

AAMS 111 | Intro African American Studies

This course seeks to provide a survey of African American culture in seven core components: 1) History 2) Sociology 3) Religion 4) Aesthetics and Art 5) Psychology 6) Economics and 7) Political Science. This course will introduce students to examining the Black experience from a multi-disciplinary perspective, and enhance clarity and substance of African diasporic history and culture. [3 credits]

AGBU 103 | Agricultural Economics (C)

The process of economic growth; the nature of production, marketing and consumption of food in the US; basic principles of economics applied to agriculture including the production function, input-output analysis, supply, demand and price determination; an overview of the world agricultural situation; and consideration of farm policy problems are the topics covered. Throughout the course, the interrelationships between agricultural and non-agricultural industries are stressed. [3 credits]

AGBU 341 | Ag Economics & Geography (C)

An analysis of agricultural production in the United States and the world based on the major influence of geography. Agricultural development, world trade in agriculture and problems of the farm sector of the United States' economy are studied in relation to geography and economic principles. Prerequisite: AGBU103 or micro- or macro- economics, or permission of the instructor. [3 credits]

AGRN 232 | Plant Ecology (C)

A study of global and local plant communities and their development in response to environmental conditions. The impacts of climate, topography, soil conditions, geographic locations and interactive biotic influences on plant community stability and succession are investigated in detail. Plant ecological principles are applied to the management of specific ecosystems including agricultural, silvicultural, recreational and natural systems. College land laboratory, audio-visual materials and field trips are utilized for laboratory activities. [3 credits]

AGRN 313 | Soil Fertility (C)

An advanced course emphasizing the role of soil as a source of essential plant nutrients. Properties of clay and humus, organic matter decomposition, soil pH, soil physical properties and activities of soil organisms are considered as they relate to soil fertility and pollutant movement. Biological and chemical transformations of nutrient elements are studied in detail. Components of soil management involving the use of soil amendments, liming materials, compost and fertilizers as well the use of soil as a repository for organic wastes are discussed. Prerequisite: AGSC111 or equivalent: Inorganic Chemistry recommended. [3 credits]

AGSC 111 | Intro to Soil Science (C)

An introductory course which stresses the function of soil as a medium to support plant life. The biological, chemical and physical aspects of soil development and management will be studied. (This course may be considered as a liberal arts and science elective for environmental studies majors only.) [3 credits]

AGSC 186 | Entomology

The anatomy, identification, life cycles and control of insects detrimental to both plants and humans are studied. Both chemical and biological control methods are discussed. Insect identification is stressed in the laboratory portion of the course. Proper handling and application of insecticides is emphasized. An insect collection is required. (This course may satisfy liberal arts and sciences elective credit for environmental studies majors only.) [3 credits]

AGSC 227 | Intro to Plant Biotechnology

This course is an introduction to plant biotechnology, with an emphasis on the issues in the use of biotechnology and techniques used for gene transfer into plants. Students will learn how biotechnology can be used for continuous improvement of people's lives. The students who successfully complete this course will have a better

appreciation of the differences and similarities between traditional plant breeding and modern molecular breeding. The student will also have a better awareness of the issues involved in the application of biotechnology to scientific investigations in general and to plant improvement in particular, and will be able to form an informed opinion on whether or not biotechnology should be applied to some hotly debated areas, such as genetically modified organisms including animals. Prerequisite: BIOL116 or BIOL101 [3 credits]

AMSL 145 | American Sign Language I

In introductory focus upon American Sign Language techniques, emphasizing receptive, expressive and interactive skills. Students utilize eyes, hands, facial and body postures in transmitting and receiving grammatical information. Additional topics include culture and heritage of deaf people in America. [3 credits]

AMSL 146 | American Sign Language II

This course will continue the introduction to American Sign Language techniques. The focus is on receptive skills, and students are required to give presentations, concentrating on interactive skills. Additional vocabulary is introduced, and increased utilization of body language and posture is encouraged. Students are required to read and discuss articles on deaf education and main-streaming. Deaf guests are an integral part of this course.

Prerequisite: AMSL145 [3 credits]

ANTH 114 | Physical Anthropology

This course will provide the student with an introduction to the more scientific aspects of anthropology. Topics to be studied in physical anthropology and archeology will include the foundations of evolutionary theory, the fossil evidence for human evolution, the evolution of culture, field studies of the primates, techniques used in archeological investigation, the evolution of food production and the consequences of that process for both Old and New World prehistory, physical variation in modern human populations, and the ancient Near East and Mesoamerica Civilizations. [3 credits]

ANTH 115 | Cultural Anthropology

This course will provide the student with an introduction to the substantive and theoretical nature of social and cultural anthropology. The course will examine preindustrial populations within a worldwide context, however both North and Middle American native cultures will be emphasized. An economic/ecological approach will be utilized in studying two radically different production modes: (1) hunting and foraging; and (2) the continuum spanning incipient cultivation to intensive hydraulic agriculture. The sociocultural consequences of these varied technologies will be a major concern of the course, namely social structure and the evolution of political and religious systems. Students completing this course should have an emerging appreciation for the notion of "humanity," and a respect for the diversity found in the preindustrial world and in preindustrial technology. This course does not require ANTH114 as a prerequisite. [3 credits]

ANTH 200 | Introduction to Archeology

This course will provide the student with an introduction to the principles and methods of modern archeological science. The course will be concerned with New World Prehistory. Students will be introduced to the concepts of prehistory, field excavation, classification, description, and analysis of artifacts, and methods used in reconstructing the past. [3 credits]

ANTH 216 | Cult, Society & Ag Ancient Mexico

This course examines the archeological cultures of pre-Hispanic Mexico and specifically the evolution of Aztec civilization. The relationship between food production strategies, technology, land use and empire building will be closely examined throughout the course. A historical survey of the Spanish Conquest and the Colonial Period will provide the student with a framework for understanding the factors which lead to massive 20th Century social and economic problems. The course brings together a wide variety of inter-disciplinary approaches in understanding the evolution of a tropical American civilization: ethnohistory, geography, demography and ecological

anthropology. Prerequisites: Any of the following: ANTH114, ANTH115, HIST 101, HIST102, HIST121, HIST122, NAMS111 [3 credits]

ANTH 317 | Agriculture and Society

This course is an historical and anthropological investigation into the many ways in which agricultural technology has irreversibly altered the course of human social life. Major events of the past, such as the rise and expansion of civilization, the evolution of warfare and technological evolution will be concerns of this course. In addition, the course will deal with probable future changes to human cultural and social systems in the areas of value structure, economics, politics and demography. Prerequisites: ANTH115 or HIST101 suggested but not required. [3 credits]

ARAB 101 | Beginning Arabic

This is the first semester of a two-semester sequence in the basic skills of understanding, speaking and, to a lesser extent, reading and writing a complex foreign language. Students should be highly motivated as they will need to engage in self-instruction outside of the regularly assigned class period. The course design follows the guidelines of the National Association of Self-Instructional Language Programs. This means that students work with native-speaker mentors who guide classroom interaction and model the language for students. Prerequisite: Students should have already formally studied another foreign language or should be recommended by a faculty member who teaches a foreign language. [3 credits]

ARAB 102 | Beginning Arabic II

This is the second semester of a two-semester sequence in the basic skills of understanding, speaking and, to a lesser extent, reading and writing a complex foreign language. Students should be highly motivated as they will need to engage in self-instruction outside of the regularly assigned class period. The course design follows the guidelines of the National Association of Self-Instructional Language Programs. This means that students work with native-speaker mentors who guide classroom interaction and model the language for students. Prerequisite: Students should have formally studied another foreign language, completed 101 or can be recommended by a faculty member who teaches a foreign language. [3 credits]

ARTS 124 | History of Art I

A survey of the visual arts from the Prehistoric to late Gothic period. Lecture and slide presentation. [3 credits]

ARTS 125 | History of Art II

A survey of the visual arts from the late Gothic to 20th Century. Lecture and slide presentation. [3 credits]

ARTS 300 | History of American Art

This course is a survey of American Art to include: Pre-contact Native American Art, painting, sculpture, architecture, photography and decorative art from early Colonial through the late 20th Century. Students will master vocabulary and concepts, study historical periods and styles, as represented by specific art works. Students will develop observation and analytical skills necessary for comment, discussion and comparison/contrast of various art works and period influences. Prerequisites: ARTS124 or ARTS125, BT student or permission of instructor [3 credits]

ARTS 310 | Selected Topics in Art

This course will explore in depth a particular issue in art. Themes of the course will change each semester in which it is offered and will be announced prior to registration. [3 credits]

ARTS 324 | History of Graphic Design

This course focuses on visual communication, primarily graphic design, in the Western world from the late 19th century to the present. A brief summary of important historical precedents launches a chronological and topical

series of lectures on significant movements and individuals, and the economic, political, and technological developments that have influenced modern and contemporary print and online communication. [3 credits]

BIOL 101 | Introduction to Biology

This course is a survey of the fundamentals of biology starting with the molecules that make up life, leading to cells and multi-cellular organisms, and on to populations, ecosystems and human impact. Rather than a detailed exploration of each topic, the course will lead to an understanding of the unifying principals common to all biological species - such as structure and function, homeostasis, metabolism and reproduction - while highlighting the diversity of organisms that make up the web of life. Articles chosen from current events will highlight the application of fundamental concepts to specific topics in health and disease, society and/or the environment. Co- or pre-requisite: BIOL 101X. [2 credits]

BIOL 101X | Intro to Biology Lab

This lab will emphasize the scientific method of hands-on exercises on both ends of the scale, both molecular techniques and assessing ecological communities. Co-requisite with BIOL 101 lecture. [1 credits]

