, and context as shaping components of literary form.

**ENGL 202 - Creative Writing** 4 hours. For beginning writers, a course on the structures, styles, and techniques of contemporary fiction and narrative. Students experiment with subject and voice with an emphasis on creating characters. Portfolio exam.

**ENGL 203 - Imaginative Writing** 4 hours. An introductory course in the art of writing designed to foster literary awareness, release creative intuition, and develop rhetorical technique. Practical exercises provide experience in the use of image, metaphor, diction, syntax, narrative viewpoint, and other elements of form. Required work includes two projects, peer critiques, and weekly assignments in verse and prose.

**ENGL 204 - The Art of the Personal Essay** 2 hours. An examination of the best contemporary essayists. Students develop their own essays after reading and discussing these works. (Cross-listed as WMST 204)

**ENGL 205 - The Play's the Thing! - Playwriting** 4 hours. This course combines beginning acting exercises with improvisations in writing. Texts include full-length plays and one-acts. Students work on their scripts in tandem with students enrolled in an acting or directing class. (Cross-listed as THEA 205)

**ENGL 206 - Poetry Workshop** 2 hours. A beginning writing course in poetry with an emphasis on originality and freshness of language and a basic understanding of poetic form. Required work includes extensive reading of contemporary poets, weekly writing, peer review, and a final portfolio of revised poems. (Cross-listed as WMST 206)

Film

**ENGL 210 - Special Topics in Film** 2 or 4 hours. A series of introductory courses, each being a study of film not covered in other 200-level courses. (C)
ENGL 233 - Film Criticism 4 hours. An introductory course examining narrative films for their basic elements in order to perceive the ways they convey values and experiences and solicit aesthetic response. (C)

ENGL 234 - Crime on Film 4 hours. A study of the criminal underside of American life as depicted in the gangster film (Public Enemy, Scarface, Godfather I, II) the private eye film (Maltese Falcon, Chinatown), and the "film noir" (Double Indemnity, Out of the Past, Gilda). (C)

ENGL 235 - Comedy in Film 4 hours. This study of American film comedy (excluding silents) examines such figures as Chaplin, the Marx Brothers, Lubitsch, Sturges, Capra (It Happened One Night), Hawks, (Bringing up Baby), Kubrick (Dr. Strangelove), Allen (Annie Hall) and others. (C)

ENGL 236 - Women in Film 4 hours. This study will examine from Imitation of Life to Thelma and Louise, the portrayal of women in such American films as the material and domestic melodrama, the romantic comedy, the film noir, the "women's film," and the "new women's film." (C)

Introduction to Literature
ENGL 211 - The Short Story 2 or 4 hours. This introductory course may adopt one or more of the following approaches: an historical survey of the genre, examining the emergence and growth of this literary form; an aesthetic treatment; a cultural stance, illustrating how class, gender, and ethnicity influence literary texts; a thematic ordering, revealing how different works treat familiar themes. (A)

ENGL 212 - The Novel 2 or 4 hours. An introductory examination of one of the most complex and powerful of all genres. This course may focus on a number of issues crucial to the novel: history, conventions, theme, and/or culture. British, American, and/or Continental authors. (A).

ENGL 213 - Introduction to Poetry 2 or 4 hours. This course introduces students to the main traditions of English verse and the fundamentals of poetic form. Selections include the major poets of the English language, as well as contemporary British, Irish, and American poets. (A)

ENGL 214 - Introduction to Drama 2 or 4 hours. A study of plays as literature, parallel to other genres, but unique by way of staging and performance. The course examines comedy and tragedy as well as less traditional dramatic forms. Readings are drawn from plays of ancient Greece and Rome, the Middle Ages and the Renaissance, the Neoclassical Period, and the twentieth century. (A)

ENGL 215 - The Short Novel 2 or 4 hours. This course approaches the short novel or "novella" as differing from novel and story not merely in size, but in kind. It is a distinct species of fiction, uniquely crafted and responsive to an aesthetic separate from that of its longer and shorter cousins. Readings are selected from American, British, Irish, and Continental short novels. (A)

ENGL 216 - 20th Century Poetry 4 hours. In this course we will read some of the best known 20th-Century American, British, and Irish poets: Robert Frost, ee cummings, Sylvia Plath, Thomas Hardy, W. B. Yeats, and Seamus Heaney among others. (A)
ENGL 218 - Autobiography 2 or 4 hours. "[O]ne never finds truth; one creates it" (Lillian Smith). What does it mean when an individual writes his/her life? This course combines the study of literary autobiography with traditional critical approaches to the genre. Readings include stories, letters, diaries, poems, memoirs, and criticism. (Cross-listed as WMST 218) (A)

ENGL 219 - British Literature(s) 4 hours. This course examines British literature from one of several possible perspectives: cultural, aesthetic, historical, thematic, and political. Literary periods or scope of reading may vary according to the perspective. (A)

ENGL 220 - Special Topics in Literature 2 or 4 hours. A series of introductory courses, each being a study of literature not covered in other 200-level courses. (A)

ENGL 221 - Tales of King Arthur 2 or 4 hours. This course examines King Arthur from his historical origins, to both his glorious and not-so-glorious medieval forms, and finally to his modern incarnations. It introduces students to medieval romance, the concept of chivalry, and the transmission of the Arthurian legend from one culture to another. (A)

ENGL 223 - Survey of British Literature 4 hours. This course will provide an overview of British Literature: Beowulf, Chaucer, Renaissance and Metaphysical Poetry. Shakespeare and the Jacobean, Restoration and 18th Century Poetry and Prose, 19th and 20th Century novels. Romantic, Victorian, and 20th Century Poetry.

ENGL 224 - Introduction to Shakespeare 2 or 4 hours. This course introduces students to a wide variety of Shakespeare's plays, including comedies, tragedies, histories, as well as to the theories of comedy and tragedy. (A)

ENGL 225 - Shakespeare in Cinema 2 or 4 hours. This course explores some of Shakespeare's most popular plays and their film adaptations. Students focus on the literary analyses of character, theme, and language in the written texts. We also compare the cultural contexts of representative comedies, tragedies, and histories, with their contemporary film settings. (A)

ENGL 240 - American Literature(s) 4 hours. This course examines American literature from one of several possible perspectives: cultural, aesthetic, historical, thematic, political. Literary periods or scope of reading may vary according to the perspective. (A)

ENGL 241 - Survey of American Literature 4 hours. This course will focus on the problematic question of a national literature. By looking at the variety of texts that make up American literature, the course will examine the influence of history and culture on literary theme and voice.

ENGL 243 - Lunatics, Lovers, and Poets: Southern Storytellers 2 or 4 hours. Southerners don't hide their skeletons in closets; they invite them into the living room to entertain at tea. This course focuses on works which examine what Flannery O'Connor defined as the Southern grotesque-individuals "forced to meet the extremes of their own nature." Exploring the world created when tragic merges with comic, other writers might include Faulkner, Williams, Welty, Percy, Crews, Dickey, and Tyler. (A)
ENGL 244 - New American Poetry 2 or 4 hours. In this course we will examine the current work of living American poets. We will give special attention to poets who address moral, social and environmental issues. Selections will vary from year to year. (A)

ENGL 251 - World Literature I 4 hours. This course introduces students to early English and non-English literary traditions and provides an understanding of the connections between and differences among cultures of the ancient, medieval, and renaissance periods. (A)

ENGL 252 - World Literature II 4 hours. This course introduces students to both English and non-English literary traditions in the early modern and modern periods and provides an understanding of the connections between and differences among cultures from the Enlightenment to the present. (A)

ENGL 254 - Women Writers 2 or 4 hours. A course that examines issues of language, gender, and culture portrayed through the lens of the woman writer. Texts may include novels, stories, autobiographies, essays, letters, and poetry. (Cross-listed as WMST 254) (A)

ENGL 256 - Multicultural Literature 2 or 4 hours. The literature of diverse cultures. African, Asian, Jewish, and Native American literatures as well as other cultural traditions may be represented. (Cross-listed as CRIT 256, WMST 256) (A)

ENGL 275 - Fiction into Film 2 or 4 hours. A comparative study of several fictional works and their film adaptations. The course analyzes individual texts and films, and considers the relationship between words and visual images or between the literary canon and popular culture. (A)

ENGL 277 - Tales of Adventure 4 hours. Tales of adventure constitute the oldest literature that has survived through the centuries. This course examines many genres: epic, political satire, romance, horror, the fairy tale, and science fiction. Readings span more than 2500 years of literary history. (A)

ENGL 278 - The Middle Ages in Literature and Film 4 hours. This course examines the use and abuse of medieval concepts such as the quest, Christian morality, and courtly love, as well as of specific medieval characters and events by authors and filmmakers such as J.R.R. Tolkien, C.S. Lewis, T.H. White, John Cleese, Walt Disney, and Quentin Tarantino. (A)

ENGL 279 - The Vietnam War in American Literature 4 hours. This course explores the impact of the Vietnam War on American literature, concentrating on how the lens of literary imagination has become a tool for seeing the war more clearly and for coming to terms with it as cultural experience and ordeal. (A)

ENGL 281 - Literature and Science 2 or 4 hours. "Three quarks for Muster Mark" (James Joyce). This course will explore and challenge the boundaries separating disciplines. Fictional representations of emerging technologies, medical nightmares, and futuristic utopias and distopias are all possibilities for discussion. (Cross-listed as CRIT 281) (A)

ENGL 290 - War and Imagination 4 hours. This course explores the irony that war, humankind's worst activity, has stimulated the human imagination to admirable accomplishments.
The class examines the fiction of war from the American Civil War, through the two World Wars, and up to Vietnam. A selection of war poetry is read in conjunction with novels and short stories. (A)

**ENGL 292 - Tales of Terror** 2 or 4 hours. "Only the perverse fantasy can save us" (Goethe). If you like women in white, gray castles, and dark secrets, this course is for you. An exploration of the conventions and tropes in Gothic literature. (A)

**ENGL 293 - A Place in the Universe** 4 hours. A course based on the writings of naturalist-authors from Thoreau to Annie Dillard who have sought or are seeking a satisfactory relationship between humankind and the embattled environment. (Cross-listed as WMST 293) (A)

**Advanced Studies**

**ENGL 300 - Major Figures in Literature** 2 or 4 hours. A series of courses, each being a detailed examination of the work of a single major writer. Currently these include: Homer, Dante, Swift, Hardy, Lawrence, Cather, Hemingway, Faulkner, and Morrison.

**ENGL 302 - Greek Tragedy and Myth** 2 or 4 hours. A study of tragic drama, and its mythic foundations, as literature and as communal institution with ancient Greek culture. Readings are drawn from the seven surviving plays of Aeschylus, the seven extant plays of Sophocles, the nineteen plays attributed to Euripides, and Aristotle's "Poetics."

**ENGL 305 - History of the English Language** 4 hours. This course introduces students to the history of the English language, to Anglo-Saxon and medieval English culture, and to the basic grammar and forms of Old English and Middle English literature by reading works such as "Beowulf," "The Wanderer," "The Seafarer," "The Dream of the Rood," "The Canterbury Tales," "Sir Gawain and the Green Knight", and works of the medieval mystic tradition. (Cross-listed as CRIT 305)

**ENGL 306 - A Medieval Bookshelf** 4 hours. This course introduces students to the connections between medieval English literature, its classical sources, and medieval European literatures.

**ENGL 307 - Chaucer** 4 hours. This course introduces students to Chaucer's works. All readings are in Middle English, and students will gain competence in reading and pronouncing Chaucer's English. Readings will include "The Book of the Duchess," excerpts from "The Legend of Good Women," "Troilus and Criseyde," and excerpts from "The Canterbury Tales."

**ENGL 308 - Women Writers in the Middle Ages** 4 hours. This course examines the writings of medieval women - abbesses, merchants, wives, mothers, and mystics - to explore the challenges female writers such as Heloise, Margery Kempe, Julian of Norwich, and Christine de Pizan presented to orthodox Christianity, to gender stereotypes, and to medieval political and social structures. (Cross-listed as WMST 308)

**ENGL 310 - English Renaissance Literature** 4 hours. This course focuses on the poetry and drama of the sixteenth and seventeenth centuries. The Elizabethan, the metaphysical, and the classical traditions of poetry are represented by Spenser, Shakespeare, Donne, Jonson, and Milton; the Elizabethan-Jacobean drama is presented by such dramatists as Marlowe, Jonson, and Webster.
ENGL 311 - Shakespeare's Comedies and Histories 4 hours. This course introduces theories of comedy and explores Shakespeare's development as a comic dramatist as students read the festive and romantic comedies, comparing his early efforts with his mature plays. It also examines Shakespeare's dramatization of English and Roman history, the genre of the history play, and the playwright's adaptation of history to the comic and tragic modes.

ENGL 312 - Shakespeare's Tragedies 4 hours. This course focuses on Shakespeare as a tragic artist. It introduces theories of tragedy, explores the playwright's experimentation with the genre, comparing his early efforts with his mature accomplishments, and examines some tragi-comedies.

ENGL 313 - The Eighteenth Century 4 hours. This course explores the works of such authors as Jane Austen, Oliver Goldsmith, Matthew Lewis, Lady Mary Wortley Montagu, and Jonathan Swift against the background of eighteenth-century values and ideas. Genres include the novel, drama, and poetry.

ENGL 314 - English Romantic Movement 4 hours. This course focuses on the well-known works of Blake, Wordsworth, Coleridge, Byron, Shelley, and Keats as well as on the less well known but important works of writers such as Anna Barbauld, Mary Robinson, and John Clare. Poems will be supplemented by works of fiction associated with British Romanticism such as Mary Shelley's "Frankenstein".

ENGL 315 - Victorian Literature 4 hours. This course focuses on major Victorian poets and novelists such as Alfred Lord Tennyson, Matthew Arnold, Robert Browning, Elizabeth Barrett Browning, Christina Rossetti, Gerard Manley Hopkins, Charles Dickens, the Brontes, Thomas Hardy, and Oscar Wilde.

ENGL 321 - Modern British Literature 4 hours. A study of modernism in English literature as an intensely productive and international movement. Emphasis is placed on fiction, poetry, and drama written between the two world wars, with readings drawn from such writers as Conrad, Joyce, Woolf, Lawrence, Greene, Yeats, Eliot, Thomas, Shaw, and Lowry.

ENGL 324 - The Life and Art of James Joyce 4 hours. This course focuses on Joyce's fiction, including "Dubliners", "A Portrait of the Artist as a Young Man", "Ulysses", and selections from "Finnegans Wake". Biographical readings will accompany the literature, and Homer's "Odyssey" will be studied in parallel with Joyce's "Ulysses".

ENGL 331 - 19th-Century American Literature 4 hours. This course explores the diverse literary experiments of a nation striving toward cultural and aesthetic independence. Readings and critical perspectives vary according to instructors.

ENGL 332 - 20th Century American Visions 4 hours. This course examines modern and postmodern literary experiments as manifested in American culture. Readings and critical treatments vary according to instructors. (Cross-listed as CRIT 332)

ENGL 333 - Voices in British and American Poetry 4 hours. The "experience of each new age requires a new confession, and the world seems always waiting for its poet" (Emerson). Selected readings introduce representative poetic voices throughout each British and American age, from the Middle Ages to the present, from Beowulf to Prufrock.
ENGL 334 - American Drama 4 hours. This course introduces students to selected American drama, allowing students to develop analytical skills for addressing dramatic texts and to relate their understanding of American plays to specific and dynamic cultural and historical backgrounds. Prerequisite: One lower-level literature course.

ENGL 336 - Literature of the American South 2 or 4 hours. This course examines short stories, novels, plays, and poetry which led to a "Southern Renaissance" in the twentieth century. Writers might include Chopin, Faulkner, Hurston, Williams, Welty, O'Connor, Percy, Crews, Dickey, and Tyler.

ENGL 341 - Drama to 1800 2 or 4 hours. This course traces the evolution of drama from its seeds in Greco-Roman ritual and medieval liturgy to its flowering in the great secular plays of the Renaissance. It also encompasses Restoration and 18th-century drama. Including such playwrights as Sophocles, Marlowe, Jonson, Webster, Ford, Moliere, Racine, Goldsmith, and Sheridan, the course touches on the earliest beginnings of drama but concentrates on plays written between 1550 and 1800.

ENGL 342 - Modern and Contemporary Drama 2 or 4 hours. This course begins with the birth of the modern play in the late 19th century, then traces the evolution of dramatic literature to the present time. Readings selected from such playwrights as Ibsen, Strindberg, Chekhov, Shaw, O'Neill, Williams, Miller, Ionesco, Albee, Baraka, Pinter, Stoppard, Shepard, Shaffer, Norman, and Mamet.

ENGL 343 - Studies in the Novel 2 or 4 hours. This seminar explores a number of issues central to our understanding of the novel. The approach varies according to instructor but may include historical development, comparative study, and/or thematic grouping. Readings vary but focus on the American, British, and European traditions.

ENGL 359 - Literary Criticism and Theory 2 or 4 hours. This course examines how literature has been approached and understood from the time of Plato to the present day. Readings are selected from those critical and theoretical statements which have most profoundly influenced literary response and even literature itself. (Cross-listed as CRIT 359)

ENGL 360 - Special Topics Seminar 1-4 hours. A series of courses, each being an advanced study of a subject not covered in detail by other 300-level courses.

ENGL 371 - Feminist Poetics 4 hours. "What difference does difference make?" (Miller). A course that explores the gendered nature of poetics. Readings include theory and literature; student writing explores distinctions between women's writing and a common language. Prerequisite: WMST 101, Creative Writing, or permission of instructor. (Cross-listed as WMST 371)

ENGL 373 - Auto/Biographical Acts: Studies in Creative Non-Fiction 4 hours. Students consider the moral and aesthetic decisions that writers make in the process of writing lives and rendering images of the world. Focus is on autobiographical and biographical writing. Portfolio exam. Prerequisite: 4 hours of 200-level creative writing.

ENGL 374 - Writing the Short Story 4 hours. An intensive writing workshop with an emphasis on the dynamics of the short story.
Students are encouraged to experiment with form while learning the techniques of the well-crafted story. Portfolio exam. Prerequisite: 4 hours of 200-level creative writing.

**ENGL 381 - International Women Writers** 4 hours. Explores literature written by contemporary women from different cultures. Study focuses on voice, content, and style, with some attention to the conditions in which the work was produced and to its reception. (Cross-listed as WMST 381)

**ENGL 382 - African-American Literature** 4 hours. This course traces the directions of African-American literature from the slave narrative through the Harlem Renaissance to contemporary fiction, drama, and poetry. Writers such as Frederick Douglass, Jean Toomer, Zora Neale Hurston, Langston Hughes, Richard Wright, Ralph Ellison, Lorraine Hansberry, James Baldwin, Alice Walker, and Toni Morrison are included.

**ENGL 383 - Harlem Renaissance** 2 hours. Pronounced a "golden age of black art," the Harlem Renaissance focuses on a chorus of new voices introduced to American literature in the 1920s and culminating with the Works Progress Administration in 1937. These include: McKay, Toomer, Hughes, Bontomps, Cullen, Hurston, Sterling A. Brown, Margaret Walker, and the young Richard Wright.

