KEY:

CLASS IS BASED ON SUSTAINABILITY

CLASS INCORPORATES SUSTAINABILITY

*\*Business College\**

**1. ACCT 6100 - Accounting for Decision Making**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

This case-based course focuses on the use of accounting information for executive decision-making. Emphasis is on identifying, evaluating and using accounting information to make long-term strategic decisions and short-term operating decisions. The role of regulatory requirements, International Accounting Standards and ethical considerations in the decision-making processes are examined. Open to admitted MBA students only. Prer., ACCT 5500.

**2. ACCT 6510 - Accounting Ethics and Institutions**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

An in-depth study of the technical and behavioral ethical standards existing for professional accountants in all fields, and of the political and regulatory institutions that affect the practice of professional accounting including the SEC, IRS, FASB, AICPA and state authorities. Prepares students for dealing successfully with ethical issues throughout their careers. Meets with ACCT 4510. Prer., ACCT 6600 (or ACCT 4600), MBA & Graduate Business Certificate students only.

**3. BUAD 4000 - Business, Government, Law, and Society**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

An examination of interrelationships between business, society, and government. Explores the legal and ethical significance of transactions in the business decision-making processes. Prer., BUAD 3000, QUAN 2020. Business students only, 75 hours completed.

**6.FNCE 4590 - Ethics in Finance**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Ethics in Finance prepares students with a conceptual framework necessary to analyze and understand the requirements of ethical conduct within the organization, and the ethical problems facing business and financial managers in a global environment. Case studies and practical tools will be used to develop an ethical framework, as well as, establish and review ethical practices in the workplace. Req., FNCE 3050. Business students only. Meets with BUAD 4950.

8.INTB 3600 INTERNATIONAL BUSINESS

An introduction to international business. Examines economic, political and cultural systems and provides a broad overview of how these effect business management. Addresses managerial issues related to all the functional areas of business. Provides an overview of major aspects of planning, organizing and controlling international business ventures. Prer., FNCE 3050 or MGMT 3300 or MKTG 3000. Business students or Business Minors only.

9.INTB 4610 - Regional Business Environment Europe

 Short-term study abroad. A series of international business seminars conducted abroad by management personnel of European companies. Insight is provided into the cultural, social, and political environments of each country visited. This is an intensive international business and travel experience. Prer., Instructor approval.

**10.INTB 6100 - Managing in Global Markets**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Designed to prepare students to anticipate global forces that impact present management. Examines the economic, the social-cultural, and the political/legal context of global management. Presents various concepts related to the internationalization process of the firm and frameworks related to global strategy. MBA & Graduate Business Cert. Only.

**11.INTB 6190 - Managing in Global Markets**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Designed to prepare students to anticipate global forces that impact present management. Examines the economic, the social-cultural, and the political/ legal context of global management. Presents various concepts related to the internationalization process of the firm and frameworks related to global strategy. Distance MBA course. Tuition schedule differs from on-campus program.

**12.MGMT 4110 - Experiences in Leadership**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Through lectures, videos exercises, case studies, and a major project, students learn the needed skills to become effective leaders. Topics covered include building relationships, dealing with conflict, planning, change, teams and the major leadership theories that have been developed. Prer., MGMT 3300. Junior standing; Business students only.

**13.MGMT 6000 - Leading and Managing in Changing Times**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

This course is designed to help students succeed personally and professionally in a rapidly changing, global world. The course begins with a focus on our changing environment and the need for personal and organizational excellence. The remainder of the course focuses on developing leadership and management skills and applying them to bringing out the best in individuals, groups, and organizations.

**14.MGMT 6090 - Leading and Managing in Changing Times**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Designed to help students succeed personally and professionally in a rapidly changing global world. Focuses first on our changing environment and the need for personal and organizational excellence, then on developing leadership and management skills and applying them to bringing out the best in individuals, groups, and organizations. Distance MBA course.Tuition schedule differs from on-campus courses.

**17.MKTG 6900 - International Marketing and Export Management**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Provides an overview of international marketing issues. Provides detailed analysis of each marketing mix element from a global perspective. Special emphasis is placed on managing the export function, how cultural differences impact marketing strategies and tactics, and on international marketing ethics. Open to admitted MBA studentsonly. Prer., MKTG 6000.

courses. Prer., ACCT 5590 and QUAN 5590.