BIOL 103 | Human Biology

Human Biology is an introductory course designed for students with little or no background in biology. Its aim is to teach the fundamental functioning of the human body, examining the organ systems, their physiology, and several aspects of disease on normal system operation. Basic cell architecture and function and biochemistry are taught within the framework of the human body. [2 credits]

BIOL 104 | Prin Animal Anatomy/Physiology

This course is a study of basic animal anatomy and physiology. The orientation of all activities and discussions is to investigate how animal physiology is affected by the various environments found on the farm. Laboratory involves working on livestock and in their environments. Lecture includes a study of the following: the integument and the nervous, circulatory, respiratory, renal, endocrine, reproductive and immune systems. [3 credits]

BIOL 105 | Principles of Genetics

A college-level study of the principles of animal genetics. Topics include Mendelian (transmission) genetics, DNA/RNA structure, protein synthesis, DNA sequencing, determination of sex, gene action, epistasis, multiple alleles, linkage, basic probability, hypothesis testing, population genetics and quantitative (polygenic) traits. [2 credits]

BIOL 105X | Principles of Genetics Lab

1 credit laboratory course designed to compliment BIOL 105. Focus will be on solving written problems designed to illustrate the principles covered in BIOL 105. [1 credits]

BIOL 106 Environmental Science for Educators

Environmental Science for Educators examines the basic principles of upstate New York's natural history, including animals, plants, geology, habitat types and astronomy. The natural history of the area will be presented through lectures, laboratory studies, and field visits. The "how-to" of running student field study trips, from the schoolyard to the state park, will be discussed. A survey of common environmental activity guides will enable students to use these and other guides when developing programs or curricula for children. Students will be required to build an environmental education lesson and present it to the class. Fulfills the Liberal Arts and Sciences laboratory science requirement. Co-requisite: BIOL 106X [Fall, Spring] [2 credits]

BIOL 106X Environmental Science for Educators

The lab component of BIOL 106- Environmental Science for Educators. Co-requisite: BIOL 106 [Fall, Spring] [1 credits]

BIOL 110 Special Topics in Biotechnology

This course will provide a general introduction into the field of biotechnology while discussing new and novel applications. Students will learn the basic principles about DNA, genomics and gene expression which are fundamental to biological life functions, and will also examine issues and ethics concerning the future of biotechnology and our society. The course will give students a panoramic survey of the current applications of biotechnology and career opportunities in this rapidly growing field. [3 credits]

BIOL 111 | Biology I

The first semester of a two-semester university-level biology course covering fundamental principles common to living systems at the molecular, cellular, and organismal levels with a taxonomic survey of the major groups of living organisms. Topics covered include basic biochemistry, cell structure and function, reproduction, biodiversity, evolutionary theory, and the interrelationships between living things (especially humans) and their environment (green course designation) with emphasis on current biological problems. This course is designed for prospective biology majors and other science majors who have had Regents-level high school biology or its equivalent. Requires appropriate laboratory course. Co-or prerequisite: BIOL111X [3 credits]

BIOL 111X | Biology I Lab

BIOL111X is a one-credit laboratory designed to accompany lecture topics covered in BIOL111, Biology I lecture. Students should be currently enrolled in or have previously completed BIOL111 lecture. Laboratory runs for one three-hour block each week giving students "hands-on" experiences in dissection, microscopy, and the set-up of controlled experiments including data collection, analysis, and interpretation. Creating and keeping a sustainable and healthy environment are emphasized throughout the semester (green course designation). Specific emphasis will be placed on biodiversity and how it relates to a healthy environment by studying selective taxonomic groups of organisms. Co- or prerequisite: BIOL111 [1 credits]

BIOL 112 | Biology II

A continuation of BIOL111. Topics include: cell energetics, the biology of plants (selected topics), animal form, function and regulation, genetics, development, and evolution and ecology. Prerequisite: BIOL111. Co- or prerequisite: BIOL112X [3 credits]

BIOL 112X | Biology II Lab

BIOL112X is a one-credit laboratory designed to accompany lecture topics covered in BIOL112, Biology II lecture. Students should be currently enrolled in or have previously completed BIOL112 lecture. Laboratory runs for one three-hour block each week and emphasizes the set-up of controlled, experiments including data collection, analysis, and interpretation. Creating and keeping a sustainable and healthy environment are emphasized throughout the semester (green course designation). Co- or prerequisite: BIOL112 [1 credits]

BIOL 116 | Botany I

A study of cell division in plants and tissues, and their structure and function in roots, stems, leaves and flowers. Photosynthesis, respiration, mineral use, food distribution, inheritance and variation, meiosis, taxonomy and evolution are also considered. [3 credits]

BIOL 117 | Botany II

A continuation of Botany I with emphasis on plant cell function, cell life, metabolism, respiration, food and mineral translocation, theories on the formation and use of amino acids, vitamins, carbohydrates and auxins, photosynthesis, environment, and plant deficiency diagnosis and correction. Recommended prerequisite: BIOL116 or BIOL111 [3 credits]

BIOL 131 | Natural History of Vertebrates

Identification, evolution, taxonomy and life history of local vertebrates. General ecological requirements, reproductive habits, distribution and habitat preference are emphasized for each of the vertebrate classes.

Laboratory and field experiences are included. (Students cannot take both BIOL131 and BIOL136.) Prerequisite: BIOL101 or BIOL111 [3 credits]

BIOL 136 | Vertebrate Biology

An in-depth study of the biology of the vertebrates covering characteristics, identification, taxonomy, distribution, adaptation, behavior, population dynamics, ecology and evolution. Special topics will cover biodiversity and current environmental problems, conservation, migration, orientation, dormancy, homing and navigation abilities. Prerequisites: BIOL101, BIOL104 or BIOL111 [2 credits]

BIOL 136X | Vertebrate Biology Lab

Appropriate lab and field experiences related to lecture material in BIOL136. Co- or prerequisite: BIOL136 [1 credits]

BIOL 158 | Human Anatomy & Physiology I

Human Anatomy and Physiology I and II is an introductory course sequence designed for students with an interest in physical education and health-related professions but is open to all students. The aim is to teach the fundamental structure and function of the human body, examine the normal operation of organ systems and the effect of disease on normal system operation. Basic cell architecture and function and biochemistry are taught within the framework of the human body. Prerequisite: High school biology [2 credits]

BIOL 158X | Human Anatomy/Physiology I Lab

BIOL158X is a one-credit laboratory course designed to accompany lecture topics covered in BIOL158. [1 credits]

BIOL 159 | Human Anatomy & Physiology II

Human Anatomy and Physiology I and II is an introductory course sequence designed for students with an interest in physical education and health-related professions but is open to all students. The aim is to teach the fundamental structure and function of the human body, examine the normal operation of organ systems and the effect of disease on normal system operation. Basic cell architecture and function and biochemistry are taught within the framework of the human body. Prerequisite: BIOL158 [2 credits]

BIOL 159X | Human Anatomy/Physiology II Lab

BIOL159X is a one-credit laboratory designed to accompany lecture topics covered in BIOL159. [1 credits]

BIOL 211 | Terrestrial Ecology

Terrestrial ecology examines the basic principles of ecology including trophic structure, energy cycling and biogeochemical cycles. A survey of terrestrial ecosystems of North America will be conducted with an emphasis on northeastern environments. Interactions between abiotic and biotic elements of ecosystems will be discussed in depth. Labs involve sampling of the flora, fauna and abiotic features of local terrestrial habitats. Students will gain Project Wild certification. Prerequisites: BIOL111 or BIOL116 [3 credits]

BIOL 215 | Aquatic Ecology

Lectures and field surveys will examine the physical, chemical, and biological components, interrelationships and sampling techniques characteristic of the major north temperate aquatic and marine environments. An applied ecosystem approach will be utilized in the study of the ecology of streams, rivers, reservoirs, lakes, ponds, swamps, marshes, estuaries, as well as intertidal shores, tidal ponds and marshes, hard and soft benthos, and coastal and offshore environments. Field instructional experiences, some on weekends, are a major part of this course. Field costs are shared by the students. Waders and life jackets are required. [3 credits]

BIOL 219 | Microbiology

The study of bacteria, yeasts, molds and viruses which considers their morphology, physiology, molecular biology, relation to normal symbiosis or pathogenesis, and their influence on human progress. Prerequisite: BIOL111 [3 credits]

BIOL 219X | Microbiology Lab

A series of extensive laboratories giving students practical skills necessary to isolate, characterize and identify microorganisms important in both normal symbiosis and disease, in food and water quality control, and in the applications of microorganisms in modern biotechnology. Co- requisite: BIOL219 [1 credits]

BIOL 251 | Microscopic Anatomy

This course provides a comprehensive study of the microscopic anatomy (histology) of mammalian cells, tissues and organs, particularly in the human. Lectures and discussions are oriented toward understanding the correlation between the organization of the cells comprising the basic tissue types and organs and their respective functions.