**ENGL 400 - Special Topics** 1-4 hours. A series of courses, each being an advanced study of a subject not covered in detail by other 400-level courses.

**ENGL 450 - Independent Study** 1-4 hours. Self-directed study. Permission of instructor and Plan of Study required.

**ENGL 485 - Internship in English** 1-4 hours. An off-campus independent study project under the direction of a faculty sponsor. Students gain exposure to possible careers related to English studies. Requirements for this project include a journal, job evaluations, and a final report. May be taken during the summer or semester abroad.

**ENGL 495 - Undergraduate Research Project** 2-6 hours. Undergraduate funded research project. Intended for students who are majoring in English. Prerequisites: minimum 3.0 in the major; proposal acceptance by faculty committee.

**ENGL 496 - English Honors Thesis** 2 hours. To graduate with Honors in English, students must attain a cumulative GPA of 3.30 in their major, successfully complete this senior project, and pass an oral examination. Eligible seniors should discuss their project plans with the Division Chair before registering for ENGL 496.

**English as a Second Language**

**ESL 400 - Special Topics** 1-4 hours.

**ESL 401 - Speaking and Listening** 2 hours. This course will help non-native English speakers improve their speaking and listening skills. Students will work on pronunciation, oral presentation, and extracting meaning from conversations and other kinds of extended discourse.

**ESL 402 - Writing Academic English** 2 hours. This course will help non-native English speakers improve their writing skills. Students will work on a variety of academic writing projects related to their disciplines. Grammar and usage problems specific to academic writing will be addressed in relation to specific projects.
ESL 450 - Independent Study 1-4 hours. Self-directed study. Permission of instructor and Plan of Study required.

Environmental Studies
ENVS 101 - Environmental Studies I - Natural Science 4 hours. An introductory science course for environmental studies majors, which may also be used by other students to fulfill graduation requirements in natural sciences. This course provides an understanding of basic ecological principles and an awareness of the interaction of physical, chemical, and biological forces on Earth. (F)

ENVS 102 - Environmental Studies I - Social Science 4 hours. This interdisciplinary social science course examines the environmental implications of various socio-cultural, economic and political patterns in primitive, agricultural and industrial settings. These problems in contemporary America receive special attention.

ENVS 103 - Principles of Geography 4 hours. Geography is the study of the location and interrelations of the earth's features, including landforms, climate, water, natural resources and people. In this course, including three hours of class and a two-hour lab each week, students will study the interactions among these systems, using maps as one tool for analysis. (F)

ENVS 105 - Atmosphere, Humans, Ecosystems 4 hours. Life forms have been influencing the nature of the atmosphere for millions of years, but in recent centuries, human activities have caused profound changes in the atmosphere that are now affecting ecosystems. These include emissions that have caused acid rain, global climate change, damage to the ozone layer, and mercury pollution. This course will explore the effects humans (and other biota) have had on the atmosphere and the results that these changes have had on ecosystems. (F)

ENVS 115 - Climate Change: Past, Present, and Future 4 hours. Examines Earth's climate system throughout Earth history. This understanding becomes the basis for understanding human-caused alterations in the composition of Earth's atmosphere and potential associated alterations in the climate system. Socioeconomic considerations of climate change are also considered. (F)

ENVS 120 - Hazardous Materials 3 hours. This course will acquaint the student with the complexities and dangers of environmental work involving hazardous wastes. Aspects of hazardous materials chemistry, legal and regulatory aspects of hazardous materials, safe work practices, and basics of toxicology will be covered.

ENVS 140 - Environmental Ethics 4 hours. Examines the nature of human interactions with the environment from a variety of ethical perspectives. The main schools of thought and critical perspectives in modern environmental ethics will be addressed, as will the challenge of putting ethical precepts into practice.

ENVS 200 - Special Topics 1-4 hours. Further consideration of environmental issues introduced in 100 and 200-level courses.

ENVS 201 - Environmentalism 2 hours. This course invites students to rethink assumptions and reframe environmentalism. We will explore the present context -- historical, economic and political -- that shapes and delivers the many assaults to our natural world (and that includes us humans!). How can we see, think and act differently in order to change that context, thus enabling the reward of real victories for activist campaigns on behalf of environmental and public health.
ENVS 202 - Tolkien and Nature 1 hour. An introduction to the philosophy of nature embedded in the writings of JRR Tolkien. Attention focuses on Tolkien's perspective of nature and natural philosophy, along with implications of this perspective for hopeful/spiritual/ethical living by people today. Prerequisite: a thorough reading of Tolkien's "Lord of the Rings".

ENVS 204 - Environmental History 2 hours. This survey course looks at attitudes toward nature in American history, the evolution of mainstream and fringe environmental advocacy groups, and key people and events that have shaped the modern environmental movement.

ENVS 205 - Environmental Data Analysis 4 hours. Basic techniques and tools for manipulation of quantitative data, emphasizing environmental studies, data collection, analysis on spreadsheets and statistical packages, graphical presentation. Prerequisite: ENVS 101 and 102 or permission of instructor. (III)

ENVS 211 - Environmental Problem Solving 4 hours. Discussion and implementation of techniques to analyze and solve environmental problems, including literature research, public opinion surveys, data analysis, and environmental regulation. Prerequisite: ENVS 101.

ENVS 220 - Introduction to Geographic Information Systems 4 hours. This class introduces students to the fundamental concepts of computerized geographic information systems (GISs). It will combine an overview of the general principles of GIS and spatial data management with training on one of the most widely used GIS software packages, ArcView (Environmental Systems Research Institute). Students learn ArcView computer skills to manipulate data and create maps. A large selection of natural and social science data will be used for independent projects.

ENVS 240 - Environmental Research Procedures I 3 hours. In this course, students are taught contemporary methods for studying and solving environmental problems. These include geological, biological, and geographical methods. Students are given the opportunity in the course to learn and practice the procedures while working on relevant problems.

ENVS 241 - Environmental Research Procedures II 3 hours. Continuation of ENVS 240. In this course, students are taught contemporary methods for studying and solving environmental problems. These include geological, biological, and geographical methods. Students are given the opportunity in the course to learn and practice the procedures while working on relevant problems. Prerequisite ENVS 240.

ENVS 245 - Spirituality and the Environment 2-4 hours. This course will survey past and present beliefs of major religions and spiritual movements in respect to the way those beliefs have shaped adherents' attitudes toward the environment. Reading will include ancient creation myths, medieval mystical writings on nature, and current interpretations and re-interpretations of religious beliefs about nature. The course will focus as well on the contemporary debate about religion and its place in the environment.

ENVS 300, 400 - Special Topics 1-4 hours. Further considerations of environmental issues introduced in 100 and 200-level courses.
ENVS 308 - International Environmental Issues 4 hours. How environmental issues differ in other places due to governmental, social, cultural, and historical policies and legacies. Topics include Eastern European pollution, tropical deforestation, marine resources depletion, etc. Also considers how women fill a role as resource caretakers. Prerequisite: One of ENVS 101, ENVS 102, ENVS 103; or permission of instructor.

ENVS 312 - Environmental Economics 3 hours. Examines human interactions with the environment from economic perspectives. Topics include externalized costs, other market failures, resource economics, time discounting of environmental legacies, intra/inter-generational resource allocation, and implications of macro-economically inappropriate thermodynamic/ecosystem understandings. Explores theoretical and practical solutions to issues. Prerequisite: ECON 201 or permission of instructor. (Cross-listed as ECON 312)

ENVS 320 - Advanced GIS Applications 4 hours. Students use GIS technology to input primary data, generate spatial statistics, and design and produce maps for their own research areas such as community development and planning, ecology, or any traditional academic discipline. Prerequisite: ENVS 220 or permission of instructor.

ENVS 325 - Water Quality Management 4 hours. Inquiry into the need for and means of managing freshwater resources, with emphasis on application of contemporary methods to local and state concerns. Prerequisite ENVS 101 and 102 or permission of instructor.

ENVS 340 - Oral and Written Communication Skills 4 hours. Students hone their written and oral communication skills as they gain experience with preparing essays, articles, posters, and grant and research proposals for topics in the natural and social sciences. Use of the library resources, both archival and on-line, is expected. Prerequisites: ENGL 102; ENVS 101 or 103.

ENVS 345 - International Environmental Politics 4 hours. (See POLS 345)

ENVS 351 - Environmental Biogeochemistry 4 hours. Transformation and movement of elements on Earth, with emphasis on effects of humans and potential global change. Projects involve field and instrumental analyses. Prerequisites: ENVS 101 and CHEM 105 or permission of instructor.

ENVS 352 - The Earth's Climate System and Human Impacts 4 hours. Examines Earth's climate system throughout Earth history, emphasizing the physical and biogeochemical processes involved in the system. Human-caused alterations to Earth's atmosphere and associated alterations in the climate system are examined. Socioeconomic and ethical considerations of climate change are considered. (Cross-listed as GEOL 352)

ENVS 360 - Junior Seminar 1 hour. Students in this course will attend weekly seminars on pertinent topics related to Environmental Studies. Required of all Environmental Studies majors.

ENVS 415 - Natural Resources Management 3 hours. Development of a management plan for a local natural resource provides the focus of this course. The class works as a team to satisfy the needs of a project sponsor and those of the local community. Prerequisite: junior standing.
ENVS 440 - Environmental Research Planning 2 hours. How research in environmental fields is developed, proposed, performed, and presented, with an emphasis on research projects to be conducted as required independent studies for Environmental Studies majors.

ENVS 450 - Independent Study 1-4 hours. Independent study under the supervision of an instructor. Permission and Plan of Study required.

ENVS 460 - Environmental Studies Seminar 2 hours. In a multidisciplinary, issue-oriented seminar, students, instructors and consultants from various fields combine their talents to develop solutions to local and regional environmental problems.

ENVS 485 - Internship in Environmental Studies 1-4 hours. An off-campus independent study project. Students gain experience by serving as interns at public agencies or private firms which deal with environmental problems. Instructor permission required.

ENVS 490 - Senior Seminar 2 hours. Students in this course will be guided through some of the common aspects of their senior research projects, such as literature searches, task mapping, and development of analytical protocols. All students will be required to present a weekly report on the progress of their senior research. Students will also attend the weekly Environmental Studies seminar series and learn about research techniques and procedures used by professionals. Required of all ENVS majors.

ENVS 495 - ARGUS Project 3 hours. Undergraduate research project for ARGUS program students who are majoring in a natural science. Prerequisite: proposal acceptance by faculty committee.

ENVS 499 - Senior Project in Environmental Studies 2-4 hours. Independent research under an instructor's supervision. Presentation of project is required for graduation.

Fine Arts
FNAR 101 - Fine Arts I 4 hours. Thematically-organized foundation course for BA Fine Arts majors. Creative projects combine studio work with art theory. Instruction in wide range of visual media and exposure to associated conceptual issues. Semester themes may vary each year. Prerequisite: permission of Fine Arts Director.

FNAR 102 - Fine Arts II 4 hours. Continuation of FNAR 101.

FNAR 103 - Fine Arts III 4 hours. Continuation of FNAR 102.

FNAR 104 - Fine Arts IV 4 hours. Continuation of FNAR 103.

FNAR 105 - Introduction to the Visual Arts 4 hours. Learn to recognize different approaches and media influencing and persuading us in contemporary art today. Students express perceptions and ideas both visually and verbally in a sketchbook/journal. (C)

FNAR 200 - Topics in Fine Art 1-4 hours. Specialized studio areas are offered. The area changes each time the course is taught. Prerequisite: completion of an art foundation program.
FNAR 300 - Selected Topics in Fine Arts 1-4 hours. Contemporary and historical issues in art theory are surveyed. The topic changes each time the course is offered.

FNAR 307 - Detour from the Mainstream 4 hours. Investigates non-traditional art objects and practices such as an Outsider Art, Brut art, domesticity and housekeeping, "wild wheel" (car decoration), tattoos, gardens, graffiti, and mourning walls. The course explores the relationship between these practices and the art world. Should these objects count as art? What are the consequences of defining them as art? How should the objects be treated in terms of museum practices, art historical documentation, and the market? What is the nature of the relationship between the "outsider" art and mainstream art? Prerequisite: PHIL 283. (Cross-listed as PHIL 307)

FNAR 351 - Text, Image, Binding: The History of the Book 4 hours. Through examination of the developments which led to the book, comparison of western and non-western book styles, and hands-on experience with making books, students develop an understanding of the ways in which western culture has been shaped by the relationship between text, image, and binding in the modern printed book. (Cross-listed as HIST 351)

FNAR 389 - Birth of Modernism 4 hours. (See HIST 389)

FNAR 450 - Independent Study 1-4 hours. Independent study under the guidance of a faculty member. Plan of Study required.

FNAR 460 - Fine Arts Seminar 4 hours. A topical seminar primarily for Fine Arts majors. Topics vary from year to year. (Sufficient demand)

FNAR 485 - Fine Arts Internship 1-4 hours. Internship under supervision in such agencies as a regional art council, museum, gallery, etc. Available irregularly.

French

FREN 101 - French I 4 hours. Introduction to the language and culture of the French-speaking world; speaking, reading, understanding and writing. Practice in language lab. Emphasis on communicative skills. Assumes no prior knowledge of the language. (II)

FREN 102 - French II 4 hours. Continuation and further development of the skills learned in FREN 101. Prerequisite: FREN 101, 41-60% on French Language Placement Exam, or permission of instructor. (II)

FREN 200, 300, 400 - Special Topics 1-4 hours. Content varies. Prerequisite: FREN 102, 61% or higher on French Language Placement Exam, or permission of instructor.

FREN 201 - French III 4 hours. Continuation and further development of the skills learned in FREN 102. Prerequisite: FREN 102, 61% or higher on French Language Placement Exam, or permission of instructor. (II)

FREN 202 - French IV 4 hours. Continuation and further development of the skills learned in FREN 201. Prerequisite: FREN 201 or permission of instructor. (II)
FREN 203 - French Conversation 4 hours. Intensive practice in speaking French for those with some background in the language. Goals: to develop fluency in and sharpen understanding of spoken French. Prerequisite: FREN 102, or at least two years of high school French, or permission of instructor.

FREN 210 - Global Perspectives: Paris 2 hours. A course enabling students to develop an understanding and appreciation of another culture, first in the classroom, and then two weeks in Paris. Focus is on history, art, and contemporary culture. Open to all students. (Alternate years)

FREN 300 - Special Topics 1-4 hours.

FREN 301 - Advanced French Conversation 4 hours. Intensive practice in speaking French, with particular attention to the French sound system. Topics for conversation are taken from contemporary French journals, newspapers, films, etc. Prerequisite: FREN 202 or permission of instructor.

FREN 302 - Advanced French Grammar and Composition I 4 hours. An analysis of the grammatical structure of the French language with emphasis on the more complex problems in French syntax and usage, followed by practice in composition. The course is conducted in French. Prerequisite: FREN 202 or permission of instructor. (Alternate years)

FREN 310 - Reading French Texts 4 hours. Intensive vocabulary building, writing, reading and discussion of texts in French. Designed to prepare students for other upper-level French courses. Prerequisite: FREN 202 or permission of instructor.

FREN 311 - French Literature I 4 hours. A historical-critical view of French literature from the Middle Ages through the 18th century. Readings from anthologies and selected complete texts from each period. Discussion and reading in French. Prerequisite: FREN 310 or permission of instructor. (Alternate years)

FREN 312 - French Literature II 4 hours. An overview of nineteenth and twentieth-century French literature. Readings from anthologies and selected complete works from the period. Discussions and readings in French. Prerequisite: FREN 310 or permission of the instructor.

FREN 316 - Contemporary French Culture 4 hours. Introduction to the most important elements of present-day French culture, literature, film, art, and music. Recent history and politics, economics and social structure; religion, family, cuisine, and customs. Readings and discussions in French. Prerequisite: FREN 310 or permission of the instructor. (Alternate years)

FREN 360 - Literary Theory Seminar 4 hours. This course is intended to introduce those students with a major or a minor in a foreign literature and language to Literary Theory and Criticism. Students will be using different types of theory to analyze texts in English and in their target language. This course will be required of all foreign language and literature majors and is recommended for those students with a minor in a foreign language. Prerequisite: FREN 202 or permission of instructor. Students may not retake this course for credit as GRMN or SPAN 360.
FREN 400 - Special Topics in French 1-4 hours. Content varies from year to year with topics such as French Women's Literature and Feminist Theory, Bilingualism in Quebec, Medieval French Literature, Ethnic Minorities in France, Caribbean French Culture. The course is conducted in French. Prerequisite: FREN 310 or permission of instructor.

FREN 401 - French-Speaking Africa 4 hours. An introduction to the cultures and literature of French-speaking Africa. Readings and discussions of works by contemporary Francophone African writers.

FREN 410 - French Film Criticism 4 hours. Examines the basic elements of the art of French film in order to understand both the historical development of filmmaking in France and the personal vision of each director. Students view films by such filmmakers as Melies, Renoir, Carne, Truffaut, and Varda. (C)

FREN 420 - The Art of French Translation 4 hours. Intensive practice in translation from French to English, and from English to French. Current nonfiction, fiction, periodicals, and newspapers are materials for translation. The course is conducted in French. Prerequisite: FREN 303.

FREN 450 - Independent Study 1-4 hours. For students with a particular interest in an aspect of French language or literature which is not normally offered. Prerequisite: Permission of instructor. Plan of Study required.

Geology
GEOL 101 - This Dynamic Earth 4 hours. An introduction to the nature of the materials that make up the earth, their genesis and arrangement (both inside the earth and at the surface) and to the physical processes that act upon them. Topics include: rocks and minerals, the structure of the earth, plate tectonics, land forms. Three lectures and a laboratory. (F)

GEOL 103 - Earthquakes and Volcanoes 4 hours. This course reviews what is presently known about earthquakes and volcanoes, investigates ways to reduce loss of life and property, and explores some current research which may lead to a better understanding of these violent natural events. (F)

GEOL 104 - Earth and Life through Time 4 hours. An introduction to the history of the earth and life on it, and to the techniques for "reading" these from the rock record. Topics include geologic time, sedimentary rocks and depositional environments, fossils, ancient and recent geologic events and the evolution of life. Three lectures and a laboratory. (F)

GEOL 105 - Energy, Minerals, Water Resources and the Environment 4 hours. An exploration of the occurrence, use, and distribution of geological resources across the globe. Topics explored include the history and politics of resources use as well as scientific aspects of resource exploration and exploitation. (F)

GEOL 106 - Elementary Oceanography 4 hours. A study of the major contemporary concepts of biological, chemical, geological, and physical oceanography. The nature and origin of ocean basins, sea water composition, water masses, oceanic circulation, waves, tides, marine ecology, biological productivity, sedimentation, and plate tectonic theory are discussed. (F)
GEOL 109 - The Physical World 4 hours. An inquiry-based exploration of Physics, Chemistry, and the Earth Sciences using New York state and planet Earth as principal subjects. (F)

GEOL 110 - Lunar Geology 2 hours. This course studies and interprets the results of recent lunar studies within the framework of current cosmochemical models of the solar system. The study of moon rocks and geological maps of the moon is integrated with classical astronomical and geophysical data to develop an evolutionary history of our sister planet. (F)

GEOL 200 - Special Topics in Geology 1-4 hours. This course discusses topics of either general or specific nature not covered in detail in other 100 or 200-level courses, for example the evolution and extinction of the dinosaurs. (Sufficient demand)

GEOL 201 - Surficial Geology 4 hours. In this study of the earth's surface materials, major topics include weathering and soil formation, glacial deposits, aeolian deposits, surface water hydrogeology and related geomorphology. Three lectures and one laboratory per week. Prerequisite: One of GEOL 101, GEOL 104, ENVS 101; or permission of instructor.