**20.MGMT 6200 - Managing Organization Development, Change, and Transformation**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

In an environment of dynamic, non-stop change and increasing competition, organizations that have the best skills in developing healthy, high-performance organizations and managing change will have a competitive advantage. People who are trained in these skills can significantly increase their value to organizations. Course provides sound theory and practical training in how to successfully manage change, develop high-performing individuals, teams, and organizations, and transform organizations. Prer., MGMT 6000.

**21.MGMT 6290 - Managing Organization Development, Change, and Transformation**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

In an environment of dynamic, non-stop change and increasing competition, organizations that have the best skills in developing healthy, high-performance organizations and managing change will have a competitive advantage. People who are trained in these skills can significantly increase their value to organizations. Course provides sound theory and practical training in how to successfully manage change, develop high-performing individuals, teams, and organizations, and transform organizations. Distance MBA course. Tuition schedule differs from on-campus courses. Prer., MGMT 6090.

*\*Education\**

**22.CURR 5511 - Teaching Energy and Environment**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Focuses on contemporary energy and environmental topics and issues. It is designed for elementary through secondary teachers. Emphasis is placed on clarifying environmental issues; showing relationships between energy, environment, and society.

**23.CURR 5512 - Energy and Environmental Activities**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Focuses on developing and utilizing activities, games, and role playing simulations in the area of energy, environment and conservation. This course is designed to enable classroom teachers at all levels to present and clarify various related concepts.

**24.CURR 5513 - Activities for Teaching Earth Science**

**2** **Credits (Minimum)** **2** **Credits (Maximum)**

Focuses on using and developing classroom activities for anyone teaching earth science topics. Most activities presented are adaptable from preschool through high school. The course will cover five main topics including: space, land, water, air, and the earth’s past.

**25.CURR 5514 - Activities for Teaching Weather**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Provides many classroom activities demonstrating various aspects of weather and weather prediction. Topics include aspects of weather ranging from local up-slope caused by an “Albuquerque Low” to global warming. Activities presented will be applicable for elementary through high school grades.

**26.CURR 4547 - Current Issues in American Education**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Presents the various facets of American education as a foundation for professional development of the teacher candidates enrolled. Content includes school culture, organization, school and community involvement and major issues in education today. Meets with CURR 5547.

**27.CURR 5530 - Cutting Edge Science for Cutting Edge Teachers**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Focuses on the readings from contemporary journals, magazines, databases, etc. It will bring participants up-to-date with recent developments in science and technology. It allows teachers to explore current scientific information along with strategies for including new information in their science teaching from K-12.

**28.LEAD 4110 - Experiences in Leadership**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Leadership in the context of organizational management, the political arena, and social causes. Students organize expert discussion panels. Special issues include women and minorities in leadership. Students research and prepare their own leadership development programs with emphasis on application and skill development. Prer., COMM 1110 and LEAD 2110 or equivalent

**29.LEAD 1630 - Leadership Development Through Global and Cultural Studies**

**1** **Credits (Minimum)** **3** **Credits (Maximum)**

Introduces students to various regions of the world from a geographic, historical, and cultural perspective. Provides increased international awareness and insight into foreign affairs, which permits an educational understanding of other cultures. Geopolitical issues such as terrorism, economics, politics, military issues, religion, environmental concerns, and other cultural issues will be addressed. Extended Studies offering.

**31.LEAD 4850 - The Leaders in a Team: Collaboration and Change**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Focuses on the role of the leader in building a leadership team. Students will learn how the power of collaboration in a team setting can productively enable the leaderhsip team to function in a collective manner and generate change. Effective leadership teams create synergy where “The sum of the parts is greater than the whole.” Students will learn the key principles in developing and managing effective leadership teams. Extended Studies offering. May be used toward a degree with advisor and department chair approval.

*\*Engineering & Applied Science\**

ECE 4990 SEL TPCS:RENEWABL ENER & ELC PWR

Credit and subject matter to be arranged. Consult current course schedule of classes for offering of topics. Prer., Consent of instructor.

ECE 5990 ADV TPCS:RENEWABL ENER & ELEC PWER

Current topics in microelectronics, materials, devices, and processes. Prer., Consent of instructor. Meets with ECE 6990.

**ENGR 1502 - Principles of Engineering**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Introduces the field of engineering. Explores various technology systems and manufacturing processes to demonstrate how engineers use math, science and technology in an engineering problem solving process. The course also includes an examination of social and political implications of technology. Extended Studies course only.