Prerequisite: BIOL111 and CHEM 111. BIOL 112 and CHEM 112 strongly recommended; a final grade of "C" or better or permission by the Histotechnology Committee is required for students who expect to take BIOL 268. [2 credits]

BIOL 251X | Microscopic Anatomy Lab

The laboratory sessions are designed to familiarize the student with the identification of cells, tissues and organs under the microscope. Each student will have a complete set of slides and a microscope for the semester. Most slides will be stained with the routine hematoxylin and eosin staining, though some will have special stains to demonstrate specific structures. Sample slides will be shown and discussed with the aid of a videomicroscope. In addition, high quality demonstration slides will be available as supplemental slides for study and review. Co- prerequisite: BIOL251; a grade of "C" or better or permission of the Department of Natural Sciences is required for students who expect to take BIOL268. [2 credits]

BIOL 258 | Anatomy & Physiology I

This is the first semester of two Anatomy and Physiology lecture courses covering the structure and function of the human body. Topics include the basic chemistry of life processes, a discussion of the four classes of macromolecules in the body, the muscular and skeletal systems, and the organization and integrative functions of the nervous and endocrine systems. Prerequisites: BIOL111 and CHEM111 or permission of the instructor. BIOL 112 and CHEM 112 strongly recommended. Co-requisite: BIOL 258x [3 credits]

BIOL 258X | Anatomy and Physiology I Lab

The laboratories are designed to teach the students proper dissection techniques as well as to help develop the skills to design, record, analyze and interpret data from experiments. Physiology labs will familiarize the student with standard curves, dilutions and clinical methods to detect and measure the levels of normal serum constituents such as glucose and cholesterol. Dissections will include the muscles of the cat, a bovine eye and a sheep brain. Bone identification will be based on the skeletal bones of the cat available in individual boxes. Co-requisite: BIOL258 [1 credits]

BIOL 259 | Anatomy & Physiology II

This is the second semester of two Anatomy and Physiology lecture courses covering the structure and function of the human body. Topics include cardiovascular dynamics, respiration, digestion and absorption, the urinary system and its role in water and electrolyte and acid/base balance, metabolism and reproduction. Prerequisite: BIOL111 and CHEM111 or permission of instructor. BIOL258 and BIOL258X and BIOL 112, CHEM 112 strongly recommended. Co-requisite: BIOL 259X. [3 credits]

BIOL 259X | Anatomy and Physiology II Lab

The laboratories utilize a variety of techniques. The physiology experiments include assays using standard curves and ELISA methodologies, assessment of urinary and digestive functions and measurement of physiologic parameters such as pulse rate, EKG's and lung volumes. Dissections and/or prosections of the cat include identification of thoracic, abdominal and pelvic organs and the blood vascular system. Structure and function relationships will be emphasized. Prerequisites: BIOL111 and CHEM111 or permission of instructor. BIOL258 and BIOL258X strongly recommended. [1 credits]

BIOL 300 Principles of Parasitology

An introduction to the parasitic diseases of domestic and wild animals with emphasis on their biology and control. Prerequisites: Six credits of Biology having a laboratory emphasis. An additional three credits of Microbiology are strongly recommended. [Fall, Spring] [3 credits]

BIOL 305 | Ethics Science, Medicine & Tech

This course is an upper-level philosophy/science course focused on the elements of moral philosophy, especially as they apply to emerging ethical dilemmas in science, medicine, and technology. Emphasis will be on gaining

cognitive skills and applying reason to all decision-making processes, including the appropriate use of emerging science and technologies. Prerequisites: A college-level science or philosophy course or permission of the instructor. [3 credits]

BIOL 307 | Invertebrate Zoology

This course will examine the major invertebrate taxa of North America with emphasis on life history, phylogeny, morphology and ecology. Studies on invertebrate organisms with ecological and economic significance will be stressed. Field and laboratory instructional experiences, some on weekends, will provide first-hand experience collecting and observing common northeastern invertebrates. Field costs are shared by the students. Prerequisite: BIOL111 [3 credits]

BIOL 316 | Ornithology

This course covers anatomy, physiology, taxonomy, distribution, biogeography, ecology and conservation of birds in North America. Lectures provide an introductory review of the study of birds and ornithology as a science. Practical laboratory and field exercises include gross anatomy, preparation of study skins, field identification of birds by sight and sound, research methodology, and analysis and interpretation of field data. Binoculars are required. Prerequisites: BIOL131, BIOL211 or BIOL215 [3 credits]

BIOL 317 | Herpetology

This course covers anatomy, physiology, taxonomy, distribution, ecology, behavior and conservation of amphibians and reptiles of North America. Lectures provide an introductory review to the study of herpetology as a science. Practical laboratory and field exercises involve the identification of North American amphibians and reptiles, recognition of frog and toad calls, sampling populations and habitats of local species, and analysis and interpretation of field data. Prerequisites: BIOL131, BIOL211 or BIOL215 [3 credits]

BIOL 318 Fish Biology

Lectures and field surveys will examine the fisheries resources of the northeastern states with emphasis on the life history and special requirements of species making up the major commercial and recreational fisheries. Field and laboratory instructional experiences, some on weekends, will provide first-hand experience with the biology of northeastern freshwater and marine fish. Field costs are shared by the students. Waders and life jackets are required. Prerequisites: BIOL131, FWLD221 [Fall] [3 credits]

BIOL 320 Environmental Toxicology

This course should be of interest to science majors who desire a knowledge of toxics in the environment and the negative impact they can have on plants and animals. Lectures blend material with the instructor's extensive diagnosing environmental toxicant motilities in fish and wildlife, and investigating contamination of the wildlife food supplies. Chemicals are traced from their production, to loss in the environment, to movement into the food chain. Environmental contaminants discussed include metals, industrial compounds, and pesticides, as well as toxins produced by microbes, plants, and animals. The laboratory portion of the course, BIOL302X, may also be taken. Prerequisite: CHEM 111 and 6 credits of Biology including BIOL 111. [Spring] [3 credits]

BIOL 375 | Cell Biology

This course is a study of the structure, function, and the life history of cells and their components. We will especially examine the relationships among cell organelles and between cells and their environments. Prerequisite: BIOL111/BIOL112 or equivalent and CHEM111/112 or equivalent or permission of the instructor. [3 credits]

BIOL 400 | Evolutionary Biology

This course explores various mechanisms of biological evolution of plants and animals. Lecture reviews and class discussions serve as an introduction to concepts of evolutionary processes such as adaptation and speciation, genetics, natural selection, coevolution, extinction, sociality and biodiversity. Prerequisites: BIOL316, BIOL317 or BIOL318. Students not meeting prerequisites need permission of the instructor. [3 credits]

BIOL 410 | Molecular Genetics

This course is designed to give students the basic foundation of genetics from a molecular/genomics perspective. Emphasis is placed in DNA/genome structure and function as well as regulation of gene expression. Additional advanced topics include molecular methods in the laboratory, bioinformatics, and analysis of gene expression. Prerequisite: BIOL111/112 or equivalent and CHEM111/112 or equivalent or permission of the instructor. Microbiology or Cell Biology is recommended. [3 credits]

BIOL 415 | Marine Ecology

Lectures and field surveys will examine the physical, chemical and biological components, interrelationships, and sampling techniques characteristic of the major northeastern marine environments. An applied ecosystem approach will be utilized to study the ecology of estuaries, intertidal shores, tidal ponds, saltmarshes, hard and soft benthos, and coastal environments. Field instructional experiences, on weekends, are a mandatory part of this course. Field costs are shared by the students. Waders are required field gear. Prerequisite: BIOL215. [3 credits]

CHEM 101 | Introductory Chemistry

The course will introduce students to chemical principles as they relate to real-world applications in society and the environment. The following topics will be covered: units and measurement, classification and properties of matter, energy in chemical changes, bonding interactions in physical and chemical processes. Specialized topics include acids and bases, oxidation and reduction, organic chemistry, materials science, and environmental issues. A previous background in chemistry is not assumed. The course is useful for preparing students conceptually for CHEM 111 and satisfying a science elective for nonscience majors. [2 credits]

CHEM 101X | Introductory Chemistry Lab

The laboratory activities are designed to provide students with hands-on experience with general laboratory experimentation methods, while at the same time examining the practical application of chemistry in common, everyday substances. Students will learn basic lab safety, measurement and observation skills, data collection and analysis techniques. Co- or prerequisite: CHEM 101 [1 credits]

CHEM 110 Forensic Science

A comprehensive analysis of work in a crime laboratory, including theory and methods. Includes ballistics, examination of questioned documents, criminal analysis and instructional analysis. Laboratory topics will range from traditional fingerprinting and blood samples to leading edge topics like chromatography, DNA "fingerprinting" and toxicology. Recommended for the second semester or later. Prerequisite: High school biology or high school chemistry. Co-requisite: CHEM 110X [Fall] [2 credits]

CHEM 110X Forensic Science Lab

The lab component for CHEM 110 Forensic Science. Co-requisite: CHEM 110. [Fall] [1 credits]

CHEM 111 | General Chemistry I

The first semester of a two-semester university-level general chemistry course. This first part will focus on understanding the basic principles of chemistry. Why does matter behave as it does? Topics include: mathematics of chemistry, nomenclature, chemical reactions, stoichiometry, solutions, gases, thermochemistry, atomic structure, chemical bonding and molecular structure. Students will experience a mixture of lectures, demonstrations and group- learning activities. Prerequisite: "C" in high school chemistry or CHEM 101 and placement in MATH 111 or higher; and co-requisite or pre-requisite CHEM 111X [3 credits]

CHEM 111X | General Chemistry I Lab

Laboratory experiments designed to accompany the lecture topics presented in CHEM 111. Emphasis on observation, interpretation, measurement, safety, record keeping, data analysis and lab skills. It is highly recommended that this course be taken concurrent with CHEM 111. Co- or prerequisite: CHEM 111 [1 credits]

CHEM 112 | General Chemistry II

A continuation of CHEM 111. This course with focus on understanding the world around us by applying the principles studied in CHEM 111. Topics include: interpartical forces, states of matter, solutions, chemical equilibrium, acids and bases, electrochemistry, coordination compounds, organic chemistry, polymers, biochemical molecules and nuclear chemistry. Prerequisite: CHEM 111; and co-requisite or prerequisite CHEM 112X [3 credits]