GEOL 210 - The Geology of Venus 2 hours. This course is intended to introduce students to the geology of Venus and to develop skills in acquiring and interpreting digital data and digital documents.

GEOL 220 - Geology of Mars 2 hours. This course is intended to introduce students to the geology of Mars and to develop skills in acquiring and interpreting digital data and digital documents. Some science background is expected. Prerequisite: one college-level science course or permission of instructor.

GEOL 301 - Structural Geology 4 hours. Students learn how to recognize deformational features such as folds, faults, joints and dikes; how to, correlate these with three dimensional geometric techniques such as folding lines and stereographic nets; and how to derive from these features the important tectonic parameters active at the time of their formation: maximum stress direction, principal stress differences, confining pressure and strain rate. Prerequisite: one geology course.

GEOL 302 - Mineralogy and Petrology 4 hours. Description, classification, and genetic interpretation of the rock forming minerals and the igneous and metamorphic rocks which are formed from them. Focus will be on mineral and rock associations in space and time, with emphasis on tectonic and environmental interpretations. Prerequisite: one 100-level geology course or permission of instructor.

GEOL 304 - Field Methods 2 hours. An introduction to the study of rocks in the field. Maps, their projections and their construction, are studied inside. Techniques of field geology will be practiced outside and skills in using surveying equipment and making observations of sedimentary, igneous and metamorphic rock are developed. Prerequisite: one geology course or permission of instructor.

GEOL 307 - Stratigraphy and Sedimentation 4 hours. The chemical and physical processes leading to weathering, erosion, transport, deposition, lithification and alteration of sediments are considered along with the economic aspects of sedimentary rocks, such as the occurrence of oil, natural gas, and coal. Prerequisite: one geology course or permission of instructor.
GEOL 352 - The Earth's Climate System and Human Impacts 4 hours. (See ENVS 352)

GEOL 400 - Special Topics in Geology 1-4 hours. A discussion of topics appropriate to current geological phenomena, including such topics as environmental geochemistry or economic geology. (Sufficient demand)

GEOL 408 - Tectonics 4 hours. The formation and evolution of cratons, rifts, Atlantic type margins, shear zones and island arcs are discussed in this course. A detailed study is made of the geological structure and history of the Appalachians, Rockies, Alps and Himalayas. (Alternate years)

GEOL 414 - Geophysics 4 hours. A study of the structure and evolution of the solid earth using information derived from geophysical investigations. The shape of the earth, its gravity, magnetic field, thermal and rheological characteristics as well as the gravitational fields are used to impose constraints on possible models of the planet. (Alternate years)

GEOL 423 - X-ray Techniques in Geology 2 hours. The theory and methods of X-ray diffraction analysis are discussed with special emphasis on the use of X-ray diffraction in mineralogical characterizations. Laboratory work involves techniques of sample preparation for X-ray diffraction analysis and use of X-ray diffraction equipment for identification of unknown materials. Prerequisite: GEOL 340 or CEMS 214 or permission of instructor. (Alternate years)

GEOL 424 - Clay Mineralogy 2-3 hours. Theoretical and applied aspects of the nature of clay minerals are addressed through lectures, discussions, readings, and original research. Topics include the structure and chemistry of clay minerals; their origin, paragenesis, classification, and identification; the weathering and alteration of minerals; properties and morphologies; and techniques used in clay mineral analysis. Knowledge of a programming language is desirable. Prerequisite: GEOL 423 or CEMS 349 or permission of instructor. (Alternate years)

GEOL 440 - Glacial Geology 4 hours. This course examines the formation and geomorphic activity of glaciers. Focusing on the most recent glacial ages, it looks at erosional and depositional features and gives special attention to the processes involved in glacier formation. Three to four days of required field trips. Prerequisite: One of GEOL 101, 104, 425; or permission of instructor. (Sufficient demand)

GEOL 450 - Independent Study 1-4 hours. Independent study under the supervision of an instructor. Permission and Plan of Study required.

GEOL 464 - Hydrogeology 4 hours. An examination of the hydrologic system as a whole and in parts. Emphasis is on subsurface water and hydrogeochemistry. Additional topics may include water use and management, water pollution, and flood control. Laboratories emphasize field and laboratory techniques of water quality and quantity analysis. Prerequisite: GEOL 201 or permission of instructor.

GEOL 466 - Geology in the Field 3 or 4 hours. A spring field trip to points of geologic interest that lasts three to five weeks. Travel is by van with overnight accommodations at campgrounds. Students have the chance to view outstanding geological, archeological and scenic features in addition to learning mapping and field techniques. Each year's trip is outlined in a separate announcement. Fee required. Prerequisites: one geology course and permission of instructor.
Courses of Instruction: College of Liberal Arts and Sciences

GEOL 470 - Directed Field Studies 1-6 hours. Field work is carried out in connection with various research studies or field trips of one to three (or more) weeks in specialized localities. A separate description is provided each time the course is offered. It may be repeated for credit and may be offered on an individual basis. Prerequisites: GEOL 101 or 104 or an upper level geology course.

GEOL 495 - ARGUS Project 3 hours. Undergraduate research project for ARGUS program students who are majoring in a natural science, including the natural science concentration in Environmental Studies. Prerequisites: minimum 2.8 GPA overall and 3.0 in the major; proposal acceptance by faculty committee.

German

GRMN 101 - German I 4 hours. Introduction to the language and culture of the German-speaking world. Development of skills in speaking, reading, understanding and writing. Practice in language lab. Emphasis on communicative skills. Assumes no prior knowledge of the language. (II)

GRMN 102 - German II 4 hours. Continuation and further development of the skills learned in GRMN 102. Prerequisite: GRMN 101, 41-60% on German Language Placement Exam, or permission of instructor. (II)

GRMN 200 - Special Topics in German 1-4 hours. Content varies from year to year.

GRMN 201 - German III 4 hours. Continuation and further development of basic skills learned in GRMN 102. Includes introduction to short fiction and a review of grammar. Prerequisite: GRMN 102, 61% or higher on German Language Placement Exam, or permission of instructor. (II)

GRMN 202 - German IV 4 hours. Continuation of reading exercises and grammar review from GRMN 201. Further development of listening and speaking skills. Prerequisite: GRMN 201 or permission of instructor. (II)

GRMN 204 - German Authors in Translation 4 hours. Analysis and discussion of works by writers of the German-speaking world in translation. The course has an emphasis on literature, but may also include essays and theoretical writings. Readings and discussions are in English. No prerequisite. (A)

GRMN 301 - Advanced German Conversation and Composition 4 hours. Exercises for students to speak and write more precisely and idiomatically. Newspaper and journal articles, videos and other media are the basis for conversation and writing. Readings, discussions, and assignments are in German. Prerequisite: GRMN 202 or permission of instructor.

GRMN 312 - German Literature I 4 hours. An introduction to literature of the German-speaking world through texts of the eighteenth and nineteenth centuries. Readings include essays, plays, novellas, and poetry. Particular attention is given to the role of class, gender, race and religion in the texts, their production and reception. Readings, discussions and assignments are in German. Prerequisite: GRMN 202 or permission of instructor.

GRMN 313 - German Literature II 4 hours. Literature of the German-speaking world from the twentieth century. Readings include theory and the following genres: journals, short stories, novellas, plays, novels, and poetry. Includes an introduction to German film.
Particular attention is given to the role of class, gender, race and religion in the texts, their production and reception. Readings, discussions, and assignments in German. Can be taken as a continuation of GRMN 312 or may be taken independently. Prerequisite: GRMN 202 or permission of instructor.

**GRMN 316 - German History and Culture** 4 hours. Cultural and historical development of the German-speaking world from accounts of the earliest Germanic tribes to post-unification Germany of the 1990s and twenty-first century. Readings, discussions and assignments are in German. Prerequisite: GRMN 202 or permission of instructor.

**GRMN 360 - Literary Theory Seminar** 4 hours. This course is intended to introduce those students with a major or a minor in a foreign literature and language to Literary Theory and Criticism. Students will be using different types of theory to analyze texts in English and in their target language. This course will be required of all foreign language and literature majors and is recommended for those students with a minor in a foreign language. Prerequisite: GRMN 202 or permission of instructor. Students may not retake this course for credit as FREN or SPAN 360.

**GRMN 400 - Special Topics** 1-4 hours. Special topics may include: Literature and Film of the former GDR, History of the German Language, German Literature of the Renaissance, Contemporary Writers in the German-speaking World, Minority Writers in Germany, and The History of Jews in Germany. Readings, discussions and assignments are in German. Prerequisite: 300-level German course or permission of instructor.

**GRMN 410 - History of German Cinema** 4 hours. This course is a survey of the German cinema from its beginning to the most recent developments of the 21st century. The aim of the course is to equip students with a sufficient historical background to grasp the compromises filmmakers have had to make between political and aesthetic goals, or between cinematic experimentation and accessible narratives. Students will be introduced to basic film terminology and techniques as well as to contemporary film criticism. The course is taught in English as the largest body of literature of German film criticism is in English. Most writing on film theory is also in English. All films have English subtitles, and all assignments will be in English. Prior knowledge of German is recommended but not required.

**GRMN 450 - Independent Study** 1-4 hours. For students with a particular interest in an aspect of German language, culture or literature which is not normally offered. A 4-hour independent study is required for all German majors. Prerequisite: Permission of instructor. Plan of Study required.

**Gerontology**

**GERO 272 - Adult Development and Aging** 4 hours. This course examines adulthood and aging from a biopsychosocial perspective. Topics include research methodology in adulthood; theories of normal aging, physical and environmental influences on adult development; diseases and disorders associated with aging; changes in cognition; intelligence and wisdom; gender and minority issues in aging; issues regarding death and dying. It also challenges popular misconceptions about aging. (Cross-listed as PSYC 272) (E)

**GERO 300 - Special Topics in Gerontology** 1-4 hours. A series of directed readings on special topics, changing from semester to semester.
Courses of Instruction: College of Liberal Arts and Sciences

Through a combination of reading, seminar feedback, and guest lectures, students are able to explore areas of special interest in greater depth. Prerequisite: PSYC 101. Recommended GERO 272 or permission.

GERO 429 - Cognition and Aging 2 hours. A lecture and discussion course covering current research and theories of cognitive processes in the older adult. Basic topics include age differences in memory, verbal processes, motor performance, perception, problem solving, and intelligence. Prerequisite: PSYC 101. Recommended: PSYC 332 or GERO 272 or permission of instructor. (Cross-listed as PSYC 429) (Alternate years)

GERO 450 - Independent Study 1-4 hours. Prerequisite: Permission of instructor and an approved Plan of Study.

GERO 485 - Gerontology Internship 4 hours. Field work associated with federal, state or local agencies for the aging, or with social service, health care, legal, recreational or residential facilities primarily serving older adults. Supervision provided jointly by agency personnel and the instructor. At least 6 hours per week in a field placement is expected. Prerequisites: Senior Gerontology major and permission of instructor.

GERO 497 - Senior Seminar in Gerontology 2 hours. An advanced discussion group focusing on a variety of contemporary issues. Prerequisite: Senior Gerontology major or permission of instructor.

Global Studies

GLBS 101 - Introduction to Global Studies and Intercultural Communication 4 hours. This course introduces students to an overview of contemporary human patterns from geographic, environmental, linguistic, socio-cultural, religious, political, and economic perspectives. From this global framework, students learn to communicate (and think) across cultures. (E)

GLBS 200, 300, 400 - Special Topics 1-4 hours. An open course, varying in content from year to year, which allows for concentration in specialized areas. (Sufficient demand)

GLBS 405 - Women in Latin America 4 hours. (See SPAN 405)

GLBS 450 - Independent Studies 1-4 hours. Self-directed study. Permission of instructor and Plan of Study required.

GLBS 495 - Senior Seminar 4 hours. This integrative capstone course allows seniors to study a variety of global issues in-depth and to present the results of their own particular global experiences and studies. Topics examined will vary from year to year. The seminar may be focused on a central theme or on a variety of issues, depending upon the students' international interests and the instructor's discretion. Prerequisites: GLBS 101; Study Abroad; senior standing.

History

HIST 107 - The World in the 20th Century 4 hours. Surveys political, social, economic, and intellectual movements shaping twentieth century states and peoples. Special attention is devoted to the decline of European hegemony, the rise of the United States, and the evolution of “emerging” nations in Asia, Africa, and the Americas. (D)
HIST 110 - The Making of Europe 4 hours. An investigation into the origins and development of Europe, from ancient civilizations to 1650. Focus on the formation of nations, empires, and ideologies; social and cultural developments; and cultural interactions within and beyond Europe's borders. (D)

HIST 111 - Modern Western History 4 hours. A survey of developments in Europe and the Western Hemisphere since the 1500s, with emphasis on the impact of ideas and ideologies (including Fascism, Nazism, and Communism), social and economic change (including industrialism), revolutions and world wars, and imperialism. (D)

HIST 120 - The Ancient Mediterranean 4 hours. Survey of civilizations that helped shape modern-day Eurasia and North Africa - Mesopotamia, Egypt, Minoan Crete, Israel, Greece, Persia, and Rome. Emphasis on the interaction of these cultures around the Mediterranean Sea. Evaluation based on short papers, exams and quizzes, and participation. (D)

HIST 121 - Medieval Culture 4 hours. Exploration of the three dominant cultures of the medieval period: Europe, the Byzantine Empire, and the Islamic world, with special focus on regions where significant interaction occurred - Spain, the Mediterranean, and the Middle East. (D)

HIST 151 - The Rise and Fall of Iberia, 1450-1950 4 hours. An introduction to the development of European nationalism, global trade, and imperialism, using the cases of Portugal and Spain. Emphasis will be on politics and culture; cultural interaction in Africa, Asia, and the Americas; and the empires' legacies in the modern world. (D)

HIST 200, 300 - Topics in History 1-4 hours. A historical examination of issues in history. Topics will vary each time the course is offered. (Sufficient demand)

HIST 211 - American History I 4 hours. American history from Jamestown to the Civil War with particular attention to the political, social, and economic development of the new nation. (D)

HIST 212 - American History II 4 hours. American life from the Civil War to the present with particular attention to the transformation from a rural to an urban society, movements for social reform, and the further extension of civil and political rights. Can be taken as a continuation of HIST 211 or may be taken independently. (D)

HIST 222 - Churchill, Stalin, Roosevelt, Hitler 2 hours. Comparative biographies of the four major World War II leaders. (Sufficient demand)

HIST 301 - America in War during the 20th Century 4 hours. With reference to both World Wars, Korea, Vietnam, and the Gulf War, the course addresses origins, strategy and leadership, political and social effects, and moral and legal issues including the army code of conduct, Hiroshima, the Nuremburg Trials, and Mylai. (Alternate years)

HIST 302 - The Vietnam War 4 hours. A survey of America's longest and most controversial war, the course examines both military and domestic issues. (Alternate years)
HIST 303 - The Civil War Era: 1830-1877 4 hours. A study of the War Between the States, including analyses of the political, social, economic, and ideological differences between the sections; the war and its aftermath; the historiography of the war: and an evaluation of the traditional view of the war as the "watershed" of American history. (Alternate years)

HIST 306 - Prosperity and Depression: America 1919-1941 2 hours. A survey of the Roaring Twenties and the Great Depression. The course examines political, social, and economic developments, as well as the importance of cultural phenomena like Lindbergh's flight, the impact of movies, the rise and fall of the KKK, and the stock market crash. (Sufficient demand)

HIST 307 - Post-World War II America 4 hours. A historical survey of domestic events since World War II with particular attention to the fate of the New Deal, McCarthyism, the Kennedy legacy, the impact of Vietnam, and the civil rights and women's movements. (Alternate years)

HIST 310 - The Ancient Greeks 4 hours. The origins, growth and development of the Greek world from Mycenean through Hellenistic times (12th-1st centuries, B.C.), with topics such as the Homeric myths, Sparta, Athens, democracy, the polis, the Hellenistic world. (Alternate years)

HIST 311 - The Roman World 4 hours. Rome from a river village to an empire (5th century B.C. - 3rd century A.D.), including its traditional origins, Etruscan control, republicanism, social conflict, imperialism, Julius Caesar, Antony and Cleopatra, Augustus and Nero, imperial life and livelihood. (Alternate years)

HIST 312 - Early Medieval Europe, 400-1050 4 hours. This course covers European history from the end of the Roman Empire to the beginning of feudal society. Through reading, lectures and discussions, students discover that the "Dark Ages" were actually filled with activity and innovation. (Alternate years)

HIST 313 - The High Middle Ages and the Renaissance 4 hours. This course covers Europe from the High Middle Ages to the Renaissance. Through reading, writing, and discussion, students learn about the political, cultural, intellectual, religious and social issues of the period that shaped our modern worldview. (Alternate years)

HIST 314 - Reformation and Enlightenment: Europe 1500-1789 4 hours. A survey of European history from the Reformation to the eve of the French Revolution. Class includes lectures and discussions on political, social, intellectual, and religious issues of the period from which emerged most of our modern assumptions about the world. (Alternate years)

HIST 315 - Nineteenth-Century Europe 4 hours. Examines the period 1789-1914 by focusing on political, economic, social, and cultural developments. Subjects covered include the French Revolution, the Industrial Revolution, Conservatism, Liberalism, Socialism, Romanticism, Nationalism, Imperialism, Anti-Semitism, and the origins of World War I.

HIST 316 - Twentieth-Century Europe 4 hours. Examines the period 1914-present by focusing on political, economic, social, and cultural developments. Subjects covered include World War I, the Russian Revolution, Fascism, Nazism, Soviet Communism, World War II, the Cold War, decolonization, Communist collapse, and the European Union.
HIST 317 - *Sex in Western Culture* 4 hours. This course examines attitudes towards sex, definitions of sexuality, the creation of sex roles in Western history, and the impact of sex on Western institutions. A chronological approach from the ancient world to the present, it includes topics such as marriage as a religious and legal institution, changes in the concept and reality of the family, and the regulation of sexual attitudes and practices. (Alternate years)

HIST 318 - *North Africa in Modern Times* 4 hours. Examines the rise of Islam and the history of North Africa, with primary emphasis on the colonial and post-colonial eras during the nineteenth and twentieth centuries. Prerequisite: One 100- or 200-level history course.