**ENGR 5100 - Principles of Engineering**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Introduces the field of engineering to high school educators. Explores various technology systems and manufacturing processes to demonstrate how engineers use math, science, and technology in an engineering problem solving process. Also includes an examination of social and political implications of technology and instruction on the pedagogy of engineering. Open only to Extended Studies graduate students.

**MAE 1502 - Principles of Engineering**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Introduces the field of engineering. Explores various technology systems and manufacturing processes to demonstrate how engineers use math, science and technology in an engineering problem solving process. The course also includes an examination of social and political implications of technology.

**MAE 2302 - Applied Energy Systems**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

An applications-based course introducing thermodynamics for non-engineering majors. Concepts are taught through exploration of energy systems such as solar, wind, geothermal, weather, etc. Considers political, economic, environmental, sustainability, and other aspects to energy systems. Emphasizes a basic scientific understanding of energy and global considerations of energy applications. Prer., PES 1000 or equivalent, MATH 1040 equivalent.

**MAE 4320 - Sustainable Energy Systems**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Application of energy systems with a focus on sustainability. Fundamentals of sustainability. Principles of sustainable applications in energy production. Energy system designs including (but not limited to) solar, wind, geothermal, and biomass. Fundamentals of economics and political ramifications of sustainable energy applications. Prer., MAE 3130, coreq., MAE 3302.

**MAE 3040 - Engineering Ethics**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Emphasis on developing the independent capability for moral analysis and solutions to real and hypothetical ethical problems encountered by engineers. Topics include professional rights and responsibilities, whistleblowing, risk, safety, accidents, environmental issues, computer ethics, and conflict of interest. Junior/Senior only.

**MAE 3320 - Biomass Energy Analysis**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Analyzes energy production from biomass resources. Explores the fundamentals of development, energy yield, economics, production, and processing methods for herbaceous, biological waste and woody crops. Technologies covered include combustion, gasification, pyrolysis, fermentation, and anaerobic digestion. Value-added bio-refining products are also examined along with the environmental impacts of biomass energy. Prer., MAE 2301.

**MAE 4510 - Engineering Design I**

**1** **Credits (Minimum)** **1** **Credits (Maximum)**

Design principles with the realistic constraints of economy, safety, reliability, aesthetics, ethics andsocial impact. Project and team organization to meet design goals. Professional oral and written communication of the design through presentations, memos, reports, and e-mail. Prer., ENGL 3090, senior standing. Meets with MAE 5510.

**MAE 5510 - Engineering Design I**

**1** **Credits (Minimum)** **1** **Credits (Maximum)**

Design principles with the realistic constraints of economy, safety, reliability, aesthetics, ethics and social impact. Project and team organization to meet design goals. Professional oral and written communication of the design through presentations, memos, reports, and e-mail. Prer., Senior/Graduate standing. Meets with MAE 4510.

*\*LAS\**

ANTH 1030 - Introduction to Human Origins

3 Credits (Minimum) 3 Credits (Maximum)

Evolution of humanity and its cultures from their beginnings through the early metal ages. Covers human evolution, race, prehistory, and the rise of early civilization. Approved for LAS Natural Science area requirement. GT-SS3.

### ANTH 1040 - Introduction to Cultural Anthropology

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Introduction to the major aspects of culture, such as social organization, law, religion, and language. Approved for LAS Social Science area and Global Awareness requirements.GT-SS3.

### ANTH 3040 - Women Around the World

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Provides a global, cross-cultural perspective on women, using an anthropological framework to examine women’s status, issues, and general cultural experience in the context of gender systems of different types of societies. Approved for LAS Social Science area and Global Awareness requirements. Prer., ANTH 1040, WEST 2010, or permission of instructor. Meets with WEST 3040.

### ANTH 3430 - Anthropological Approaches to Globalization

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Through specific case studies, seminar analyzes how cultural identities and societal changes both respond to and shape global agendas. Addresses innovative anthropological and ethnographic approaches to globalization studies, and considers why they form a critical component of contemporary anthropological research. Prer., Junior/Senior, ANTH 1040 or permission of instructor.

### BIOL 1510 - Environmental Science

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Introduction to atomic molecular structure and to biological structure and function. Environmental contaminants in air and their reactions, water quality and its analysis, wastewater treatment, the ecology of natural systems and genetic adaptation. Approved for LAS Natural Science area and Global Awareness requirements. GT-SC2. Meets with CHEM 1510.

### BIOL 1530 - Environmental Science Laboratory

**1** **Credits (Minimum)** **1** **Credits (Maximum)**

With BIOL 1510, satisfies the LAS science requirement and lab requirement. Fall, Spring. Meets with CHEM 1530.