CHEM 112X | General Chemistry II Lab

Laboratory experiments designed to accompany the lecture topics presented in CHEM 112. Emphasis on observation, interpretation, measurement, safety, record keeping, data analysis and lab skills. It is highly recommended that this course be taken concurrent with CHEM 112. Prerequisite: CHEM 111X; and co-requisite or prerequisite: CHEM 112 [1 credits]

CHEM 216 Water Chemistry

We'll look first at the physical and chemical properties of water and what forces account for its ability to dissolve other chemicals. Next we'll examine which natural chemical and biological substances and where these substances come from, how we can measure their concentrations, how they affect the quality of water and what that means to a sustainable environment. Prerequisites: CHEM111 or permission of instructor. Co-requisite: CHEM216X [Spring] [2 credits]

CHEM 216 Water Chemistry

Emphasizes the Standard Methods for determining water quality. Students individually select a body of water for study and each week test for a different water quality parameter. Tests include: alkalinity, pH, hardness, sodium, iron, chloride, phosphate, ammonia, nitrate, solids and coliform bacteria. Both wet-bench and instrumental methods are used in testing for natural and manmade pollutants. Results are summarized in an end-of-semester term report. The lab is writing intensive and will emphasize keeping a scientific notebook. Prerequisite: CHEM 111X or permission of instructor; and co-requisite: CHEM 216 [Spring] [1 credits]

CHEM 231 | Organic Chemistry I

Introduction to structure, synthesis and reactivity of alkanes, alkenes, alkynes, alcohols and ethers stressing the underlying principles of theory, mechanism, stereochemistry and spectroscopy. Recommended for pre-medical and veterinary students and science majors. Prerequisite: CHEM111/CHEM111X and CHEM 112/CHEM 112 X. Co-requisite CHEM231X. [3 credits]

CHEM 231X | Organic Chemistry I Lab

Use of micro and mini scale techniques to synthesize and characterize organic compounds using evaporation, extraction, recrystallization, reflux and chromatography. Applications of infrared spectroscopy, gas chromatography, melting and boiling point analysis, refractive index, and optical rotation are used to identify hydrocarbons. Co-req. or Prerequisite: CHEM 231 [2 credits]

CHEM 232 | Organic Chemistry II

Continued treatment of topics from Organic Chemistry I, including conjugation, aromaticity and reactivity of other principal organic compounds including aldehydes, ketones, amines, carboxylic acids and their derivatives. Introduction to carbohydrates, proteins, lipids and nucleic acids. Prerequisite: CHEM 231 and CHEM 231X; and co-requisite or prerequisite: CHEM 231X and CHEM 232X [3 credits]

CHEM 232X | Organic Chemistry II Lab

Continued study of the methods, techniques, syntheses and instrumentation of representative classes of organic compounds. Prerequisite: CHEM 231 and CHEM 231X; and co-requisite or prerequisite: CHEM 232 [2 credits]

CHEM 244 Instrumental Analysis

This course introduces students to modern analytical instruments and the application of chemical instrumentation to real-world problems, in particular those pertaining to the environment. How do they work, how do you use them, what do they tell you, how should they be maintained?

Instrumentation studied includes: visible, ultraviolet, infrared, atomic absorption, fluorescence, and nuclear magnetic resonance spectroscopy; gas and liquid chromatography. Prerequisite: CHEM 111 and CHEM 111X. Co-requisite: CHEM 244X [Spring] [2 credits]

CHEM 244X Instrumental Analysis Lab

Extensive hands-on experience with the instruments discussed in CHEM 244 lecture. Emphasis is on instrument operation skills, troubleshooting, record keeping and data analysis. The experiments involve environmental, industrial and consumer samples. Co-requisite or prerequisite: CHEM 244. [Spring] [2 credits]

CHEM 351 | Biochemistry

The structure, function and synthesis of proteins, nucleic acids, carbohydrates and lipids, enzyme kinetics, bioenergetics and introduction to metabolism. Prerequisite: CHEM111 and CHEM231 or permission of the instructor. 3 class hours [3 credits]

CHIN 101 | Beginning Chinese

This is the first semester of a two-semester sequence in the basic skills of understanding, speaking and, to a lesser extent, reading and writing a complex foreign language. Students should be highly motivated as they will need to engage in self-instruction outside of the regularly assigned class period. The course design follows the guidelines of the National Association of Self-Instructional Language Programs. This means that students work with native-speaker mentors who guide classroom interaction and model the language for students. Prerequisite: Students should have already formally studied another foreign language or should be recommended by a faculty member who teaches a foreign language. [3 credits]

CHIN 102 | Beginning Chinese II

This is the second semester of a two-semester sequence in the basic skills of understanding, speaking and, to a lesser extent, reading and writing a complex foreign language. Students should be highly motivated as they will need to engage in self-instruction outside of the regularly assigned class period. The course design follows the guidelines of the National Association of Self-Instructional Language Programs. This means that students work with native-speaker mentors who guide classroom interaction and model the language for students. Prerequisite: Students should have already formally studied another foreign language, completed CHIN101 or can be recommended by a faculty member who teaches a foreign language. [3 credits]

COMM 108 | Intro to Mass Media: Comm Info Age

A history of mass media, and an overview of the effects of mass media on popular culture. The course covers radio, television, books, magazines, public relations, advertising and the Internet. [3 credits]

COMM 120 | Interpersonal Communications

This is a course in the study of human communication on the level of one-to-one, face-to-face interaction as well as small group communication. Among the topics studied are non-verbal communication, listening, the role of perception, feedback, confirming and disconfirming behavior and cross-cultural issues in communication. Through class discussion, activities, and reflective writing, this course seeks not only to inform the student of communication theory, but to make the student a more effective communicator. Students are also expected to complete a research project as part of their study. [3 credits]

COMM 220 | Intercultural Communication

The focus of this course is on the dynamic nature of culture and how culturally relative strategies of communication affect the formulation and comprehension of messages between different individuals and groups. It is designed to cultivate student awareness of how diverse cultures construct views of the role and nature of language, of the social world, and of "reality" itself, and how these differences influence human interaction in an increasingly global environment. Prerequisite: ENGL101 or permission of instructor. [3 credits]

COMM 301 | Technical Communication

Technical communication concentrates on writing for professional situations, as well as upper-level research. It covers research, analysis and presentation of data, form and content of formal and informal reports, letters and resumes. Group work is required, as are presentations. Prerequisites: ENGL101 or ENGL201 This course is intended primarily for bachelor degree students. [3 credits]

COMM 302 | The Dynamics of Narrative

This course is designed to familiarize the student with models of cultural and linguistic systems of signification and their application in media writing. The theoretical component involves study of sign theory and semiology, with special focus on dynamics of narrativity, to include concepts of intertextuality, modalities of action, and the rhetorical function of liminality, schema of transformation, and generating and sustaining tension through semantic opposition. These concepts will be applied in both analytical exercises and a story adaptation. [3 credits]

COMM 315 | Contemporary Issues Mass Media

This is a media literacy course that examines mass media's relationship with society in intellectual, economic, political, and social contexts. It requires research projects, presentations, classroom discussion and extensive readings and observations of mass media outlets. It is for upper-level communications majors and students in all bachelors programs. Of particular interest will be the corporate culture of media, particularly media consolidation, as well as government regulation. Burgeoning internet media will also be a focus, including news blogging and the controversy over Network Neutrality. We will also examine media bias, the relationship between a healthy press and democracy, and other controversies and legislation (Telcom Act of 1996, Fairness Doctrine, etc). In addition, the course will explore key issues regarding print, radio, TV, and film. Prerequisite: ENGL101 or higher [3 credits]

COMM 420 | Visual Media

This course is intended to provide Visual Media students with theoretical and practical understanding of the image as culturally located message medium through study and application of semiological and aesthetic models and principles to still and moving images, to include artistic and advertising design. Students will perform both critical deconstruction of images from a variety of genres using core concepts, as well as compose a visual term project for class presentation that includes a written explanation of their design strategy applying models covered in class. [3 credits]

ECHD 252 | Conflict Resol: Create Peace Env

Conflict exists in society, classrooms, families and ourselves. In this course, students will engage in creative exercises and activities that foster cooperation, personal self-expression, communication, affirmation, mediation and conflict resolution. Students will learn how to prevent conflict and how to use conflict productively for learning. [3 credits]

ECON 123 | Micro-Economics

A study of the composition of the market structure, price and distribution theory, and an analysis of the factors of production and international trade. [3 credits]

ECON 124 | Macro-Economics

An introduction to the operation of the modern national economy including: analysis of national output, income employment, business fluctuations, money and banking. [3 credits]

ENGL 101 Composition I

In this composition course, students will write personal essays developing a point or an idea with evidence drawn from their own lives and academic essays organized around an intellectual task, such as arguing in favor of an idea, comparing, defining or analyzing. A student must demonstrate competency in (1) organizing and paragraphing, (2)

clarity of main point, (3) appropriateness, logic and specificity of development, (4) maturity of content, and (5) sentence structure, grammar, spelling, and punctuation. This course will include an introductory research component. [3 credits]

ENGL 102 | Composition II

This composition course will begin with a review of academic essay writing as presented in ENGL 101 and proceed to intensive work on writing research essays and term papers. A student must demonstrate competency in items 1-5 in the course description of ENGL 102 and in (6) locating, evaluating, using and documenting source material (7) command of various modes of rhetorical development and (8) ability to revise one's writing at the thesis level and beyond. Prerequisite: ENGL 101 or admission to the Honors program. This course is designed primarily for students transferring to four-year institutions which require two semesters of composition. [3 credits]