HIST 319 - *Middle East in Modern Times* 4 hours. Examines the rise of Islam and the history of the Middle East, with primary emphasis on the colonial and post-colonial eras during the nineteenth and twentieth centuries.

HIST 320 - *Europe and the Americas, 1450-1750* 4 hours. An inquiry into the dynamics and results, for both Natives and Europeans, of encounters between them. Included are assumptions and situations of each side, conflicts and cooperation among groups, and adaptations of Europeans to the new environment and Natives to European presence. No prerequisite.

HIST 324 - *Gay American History* 4 hours. What is gay and lesbian history? Why write it? Who should be included? The course addresses these and other questions as it outlines theoretical problems and possible content in the study of homosexual behavior and identity in America, and reactions to it since the seventeenth century. (Cross-listed as CRIT 324, WMST 324) (Alternate years)

HIST 351 - *Text, Image, Binding: The History of the Book* 4 hours. (See FNAR 351)

HIST 359 - *History of Chinese Thought* 4 hours. (See RLGS 359)

HIST 365 - *The British Isles in the Middles Ages* 4 hours. The history of the British Isles from the Anglo Saxon invasions to the end of the Tudor dynasty. Focus on the interrelationship of all four regions—England, Wales, Scotland, and Ireland—in the Middle Ages. (Sufficient demand)

HIST 371 - *American Diplomacy: 1763-1898* 2 hours. An analysis of American foreign policy in the eighteenth and nineteenth centuries, with special attention to the domestic attitudes and developments which affected the diplomacy of continental expansion. (Sufficient demand)

HIST 372 - *America as a World Power, 1898-Present* 4 hours. American diplomacy in the age of mass production, world wars, fascism and communism including close scrutiny of the conflict between isolationism and internationalism. (Alternate years)

HIST 374 - *American Women: History and Herstory* 4 hours. Historical survey of the American woman with emphasis upon the birth of the women's movement, Progressivism and suffrage, home and work, and the recent liberation phase. (Cross-listed as WMST 374) (Alternate years)
HIST 375 - The Creation of American Culture 4 hours. An examination of the dynamics of both "serious" and "popular," culture in nineteenth century America, with specific attention to their interaction, as well as to the relationships between the developing political/social ideology and the creative activity of the era. (Alternate years)

HIST 376 - Modern American Culture 4 hours. An examination of the variety of artistic expression, both "serious" and "popular," in 20th century America, with particular attention to relationships between artistic media, democratic ideals, economics, and technology.

HIST 377 - History of American Slavery 2 hours. A history of American slavery and race relations from the 17th century until emancipation. (Sufficient demand)

HIST 380 - World War I 2 hours. An investigation of the background, character, and consequences of World War I. Special attention paid to the question of social and technical mobilization and the attempt to reconstruct the European order following the 1917-18 collapse. (Alternate years)

HIST 381 - World War II 4 hours. Global in approach, this class approaches the causes and course of the Second World War. Emphasis is placed upon the European and Pacific theatres, the role of new military tactics, the impact of military mobilization upon civilian society and the establishment of a new world order. (Alternate years)

HIST 383 - The Nazi Holocaust 2 hours. This course will cover a number of topics, including German anti-Semitism and the means by which Hitler engineered the Final Solution. Half the course will focus on the Nazis, the other half on their victims. It concludes with a discussion of Holocaust "denial" and the nature of evil.

HIST 384 - Modern Germany 4 hours. A survey of modern German political and intellectual history. Emphasis placed upon Germany's response to the Napoleonic invasions, the revolutions of 1848, unification under Bismarck, German war aims in World War I, and the Weimar and Nazi eras. (Alternate years)

HIST 385 - Internship in History 1-4 hours. Internship under supervision.

HIST 386 - The History of Russia 4 hours. A survey of Russian history from the Kievan period to the modern era. Special emphasis on the Mongol conquest, the rise of Muscovy, the reign of Peter the Great, and the forces leading to the 1917 Revolution and the Stalinist aftermath. (Alternate years)

HIST 387 - Modern France, 1815-Present 4 hours. A historical survey of the development of modern France. Particular attention is given to the emergence of a modern democratic society and the attempt to resolve a revolutionary heritage. (Alternate years)

HIST 388 - Empire and Nation in Eastern Europe 4 hours. Examines the transition from empire to nation in Eastern Europe, with emphasis on the era since 1914. Prerequisite: One 100- or 200-level history course.

HIST 389 - Birth of Modernism 4 hours. Focusing on the high modernist period in Europe, especially on the artistic circle of Serge Diaghilev's "Ballets Russes," this class traces the various "modernisms" which defined the period.
Course work includes oral and written assignments and group projects. (Cross-listed as CRIT 389, FNAR 389) (Sufficient demand)

HIST 413 - Women in the Ancient World 4 hours. Survey of women in the ancient Near East, Greece, and Rome. Discusses images of women in law, literature, and art and the roles of women in the family, work, religion, and politics. Concentrates on primary sources with supplemental historical reading. (Cross-listed as WMST 413) (Sufficient demand)

HIST 414 - Women in Medieval and Early Modern Europe 4 hours. Survey of women's history from 500 A.D. to 1789. Discussions focus on laws regarding women, their roles in the family and work, participation in religion and politics, depictions in literature and art, and their contributions to literature, art, politics, religion, and philosophy. (Cross-listed as WMST 414) (Sufficient demand)

HIST 421 - The Age of Franklin and Jefferson 4 hours. This course examines the transformation of the colonies into an independent federation, with particular attention to paradoxes symbolized in the lives and thought of Franklin and Jefferson. Includes thorough studies of the Revolution and its legacy, the U.S. Constitution, and the social, economic, and intellectual dynamics of the early republic. (Alternate years)

HIST 430 - Crusaders and Pilgrims: Medieval Travellers 4 hours. A course about the ways in which medieval travelers interacted with the places they visited and the people they encountered, both in Europe and in other lands. Students concentrate on primary sources: chronicles of the crusades, guides to pilgrimage routes, Marco Polo's history of his travels, etc. Through research assignments and class discussions, students discover how Europeans explored the world before the Age of Exploration.

HIST 450 - Independent Study 1-4 hours. Independent study under the general guidance of the instructor. Permission of instructor and Plan of Study required.

HIST 495 - ARGUS Project 3 hours. Undergraduate research project for ARGUS program students who are concentrating in history. Prerequisites: minimum 2.8 GPA overall and 3.0 in the major; proposal acceptance by faculty committee.

Italian
ITAL 101 - Italian I 4 hours. Introduction to the language and culture of the Italian-speaking world: speaking, reading, understanding, and writing. Practice in language lab. Emphasis on communicative skills. Assumes no prior knowledge of the language. (II)

ITAL 102 - Italian II 4 hours. Continuation and further development of the skills learned in ITAL 101. Prerequisite: ITAL 101 or permission of instructor. (II)

ITAL 200 - Special Topics in Italian 1-4 hours. Content varies from year to year. Prerequisite: ITAL 102 or permission of instructor.

Japanese
JAPN 101 - Japanese I 4 hours. Introduction to the language and culture of the Japanese-speaking world: speaking, reading, understanding and writing. Practice in language lab. Emphasis on communicative skills. Assumes no prior knowledge of Japanese. (II)
JAPN 102 - Japanese II 4 hours. Continuation and further development of the skills learned in JAPN 101. Prerequisite: JAPN 101 or permission of instructor.

JAPN 200 - Special Topics 1-4 hours.

JAPN 201 - Japanese III 4 hours. Continuation and further development of the skills learned in JAPN 102. Prerequisite: JAPN 102 or permission of instructor. (II)

JAPN 202 - Japanese IV 4 hours. Development of proficiency through use of written materials in Japanese. Prerequisite: JAPN 201 or permission of instructor. (II)

Latin
LATN 101 - Latin I 4 hours. An Introduction to the Latin language. This course will include an introduction to basic Latin grammar as well as short reading passages. The focus of this course will be on classical Latin. There will be some emphasis on pronunciation and spoken Latin. There will be readings in English on both the history of Latin as an Indo-European language as well as on Roman history. (II)

LATN 102 - Latin II 4 hours. An introduction to the Latin language. This course will continue the study of grammar from Latin I. There will be selected readings from Caesar, Ovid and other writers. Class work will include reading texts aloud and analyzing translations. Historical readings will focus on the effects of Romanization in Europe even after the collapse of the Roman Empire. Prerequisite: LATN 101 or permission of instructor. (II)

LATN 201 - Latin III 4 hours. Continuation and further development of basic skills learned in LATN 102. Includes a grammar review and an introduction to longer reading passages from a variety of writers and genres. Reading texts will include myths, literary texts, political speeches, excerpts from histories and philosophical texts. Prerequisite: LATN 102 or permission of instructor. (II)

Liberal Arts and Sciences
LAS 100, 200, 300 - Special Topics 1-4 hours. Opportunities are provided for the examination of interdisciplinary topics not normally justified as regular offerings. Topics vary from year to year.

LAS 101 - Transfer Student Seminar 0 hours. Course meeting once a week to integrate College of Liberal Arts and Sciences transfer students into the academic and campus community at Alfred University. Skills building and extracurricular activities emphasized. Graded Pass/Fail.

LAS 115 - Materials in Society 4 hours. Non-technical survey of the nature, sources, production, and uses of ceramics, metals, glasses, and plastics in the modern world. Includes relation of the material properties structure. Discusses materials as the enabling basis of our modern, technological society and highlights the possibilities of new materials. Covers environmental effects of the material's lifecycle from original production through disposal or reuse. Various quantification techniques are used to understand properties, statistics, measurements, and effects on society. Selected objects will be made or destructively examined to determine the material content in the associated hands-on laboratory. Not open to students in the Inamori School of Engineering. (F) (III)
LAS 127 - Doing Science 4 hours. In this course, students learn science by doing science, planning and executing their own experiments devised to answer questions they have about a central theme. This semester-long course is taught by faculty from different scientific (or mathematics) backgrounds who guide students in their investigations. This is a one-semester course which will satisfy one lab science credit (F) and the Quantitative Reasoning Competency (III) requirements for LAS students. It is similar to LAS 123-124, but condensed and taught in only one semester. (III) (F)

LAS 369 - Leadership for Civic Involvement 2 hours. Students explore the fundamentals of leadership, social change and social service within the context of public service. Vehicles of learning include service-learning, reflection, lecture, discussion, self-assessment, and participation in the planning and presentation of a community service related event.

LAS 450 - Independent Study 1-4 hours. For students in an Individually Structured Major (Track II) program under supervision of the student's Track II board.

LAS 495 - Baccalaureate Project 1-4 hours. Senior project within the Individually Structured Major Program under supervision of the student's Advisory Board. Prerequisite: Permission of Advisory Board chair.

Linguistics

LING 120 - Introduction to Linguistics 4 hours. This course introduces key concepts in the study of language. Among the questions are considered are the following: What does knowing a language entail? Is there a language instinct? How are languages similar and how do they differ? How are languages structured? How do we acquire language? What is the relationship between language and society? And how do languages change? The course covers the basic aspects of language structure (language sounds, the structure of words and sentences, and meaning), psychological and social aspects of language, and language change. (Cross-listed as CRIT 120)

LING 240 - Language and Society 2 hours. An advanced course in linguistics, with focus on the interrelations between language and society, language and politics, language and sociocultural organization, as well as theoretical approaches to the sociology of language, sociolinguistics, philosophy of language, applied sociology of language and semiology. Taught in English. Prerequisite: LING 120. (Cross-listed as CRIT 240)

Mathematics

MATH 101 - Mathematics for the Liberal Arts 4 hours. Intended for non-math, non-science majors. Explore some of the wide variety of mathematics that exists outside of college algebra. Develop critical thinking skills and an appreciation of mathematics. Content will vary and may focus on historical mathematics or contemporary applications. (III)

MATH 102 - Mathematics for Early Childhood/Childhood Teachers 4 hours. This is a content course for early childhood/childhood education majors. Topics may include: problem-solving, whole number computation, number theory, rational numbers, decimals, percents, fractions, and introductory geometry. (III)

MATH 107 - Calculus Concepts for the Social Sciences 4 hours. The purpose of this course is to provide students with a firm foundation in the basic concepts of calculus.
Considerable time will be spent on functions, and understanding functions as a relationship between two quantities: input and output. Examples from business and social sciences will emphasize real world applications and data-sets. Mathematical models will motivate the study of how functions change, with a heavy use of technology replacing traditional algebraic manipulations. Not open to students with credit in MATH 151. (III)

**MATH 151 - Calculus I** 4 hours. An introduction to differentiation and integration of functions of a single variable, with applications. Four years of college preparatory mathematics strongly recommended. Not open to students with credit in MATH 152. (III)

**MATH 152 - Calculus II** 4 hours. A continuation of single variable calculus including transcendental functions, methods of integration, and series. Prerequisite MATH 151. Not open to students with credit in MATH 253.

**MATH 205 - Actuarial Exam Preparation** 1 hour. An extension of the calculus sequence, including both review and new material, intended as preparation for the first Actuarial Examination. Prerequisite: MATH 271. Recommended: MATH 371.

**MATH 253 - Calculus III** 3 hours. Multivariate calculus, derivatives and integrals of vector functions. Prerequisite: MATH 152.

**MATH 254 - Stokes and Greens Theorems** 1 hour. Covers Stokes and Greens Theorems. May only be taken concurrently with Calculus III. Prerequisite: MATH 152; Corequisite: MATH 253.

**MATH 271 - Differential Equations** 3 hours. Ordinary differential equations with applications to the sciences. Prerequisite: MATH 253.

**MATH 281 - Problem Solving through Problems** 4 hours. An introduction to the most important problem-solving techniques encountered in undergraduate mathematics. While general problem-solving heuristics will be emphasized, specific topics may include induction, modular arithmetic, unique factorization of polynomials, series, and intermediate real analysis. Prerequisite: MATH 253 or permission of instructor.

**MATH 351 - Introduction to Operations Research** 4 hours. Optimization techniques with application to decision making. Linear programming and other topics, e.g., network analysis, dynamic programming, game theory, stochastic processes, queueing theory.

**MATH 371 - Linear Algebra** 4 hours. The concepts of vector space, independence, basis and linear transformations, with applications to systems of linear equations, eigenvalue problems and bilinear and quadratic forms. Prerequisite: MATH 253.

**MATH 381 - Mathematical Statistics** 4 hours. The theoretical basis for statistics including probability, random variables, expectation, a curve of important probability distributions, sums of independent random variables, confidence intervals and hypothesis testing. Prerequisite: MATH 253.

**MATH 400 - Topics in Mathematics** 1-4 hours. Special topics in mathematics which vary from year to year. Prerequisite: Permission of department. (Sufficient demand)
MATH 401 - Advanced Engineering Mathematics 4 hours. Fundamental concepts of applied analysis including Fourier series and integrals, Laplace transforms, partial differential equations and boundary value problems and special functions. Prerequisite: MATH 271.


MATH 450 - Independent Study 1-4 hours. Independent study under supervision of the instructor is required of all student candidates for departmental honors. Open to qualified third and fourth year students. Plan of Study required.

MATH 461 - Geometry 4 hours. An introduction to both Euclidian and non-Euclidian geometry, with emphasis on the axiomatic method and its place in the current secondary mathematics curriculum. Prerequisite: MATH 253.

MATH 481 - Modern Algebra 4 hours. The fundamental structures and techniques of algebra including topics such as groups, rings, fields, quotient structures, theory of equations and polynomials. Prerequisite: MATH 281.

MATH 491 - Advanced Calculus 4 hours. Elements of real function theory including some notions from logic, the topology of the real line, continuity, uniform continuity, differentiation and limits of sequences. Prerequisite: MATH 281.

Music

History and Theory

MUSC 110 - Music Appreciation 4 hours. An introductory course designed to provide a basic orientation to the enjoyment and understanding of music. No prerequisite courses or special skills required. (C)

MUSC 120 - Fundamentals of Music 4 hours. A study of the basic rudiments of music--notation, pitch, rhythm, melody and harmony--and how these elements relate to music. Open to all students. (C)

MUSC 121 - Sight Singing: Reading Music 2 hours. An introduction to the basics of reading music. Students will learn to recognize scale patterns, intervals and basic chords, to sing and hear music at first sight and take simple music dictation (writing out of melodies and/or chord progressions). (C)

MUSC 130 - Beginning Class Piano I 2 hours. Class lessons in piano technique for the beginner. Covers basics of tone conception, rhythm, articulation, and fingering, five-finger patterns and tonic chords in major keys. Simple composition projects are a requirement of the course. No previous musical training required. (C)

MUSC 131 - Beginning Class Piano II 2 hours. A continuation of MUSC 130. Beginning work in pedaling and phrasing, easier major scales and one minor scale in three forms, primary chords in major and minor in block and arpeggio from, composition, transposition and harmonization. Prerequisite: MUSC 130 or permission of instructor. (C)
MUSC 132 - Beginning Voice Class I 2 hours. Group lessons in technique and the art of singing. Class presents the practical application of vocal techniques, breath support, posture, diction and projection to increase the student's ease and confidence in using the singing voice as a means of expression. Outside reading and listening is required of students. (C)

MUSC 135 - Beginning String Class I 2 hours. Open to all students interested in learning a string instrument. Group lessons in basic note-reading and technical skills. Students may select violin, viola, cello or bass; University instruments are available. This course assumes no prior knowledge of music. (C)

MUSC 136 - Beginning String Class II 2 hours. A continuation of MUSC 132 with emphasis on further development in tone. Prerequisite: MUSC 135 or permission of instructor. (C)

MUSC 200 - Special Topics 1-4 hours. Includes courses in related areas of study. If applicable, small rental fee or breakage deposit required for applied music courses such as woodwinds class, Celtic music, etc. (Sufficient demand) One four-hour topics course is required for the minor and also fulfills the "C" credit for General Education. (C)

MUSC 210 - The Performing Arts: A Global Perspective 4 hours. A Freshmen oriented course which introduces the student to the role of the performing arts in society at large. It has a multi-cultural focus, beginning with an exploration of the roots of musical, theatrical and movement forms of expression in early tribal society, and followed by contrasting these forms to the more familiar contemporary Western forms of expression. The course then examines the Performing Arts of selected cultures, societies and diverse populations, such as Native American/ Native Alaskan, selected minority populations of the United States, Japanese, Indonesian, Chinese, Indian, African, Slavic and others. (Cross-listed as THEA 210) (C)

MUSC 211 - World Music 4 hours. World Music is an exploration of Non-Western European music. It is an introduction to the study of "ethnomusicology" and the role of music in society at large and a broad-ranging view of how this role is fulfilled in a variety of cultures. The course will focus on the indigenous cultures and music of Native America, Latin America, Africa, Eastern Europe, India, Indonesia and East Asia (Japan and Korea). Student projects will explore the popular music of one or more of these areas. (C)

MUSC 212 - American Music 4 hours. This is a listening/survey course of the music of the United States from colonial times to the present. The course will examine the historical and social backgrounds of the incredible diversity of American Music, including Native American, Classical and Popular music through the ages, Folk, Jazz and the beginnings of Rock `n Roll. Students will also learn basic skills on a folk instrument (lap dulcimer, recorder, guitar) to give a hands on approach to learning American Folk Music. (C)

MUSC 213 - Introduction to Jazz 2 hours. This course covers the extraordinary men and women who made the music Jazz. From its earliest roots in New Orleans before the Civil War, through WWI, the Great Depression, and WWII, the story of Jazz is the backdrop of life in America during its greatest struggles. The history of Jazz will be explored via the creators and performers as well as the social and historical forces unique to America. (C)
MUSC 235 - Intermediate String Class I 2 hours. A continuation of Beginning Strings. At this level, students are expected to be intermediate note/music readers and are more independent on their instruments without a great deal of one-on-one contact with the instructor. Students will study works involving two and four part harmonies using string orchestra repertoire from baroque and classical eras. Prerequisite: MUSC 136 or permission of instructor.