ENGL 104 | Oral Interpretation

Development of the ability to discover and to communicate orally an author's ideas, mood and feeling through an analysis of readings in literature. [3 credits]

ENGL 111 | Fund of Speech Communications

An introductory course presenting and developing principles and skills common and basic to all forms of the art of oral expression. It seeks, through class experience in discussion and public address, as well as through lecture, to provide the student with a working knowledge of communication theory. [3 credits]

ENGL 121 | Introduction to Literature

This course introduces the student to literature through readings in the various genres and across a broad spectrum of styles and eras. Additionally, through writing critical/ analytical essays, the student learns the terms associated with literary analysis and gains additional experience in writing in support of a thesis. [3 credits]

ENGL 151 | Introduction to Drama

A course designed to develop in the student an appreciation of drama as a form of literature and as a function of theater. It seeks to develop in each student a set of critical standards applicable to dramatic literature and its manifestation in the related forms of television and film. Evaluation will be based upon such factors as class participation, tests including essay questions and written assignments. [3 credits]

ENGL 201 | Expository Writing

A course in composition concerned with the principles of rhetoric necessary for effective prose. The emphasis will be upon the methods of exposition, particularly argument, and the development of a style of writing which is unified, coherent and expressive. Prerequisite: ENGL 101, "C+" or above. [3 credits]

ENGL 210 | Latin Am Novel in English Tran

This course will explore in depth a particular literary issue, period or genre. Themes of the course will change each semester in which it is offered and will be announced prior to registration. [3 credits]

ENGL 215 | Readings in Women's Literature

Intended to make the artistic work of women more accessible to the student. Works by culturally diverse authors will be considered through the perspectives of literary and feminist theory, psycho-social dynamics, and writing and language as personal discovery and expression. Particular attention will be paid to themes, characterization, metaphor, atmosphere and use of language. The impact of women on other mediums such as film, the visual arts and music also will be discussed. Prerequisite: ENGL101 [3 credits]

ENGL 219 | British Lit a Perspective

Students are steered through a lively series of writings- ranging from the Anglo-Saxons to Samuel Beckett-and provided with a clear line of British literary development. Evaluation will be based upon such factors as class participation, tests including essay questions and written assignments. [3 credits]

ENGL 221 | Readings in Literature

An examination and critical analysis of selected readings which reflect significant intellectual attitudes as they appear in the drama, the novel and in poetic forms. Evaluation will be based upon such factors as class participation, tests including essay questions, and written assignments. [3 credits]

ENGL 223 | Readings American Literature

Specific genres, time periods or themes in American literature are treated by each instructor with emphasis on developing the student's skills in reading and interpretation. Evaluation will be based upon such factors as class participation, tests including essay questions, and written assignments. [3 credits]

ENGL 241 | Short Story

Reading and discussion of representative examples of the short story form, with emphasis on response, interpretation and appreciation. Evaluation will be based upon such factors as class participation, tests including essay questions, and written assignments. [3 credits]

ENGL 250 | Fiction Writing

Intended for those who like to write and who have some prior exposure to fiction, either as readers or writers. Focus is on writing short fiction and class serves as writers' workshop, evaluations given both by classmates and instructor. Course emphasizes the individual progress of each writer and the development of a community of writers. Prerequisite: ENGL 241 or by instructor's permission [3 credits]

ENGL 304 | Writing in the Disciplines

This course in advanced composition considers the concept of discourse in the various disciplines. Through a carefully developed portfolio of significant texts in their discipline as well as their own work, students will explore the discourse of their major discipline; enhance their ability to think and write critically about contemporary issues; and develop advanced skills in research, analysis, and synthesis of information. Prerequisite: ENGL 101 and 102, or ENGL 101 and any Literature class; or ENGL 101 and permission of instructor (all English courses used to satisfy prerequisite requirements must have been passed with a "C+" or better) [3 credits]

ENGL 316 | Rdngs in Native American Lit

This course is a study of the literature of the indigenous peoples of North America and considers the following: prevalent themes, language use, the effect of contact with European culture, and the cultural values and experiences expressed in the work. Class methodology will include readings, lecture, discussion, tests and written exploration and critique of the literature. Prerequisites: ENGL101 and one lower-level literature or writing course, or permission of the instructor. Either NAMS111 or NAMS121 highly recommended. [3 credits]

ENGL 320 | Write:Human Express&Ntrl Wrld

This course is designed to introduce the student to the genre of Nature Writing. Against the backdrop of a variety of readings in the genre, consideration of other art forms, as well as theoretical writings on the relationship of humankind to the environment, students will explore their own relationship with the natural world through writing spontaneous, observational and theoretical pieces as well as developing a project in their artistic medium. Prerequisite: ENGL 101 or other introductory writing course except ENGL 099 [3 credits]

ESOL 130 | ENGL Speakers Other Languages

Each (beginning, intermediate, advanced) level of this course consists of one month of intensive study in English as a foreign language. Students are taught listening, speaking, reading and writing skills through content-based, context-sensitive materials, including computers. Classroom study with trained ESL instructors takes place five mornings per week for three hours at each session. Afternoon sessions provide English language reinforcement in

U. S. cultural situations. Placement is determined by a writing sample on the first day of class if no TOEFL scores are provided. Students who have taken the TOEFL exam and have received a score of 500 or better are enrolled in the advanced level. [3 credits]

FREN 101 | Beginning French I

This is the first semester of a two-semester sequence in the basic skills of understanding, speaking, reading and writing the French language. [3 credits]

FREN 102 | Beginning French II

This is the second semester of a two-semester sequence in the basic skills of understanding, speaking, reading and writing the French language. Prerequisite: FREN101 or three years of high school French and a 75 or higher on the NYS Regents [3 credits]

FREN 201 | Continuing French I

This is the first semester of a two-semester sequence in intermediate-level French. Following a thorough review of basic grammar, this course will focus upon development of fluency in reading, writing, understanding and speaking the French language. Prerequisite: permission of the instructor, high school French and a 75 or higher on the Regents [3 credits]

FREN 202 | Continuing French II

A sequel to FREN 201, this is the second semester of a two- semester sequence in intermediate-level French. Prerequisites: FREN 201 or permission of the instructor. the instructor [3 credits]

FWLD 352 | Wetland Ecosystems

A comparative review of the physical and biological characteristics of major wetland ecosystems across North America. The functional role of wetlands systems and associated wildlife will be emphasized. Prerequisite: FWLD 350 [1 credits]

GOVT 141 | American Government

A survey of the federal government, its institutions and operation, and the political processes related thereto. [3 credits]

GOVT 143 | Comparative Politics

This course examines the political process in a variety of European, Asian and Latin American countries. In an introductory fashion, study of historical political development, social forces and cultural pressures is pursued so as to acquaint students with the world's governments. Course includes field trip to United Nations - cost \$30 Prerequisite: GOVT 141 or permission of instructor [3 credits]

GOVT 242 | State & Local Politics

An examination of the types of state and local governments, with a special focus on rural politics and New York State politics. Special attention is paid to public influence on state and local government, and the modern pressures on these governments. Prerequisites: GOVT 141 [3 credits]

GOVT 312 | The American Legal System

This course presents an overview of American law. Students will read cases that will be discussed in class. The course is designed to provide students with a basic understanding of important legal topics, including: family law, the law of contracts, basic tort law, basic property law, criminal law, administrative law, and various other legal topics. Prerequisites: GOVT141 - American Government, or permission of the instructor. [3 credits]

GOVT 322 | American Constitutional Law

This course presents an overview of U.S. constitutional law. Topics include the nature and scope of due process law, the Bill of Rights, judicial review, separation of powers, the nature of executive and congressional power, federalism and the Interstate Commerce Clause, the right to privacy and equal protection of law. Issues to be considered will include the right to an abortion, freedom of religion, freedom of the press, affirmative action, gay marriage and the power of the government to restrict individuals' private property rights. Prerequisite: GOVT141 - American Government, or permission of the instructor. [3 credits]

GOVT 345 | International Relations

This course introduces the historical development of modern nation-state relations, as well as some basic theories covering the interactions of the modern nation-state. The bulk of the course covers the major contemporary issue areas of international relations, e.g., international economics, global environmental crisis and the U.S. in the post-Cold War world. As part of this course, students are required to participate in a field trip to the United Nations, with a cost of \$30 Prerequisite: GOVT141, HIST102 or GOVT143 or permission of instructor [3 credits]

HIST 101 | Hist Western Civilization I

This course surveys the origins and development of social, economic, political, and technological processes which have culminated in historic Western Civilization. Lecture topics include the rise of states in the ancient Near East, the legacy of Greek and Roman civilization, post-Roman European culture, the Middle Ages and the Renaissance. Emphasis is placed upon such topics as agricultural production, social organization, the evolution of law and government, commercial activity, varied religious and philosophical orientations, urban growth, and cultural achievements. [3 credits]

HIST 102 | Hist Western Civilization II

This course is a continuation of HIST101. Topics include the Reformation, Age of Exploration, Traditional European monarchies, absolutism, constitutionalism, the Agricultural and Scientific Revolutions, the Enlightenment, the French Revolution, Industrialization, the political and social upheavals of the nineteenth century, colonialism, imperialism, nationalism, and nineteenth century state building, and the political, economic and social crises of the twentieth century. HIST101 is not a prerequisite for HIST102. [3 credits]

HIST 103 | History World Civilization I

Beginning with an introduction to the nature and study of history, this course is concerned with the emergence and development of world civilizations to about 1500 A.D. in the Near East, India, China, Europe, Africa and the Americas. Special attention will focus on the development of political, economic and religious systems. [3 credits]

HIST 104 | History World Civilization II

This course is concerned with civilizations and their influences on each other. Emphasis will be on forces that have shaped the contemporary world-industrialization, urbanization, nationalism, militarism, imperialism, liberalism, communism and revolution. [3 credits]

HIST 121 | History of United States I

An investigation of the political, economic and social development of the United States. The course begins with contact of Europeans, Africans and Native Americans and ends with Reconstruction. [3 credits]

HIST 122 | History of United States II

An investigation of the political, economic and social development of the United States. The course begins with Reconstruction and moves to the 1990s. [3 credits]

HIST 205 | Latin America Soc/Civilization

This is a specialized introductory course which examines the political, economic and cultural evolution of Latin America from pre-Columbian times to present day efforts at promoting regional economic integration.

Prerequisite: HIST102 or HIST104 or HIST121 or HIST122 or SOSC111. [3 credits]

HIST 310 | Triumph/Tragedy History of 60s

This course is an examination of the extraordinary changes in politics, technology, society, and culture that overwhelmed the United States in the period from 1960 until 1975. In the course, material will focus on political events (the Kennedy, Johnson, Nixon Presidencies), the Vietnam War and the resultant social forces unleashed in the US, the Civil Rights Movement, the tragic events exemplified by the assassinations of the Kennedy's and King, changes in music and movies, the rise of the environmental and women's rights movements. The course will be presented in a multi-media setting, utilizing lectures, discussions, video and music. Prerequisite: HIST122. [3 credits]

HUMS 101 | Intro to the Humanities

A introductory course in the development of knowledge and understanding of music, theater, dance, film, painting, architecture, sculpture, geography, religions and history in Western Civilization and their interrelationship with world cultures. The means used will be lecture, live experiences and media. Understanding developed through work in the humanities may, it is hoped, change lives as well as ideas. [3 credits]

HUMS 210 | Cinema and Society

This course introduces the student to cinema as an art form that both reflects and affects society, starting with an introduction to the various elements of film-making and working through both individual and societal responses to filmic representations. Students are encouraged to go beyond the "entertainment only" approach to film and consider how film constructs the self, contributes to or contradicts society's metanarratives, and serves as a powerful force of representation in our culture. Students will be guided in thinking critically about film and expressing their thoughts in well-developed essays. Pre-requisite: ENGL 101 or ENGL 102 [3 credits]

HUMS 243 | Children's Literature

The course is designed to introduce students to the history, development and current trends in children's literature. Students will read and analyze a wide variety of genre with a world view perspective, be able to critically evaluate, select, and develop strategies for response to quality children's literature. Criteria for book awards, author studies, and research of the impact of children's literature on society and education will be explored. [3 credits]

HUMS 309 | Documentary Theory & Aesthetic

This course is a theoretical consideration of documentary filmmaking, covering the subgenres, conventions, evolution, social impact, and contemporary issues of the genre. Students will watch and critique films that represent a variety of approaches to the genre. Prerequisite: Hums 210 or permissions of instructor. [3 credits]

HUMS 315 | Middle East Culture

The Middle East Culture course is a four-week (summer) overview of language and culture in the Middle East (particularly Egypt). It provides an interdisciplinary approach that allows students to gain deeper insights and a greater understanding of the Middle East region. The course is designed for students studying abroad at SUNY Cobleskill's partner institution in Egypt. Pre-requisites: Completion of sophomore year or permission of the Director of International Programs; 2.5 GPA. Application is due by March 15 (per study abroad on Cobleskill website). [3 credits]

JAPN 101 | Beginning Japanese

This is the first semester of a two-semester sequence in the basic skills of understanding, speaking and, to a lesser extent, reading and writing a complex foreign language. Students should be highly motivated as they will need to engage in self-instruction outside of the regularly assigned class period. The course design follows the guidelines of the National Association of Self-Instructional Language Programs. This means that students work with native-

speaker mentors who guide classroom interaction and model the language for students. Prerequisite: Students should have already formally studied another foreign language or should be recommended by a faculty member who teaches a foreign language. [3 credits]

JAPN 102 | Beginning Japanese II

This is the second semester of a two-semester sequence in the basic skills of understanding, speaking and, to a lesser extent, reading and writing a complex foreign language. Students should be highly motivated as they will need to engage in self-instruction outside of the regularly assigned class period. The course design follows the guidelines of the National Association of Self-Instructional Language Programs. This means that students work with native-speaker mentors who guide classroom interaction and model the language for students. Prerequisite: Students should have already formally studied another foreign language, completed 101 or can be recommended by a faculty member who teaches a foreign language. [3 credits]

JOUR 202 | Journalism Newswriting/Report

The techniques of reporting and newswriting will be practiced in light of major trends in reporting styles and the ethical problems a contemporary journalist encounters. Prerequisite: Student must have achieved at least a grade of "B" in either ENGL 101 or ENGL 201 [3 credits]

JOUR 302 | Feature Writing

This course is geared to advanced student writers who already have a foundation in writing basics from beginning writing and reporting classes. The course will focus on the techniques for finding ideas, researching and conducting interviews for feature articles. The feature article will be treated as a specific genre with its own conventions. Emphasis is placed on development of a writing style that incorporates elements commonly found in newspaper and magazine feature stories, in their construction and expression. Prerequisite: ENGL 201 or permission of instructor [3 credits]

JOUR 402 | The News Media Landscape

This course will examine news media's relationship with society in historical, intellectual, economic, political, and social contexts. The course requires research projects, presentations and extensive analysis of news outlets (print, TV, online, radio) and is an upper-level major field requirement for Communications majors. Students in all bachelors programs may take it for upper-level elective credit. The endgame is to make students more aware and critical consumers of news media. Students will be responsible for three research papers of at least 10 pages (Chicago Manual of Style formatting), as well as extemporaneous in-class writing via essay exams (i.e., open-ended questions answered in paragraph form in a "blue book"). Students should emerge from the class with an expansive overview of issues that "news" is facing in a high-speed world of "new" media. Critical thinking/analysis, research, and conceptualization through writing are major focuses. [3 credits]

MATH 106 | Contemporary Math Topics

A survey course designed for students entering fields of study which do not have a strong emphasis on mathematical techniques beyond the introductory algebra level. Students will gain an appreciation for the power and utility of mathematics in solving everyday problems. Topics may include introductory statistics and probability, consumer mathematics, social choice, problem-solving, geometry of size and shape. Additional topics may be added or substituted by the instructor. Not open to students with four units of high school mathematics. Prerequisite: placement per high school transcript, MATH101 or MATH101X, or permission of the Mathematics Department. [3 credits]

MATH 111 | College Algebra

A course in Algebra for college students with a strong emphasis on problem-solving and applications. Topics include: introduction to functions and their graphs; linear and quadratic functions; solution of a variety of types of equations and inequalities using algebraic, numeric and graphical techniques; systems of equations, operations

with polynomials; rational, radical, exponential and logarithmic expressions; and exponential functions. Use of a graphing calculator may be an integral part of the course. Prerequisite: placement per high school transcript, completion of MATH101 or MATH101X with "C-" or higher, or by permission of the Mathematics Department. [3 credits]

MATH 112 | College Algebra & Trigonometry

A study of functions and their properties and applications from algebra and trigonometry. Topics include linear, quadratic, polynomial, rational, exponential, logarithmic, and trigonometric functions. Use of a graphing calculator may be an integral part of the course. Prerequisite: Placement per high school transcript - three units of high school math including at least some work in Course III, Math B, Algebra II, or their equivalent is recommended, MATH111, or by permission of the Mathematics Department. [3 credits]

MATH 125 | Statistics

A basic course in general statistics with applications in the fields of business and the natural, behavioral and social sciences. Elementary probability theory and descriptive statistics are introduced, but the emphasis is on inferential statistics including significance tests, confidence intervals, and linear regression and correlation. Prerequisite: placement per high school transcript, MATH111 or above, or by permission of the Mathematics Department. [3 credits]

MATH 131 | Pre-Calculus

A course designed to provide the necessary foundation for a standard calculus course. The focus of precalculus is the concept of a function with special emphasis on graphing functions. Topics include types of functions, graphing techniques, properties and graphs of polynomials and rational functions, exponential and logarithmic functions, and trigonometric functions. A graphing calculator may be required. Not recommended for students with four units of high school mathematics. Not open to students with credit for Calculus I except by permission of the Mathematics Department. Prerequisite: Three units of high school mathematics including NYS Course III or NYS Math B, or MATH112, or by permission of the Mathematics Department. [4 credits]

MATH 225 | Statistical Methods

A review of basic statistical concepts, probability concepts, discrete and continuous distributions, sampling techniques and sampling distributions, point estimation, interval estimation, testing statistical hypotheses, analysis of variance, basic design of experiments, simple and multiple regression, analysis of covariance, nonparametric techniques, analysis for categorical data. Prerequisite: MATH125 or its equivalent with a minimum grade of "C." [3 credits]

MATH 229 | Linear Algebra

Geometrical vectors, matrices and linear equations, determinants, vector spaces and linear transformations. Prerequisite: MATH 231 or higher, or by permissions of Mathematics Department. [3 credits]

MATH 231 | Calculus I

A course in plane analytic geometry, functions, limits, continuity, differentiation and antidifferentiation of algebraic, trigonometric and exponential functions of a single variable with applications. An introduction to definite integrals is included. A graphing calculator as well as a computer algebra system (MAPLE) may be used. Prerequisite: Four units of high school regents mathematics including precalculus, MATH131 ("C" or better), or by permission of the Mathematics Department. [4 credits]