MUSC 236 - Intermediate String Class II 2 hours. A continuation of MUSC 235. By the end of this course students should be able to produce a wide variety of bow strokes, learn the basic elements of shifting into the higher positions, and the basic motion to produce vibrato on their instruments. Prerequisite: MUSC 235 or permission of instructor.

MUSC 332 - Advanced Voice Class 2-4 hours. A continuation of MUSC 132. Continued work on vocal technique and expression with additional emphasis on singing in foreign languages (Italian and German diction). Students will learn and the use the IPA - the International Phonetic Alphabet. Prerequisite: MUSC 132 or permission of the instructor.

MUSC 335 - Advanced Violin Class 1 hours. Open to violinists of intermediate to advanced skills. Focus is on a new approach to scales and etudes, resulting in a greater violinistic understanding of the music and command of the instrument.

MUSC 450 - Independent Study 1-4 hours. Specialized pursuit of a subject within the area of music history or literature of particular interest to the student. Permission of instructor and Plan of Study required.

Applied Music
MUSC 101-108 - Private Lessons 1 hour. Open to all students. One half-hour private lesson per week. Private lesson fee includes the use of practice rooms. At the discretion of the instructor, the student may be expected to demonstrate progress by music jury examination.

MUSC 301-308 - Private Lessons, Advanced 2 hours. Advanced study. One-hour lesson per week. Private lesson fee. Permission of instructor required.

MUSC 495 - Senior Recital 1 hour. Students enrolled in Private Lessons for at least six semesters are encouraged to present a half or full recital during their Senior Year.

Ensembles
MUSC 271 - University Chorus 2 hours. University Chorus, a large singing ensemble is open to all students. The repertoire varies from traditional to global to popular and musical theatre. A major work is performed every other semester with the AU orchestra. Previous works include Handel's "Messiah", Vivaldi's "Gloria" and Orff's "Carmina Burana". (C)

MUSC 272 - Chamber Singers 2 hours. The Alfred University Chamber Singers, a select vocal ensemble of 20-30 singers, performs a wide variety of repertoire in concerts on and off campus. Open to all students by audition. (C)

MUSC 273 - Concert Band 2 hours. Band members study and perform music composed and arranged for the modern symphonic band, including orchestral transcriptions. Various styles of music, from classical to contemporary, are performed, including major symphonic and concert band literature. (C)
MUSC 274 - Jazz Ensemble 2 hours. The Jazz Ensemble provides an opportunity to explore the many styles of jazz in a big band context, including swing, be bop, Latin, and fusion. Students are also given the chance to develop their skills in improvisation. Open to all students by audition. (C)

MUSC 275 - University Symphony Orchestra 2 hours. Open to all students who play violin, viola, cello, or string bass, the symphony orchestra provides students an opportunity to participate in an orchestra and to study music ranging from the classical era to the 20th Century. The ensemble presents a concert each semester which often features student soloists. Prerequisite: None (C)

MUSC 276 - University Chamber Orchestra 2 hours. Open to all students who play violin, viola, cello, or string bass, the chamber orchestra provides students an opportunity to participate in a string orchestra and to study music ranging from the Baroque to the Romantic. The ensemble presents a concert each semester. Prerequisite: None (C)

MUSC 279 - Chamber Music 1 hour. Chamber Music refers to small ensembles (string quartets, woodwind quintets, flute duets/trios/choirs; piano trios [piano plus two other instruments] or virtually any combination of instruments and/or voices). Students will be assigned to a group and will work on classical music for their particular ensemble. Students enrolled in this class should have at least a moderate facility on their instrument and be able to read music.

Philosophy

PHIL 101 - Introduction to Philosophy 4 hours. This course provides students who have had little or no acquaintance with philosophy with a workable knowledge of philosophical language and familiarity with its method. (B)

PHIL 201 - Existentialism 4 hours. An elementary study of the interpretation of human existence by selected existentialist thinkers. (Sufficient demand) (B)

PHIL 281 - Ethics 4 hours. An attempt to understand the fundamental human alternatives in the wake of the moral skepticism of our age. Traditional answers to the question "What is the good life?" will be examined by reading selected philosophers from Plato to Sartre. (B)

PHIL 282 - Introduction to Logic 4 hours. Standard propositional logic, quantifier logic, and informal fallacies. Logical concepts are compared with some concepts of the English language. Discusses the nature of formal systems and emphasizes the development of proof techniques. Recommended for pre-law students.

PHIL 283 - Philosophy of the Arts I 4 hours. Conceptual analysis of the arts and what they reveal about human existence. Emphasis is placed on questions about creativity and meaning. Topics include representation and truth, expression, art and language, and the nature of cultural regularities. Special emphasis on the rise of modernism and formalism. (B)

PHIL 300 - Topics in Philosophy 1-4 hours. Varying topics from year to year are selected from either the history of philosophy or contemporary philosophic problems. Prerequisites vary depending on the topic. (Sufficient demand)

PHIL 303 - Women, Knowledge and Reality 2-4 hours. Conceptual foundations of the movements for the liberation of women are central.
Courses of Instruction: College of Liberal Arts and Sciences

Readings are drawn from contemporary writings in feminist theory with particular attention to discussions of knowledge, values, and reality. Prerequisite: A previous philosophy course, WMST 101, or permission of instructor. (Cross-listed as CRIT 303, WMST 303) (Sufficient demand)

PHIL 307 - Detour from the Mainstream 4 hours. (See FNAR 307)

PHIL 308 - Postmodern Theory: Hermeneutics and Poststructuralism 4 hours. A study of Continental thinkers central to the emergence of postmodern cultural theory, including hermeneutic theorists like Heidegger and Gadamer and poststructuralists like Foucault, Lacan, Derrida, Barthes, Lyotard, Deleuze, Guattari and Baudrillard. (Cross-listed as CRIT 308)

PHIL 309 - Philosophical Psychology 4 hours. Logical analysis of concepts about the mind, emphasizing problems of meaning for such terms as sensation, imagination, emotion, memory, dreams, intention, belief, reason, motivation, consciousness and personal identity. Methods of psychological explanation are also studied. (Sufficient demand) (Cross-listed as PSYC 309)

PHIL 311 - Greek Philosophy 4 hours. The history of Greek philosophy from the Presocratic through the Hellenistic period. Gives special emphasis to Plato and to Aristotle. (Alternate years)

PHIL 312 - Modern Philosophy 4 hours. The history of European Philosophy during the 17th and 18th centuries. Examines figures whose thought reflects the rise of modern science and the emergence of the modern state. Emphasis given to such thinkers as Hobbes, Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, and Kant. (Alternate years)

PHIL 313 - 19th Century Philosophy 4 hours. The history of European Philosophy during the nineteenth century, including German Idealism, the rise of Marxism, and the nineteenth century precursors of Existentialism. Emphasis given to such figures as Hegel, Schopenhauer, Marx, Kierkegaard, and Nietzsche. Prerequisite: PHIL 312 or permission. (Sufficient demand) (Cross-listed as CRIT 313)

PHIL 314 - 20th Century Philosophy 4 hours. The most important developments in twentieth century philosophy, including such schools of thought as logical atomism, logical positivism, ordinary language philosophy, process philosophy, pragmatism, phenomenology and existentialism. Emphasizes such thinkers as Russell, Wittgenstein, Whitehead, Dewey, Husserl, Heidegger, Sartre, and Merleau-Ponty. Prerequisite: PHIL 312 or permission. (Sufficient demand) (Cross-listed as CRIT 314)

PHIL 320 - The Great Philosophers 2 hours. Individual thinkers, both classical and contemporary, whose influence has been great in philosophy. Students may receive credit for this course each time it has a different subtitle. Previous course work in philosophy is recommended. (Sufficient demand)

PHIL 321 - Nietzsche 4 hours. Nietzsche is considered as 19th century philosopher and precursor of 20th century thought. Topics include: Nietzsche’s perspectivism, theory of interpretation, genealogical critique of morality, religion and history, and ideas about art, tragedy, will to power, eternal recurrence, and the overman. (Cross-listed as CRIT 321)

PHIL 340 - Classical Political Theory 4 hours. (See POLS 340)
PHIL 341 - Modern Political Theory 4 hours. (See POLS 341)

PHIL 359 - History of Chinese Thought 4 hours. (See HIST 359, RLGS 359)

PHIL 382 - Philosophy of Religion 4 hours. A critical inquiry into the nature and validity of religious experience, its variety and unity, and its relation to other human endeavors. Particular attention given to the manifestations of religion in the institutions of the Western world. (Sufficient demand)

PHIL 383 - Philosophy of the Arts II 4 hours. Continued study of the question of meaning in art emphasizing the problem of interpretation. Models for criticism and contemporary debates about postmodern culture are examined. Topics include the relativity of interpretations, the role of styles and traditions, and the relationship of different artistic media to each other. Prerequisite: PHIL 283 or permission (Sufficient demand) (Cross-listed as CRIT 383)

PHIL 384 - Aesthetics 4 hours. Consideration of theories of aesthetic value, the problem of verifiability of critical judgments, reconciliation of conflicts of taste and choice, problems of form and content, nature of expression and aesthetic creation in fine arts, relations of arts to other human interests. (Sufficient demand)

PHIL 386 - Social and Political Philosophy 4 hours. An inquiry into some problems of social philosophy or social theory, usually involving the nature of the state and the citizen's relation to it and the bearing of ethics and social science on this inquiry. Prerequisite: Some previous course in philosophy. (Sufficient demand)

PHIL 387 - Theories of Knowledge 2-4 hours. A study of the nature and extent of human knowledge. Can beliefs be justified? Are some beliefs foundational? Is some variety of coherence the test of knowledge? Can skepticism be answered? Prerequisite: previous course work in philosophy. (Sufficient demand)

PHIL 388 - Topics in Metaphysics 2-4 hours. An analysis of attempts to define the nature of reality. Works of both metaphysicians and critics of metaphysics examined. Emphasis placed upon recent controversies concerning metaphysical reasoning. Previous course work in philosophy recommended. (Sufficient demand)

PHIL 450 - Independent Study 1-4 hours. To be arranged with instructor. Plan of Study required.

PHIL 490 - Advanced Seminar in Philosophy 4 hours. An advanced seminar on special topics which vary from year to year. Prerequisite: permission of instructor. (Sufficient demand)

Physical Education
Activity Courses
Note: All 100-level PHED courses and some Dance courses (see the Dance section of this catalog) can be applied to the University Physical Education requirement.

PHED 100 - Special Topics 2 hours. Offerings vary years to year depending on the availability of faculty with expertise in the particular lifetime sport activity. Typical offerings might be Cross Country Skiing, Orienteering/ Snowmobiling, Cycling.

PHED 101 - Cross Training 2 hours. Combined weight training exercises and cardiovascular activities designed to improve strength, flexibility, cardiorespiratory fitness, and body composition.
PHED 103 - Cardiovascular Fitness 2 hours. An exposure to a variety of aerobic activities with emphasis on improved cardiovascular fitness and knowledge of scientific principles needed to attain an improved level of cardiovascular fitness.

PHED 105 - Beginning Badminton 2 hours. Emphasis on the effective use of the racquet, court coverage and position play, strategy, rules, and historical background. Opportunity for regular student participation in singles and doubles games. Class tournaments arranged.

PHED 108 - Introduction to Yoga 2 hours. Derived from the Sanskrit word yuj, "yoga" means "union". To practice yoga is to reunite body, mind, and spirit. This course will focus on the first of the Three Stages of Kripalu Yoga practice. Stage One introduces yoga postures (asanas) and breathing techniques (pranayama). Special attention will be given to safety, alignment, and the coordination of breath and movement. The only prerequisite is a commitment to develop a daily practice.

PHED 112 - Beginning Golf 2 hours. Basic fundamentals of swing, grip and putting introduced. Opportunity for practical application indoors followed by several experiences at a golf course. Rules and etiquette of the game fully covered.

PHED 115 - Total Fitness 2 hours. Through lecture and participation in a specific and progressive exercise program, students experience what total fitness is, why it is important to establish life-long skills, and how to safely and effectively increase their levels of fitness.

PHED 118 - Weight Training 2 hours. A scientific look at several types of weight training programs and selection of one, based on individual needs, to be used throughout the semester.

PHED 120 - Strength and Power Development 2 hours. An intensive weight training course with emphasis on increasing muscle strength and power through the use of free weights and polymetric exercises. Prerequisite: PHED 118 or permission of instructor.

PHED 122 - Beginning/Intermediate Racquetball 2 hours. A fundamentals and basic court strategy course exposing students to games of one wall and four wall racquetball. Rules and court etiquette stressed.

PHED 125 - Karate: Level I 2 hours. Physical conditioning and discipline through experiencing offensive and defensive karate techniques. Students become familiar with common self-defense maneuvers and are introduced to the Kata (formal exercises of martial arts). Included are martial arts history, tradition and etiquette.

PHED 126 - Karate: Level II 2 hours. Increased application of basic techniques through principles and practices of pre-arranged sparring techniques and strategies. Intermediate level Kata performed and psychocybernetics and self-discipline through meditation and controlled sport experience are emphasized. Participation in limited competition encouraged. Prerequisite: PHED 125 or permission of instructor.

PHED 129 - Beginning/Intermediate Swimming 2 hours. An exposure to the basic strokes with emphasis on achieving confidence in the water. Opportunity to perfect strokes and increase endurance.
PHED 130 - Advanced Swimming 2 hours. Advanced strokes and swimming skills are presented along with some racing and diving techniques.

PHED 131 - Lifeguard Training 2 hours. An American Red Cross course providing the necessary minimum skills and knowledge individuals need to qualify and serve as a non-surf lifeguard. Not intended to be a complete lifeguard training program. Prerequisite: PHED 130 or passing qualifying test.

PHED 133 - Basic Tennis 2 hours. Group presentation of basic strokes, simple strategy and rules, provides beginners with early opportunities for singles and doubles play. Students are screened by instructor to determine beginner's status.

PHED 134 - Intermediate Tennis 2 hours. A more advanced course offering lob, overhead, and volley with some singles and doubles play. Prerequisite: PHED 133 or demonstrating satisfactory basic skills in first class session.

PHED 136 - Introduction to Dressage 2 hours. Open to students with intermediate experience in the English disciplines. Dressage is offered to equip students with a broad base of knowledge in classical horsemanship encompassing theory, philosophy, riding, and care of the horse. Students will be riding training level dressage tests and introduced to the movements of first level dressage.

PHED 137 - English Riding: Level I 2 hours. Open to students with little or no riding experience for basic hunter seat equitation taught at the walk, trot and canter. Topics include horse grooming, hoof care, safety procedures (on and off the horse), care of riding equipment, and a horse's health.

PHED 138 - English Riding: Level II 2 hours. Competent hunter seat flat riders are introduced to jumping, trail and recreational riding. Jumping classes encounter fences three feet and under. The course emphasizes safety and training riders to recognize their own abilities in the ring, on the trail, or in the barn. Topics include horse care, cost and management of one's own horse.

PHED 139 - English Riding: Level III 2 hours. Riders entering this course should have a secure hunter seat at the walk, trot and canter and should exhibit good control over single fences (maximum height two feet). This course further conditions riders for more strenuous exercises on the flat and the course requires riders to jump a two-foot, eight fence course. Students also experience instructing a class. There will be a number of periods of recreational riding.

PHED 140 - English Riding: Level IV 2 hours. Riders at this level should be competent to walk, trot, canter, and jump with reasonably good equitation. This course furtherces the riders' abilities over higher (maximum three feet) fences and more complex courses. Riders continue practice teaching and, time permitting, pleasure and practice sessions, as well.

PHED 141 - Combined Training 2 hours. Concentrating on three areas: Dressage, Cross Country Jumping and Stadium Jumping Students are given an introductory working and riding knowledge in combined training. During the course students attend one clinic in each phase and a three day event.

PHED 142 - Western Riding Level I 2 hours. Open to students with little or no riding experience in the western disciplines. Skills taught include: western bridling, saddling, and horsemanship for the walk, jog and lope. Topics include grooming, hoof care, lungeing, safety procedures, care of horse and equipment.
PHED 143 - Western Riding Level II 2 hours. Open to students with beginning experience in the western disciplines. Skills taught include: western pleasure, horsemanship and showmanship patterns. Topics include safety procedures, proper tack, attire, equipment, and care of horse.

PHED 144 - Western Riding Level III 2 hours. Open to students with intermediate experience in the western disciplines. Skills taught include: western pleasure, horsemanship, showmanship and introductory trail obstacles found on trail course patterns. Topics include showing the all-around horse at breed shows, safety procedures, care of horse and equipment.

PHED 145 - Western Riding Level IV 2 hours. Open to students with intermediate or above experience in the western disciplines. Skills taught include: speed events including barrel racing, pole bending, stake race, and goat tying. Topics include: safety procedures, care of horse and equipment and introductory knowledge of team penning.

PHED 146 - Dressage II 2 hours. Theoretical and practical experience in effectively riding dressage at USDF levels 1 and 2. The practical side of this course prepares the student for successful competition. The theoretical side develops the student's comprehension of the history and philosophy of dressage. (PE)

PHED 147 - Introduction to Reining 2 hours. Designed for the advanced rider who wants to become proficient in riding reining patterns. Lecture topics include: general knowledge and observation of reining patterns, condition of the horse needed to compete in reining, health, safety issues, and the shoeing needs of reining horses. Lab skills include: loping circles, lead changes, spins, run downs, sliding stops, and roll backs. (PE)

PHED 150 - Draft Horse Driving I 2 hours. Open to students with beginning experience on and around draft horses. Skills taught include: Origin and background on draft horse breeds, harnessing, ground driving and handling the lines while driving both single and doubles.

PHED 151 - Draft Horse Driving II 2 hours. Lecture topics emphasize a survey of today's industry, breeds, history, conformation, principles of harnessing and hitching, and management of draft horses. Also included are showing procedures, breeding, foaling and training. Laboratory consists of hands-on experience in the handling, harnessing, hitching, driving, care and management of draft and driving horses. Prerequisite: PHED 150.

PHED 190 - Principles of Strength Training and Reconditioning 2 hours. This course is intended to cover the essentials of strength training and reconditioning to prepare a student who is interested in becoming a Certified Strength and Conditioning Specialist or a Certified Personal Trainer. One hour of lecture and two hours of physical activity each week.