MATH 232 | Calculus II

A continuation of MATH231. Topics include the definite integral, applications of integration, advanced integration techniques numerical approximations of definite integrals, indeterminate forms, improper integrals and infinite series. Prerequisite: MATH231 [4 credits]

MATH 233 | Calculus III

A multivariable calculus course including the following topics: power series, parametric equations and polar coordinates, vectors and vector functions, three-dimensional coordinate system, partial differentiation, double and triple integrals, applications, line integrals. Prerequisite: MATH232 [4 credits]

MATH 285 | Discrete Mathematics

Introduction to logic, principles of set theory, induction and recursion, techniques of mathematical proofs, combinatorics, introduction to graph theory. Prerequisite: MATH231 or by permission of the instructor. [3 credits]

MATH 310 | Differential Equations

Solution of various types of ordinary and partial differential equations including first order equations, second order equations of the first degree, and miscellaneous differential equations of higher order. Geometric and physical science applications. Prerequisite: MATH232. [4 credits]

MATH 385 | Mathematical Structures

This course provides students with a working knowledge of the following topics: algebraic structures, uniform structures and topological structures. Through this course students will have a chance to dramatically expand their mathematical horizons. This course emphasizes rigor and the concept of mathematical proof, providing the students with adequate tools to handle future courses in the pure sciences. Prerequisite: MATH285 or permission of the instructor. [3 credits]

MUSC 121 | Introduction to Music

An introductory course in music listening and appreciation which begins with the basic characteristics of music and is so organized that the elements of music are examined through listening to music. The course will require concert performance attendance with the possibility of a field trip to concerts in the Capital District. Cost: Approximately \$15 [3 credits]

MUSC 123 | 20th Century Music Am Contrib

A study of the mainstreams in American 20th Century music: rock and roll, jazz, serial, and chance. The course will require concert performance attendance with the possibility of a field trip to a concert in the Capital District: Cost: approximately \$15. Prerequisite: MUSC121 or permission of instructor. [3 credits]

NAMS 111 | Intro to Iroquois

The Iroquois (Haudenosaunee) are the oldest and longest functioning spiritual-political system in what is now New York State. This course will cover the culture, history and prehistory of the Iroquois as well as their contributions to today's American society. Time will be spent on the Mohawks, who occupied the Mohawk Valley and the surrounding areas. This course should give students a better understanding as to who the Iroquois are and what Indian country is like today. [3 credits]

NAMS 121 | Intro Native American Studies

The course is intended to provide students with an introduction to Native American Societies in the present-day US from prior to the arrival of Europeans until US independence. As a survey course, students will be introduced to social structures, political structures, spiritual practices, and inter-tribal/nation relations. Focus will be on the tribal nations of the northwest, the great plains, and the southwest. The course will also deal with the arrival of Spanish, British, and French colonizers and the impacts that they had -- along with the emergent US -- on native nations. [3 credits]

NAMS 122 | Intro Native Am Studies II

The course is intended to provide students with an introduction to Native American Societies in the present-day US from the life and death struggles in the first century of the American Republic, through various government programs that sought to destroy natives' way of life, to the resurgence of native nations with the 1970s. The course will focus on the survival stories of native peoples who defended their ways of life against the US onslaught and reached a point in the 21st century of being flourishing communities dealing with modern challenges while maintaining traditional perspectives. [3 credits]

NAMS 361 | Native Am Phil/Spirituality

An exploration of the great variety of Native American world views in the present-day United States. The course examines pre-European contact and contemporary Native Nations' philosophical perspectives on social structures, human interactions, and the natural environment. The course also examines spiritual beliefs and practices of a selection of Native nations prior to and after contact. The course will draw from historical and contemporary sources, and the cases to be studied will include representative nations from Eastern Woodland, Southwestern Puebloan, Great Plains, and the Plateau. Prerequisite: NAMS111 or NAMS121. [3 credits]

NTRN 122 Nutrition

A study of the macro and micro nutrient requirements of individuals coupled with a study of the food composition with the goal of understanding how diet choices influence health. Nutrition needs for the life cycle, especially in infancy and childhood will be presented. Students will have an opportunity to evaluate food choices in the context of nutrition requirements using appropriate computer software. [Fall, Spring] [3 credits]

ORHT 121 | Woody Plant Materials

A detailed study of deciduous and evergreen trees, shrubs and vines; their identification, growth habits, cultural requirements, ecological usefulness and use in the landscape. Emphasis will be placed on the study of both native and introduced species. [3 credits]

ORHT 280 | History of European Gardens

This summer course offers a two-week concentrated investigation into the historical development of European gardens. The course will study the importance of the gardens as reflections of the social cultures of their times, the chronological order of their development and the designers important to their style. The course will also offer opportunities for the study of the plant materials and modern landscape techniques of western Europe. The entire course will be taught abroad. [3 credits]

PHED 151 Wellness

A course designed to assess the many areas of lifestyle choices and their relationship to an individual's health and wellness. The course will encourage regular physical activity through two 4-week blocks of participation in areas that include: lifetime sports, net sports, outdoor education and fitness, nutrition/weight management, stress reduction, mental health, injury prevention, cancer, substance abuse and abuse, sexually transmitted disease, overweight/obesity, the rise in chronic disease, alcohol, and risks associated with tobacco use. [Fall, Spring] [1 credits]

PHIL 101 | Introduction to Philosophy

A course designed to introduce students to philosophy both as a subject for study and as an activity of the human mind. Basic philosophic questions and problems will be surveyed and explored, and the significant approaches and orientations to these questions and problems will be examined and evaluated. The student will be encouraged to question, analyze, synthesize, and evaluate and to develop the critical and reflective attitude of mind that is basic to philosophic thinking. [3 credits]

PHIL 102 | Intro to Asian Philosophy

This course will introduce students to fundamental philosophical questions concerning human existence; for example, the nature of knowledge, self and reality. In particular, students will study one of the most important focal points of Asian thought: the search for harmony in life at both the individual and social levels. The course and Taoism. [3 credits]

PHIL 305 | Ethics Science, Medicine, Tech

This course is an upper-level philosophy/science course focused on the elements of moral philosophy, especially as they apply to emerging ethical dilemmas in science, medicine, and technology. Emphasis will be on gaining cognitive skills and applying reason to all decision-making processes, including the appropriate use of emerging science and technologies. Prerequisites: A college-level science or philosophy course or permission of the instructor. [3 credits]

PHYS 101 | Principles of Physics I

Students will learn the principles of the science and behavior of magnetism, electricity, electronics and heat energy. Activities will include applications in current technology to develop skills for explaining, testing and diagnosing various electrical/electronic devices and circuits. Use of digital and analog testing instruments will be stressed. [2 credits]

PHYS 101X | Principles of Physics I Lab

Hands-on application of the topics covered in PHYS101. [1 credits]

PHYS 102 | Principles of Physics II

This course is designed to provide students with an understanding of the basic principles of physics dealing with measurement, machines, heat properties of solids, liquids and gases; and the calculations required to solve for mechanical applications. Examples selected will be directly utilized in various technologies through the application of vectors, basic algebra and trigonometry processes. The concepts of work and energy will be applied throughout the course. [2 credits]

PHYS 102X | Principles of Physics II Lab

Hands-on application of the topics covered in PHYS102. [1 credits]

PHYS 111 | College Physics I

The first semester of a two-semester course in general physics. The emphasis will be placed on all branches of physics and their mathematical implications. It is assumed that each student will be quite familiar with the process of algebra and right triangle trigonometry. Areas of study will include: classical mechanics using a vector approach to statics and dynamics of rigid and non-rigid bodies, concepts of work, energy, power, momentum, heat and thermodynamics. Prerequisites: Satisfactory completion of three years of high school mathematics or MATH 111. Co-requisite: PHYS 111X (however, this course may be repeated without lab if PHYS 111X has been successfully completed previously) 3 class hours; 1 one-hour recitation. [3 credits]

PHYS 111X | College Physics I Lab

Laboratory experience directly related to the material in PHYS 111. The activities are designed to develop a better understanding of the concepts covered in lecture, and to develop skills in measurement, error analysis, observation and interpretation. Computers will be used for data acquisition and analysis. Co- or prerequisite: PHYS 111 1 three hour lab. [1 credits]

PHYS 112 | College Physics II

PHYS 112 is a continuation of PHYS 111. Topics of study will include: electricity and magnetism; wave phenomena; geometrical and physical optics; and an introduction to modern physics (including special and general relativity and quantum theory). Prerequisites: PHYS 111, PHYS 111X Corequisite: PHYS 112X (however, this course may be repeated without lab if PHYS 112X has been successfully completed previously) 3 class hours; 1 one-hour recitation [3 credits]

PHYS 112X | College Physics II Lab

Laboratory experience directly related to the material in PHYS 112. The activities are designed to develop a better understanding of the concepts covered in lecture, and to develop skills in measurement, error analysis, observation and interpretation. Computers will be used for data acquisition and analysis. Co- or prerequisite: PHYS 112; 1 three-hour lab. [1 credits]

PHYS 211 | Calculus Physics I

Emphasis will be placed on familiarity with all branches of physics and the application of calculus to derivation of equations, problem-solving, data analysis and error analysis. It is assumed that each student will be familiar with elementary techniques of differentiation and integration. Areas of study will include: classical mechanics, work and energy, conservation laws, simple harmonic motion, wave motion, gravitation, heat and thermodynamics. Credit may not be earned for both PHYS 111 and PHYS 211. Prerequisite: High School Regents Physics or PHYS 111 AND one semester of calculus (Math 231). Co-requisite:PHYS 211X (however, this course may be repeated without lab if PHYS 211X has been successfully completed previously) 3 class hours; 1 one-hour recitation [3 credits]