Theory/Classroom Courses
(These Courses Do Not Apply to the University PE Requirement)
PHED 200 - Topics in Physical Education 2-4 hours. Classroom/theory topics are covered. Topics vary from year to year.

PHED 201 - Champs Life Skills 2 hours. Intended for student athletes and others interested in developing and incorporating life skills in the areas of academics, athletics, career and personal development.
PHED 237 - The Art and Theory of Equitation 4 hours. This course emphasizes the philosophy and theory of equitation, producing a deeper understanding and strengthening students' mental and physical approach to riding. Both the schooling and competitive frame of mind of horse and rider are included and the rider is expected to get the most out of his/her mount and know that particular horse's abilities, habits and limits. An asset to show preparation. Prerequisite: PHED 140 or 145 or equivalent.

PHED 238 - Introduction to Equine Science 4 hours. This course covers classroom studies of anatomy, nutrition, disease, and veterinary aspects of owning a horse or running a stable. Barn assignments deal with particular injuries and there are demonstrations with horses in terms of wrapping various wounds and treating common equine ailments. A trip to the Cornell Veterinary Clinic is included in the semester.

PHED 239 - Methods of Teaching English Riding 4 hours. Students in this course are required to observe teaching of classes and to discuss objectives and methods with the instructor. In time the student acts as apprentice teacher under the instructor's supervision. When ready, the student assumes the role of instructor with the responsibility of setting up safety rules and class curriculum. The student's efforts are reflected in the riders' progress. A lecture/question period will be held with local leaders of 4-H and Pony Clubs. Prerequisite: PHED 237.

PHED 240 - Methods of Teaching Western Riding 4 hours. Open to students with advanced experience in the western disciplines. Students will learn to teach beginning western pleasure skills. The student will progress from observation, to discussion of methods and teaching safety practices, to actually working with a beginner student in a supervised setting. Prerequisite: PHED 144 or permission of instructor.

PHED 241 - Equine Management 4 hours. This course is designed to provide practical experience in supervising barn management and equine care. Topics will include: stable management, general knowledge and observation of horse health, condition, dentistry, internal and external parasites, limb and hoof care, shoeing and trimming. Lab skills will include: clipping, banding, braiding, leg wraps, equipment application, fitting, and showmanship.

PHED 242 - Judging Horse Shows 4 hours. Open to students with advanced level riding skills in either English or Western riding. Students will learn how to evaluate and place conformation, halter and performance classes according to the standards set by various organizations and breeds of horses.

PHED 243 - History of the Horse 4 hours. Theoretical and practical experience in understanding the history and the evolution of the horse. Meets at Continental Acres Equine Resort in Weirsdale, FL in the first two weeks of Summer School. With access to the Gloria Austin Equine Museum, students have hands-on opportunities while studying the history of the horse and museum operations. (Summer)

PHED 291 - Philosophy, Principles, and Organization of Athletics 3 hours. Fundamental concepts and principles of athletics in education are covered and administration, management and organizational aspects of school sports discussed.

PHED 292 - Philosophy of Sport 2 hours. A study of the concepts, issues and problems of sport.
PHED 295 - Psychology of Coaching 3 hours. This course covers topics such as learning, performance, attention, anxiety, motivation, aggression, arousal, and the social-psychological dynamics of participation in sports.

PHED 311 - First Aid and CPR 2 hours. Basic level life support techniques including CPR, rescue breathing, and care of choking victim in conjunction with first aid techniques such as using a sling, splinting and bleeding control. Satisfies requirements for American Red Cross Professional Rescuer Certification.

PHED 312 - Theory and Technique of Coaching Football 2 hours. Theories of team offensive and defensive techniques, condition and training methods discussed. Practical experience is a part of the course. Coaching courses offered on a rotating basis.

PHED 313 - Theory and Technique of Coaching Basketball 2 hours. A complete coverage for the aspiring coach, including every phase of the game with special emphasis on fundamentals, offense, and defense and how to prepare a team totally for the entire season. Offered on a rotating basis.

PHED 314 - Theory and Technique of Coaching Volleyball 2 hours. A complete coverage with emphasis given to the fundamentals of the game, plus offensive and defensive strategies, conditioning, and statistic charts. Practical experience is a part of the course. Offered on a rotating basis.

PHED 315 - Theory and Technique of Coaching Lacrosse 2 hours. A complete coverage for the ambitious coach using the United States Lacrosse Coaches Association's Handbook of Coaching Techniques as guide. Special emphasis on the fundamentals of riding, clearing, offensive and defensive play for the individual as well as the team. Practical experience is part of the course. Offered on a rotating basis.

PHED 316 - Theory and Technique of Coaching Track and Field 2 hours. The fundamental concepts and principles of competitive track and field. Includes moderate amounts of physical participation in each event, complemented with lectures, loop films, and transparencies. Practical experience is a part of the course. Offered on a rotating basis.

PHED 317 - Theory and Technique of Coaching Soccer 2 hours. A complete coverage for ambitious coaches using the United States Soccer Federation coaching format. Special emphasis is given to the fundamentals of the game, tactics, and techniques of team play, and overall preparation for team play. Practical experience is a part of the course. Offered on a rotating basis.

PHED 450 - Independent Study 1-4 hours. Permission of instructor and Plan of Study required.

Physics

PHYS 111 - Introductory General Physics I 4 hours. A lecture and laboratory course which includes mechanics, wave motion and sound, fluids and heat. Calculus is not used but some knowledge of algebra and trigonometry is assumed. (F)

PHYS 112 - Introductory General Physics II 4 hours. A lecture and laboratory course including electricity and magnetism, optics, and some modern physics. Calculus is not used but some knowledge of algebra and trigonometry is assumed. Prerequisite: PHYS 111 or PHYS 125. (F)
PHYS 125 - Physics I
4 hours. A calculus-based lecture and laboratory course which includes one and two dimensional kinematics and dynamics, the work energy theorem, conservation of energy, the impulse momentum theorem, conservation of momentum, rotational and simple harmonic motion and gravitation. Prerequisite: MATH 151. (F)

PHYS 126 - Physics II
4 hours. This calculus-based lecture and laboratory course includes electric field and potential, direct and alternating current circuits, magnetism and magnetic induction and an introduction to electromagnetic and other waves. Prerequisites: MATH 152 and PHYS 125. (F)

PHYS 200 - Special Topics in Physics
1-4 hours. Topics vary from year to year and are designed especially for, but not limited to, non-science majors. Typical topics might be light and color, music and sound; or laboratory topics to include aspects of physics of interest to artists, musicians, photographers, environmentalists, etc. (Sufficient demand)

PHYS 325 - Elementary Optics
3 hours. This course discusses geometrical and wave optics with special emphasis on optical instruments. Prerequisite: PHYS 126.

PHYS 326 - Elementary Modern Physics
3 hours. This course includes basic relativity, quantum and waves aspects of radiation and particles, atomic structure, and an introduction to nuclear physics properties. Prerequisite: PHYS 126.

PHYS 400 - Special Topics
1-4 hours. Topics vary from year to year and are designed especially for, but not limited to, non-science majors. Typical topics might be light and color, music and sound; or laboratory topics to include aspects of physics of interest to artists, musicians, photographers, environmentalists, etc. (Sufficient demand)

PHYS 401 - Quantum Physics
4 hours. Schrödinger's theory of quantum mechanics with applications to atomic systems. Includes origin of the quantum theory, wave-particle duality, approximation methods, and time-dependent problems. Prerequisite: PHYS 226. (Alternate years)

PHYS 421 - Statistical and Thermal Physics
4 hours. Statistical and Thermal Physics deals with the various aspects of macroscopic thermodynamics and describes these statistically in terms of the microstates of systems. Examples taken mainly from gaseous and solid systems. Prerequisite: PHYS 126, MATH 253. (Alternate years)

PHYS 423 - Advanced Mechanics
4 hours. This course makes more sophisticated use of the basic laws of mechanics and includes sections on rotating coordinate systems, orbits in inverse square law fields, the analysis of vibrating systems and waves, Lagrange's and Hamilton's equations, and an introduction to the topic of chaos. Prerequisites: MATH 271, PHYS 125 and PHYS 126. (Alternate years)

PHYS 424 - Advanced Electricity and Magnetism
4 hours. A study of electric and magnetic fields and their origins in free space as well as in materials. Includes an introduction to vector calculus, solutions to Laplace's equation, multipole expansions, and Maxwell's equations in differential and integral form. Prerequisites: PHYS 126, MATH 271. (Alternate years)
PHYS 450 - Independent Study 1-4 hours. Prerequisite: Departmental approval of student's written independent study proposal and permission of instructor. (Sufficient demand)

PHYS 495 - ARGUS Project 3 hours. Undergraduate research project for ARGUS program students who are majoring in a natural science. Prerequisites: minimum 2.8 GPA overall and 3.0 in the major; proposal acceptance by faculty committee.

Political Science

POLS 110 - Introduction to American Politics 4 hours. An introductory survey of the American political system. Emphasis on the structures and processes of the political system with additional study of some of the problems faced by the system. (E)

POLS 120 - Great Issues in Politics 4 hours. What is politics? Why is politics important? This course explores various understandings of politics and their impact on differing views of citizenship and the possibilities of public life. Through readings of classic texts, students address questions about the obligations of citizenship, the role of the state, and the relationship between freedom and equality. (E)

POLS 200, 300 - Special Topics 1-4 hours. Examines topics of special interest not normally covered in other political science courses. Examples are Biopolitics, Political Socialization. (Sufficient demand)

POLS 214 - Politics and Environment 2 or 4 hours. Examines America's recent quest for coherent environmental policy, with special emphasis upon the politics of air and water pollution control.

POLS 220 - Perspectives on Political Science 2 hours. Intended as a foundation course for further work in political science. Students examine frequently used approaches to the study of politics, consider the question of personal values in political science, and investigate attempts to study politics in a scientific way.

POLS 230 - Introduction to Data Analysis and Statistics 3 hours. An introduction to statistics and data analysis in social and political life, covering the nature of variables, descriptive statistics, probability, and inferential statistics. Students use computer software to further their understanding. (Cross-listed as SOCI 230) (III)

POLS 232 - Judicial Processes 2 hours. The theory and practice of judicatory systems with primary emphasis on Anglo-American judicial processes and problems.

POLS 236 - Media and Politics 4 hours. This course examines the relationship between mass media and politics. We will explore the ways in which mass communications media shape the politics of elections, daily governance, U.S. foreign policy, interest groups, social movements, and identity.

POLS 238 - Politics and the Internet 4 hours. This course examines the role of politics in the shaping of the internet and the role of the internet in the shaping of politics. We will study the influence and potential influence of the internet on elections, the legislative process, and interest groups. We will address questions regarding free speech, pornography, and hate speech as well as questions about privacy, security, and citizenship. Underlying all of our discussions will be a concern about democracy versus the centralization of power.
POLS 242 - Approaches to Law 4 hours. What is the law and why do we obey it? What authority stands behind law? How do our answers influence the way we make and interpret law? We examine how others have approached these kinds of questions with an eye toward better understanding our own legal system.

POLS 246 - Women in Political Thought 4 hours. This course addresses the question of what part women should play in the political community. Students will examine writings in the western political tradition (and critics of that tradition) that raise questions about assumptions concerning the role of women in the family, society, and public life. (Cross-listed as WMST 246)

POLS 251 - Western Europe 4 hours. A comparative analysis of the political processes of the parliamentary democracies of Western Europe with special emphasis given to France, Great Britain, West Germany and Italy.

POLS 253 - Modern Political Movements and Democracy 4 hours. This course comparatively examines four political movements that have fundamentally shaped the modern world-liberalism, socialism, fascism and fundamentalism—and explores their relationships to the broader evolution of representative democracy.

POLS 261 - Political Development in the Third World 4 hours. Focus on the dynamics of political development and modernization in the less developed two-thirds of the world. Comparative analysis of regional divergences. (Cross-listed as SOCI 261)

POLS 271 - World Politics 4 hours. A systematic examination of the political processes affecting world political developments. Specific attention focused on such factors as the formulation and application of foreign policy, the role of major powers in world politics, and the function of international law. (E)

POLS 272 - War and Peace 4 hours. An analysis of problems affecting peace and war arising from world interdependence. Topics include international terrorism, global economic and environmental issues, food and energy resources, and disarmament.

POLS 273 - Terrorism and International Security 4 hours. This course will deepen students' understandings of 1) what terrorism is, 2) how terrorism has evolved over time, 3) the key factors generating contemporary terrorism, 4) how terrorism is inspired, financed and organized, and 5) counterterrorism strategies.

POLS 282 - Latin American Politics 2 or 4 hours. Contemporary politics of selected countries. Regional organizations and transnational enterprises; legacy of geography, history, and culture; religious and ethnic conflicts; parties, elections, and state institutions: revolutionary movements.

POLS 313 - State and Local Politics 4 hours. In the American governmental system, the intertwined destinies of states and their local governments are critical. This course studies the structure of decision-making at the state and local level, forces affecting decision, outcomes of decision, and the challenges governments face. (Alternate years)

POLS 315 - Environmental Law 2 hours. This course discusses the background for basic state and federal environmental laws and leading court cases. The case method is used. Prerequisite: POLS 110 or permission of instructor.
POLS 316 - American Constitutional Law and Politics 4 hours. An examination of the development of the Supreme Court as a major political institution concentrating primarily on the Court's decisions and its internal politics. Prerequisite: POLS 110; junior or senior standing recommended.

POLS 318 - The Presidency 4 hours. After studying the evolution of presidential power, this course will examine the relationship of the presidency to other branches of government. Students will also learn how presidents work within and against political constraints in order to get policies enacted. Prerequisite: POLS 110.

POLS 331 - Parties and Elections 4 hours. Analysis encompasses theories of parties, party organization, party conduct of campaigns and elections, voting behavior, and party roles in government. Emphasis on the American system.

POLS 332 - Political Interest Groups 2 hours. Analysis of group theory and examination of the internal structure and processes of politically active interest groups and of their methods of influencing the policy process. Prerequisite: POLS 110. (Sufficient demand)

POLS 340 - Classical Political Theory 2-4 hours. This course examines the relationship of the individual to the city-state in the ancient world, with a particular focus on the relationship between ethics and politics. Major thinkers include Thucydides, Plato, and Aristotle, as well as selected readings from other ancient authors. (Cross-listed as PHIL 340)

POLS 341 - Modern Political Theory 4 hours. A survey of the major political theorists from the Renaissance through the twentieth century, with primary emphasis on western thinkers. Particular attention given to theory as an individual and cultural phenomenon. (Cross-listed as CRIT 341, PHIL 341)

POLS 342 - Globalization 2-4 hours. A study of the global structuring of the world political economy. Examines trends in the process of globalization and considers competing theories of globalization. (Cross-listed as SOCI 342)

POLS 345 - International Environmental Politics 4 hours. A course acquainting students with the transnational factors of political economy affecting the environment. Special attention devoted to resource-utilization, in particular, the new frontiers of oceans, polar regions, and climatic forces. Also examined are the effects of global ideologies, transnational development agencies and enterprises and international law on the "development" of planetary resources. (Cross-listed as ENVS 345)

POLS 346 - American Political Thought 4 hours. This course introduces students to political thought in the United States. It explores "liberal" ideals such as individualism, freedom, equality, citizenship, and democracy, as well as important alternatives to those ideas. It will also examine the ways in which race, ethnicity, and gender have shaped American political thought. Prerequisite: POLS 110.

POLS 347 - Contemporary America 4 hours. Through readings on political leadership, the media, Washington power politics, international relations, and Americans' historic attachments to individual rights and civic participation, this course examines the forces leading to contemporary political controversies. Students will explore the interrelationship between these controversies and Americans' changing views of citizenship and democracy. (Cross-listed as SOCI 347)
POLS 355 - Public Policy 4 hours. The policy process is the heart of politics: "Who gets What, When, How?" This course emphasizes the stages of the process and the types of policies that government considers. A case study of some policy area (elderly) is provided.

POLS 356 - Movements 4 hours. Determinants, mobilization and participation processes and outcomes of movements. Topics include competing theories; types of grievances, recruitment mechanisms; organizational dynamics; tactics; external support variables; and repressions and concessions by regimes. Prerequisites: SOCI 110 or ANTH 110. (Cross-listed as SOCI 356)

POLS 411 - Bureaucracy 4 hours. Analysis of the administrative policy processes at the national level. Internal interaction and budgetary processes as well as interchange with external governmental and political institutions. Prerequisite: POLS 110. (Alternate years)

POLS 417 - American Civil Liberties 2 hours. Analysis of such current legal and political issues as free speech, religion, poverty, privacy, obscenity, and racial and sexual discrimination with attention to both established and latent areas of concern. Focuses on Supreme Court activity. Other governmental action considered, along with the theoretical and social contexts of the problems examined.

POLS 431 - Research Design and Strategies 4 hours. The major research designs and techniques used in collecting social science data. The class selects, designs, and executes a research project and prepares a joint presentation and defense of its findings. Prerequisites: SOCI 110 or ANTH 110, and senior standing or permission of instructor.

POLS 450 - Independent Study 1-4 hours. Independent study of a specific problem under the general guidance of the instructor. Open to Political Science majors at the permission of instructor. Plan of Study required. (Sufficient demand)

POLS 460 - Seminar in Political Science 1-4 hours. Provides the mature student with the opportunity for in-depth analysis of a particular subject. The subject presented identified by subtitle in the course schedule. Prerequisite: Junior or senior standing. (Sufficient demand)

POLS 463 - Revolutions 2-4 hours. An examination of social scientific writing on revolution, identifying those conditions in which revolutionary movements are most likely to succeed. (Cross-listed as SOCI 463)

POLS 470 - Field Work 2-4 hours. Supervised field work on an approved topic.

POLS 485 - Public Administration Internship 4 hours. Provides a first hand knowledge of how a government agency works and what agency personnel do. Interns have the opportunity to use skills developed in formal courses, and to assess personal interests in pursuing a public administration career. Prerequisite: Permission of instructor.

Psychology

PSYC 101 - Introduction to Psychology 4 hours. An introduction to the scientific study of behavior and mental processes. Topics typically include sensation and perception, learning and memory, consciousness, cognition and mental abilities, motivation and emotion, human development, personality, gender and sexuality, psychological disorders and therapies, and social influences on behavior. (E)
PSYC 210 - Communication and Counseling Skills 2 hours. Focused on working with adults, this course teaches interpersonal communication and counseling skills and theory to students preparing for careers in the helping professions. The course promotes self-understanding through experiential learning and role playing. Videotaping and microlabs may be employed. Prerequisite: PSYC 101 or GERO/PSYC 272.

PSYC 220 - Psychological Methods and Statistics 4 hours. An introduction to the use of data and theory in psychology. Topics include: philosophy of the scientific method, experiments and other research strategies, descriptive and inferential statistics and hypothesis testing. The course emphasizes statistical reasoning and its relationship to the scientific method. Required for majors and minors. Prerequisite: PSYC 101. (III)

PSYC 251 - Principles of Learning and Behavior Modification 4 hours. The principles and techniques of behavioral assessment and management are examined, including how to strengthen adaptive behavior through shaping, reinforcement schedules, and relapse prevention and how to minimize or eliminate maladaptive behavior through behavior modification methods such as stimulus control and extinction procedures. Prerequisite: PSYC 101.

PSYC 261 - Cognitive Development 4 hours. The course examines the theories and research in cognitive development from infancy through adolescence. Piagetian, Vygotskian, and Information-Processing Approaches are explored while examining the development of processes including attention, perception, memory, language, and reasoning. Prerequisite: PSYC 101.

PSYC 262 - Social Development 4 hours. This course examines theories and research in child and adolescent social development. Relations with parents and peers, prosocial behavior, aggression, sex-role development, and social-cognitive development are studied. Prerequisite: PSYC 101.

PSYC 272 - Adult Development and Aging 4 hours. (See GERO 272) (E)

PSYC 282 - Social Psychology 4 hours. A study of the influence that people have on each other's behavior, perception, motivation, feelings and cognition. Topics include the self and identity, social perception and cognition, attribution, race and gender, prejudice and discrimination, conformity and obedience, groups and leadership, attitudes and persuasion, aggression and violence, helping and altruism, attraction and love, conflict and peacemaking. Prerequisite: PSYC 101.

PSYC 300 - Special Topics 1-4 hours. A series of directed readings, changing from semester to semester, which affords the student an opportunity to pursue topics of special interest in greater depth by intensive reading, discussion and seminar feedback. Prerequisites: PSYC 101 and permission of instructor.

PSYC 302 - Psychological Measurement 4 hours. An introduction to psychological assessment through a survey of the principles of test design, scoring, and interpretation for tests of achievement, intelligence, personality, career interests, and attitudes. Specific concepts include: item analysis and norms, reliability and validity, ethical and legal standards. Prerequisite: PSYC 101 and PSYC 220.

PSYC 309 - Philosophical Psychology 4 hours. (See PHIL 309)
PSYC 311 - Sensation and Perception 4 hours. A study of the physiological and psychological processes involved in the immediate experience of sensory stimulation. Topics include sensory systems and coding mechanisms, psychophysical methods, signal detection, illusions, and complex perceptual processes. Prerequisite: PSYC 101.

PSYC 320 - Parenting Seminar 2 hours. This course provides students with an opportunity to learn about effective parenting through reading of literature and group discussion. The course explores a wide variety of issues, concerns, and problems that parents often face as well as the joy and gratification that effective parenting brings. Prerequisite: PSYC 101.

PSYC 322 - Health Psychology 2-4 hours. The critical link between health and behavior is the focus of this course. Students discuss and explore, in seminar format, health-related topics such as nutrition, addiction, exercise, life stress, health care delivery systems, alternative medicine, AIDS, health promotion behavior and personality and proneness to disease. Prerequisite: PSYC 101.

PSYC 329 - Freud, Jung, and Religion 4 hours. (See RLGS 329)

PSYC 330 - Neuropsychology 4 hours. A non-laboratory course dealing with the neurological correlates and determinants of behavior. Emphasis on basic neuroanatomy and neurophysiology underlying human behavior, i.e., the physical basis of sensation, perception, emotion, motivation, learning, memory and language.

PSYC 332 - Cognitive Processes 4 hours. An exploration of the psychological organization and functions of the mind. The point of view of people as active processors of information is adopted. Topics include attention, recognition, varieties of memory, psycholinguistics and consciousness. Emphasis is placed on the experimental method and its application to the study of cognitive experiences and activities. Prerequisite: PSYC 101 or permission.

PSYC 341 - Theories of Personality 4 hours. This course examines the philosophic, scientific, and applied aspects of personality theory and research. The major orientations toward investigating personality will be explored, e.g., psychodynamic, depth-psychological, trait-factor, humanistic, and social-learning models. Emphasis is placed on developing a working knowledge of each theory and methods of conducting personality research. Prerequisite: PSYC 101.

PSYC 342 - Abnormal Psychology 4 hours. Examines the biological, psychological and societal perspectives on the taxonomy, etiology, and treatment of clinically significant psychopathology. Provides a basis for understanding the personal and social problems of such individuals. Prerequisite: PSYC 101. Recommended: PSYC 261, 262, 282 or 341.

PSYC 351 - Human Sexuality 4 hours. A discussion of sexual attitudes and behavior, gender roles, love and intimacy, contraception and abortion, pregnancy and childbirth, marriage and family life, variations in sexualities, STDs, and the many psychological and cultural factors that affect human sexual behavior.

PSYC 352 - Research Techniques 2-4 hours. This course involves the conduct of laboratory and/or field research and experiments to teach techniques and skills used to gather data in specific subfields of psychology, usually child development.
The specific area to be covered may change from term to term (e.g., personality, social, learning, cognition). Prerequisite: PSYC 220 and relevant courses (such as PSYC 261 or 262) or permission of instructor.

**PSYC 362 - Industrial/Organizational Psychology** 4 hours. This course is designed to acquaint students with work psychologists perform in organizational settings. Topics may include methodology of industrial/organizational psychology, personnel selection, training and development, job satisfaction, leadership, work motivation, human performance and human engineering, performance appraisals, job stress and consumer behavior. Prerequisite: PSYC 101.

**PSYC 371 - The Psychology of Death and Dying** 4 hours. The study of death addresses questions rooted at the center of human experience. Included are historical and modern concepts, attitudes and practices toward the dying and the bereaved; psychological stages and experiences through which the dying may pass; an investigation of suicide including prevention, intervention and postvention; the concept of death in health care, medical ethics and law. Prerequisite: PSYC 101.

**PSYC 372 - Psychology of Women** 4 hours. This course examines the psychological, biological, social, and life-span development differences and similarities of the genders. Topics include cognitive abilities and achievement, personality characteristics, work issues, violence prevention, love relationships and sexualities, reproductive concerns, and physical and mental health issues. Prerequisite: PSYC 101. (Cross-listed as WMST 372)

**PSYC 411 - Psychological Research and Design** 4 hours. An advanced course in psychological research methods. Includes the logic of various research designs (variables, confounds) and their statistical analysis. The class designs and conducts several studies, gathering and interpreting data. Involves APA style report writing and the use of computers in research. Prerequisites: PSYC 101 and PSYC 220.

**PSYC 429 - Cognition and Aging** 2 hours. (See GERO 429)

**PSYC 450 - Independent Study** 1-4 hours. Prerequisite: Permission of instructor and an approved Plan of Study.

**PSYC 471 - Child Psychopathology** 3 hours. Through readings, presentations, and discussions, this course seeks to illuminate variation in child/adolescent behavior, emotion, and personality. Course material will consist of theory, research, and practice regarding "disturbed" and "disturbing" children and adolescents. Prerequisite: PSYC 261, 262 or 342.

**PSYC 472 - Child Interventions** 3 hours. This seminar introduces students to interventions for children and adolescents with disabilities and mental health disorders. Treatment strategies will be explored (such as behavior modification, play therapy, family therapy) along with treatment settings in which such therapies are delivered (schools, community mental health centers, institutions). Prerequisite: PSYC 261, 262, or 342.

**PSYC 485 - Practicum** 2-4 hours. A supervised field experience planned to develop skills in designing interventions within educational, vocational, social services or mental health settings. In addition to field placements, students may meet in weekly seminars to discuss current literature. Prerequisites: PSYC 101 and permission of instructor.
PSYC 491 - Clinical Procedures 4 hours. Focuses on the development and application of general clinical skills. Each student has the opportunity to demonstrate these skills through supervised interactions with a volunteer client. Prerequisites: PSYC 210, 341 or 342; and permission of Division Selection Committee.

PSYC 492 - Clinical Practicum 4 hours. This course provides advanced clinical/counseling-track psychology students with practical experience in a human service setting. Since each practicum site offers a somewhat different experience, attempts are made to place students in a setting that matches their interests. Supervision is provided for both on-site and in-class work. Prerequisites: PSYC 491 and permission of Division Selection Committee.

PSYC 497 - Senior Seminar 2 hours. This course provides students with an opportunity to explore contributions of important research and theorists through reading of literature, group discussions, and paper presentations. It will also focus on a variety of contemporary topics and issues. Prerequisite: completion of 20 hours of psychology. Required for majors.

Religious Studies

RLGS 105 - Introduction to World Religions 4 hours. An introduction to a limited number of religious traditions, e.g., Shamanism (emphasizing the American Indian), Hinduism, Buddhism, Judaism, Christianity, and Islam. Attention given to the nature of religion and its meaning for individuals and cultures. (B)

RLGS 240 - Religion in America 4 hours. An examination of the impact of religion in shaping American culture. Major thinkers such as Edwards, James, Emerson and Niebuhr, historical movements such as revivalism and social gospel, and distinctive themes such as religious pluralism, civil religion and ethnic awareness. (Sufficient demand) (B)

RLGS 252 - Judaism and Islam 4 hours. Introductory comparative course highlighting similarities and differences of the two religious traditions. Topics include sources and meanings of revelation, legal theories and ritual structures that uphold community, religious experience through worship and mysticism, and philosophical interpretations. (Sufficient demand) (B)

RLGS 253 - Hebrew Religious Tradition 4 hours. An exploration of the Hebrews' religious experience by centering on their biblical writings (Old Testament). Archaeological and historical findings supplement a literary treatment of the Israelites' myths, rites and festivals, their institutions of prophecy, kingship and temple priesthood, their theories of history, culture and ethics. (Sufficient demand) (B)

RLGS 254 - Birth of the Christian Tradition 4 hours. An exploration of the early Christians' religious experience both by studying their writings (e.g., letters, gospels, apocalyptic discourses, theological treatises, liturgical manuals - some in the New Testament) and by examining the Jewish, Greek and Roman cultures from which Christianity emerged. (Sufficient demand) (B)

RLGS 255 - Christianity 4 hours. Surveys the influence of Christianity on western culture. Major thinkers: St. Augustine, Thomas Aquinas, Soren Kierkegaard and others; historical movements such as monasticism, pietism, the reformation; distinctive themes such as mysticism, martyrdom and activism. (Sufficient demand) (B)
RLGS 257 - *Greek and Roman Myths* 4 hours. This course surveys the mythical world of antiquity and pays attention to classical religion, history, art, and literature in order to understand the nature of myths and how they develop and change. Contemporary methods of interpretation are also considered. (Sufficient demand) (B)

RLGS 265 - *Asian Religions: India, China, Japan* 4 hours. Introductory survey of practices and beliefs in selected Asian religious traditions in historical and contemporary periods. Will include Hinduism, Buddhism, Confucianism, Taoism, Shinto and selected other traditions, including new religious movements. (B)

RLGS 300 - *Topics in Religious Studies* 1-4 hours. An examination of issues in religious studies. Topics vary each time the course is offered. (Sufficient demand)

RLGS 305 - *Comparative Mythology* 4 hours. How can myths be true? Why do the same themes crop up in different cultures? How have they been studied? This course addresses these and other issues by investigating myths from different cultures and applying a variety of interpretive techniques. (Sufficient demand)

RLGS 307 - *Myth, Ritual, and the Creative Process* 4 hours. A cross-cultural explanation of how people establish their world views by narrating stories and by acting out their deepest aspirations and beliefs. Special attention to how and why symbolic frameworks are transmuted from certain forms to others through creative imagination. Prerequisite: One course in Religious Studies or Philosophy, or permission of instructor. (Alternate years)

RLGS 308 - *Artists, Shamans and Cosmology* 4 hours. This seminar examines how western artists and traditional shamans become mediums in creating worlds of meaning. Discussions center on the cosmogonic process of creating meaning through dreams, images, myths, metaphors, ritual activity, symbolic gesture, and language. Prerequisite: One course in Religious Studies or Philosophy, or permission of instructor. (Alternate years)

RLGS 309 - *Magic and Religion* 4 hours. An examination of the diversity to be found among human religious beliefs and practices. Includes the relationship between magic, science and religion, the functions of witchcraft, divination and spirit possession, and the role of religion in cultural revitalization. (Sufficient demand) (Cross-listed as ANTH 309)

RLGS 329 - *Freud, Jung, and Religion* 4 hours. This course studies the psychological theories of Freud and Jung, emphasizing their approaches to and interpretations of various aspects of religious life such as origins, traditions, symbols, rituals, faith, etc. Attention is also paid to whether psychological work is a religious process. (Cross-listed as CRIT 329, PSYC 329) (Sufficient demand)

RLGS 359 - *History of Chinese Thought* 4 hours. Focusing on the relationship between religion and philosophy, this course develops and understanding of the distinctive character of Chinese culture by surveying the development of religion and philosophy from antiquity to the medieval period and challenges of the twentieth century. (Cross-listed as HIST 359, PHIL 359)

RLGS 369 - *Buddhism* 4 hours. Traces the historical development of Buddhist thought, rituals and meditation from the founding by Gotama in India to the present-day divisions between the Theravada and the Mahayana. Religious expressions through myth, philosophy, and art are highlighted. (Sufficient demand)
RLGS 374 - Myth, Yoga, and Philosophy of India 4 hours. Examines myths and rituals in the Hindu religious tradition from the Vedic period to present day, the theory and technique of liberation through various forms of Yoga and the philosophies of ancient India centered in the Upanishads and Bhagavadgita. (Sufficient demand)

RLGS 450 - Independent Study 1-4 hours. To be arranged with instructor. Plan of Study required.

Science
SCIE 110 - Weather Elements 2 hours. Analyzes the fundamental physical processes of the atmosphere and their relationships to the daily weather pattern and weather forecasting in the United States. May be taken for science credit. (Sufficient demand) (F)

SCIE 111 - Science in Science Fiction 2 or 4 hours. Science fiction is intimately connected with science. In the sub-genre of hard science fiction, the story is founded on sound scientific or technological extrapolations and explores how individuals and society react to the changes. This course will look at the science used in a variety of short stories, novels and films. Topics can include planetary science, genetic engineering, artificial intelligence, celestial mechanics, black holes, chemistry, physics, and ecology. (F)

SCIE 115 - Life in the Universe 4 hours. A study of the search for extra-terrestrial intelligence including a brief introduction to astronomy, an examination of the necessary conditions for life (as we know it), and the possibility of space travel and communication. (F)

SCIE 366 - Science in the Field 3 or 4 hours. This course is offered for students who wish to pursue directed work in some area other than geology during the 3-5 week geology field trip (GEOL 466, Geology in the Field). Prior to enrolling, the student prepares a plan of study in consultation with the instructor of GEOL 466 and an instructor in his/her field of interest. The plan of study must be approved by both instructors and must include criteria for evaluation of the work. Possible project areas include nature/scientific photography, science journalism, or studies in botany, ecology, or archaeology. Students enrolled in this course go on the entire GEOL 466 field trip and pay the same required fee as those enrolled in that course. Prerequisites: permission of instructor, filing of an approved plan of study.

SCIE 450 - Independent Study 1-4 hours. Plan of Study and permission of instructor required.

Sociology
SOCI 110 - Introduction to Sociology 4 hours. The foundation course in sociology, studying such concepts as social organization, culture, personality, and social processes such as interaction, socialization, social stratification, race and ethnic relations, and collective behavior. Designed primarily for freshmen. (E)

SOCI 200 - Special Topics 1-4 hours. An open course, varying in content from year to year, which allows for concentration on such specialized areas as Political Sociology, Demography, Criminology, Social Change, Stratification, and the like. Prerequisites: SOCI 110 or ANTH 110 or permission of instructor. (Sufficient demand)
SOCI 220 - Women and Science 4 hours. Explores issues in science that are of importance to women including: historical and contemporary roles of women scientists, feminist critique of science and the influence of feminism on science, contemporary challenges, and social and political issues surrounding women's health. (Cross-listed as WMST 220)

SOCI 230 - Introduction to Data Analysis and Statistics 3 hours. (See POLS 230) (III)

SOCI 235 - Socialization 4 hours. An inquiry into the processes by which social actors learn the norms, behaviors, and patterns of attention appropriate to their positions in society. Topics discussed include: "nature versus nurture," theoretical approaches to socialization, social structure, and socialization in adult life. The relationship between socialization and other sociological concepts, such as gender, social class, and occupation are discussed. Prerequisite: SOCI 110 or ANTH 110. (Alternate years).

SOCI 236 - Cults, Sects and the Main Line 4 hours. A scientific approach to the universal phenomenon of religion in human society. How does one approach such a study? What is "religion?" What function does religion supply in the maintenance of society? Are there alternative belief systems equally functional? What kinds of people are drawn to various types of religious expression? What is the place of religion in the society of the future? Prerequisites: SOCI 110 or ANTH 110 and junior or senior standing, or permission of instructor. (Alternate years)

SOCI 242 - Social Problems 2-4 hours. Current social issues discussed and analyzed from a sociological perspective. Issues vary each term but may be drawn from the following: population and the environment; work and alienation; education; health; leisure, social welfare, and other areas. Prerequisite: SOCI 110 or ANTH 110. (Sufficient demand)

SOCI 253 - Social Welfare Institutions 2 or 4 hours. Examines social welfare institutions in the context of change brought about by industrialization and urbanization. Focus on types of welfare, welfare policy and the structure of services. (Cross-listed as WMST 253) (Sufficient demand)

SOCI 255 - Class, Status, and Power 4 hours. An inquiry into the origins and consequences of inequality in social life. Theories of social stratification explored, emphasizing economic class, life styles, and differential valuation and rewards. Prerequisite: SOCI 110 or ANTH 110 or permission of instructor. (Sufficient demand)

SOCI 261 - Political Development in the Third World 4 hours. (See POLS 261)

SOCI 342 - Globalization 2-4 hours. (See POLS 342)

SOCI 343 - Race and Ethnicity 4 hours. A discussion of theory and research concerning racial and ethnic relations in the United States and in various parts of the world.

SOCI 344 - Deviance and Society 4 hours. Deviance presented as an aspect of the normal functioning of a society, rather than as either a symptom of social pathology or disorganization or as the result of biologically or psychologically problematic individuals. Prerequisite: SOCI 110 or ANTH 110 or permission of instructor.
SOCI 345 - Crime and Delinquency 4 hours. The concept of deviance in particular reference to the sociological understanding and analysis of crime and delinquency. Prerequisite: SOCI 110 or ANTH 110 or permission of instructor.

SOCI 346 - Sociology of Sex and Gender 4 hours. Examines the concepts of sex and gender as they are defined in sociological literature, focusing on how social contexts (i.e., education, employment, family, sexuality and reproduction, etc.) construct gender which, in turn, shapes future opportunities for individuals in society. Prerequisite: SOCI 110 or ANTH 110. (Cross-listed as WMST 346)

SOCI 347 - Contemporary America 4 hours. (See POLS 347)

SOCI 348 - Sociology of Families 4 hours. An investigation of the relationship between the family and other social institutions, particularly in regard to the family functions of population maintenance, socialization and social placement. Prerequisite: SOCI 110 or ANTH 110. (Cross-listed as WMST 348)

SOCI 349 - Medical Sociology 4 hours. An examination of the social definitions of health and illness, its social distribution and relationship to the organization of health delivery systems. Prerequisite: SOCI 110 or ANTH 110. (Sufficient demand)

SOCI 352 - Sociology of Organizations 4 hours. Analysis of groups with bureaucratic structures such as factories, universities, hospitals and voluntary organizations. Topics include theories of formal organizations, impact of organizations on the individual, functions of informal groups, relationship of complex organizations to their environments. Prerequisite: SOCI 110 or ANTH 110 or permission of instructor.