PHYS 211X | Calculus Physics I Lab

Laboratory experience directly related to the material in PHYS 211. The activities are designed to develop a better understanding of the concepts covered in lecture, and to develop skills in measurement, error analysis, observation and interpretation. Computers will be used for data acquisition and analysis. Co- or prerequisite: PHYS 211; 1 three-hour lab [1 credits]

PHYS 212 | Calculus Physics II

PHYS 212 is a continuation of PHYS 211. Topics of study will include: electrostatics and electrodynamics, magnetostatics and magnetodynamics, electromagnetic radiation, geometrical and physical optics, and an introduction to modern physics (including special and general relativity and quantum theory). Credit may not be earned for both PHYS 112 and PHYS 212. Co-requisite: PHYS 212X (however, this course may be repeated without lab if PHYS 212X has been successfully completed previously) 3 class hours; 1 one-hour recitation. [3 credits]

PHYS 212X | Calculus Physics II Lab

Laboratory experience directly related to the material in PHYS 212. The activities are designed to develop a better understanding of the concepts covered in lecture, and to develop skills in measurement, error analysis, observation and interpretation. Computers will be used for data acquisition and analysis. Co- or prerequisite: PHYS 212; 1 three hour lab [1 credits]

PSCI 101 | Astronomy

An introduction to the origin, structure and behavior of the Universe. From the starting point of medieval astronomy, the course progresses through a survey of the solar system; stars, galaxies, and stellar evolution; and ends with an examination of current thinking about cosmology. Suitable for both science and non-science majors, the course emphasizes the cultural, historical and humanistic contributions of astronomy. Co-requisite: PSCI101X (lab) [3 credits]

PSCI 102 | Physical Geology

A broad survey course covering the composition and structure of the Earth's surface, with an emphasis on the processes that have created and shaped it. Topics include: Plate Tectonics, earthquakes, volcanology, fluvial processes, the ocean and general geologic principles. This course is suitable to both science and non-science majors. Co-requisite: PSCI 102X (lab) [3 credits]

PSCI 105 | Environmental Sci & Technology

This course considers the operational parameters of Planet Earth, stretching from its birth to the present day. Particular reference is made to the various natural cycles that keep it habitable, and the manner in which those cycles may have been compromised by its inhabitants. Recent technologies developed to return the earth to proper balance will round out the course. Prerequisite: MATH101 or higher [3 credits]

PSCI 303 | Field Geology

This course is designed to improve geological skills through direct observation of geologic phenomena in the field. Mapping exercises will be combined with field trips to explore the geologic history of the Cobleskill region. Good physical condition is strongly advised. [3 credits]

PSYC 111 | General Psychology

Consideration of the methods and points of view involved in the scientific study of the psycho-physical basis of human behavior with emphasis on maturation, intelligence, development, learning, motivation, personality and individual differences. [3 credits]

PSYC 221 | Child Psychology

A study of human development from infancy through early adolescence. The dynamics of the behavior of children including physical, social, intellectual, emotional and environmental aspects are considered. Developmental, dynamic, behaviorist and phenomenological theories will be included. Prerequisite: PSYC111 [3 credits]

PSYC 222 | Adolescent Psychology

Physical, intellectual, social and emotional development of the individual. Patterns of behavior and modes of adjustment are presented in order to understand the process of adolescence. Prerequisite: PSYC111 [3 credits]

PSYC 231 | Social Psychology

The scientific study of the activities and behavior of the individual as influenced by other individuals, society, culture and environment. Prerequisite: PSYC111 [3 credits]

PSYC 300 | Intro to Community Psychology

This course is designed to be an introductory course in community psychology. While the focus will be on the research strategies and strategies that promote community change, this course will also explore community psychology's core values and assumptions. Prerequisite: PSYC111 [3 credits]

PSYC 323 | Adult Development & Aging

This course will take an in-depth look at the psychological as well as the physical and social changes associated with adulthood and aging. Particular attention will be paid to race, ethnicity and gender and their effects on the aging process. The issue of age-based discrimination will also be addressed. Prerequisite: PSYC111. [3 credits]

PSYC 330 | Psychology of Learning

In this course students will learn the major psychological theories of learning. They will be able to apply their understanding to human and animal populations, and will understand the impact of learning on human and animal experience. Students will gain an introduction to the interrelationship between learning and memory, and the basic processes involved in memory. Prerequisites: PSYC111 and at least one 200 level PSYC course. [3 credits]

PSYC 341 | Organizational Psychology

A study of the changing structure and purpose of organizations and the impact of these changes on individual and interpersonal changes. Prerequisite: PSYC111 [3 credits]

PSYC 350 | Abnormal Psychology

This course reviews the historical perspective on abnormal behaviors and provides a survey of the etiology of disorders, the techniques for diagnosis and contemporary treatments. Illustrative case studies will be used to understand specific disorders. Students will be expected to think critically, and apply their knowledge in identifying disorders and suggesting possible treatments. Prerequisite: PSYC111 [3 credits]

RUSS 101 | Beginning Russian

This is the first semester of a two-semester sequence in the basic skills of understanding, speaking and, to a lesser extent, reading and writing a complex foreign language. Students should be highly motivated as they will need to engage in self-instruction outside the regularly assigned class period. The course design follows the guidelines of the National Association of Self-Instructional Language Programs. This means that students work with native-speaker mentors who guide classroom interaction and model the language for students. Prerequisite: Students should have already formally studied another foreign language or should be recommended by a faculty member who teaches a foreign language. [3 credits]

RUSS 102 | Beginning Russian II

This is the second semester of a two-semester sequence in the basic skills of understanding, speaking and, to a lesser extent, reading and writing a complex foreign language. Students should be highly motivated as they will need to engage in self-instruction outside of the regularly assigned class period. The course design follows the guidelines of the National Association of Self-Instructional Language Programs. This means that students work with native-speaker mentors who guide classroom interaction and mode the language for students. Prerequisite: Student should have already formally studied another foreign language, completed 101 or can be recommended by a faculty member who teaches a foreign language. [3 credits]

SOSC 111 | Introduction to Sociology

An introduction to the nature of social organization, culture, socialization, group structure and social process. [3 credits]

SOSC 112 | Social Problems

The application of sociological methods, concepts, analysis and theories to the study of contemporary problems. Both micro-level and macro-level problems will be examined. The process of defining situations as social problems and a critical analysis of information concerning social problems will be an objective of the course. [3 credits]

SOSC 211 | Sociology of the Family

The purpose of this course is to examine the family as a social institution within the framework of sociology. An analysis of the historical and cross-cultural variations of the family within American society will be addressed. Sociological methods, concepts, analyses and theories will be used to study contemporary family issues and problems. The emphasis of this course is on the development of critical thinking skills as they pertain to the family within a sociological perspective. Prerequisite: SOSC111 [3 credits]

SOSC 311 | Rural Sociology

This course will use the sociological perspective in the study of rural communities. The course will examine the characteristics of rural areas as well as the social institutions of rural America. Demographic changes and their impact on the rural community will be examined. Social problems in rural areas will be studied. A major part of the course will concentrate on research using archival data, research from land grant colleges and other agencies studying rural America. A requirement of the course is 20 hours of volunteer work for a community agency, accompanied by a research paper on the agency. Prerequisite: None for B.T. students; SOSC111 or SOSC112 for Associate Degree students. [3 credits]

SOSC 312 | Sociology of Community

This course reviews and analyzes historic, classic, and contemporary studies about community at the advanced level. Concepts of comparative community will concentrate on transformations, structures, theories, and problems. Examination of community as a system of social relationships from small towns to the global community. The course will include a significant amount of reading as well as the application of social science research. Prerequisite: SOSC 111 or permission of the instructor. [3 credits]

SPAN 101 | Beginning Spanish I

This is the first semester of a two-semester sequence in the basic skills of reading, writing, understanding and speaking the Spanish language. Prerequisites: None; however, students already possessing a basic knowledge of written Spanish will not be admitted. [3 credits]

SPAN 102 | Beginning Spanish II

A sequel to SPAN101, this is the second semester of a two- semester sequence. Prerequisites: SPAN101 or the equivalent or permission of instructor. [3 credits]

SPAN 103 | Intro to College Spanish

This is a course in basic Spanish for those students who have had some preparation, but are not ready to enter SPAN 201. It is designed to complement and build upon previous study and to prepare the student for success at the intermediate level. Prerequisite: Two years of high school Spanish or the equivalent, or permission of the instructor. [3 credits]

SPAN 202 | Continuing Spanish II

A sequel to SPAN201, this is the second semester of a two- semester sequence in intermediate-level Spanish. Prerequisites: SPAN201 or the equivalent or permission of instructor. [3 credits]

SUST 101 | Introduction to Sustainability

This introductory course examines the multifaceted concept of sustainability in the world. During the semester, students will analyze approximately two dozen topics related to sustainability. Topics may include animal rights, pollution, clean water, environmental justice, global warming, agriculture, energy, land use, population, consumption, and transportation. The instructor will present a broad spectrum of historical and theoretical perspective to help students better understand our changing natural world. Students will review and analyze historic, classic, and contemporary studies about the environment. Concepts of a sustainable society will concentration on theories, problems, and solution. The course will include a significant amount of reading as well as the application of a written research project. [3 credits]

TRAV 103 | World Geography

A study of the physical geography, historical and cultural background of travel destinations with emphasis on the Western Hemisphere. [3 credits]

TRAV 104 | World Geography II

A study of the physical geography and the historical and cultural background of travel destinations with emphasis on the Eastern Hemisphere. [3 credits]