SOCI 356 - Movements 4 hours. (See POLS 356)

SOCI 400 - Special Topics 1-4 hours. An open course, varying in content from year to year, which allows for concentration on such specialized areas as Political Sociology, Demography, Criminology, Social Change, Stratification, and the like. Prerequisites: SOCI 110 or ANTH 110 and junior or senior standing or permission of instructor. (Sufficient demand)

SOCI 405 - Women in Latin America 4 hours. (See SPAN 405)

SOCI 420 - Social Theory: A Survey 4 hours. An examination of contemporary theoretical schools, e.g. symbolic interactionism, structural functionalism, exchange and conflict, and ethnomethodology. Special attention devoted to the precursors and contemporary representatives of the respective schools. Prerequisite: SOCI 110 or ANTH 110 or permission of instructor. (Cross-listed as CRIT 420)

SOCI 431 - Research Design and Strategies 4 hours. The major research designs and techniques used in collecting social science data. The class selects, designs, and executes a research project and prepares a joint presentation and defense of its findings. Prerequisites: SOCI 110 or ANTH 110, and senior standing or permission of instructor.

SOCI 450 - Independent Study 1-4 hours. Work on some topic chosen by the student in consultation with the instructor. Work under this title may be carried out alone, in cooperation with other departments, or in an honors colloquium where a common problem is chosen. Prerequisite: permission of departmental staff.
SOCI 463 - Revolutions 2-4 hours. (See POLS 463)

SOCI 470 - Application of Sociology Field Work 2-4 hours. Field work associated with social services, corrections, health care, or educational agencies. Weekly class- workshop sessions and individual field work. Focus on the student's relationship with colleagues, professionals, and the public in various accredited institutional settings. Prerequisite: junior or senior standing and permission of instructor. (Sufficient demand)

Spanish

SPAN 101 - Spanish I 4 hours. Introduction to the language and culture of the Spanish-speaking world: speaking, reading, understanding and writing. Practice in language lab. Emphasis on communicative skills. Assumes no prior knowledge of the language. (II)

SPAN 102 - Spanish II 4 hours. Continuation and further development of the skills learned in SPAN 101. Prerequisite: SPAN 101, 41-60% on Spanish Language Placement Exam, or permission of instructor. (II)

SPAN 200 - Special Topics 1-4 hours. Subject matter not covered in other courses. Topics vary from one semester to another.

SPAN 201 - Spanish III 4 hours. Continuation and further development of the skills learned in SPAN 102. Prerequisite: SPAN 102, 61% or higher on Spanish Language Placement Exam, or permission of instructor. (II)

SPAN 202 - Spanish IV 4 hours. Development of proficiency through use of written materials in Spanish. Prerequisite: SPAN 201 or permission of instructor. (II)

SPAN 210 - Global Perspectives: Spain 4 hours. Students develop an understanding and appreciation of another culture and enhance their global perspective. The capstone of this course is a two-week trip to Spain. Course preparation for this trip will focus on Spanish history and contemporary culture including art, music, and theater. Although the course is given in English, students will have the opportunity to speak Spanish. Prerequisite: SPAN 102 or equivalent. (Alternate years)

SPAN 211 - Global Perspectives: Sustainable Futures and Service Learning in Costa Rica 4 hours. Students develop an understanding and appreciation of Costa Rican culture through formal course preparation in Alfreed and a two-week opportunity for direct service to the Monteverde community in Costa Rica in late May to early June. Course preparation for this trip will focus on sustainable development, history and contemporary culture including art, music, and literature. Although the course is given in English, students will have the opportunity to speak Spanish.

SPAN 301 - Advanced Conversation and Composition 4 hours. Focuses on open-ended, dramatized versions of life-like scenarios which elicit resolutions from students. Emphasis on increasing fluency and amplifying cultural competency. Students approach scenarios individually and collectively. Readings, discussions and assignments in Spanish. Prerequisite: SPAN 202 or permission of instructor.
SPAN 311 - Peninsular Culture and Literature I: Medieval - Eighteenth Century 4 hours. An introduction to canonical cultural works of Spain from the Middle Ages through the eighteenth century. Cultural discourse placed in context with socio-historical periods. Essays, literature, videos and/or films. Predominantly in Spanish. (Alternate years)

SPAN 312 - Peninsular Culture and Literature II: 19th - 20th Century 4 hours. An introduction to canonical cultural works of nineteenth and twentieth-century Spain. Cultural discourse placed in context with socio-historical periods. Can be taken independently or as a continuation of SPAN 311. Course components predominantly in Spanish. (Alternate years)

SPAN 315 - Latin American Culture and Literature I 4 hours. An introduction to canonical cultural works of pre-Columbian through eighteenth-century Spanish America. Cultural discourse placed in context with socio-historical periods. Essays, literature, videos and/or films. Predominantly in Spanish. (Alternate years)

SPAN 316 - Latin American Culture and Literature II 4 hours. An introduction to canonical cultural works of nineteenth- and twentieth-century Latin American. Cultural discourse placed in context with socio-historical period. Can be taken independently or as a continuation of SPAN 315. Course components predominantly in Spanish. (Alternate years)

SPAN 360 - Literary Theory Seminar 4 hours. This course is intended to introduce those students with a major or a minor in a foreign literature and language to Literary Theory and Criticism. Students will be using different types of theory to analyze texts in English and in their target language. This course will be required of all foreign language and literature majors and is recommended for those students with a minor in a foreign language. Prerequisite: SPAN 202 or permission of instructor. Students may not retake this course for credit as FREN or GRMN 360.

SPAN 400 - Topics in Hispanic Literature 1-4 hours. A study of the literary manifestations of socio-cultural areas such as religion, honor, love, politics, and individuality which are of concern to Hispanics. Taught in Spanish. (Sufficient demand)

SPAN 401 - Readings in Modern Peninsular Literature 4 hours. Examines 20th century Peninsular literature, emphasizing the Generation of '98, the Generation of '27, and the post-Civil War era. Readings are selected from the works of Unamuno, Valle-Inclan, Baroja, “Azorín,” Machado, García Lorca, Cela, Laforet, and Matute. Taught in Spanish. (Sufficient demand)

SPAN 402 - Readings in Modern Latin American Literature 4 hours. Latin American literature from Modernism to the present. Readings are selected from the works of such authors as Dario, Neruda, Mistral, Borges, García Marquez, Cortzar, Donoso, and Vargas Llosa. Gaucho, Indianist and Revolutionary novels are also considered. Taught in Spanish. (Sufficient demand)

SPAN 403 - El Siglo de Oro 4 hours. A study of the Golden Age through selected readings in the novel, poetry, and drama, including the picaresque novel and selected works by such writers as Lope, Calderon, Fray Luis de Leon, Santa Teresa, and Cervantes. Taught in Spanish. (Sufficient demand)
SPAN 404 - Latinos/as in the United States 4 hours. An introduction to important writings, art and/or films about the experiences of Latino communities in the United States. Addresses, for example: socio-political; gender; class; language; and generational-change issues reflected in various discourses. Given in Spanish and English. Prerequisite: SPAN 301 or permission of instructor.

SPAN 405 - Women in Latin America 4 hours. This class focuses on the diverse interests and concerns of women from different classes and ethnic backgrounds in Latin American countries. Topics include, but are not limited to, women's movements, economic and political conditions, religion and women, and reproductive rights. We will read articles and books that analyze these issues as well as their representations in literature, music, and visual art. Prerequisite for Spanish majors: SPAN 360. (Cross-listed as GLBS/SOCI/WMST 405)

SPAN 450 - Independent Study 1-4 hours. Intensive study of a topic chosen in consultation with instructor. Required of majors. Permission of instructor and Plan of Study required.

Theatre
THEA 110 - Introduction to Theatre 4 hours. A study of theatre as a creative process and cultural phenomenon, including text and performance analysis, the examination of dramatic literature, and opportunities to experience and explore the work of the actor, the playwright, the director, the designer, and the producer. Scripts and productions which are the sources for discussions and assignments are drawn from a full range of cultures and time periods. (C)

THEA 120 - Technical Theatre 4 hours. A lecture/lab course in stage technology covering set construction, painting, lighting, costumes, make-up, stage properties. Lab hours required. (C)

THEA 200, 300, 400 - Special Topics 1-4 hours. Includes non-regularly scheduled course offerings in related areas of study. Examples include Musical Theatre, Theatre and Social Change, Ritual and Theatre, Performance Theory, Ethnic Theatre.

THEA 205 - The Play's the Thing! - Playwriting 4 hours. (See ENGL 205)

THEA 210 - The Performing Arts: A Global Perspective 4 hours. (See MUSC 210) (C)

THEA 211 - Women in Theatre 3 hours. A survey course tracing the role(s) of women in theatre - audience, acting, directing, writing, designing, managing - from the ancient Greeks to contemporary times in a range of cultures. Representative plays, essays, and production artifacts are studied to discover the changing roles of women. (Cross-listed as WMST 211) (Alternate years)

THEA 220 - Principles of Theatrical and Performance Design 4 hours. A beginning design course introducing students to common principles of theatrical and performance design: scene, lighting, costume, sound, makeup, and props. Script analysis, research methods, the "isms" (realism, symbolism, absurdism, postmodernism, etc.), design unity, color, light/shadow, line/weight, and shapes, will be covered. (C)
THEA 222 - Stage Makeup 2 hours. A basic course introducing students to the principles of designing and applying stage makeup. Projects and makeup crew assignments required. (C)

THEA 240 - Acting I 4 hours. A beginning level course open to all students. Through progressive acting exercises, students are introduced to realism based theatrical performance, with emphases and exploration in vocal, physical and creativity development, textual and character analysis. Plays from a full range of cultures are used for scene study assignments. (C)

THEA 242 - Performance Lab 3 hours. This course provides students with specialized focus on various aspects of theatrical performance in a laboratory, experimental workshop setting. This flexible course is intended to respond to unique interests and needs of students not otherwise emphasized in other courses. Lab may focus on improvisational techniques, audition techniques, monologue development, masking, puppetry, or styles of acting. (C)

THEA 270 - Theatre Practicum 1-4 hours. Theatre Practicum is a lab course designed to give students practical production experience under faculty supervision in the areas of acting, technical theatre, designing, directing, and theatre management. May be repeated for credit to maximum of 4 hours. Credit received is exempt from overload tuition charges. Prerequisite: Permission of instructor.

THEA 310 - Cultural Perspectives in Theatre and Performance 3 hours. An examination of a broad range of cultural performance and theatrical traditions, and their influence/impact on contemporary American performance practices. African, Asian, Native American and other dance/drama forms from world cultures will be considered from aesthetic, social, historical, religious and political perspectives.

THEA 311 - Theatre History I 4 hours. An examination of theatre's place in many world cultures, primarily focusing on the development of Western Drama, from earliest times through 1650. Emphasis on performance content and style, theatre architecture, and management practices as a reflection of a given culture's social, religious and political structures, and aesthetic impulses. Prerequisite: THEA 110 or permission of instructor.

THEA 312 - Theatre History II 4 hours. An examination of theatre's place in many world cultures, primarily focusing on the development of Western Drama, from 1650 to the present. Emphasis on the performance content and style of dramatic literature, theatre architecture, and management practices as a reflection of a given culture's social, religious and political structures, and aesthetic impulses. Prerequisite: THEA 110 or permission of instructor.

THEA 320 - Scene Design 3 hours. A scenic design course, which builds on the principles of design taught in THEA 220. It further develops skills in research methodology, script analysis, sketching and painting techniques, model building, graphics, use of computer-aided design. Representative scripts will be studied. Prerequisite: THEA 220 or permission of instructor. (Alternate years)

THEA 321 - Lighting Design 3 hours. A study of basic electricity and theatrical lighting equipment with an emphasis on both the artistic as well as the technical aspects of stage lighting. Crew assignments required. Prerequisite: THEA 220 or permission of instructor. (Alternate years)
THEA 322 - Stage Costume Design 3 hours. A costume focused design course which builds on the principles of design taught in THEA 220. It further develops skills in research methodology, script analysis, costume design theories, artistic processes, and costume construction for specific plays. Lab hours required. Prerequisite: THEA 220 or permission of instructor. (Sufficient demand)

THEA 323 - Stage Sound 2 hours. An introductory level lecture/lab course on audio equipment and its use in theatre. The emphasis is on the design of sound for stage shows. Areas covered include sound theory, field recordings, multi-track recording and dubbing and acoustics. Prerequisite: THEA 220 or permission of instructor. (Sufficient demand)

THEA 340 - Acting II 3 hours. This intermediate level course emphasizes text analysis, scene study, in-depth character development, character relationship explorations, and exploration of the interface between text and subtext with a direct application to performance. A variety of scenes and monologues from a wide range of plays are used, with public performance expected of selected work, at the end of the semester. Prerequisite: THEA 240 or permission of instructor.

THEA 342 - Advanced Performance Lab 3 hours. Advanced level continuation THEA 242. May be repeated one time for credit (6 hours maximum).

THEA 350 - Independent Study 2-4 hours. For students wishing to undertake a specialized area of study not otherwise offered, under the guidance of the appropriate faculty member. Prerequisites: junior standing and/or permission of instructor. Plan of Study required.

THEA 370 - Advanced Theatre Practicum 1-4 hours. Advanced level continuation of THEA 270. May be repeated for credit up to a maximum of 6 credit hours.

THEA 385 - Internship in Theatre 2-4 hours. An independent study project allowing students to gain experience in professional or semi-professional theatre settings. An independent study form describing the requirements of the course must be written. Prerequisite: Junior standing; approval of Division Chair.

THEA 430 - Directing I 3 hours. The theory and practice of play production from script selection to early rehearsals to final production, focusing on directorial vision, text analysis, staging principles, actor coaching, organization of the production book. Final scenes or short one-act plays to be performed for the public are expected. A full range of scripts and approaches is discussed and used for classroom and outside assignments. Prerequisite: Junior Standing or permission of instructor.

THEA 431 - Directing II 3 hours. The continued exploration of the processes and practices of production direction from conceptualizing, to auditions, to staging, resulting in the public presentation of a one-act play. Topics include special rehearsal problems, actor coaching, rehearsal pacing, and blocking. Prerequisite: THEA 430 or permission of instructor.

THEA 440 - Acting III 3 hours. Intended for the serious student of acting, this advanced performance course applies the in-depth skills developed in Acting II (text analysis, character development, etc.) to historical texts: the Greek classics, Shakespeare, Restoration Comedy, Comedia del' Arte, turn-of-the century modern realism. Public performance of selected scenes is expected. Prerequisites: THEA 240 and 340.
THEA 470 - Advanced Projects in Theatrical Design and Technology 1-4 hours.
A faculty supervised experience for the advanced student in one of several areas of
design: scenic; lighting; costume; sound; props; makeup; and technical direction.
Prerequisite: THEA 120 and 220; One of the following: THEA 222, 320, 321, 322,
323; or permission of instructor.

THEA 495 - Senior Project 2-4 hours. Students complete a major project in their
areas of interest. May include producing, directing, performance, playwriting,
design. The project is to be submitted as a proposal to the faculty and approved in
advance, with advisory support and supervision provided by the appropriate faculty
member. Prerequisites: senior standing; approved written proposal; permission of
instructor.

Women's Studies
WMST 101 - Women in Society 4 hours. This interdisciplinary course is the
foundation of Women's Studies. It examines the relationship of women worldwide
to institutions and developments in the social, political, and economic spheres.
Topics include biological issues, women and work, women as family members,
media portrayal of women, and the origins and development of modern feminism.

WMST 200, 300, 400 - Special Topics 1-4 hours. Topics vary in content from year
to year.

WMST 204 - The Art of the Personal Essay 2 hours. (See ENGL 204)

WMST 206 - Poetry Workshop 2 hours. (See ENGL 206)

WMST 211 - Women in Theatre 3 hours. (See THEA 211)

WMST 218 - Autobiography 2 or 4 hours. (See ENGL 218) (A)

WMST 220 - Women and Science 4 hours. (See SOCI 220)

WMST 246 - Women in Political Thought 4 hours. (See POLS 246)

WMST 253 - Social Welfare Institutions 2 or 4 hours. (See SOCI 253)

WMST 254 - Women Writers 2 or 4 hours. (See ENGL 254)

WMST 255 - Issues in Women's Health across the Lifespan 2 hours. Explores
diverse health concerns of women of all ages from a multicultural and historical
perspective. An attempt is made to provide students with strategies enabling them to
become more responsible consumers in the health care market.

WMST 256 - Multicultural Literature 2 or 4 hours. (See ENGL 256) (A)

WMST 293 - A Place in the Universe 4 hours. (See ENGL 293) (A)

WMST 303 - Women, Knowledge and Reality 2-4 hours. (See PHIL 303)

WMST 306 - Gender and Communication 4 hours. (See COMM 306)

WMST 308 - Women Writers in the Middle Ages 4 hours. (See ENGL 308)

WMST 324 - Gay American History 4 hours. (See HIST 324)
WMST 346 - Sociology of Sex and Gender 4 hours. (See SOCI 346)
WMST 348 - Sociology of Families 4 hours. (See SOCI 348)
WMST 371 - Feminist Poetics 4 hours. (See ENGL 371)
WMST 372 - Psychology of Women 4 hours. (See PSYC 372)
WMST 374 - American Women: History and Herstory 4 hours (See HIST 374)
WMST 381 - International Women Writers 4 hours. (See ENGL 381)
WMST 382 - Women in Art 4 hours. (See ARTH 382)
WMST 405 - Women in Latin America 4 hours. (See SPAN 405)
WMST 413 - Women in the Ancient World 4 hours. (See HIST 413)
WMST 414 - Women in Medieval and Early Modern Europe 4 hours. (See HIST 414)
WMST 450 - Independent Study 1-4 hours. Independent study of a specific problem under the general guidance of the instructor. Plan of Study required. The end of this course of study must include a public presentation. Examples may include an oral thesis defense, a Women's Studies Roundtable, the Undergraduate Research Forum or an art exhibition/performance.
WMST 465 - Women, Minorities, and the Media 4 hours. (See COMM 465)
WMST 470 - Alphadelphian - Women's Studies Service 2 hours. Students explore the fundamentals of group identity and self-reporting within the context of community service and women's studies. Vehicles of learning include reflection and discussion and a service-learning component that requires publication of the Women's Studies newsletter. Students are responsible for each aspect of its content, layout, publication, and distribution. Prerequisite: permission of instructor.
WMST 485 - Internship 1-4 hours.