BIOL 2200 ECONOMIC BOTANY

An organismic biology course exploring botanic products used by people. Emphasis is on plants that provide food, fiber, traditional medicines, herbal medicines, psychoactive drugs, poisons, and alcoholic beverages. Prer., BIOL 1200 or 115/116, or instructor permission.

**BIOL 3750 - Conservation Biology**

**4** **Credits (Minimum)** **4** **Credits (Maximum)**

The major focus is the application of biological and ecological principles to preserve biodiversity. Ultimate sources and current worldwide losses of biological diversity are emphasized. Because conservation biology demands multidisciplinary approaches, historical, legal, economic, and ethical issues are also included. Prer., BIOL 1200 or 115/116, BIOL 3700 recommended. Meets with GES 3750 and BIOL 5700.

BIOL 4280 - Mammalogy

4 Credits (Minimum) 4 Credits (Maximum)

 Lecture, lab, and field studies. Origin, evolution and adaptation, geographic distribution, ecology, and taxonomy of mammals. Fall. Prer., BIOL 1200 or 115/116, and BIOL 1210 or 110/111. Meets with BIOL 5280.

**BIOL 4290 - Plant Communities of Colorado**

**4** **Credits (Minimum)** **4** **Credits (Maximum)**

An examination of plant assemblages in Colorado. Major plant communities will be examined in the context of environmental factors such as climate and landforms. Required field trip. Prer., GES 4260 or consent of instructor. Meets with BIOL 5290, GES 4290 and GES 5290.

**BIOL 5290 - Plant Communities of Colorado**

**4** **Credits (Minimum)** **4** **Credits (Maximum)**

An examination of plant assemblages in Colorado. Major plant communities will be examined in the context of environmental factors such as climate and landforms. Required field trip. Prer., GES 4260 or consent of instructor. Meets with BIOL 4290, GES 4290, and GES 5290.

**CHEM 3410 - Environmental Chemistry**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Lecture. An in-depth survey and discussion of problems of the environment from a chemical point of view. Air, water, land, pollution, and their effect on the ecology of living organisms. Prer., CHEM 1060 with grade of “C” or higher.

**CHEM 1510 - Environmental Science**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Lecture. Introduction to atomic molecular structure and to biological structure and function. Environmental contaminants in air and their reactions, water quality and its analysis, wastewater treatment, the ecology of natural systems and genetic adaptation. Deals with worldwide environmental issues in a scientific context. This course may be taken with or without the lab course CHEM 1530. Approved for the LAS Natural Science area and Global Awareness requirements. GT-SC2. Meets with BIOL 1510.

**CHEM 1530 - Environmental Science Laboratory**

**1** **Credits (Minimum)** **1** **Credits (Maximum)**

Laboratory and field trips designed to complement BIOL 1510 and CHEM 1510. Satisfies the LAS Natural Science laboratory requirement. GT-SC1. Coreq., CHEM 1510. Meets with BIOL 1530.

**CHEM 3410 - Environmental Chemistry**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Lecture. An in-depth survey and discussion of problems of the environment from a chemical point of view. Air, water, land, pollution, and their effect on the ecology of living organisms. Prer., CHEM 1060 with grade of “C” or higher.

**COMM 4290 - Sustainability and Corporate Social Responsibility**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Examines the communication challenges and opportunities organizations face dealing with sustainability and corporate social responsibility. Course combines theoretical and applied perspectives, focusing on issues of: corporate governance, ethics, global corporate citizenship, stakeholder management and social auditing/reporting. Meets with COMM 5290.

**COMM 5290 - Sustainability and Corporate Social Responsibility**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Examines the communication challenges and opportunities organizations face dealing with sustainability and corporate social responsibility. Course combines theoretical and applied perspectives, focusing on issues of: corporate governance, ethics, global corporate citizenship, stakeholder management and social auditing/reporting. Meets with COMM 4290.

**ECON 1000 - The Economics of Social Issues**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

The Economics of Social Issues introduces the student to economics in a less rigorous manner than ECON 1010. Economic issues are introduced in examining wealth, poverty, energy, crime, education, health, discrimination, unemployment and inflation. May not be taken for credit by students who have already completed ECON 3010. Approved for LAS Social Science area requirement. GT-SS1.

ECON 1010 INTRO TO MICROECONOMICS

An analysis of the market system and its role in allocating goods and services; problems of market failure (e.g., monopoly, environmental pollution, and public goods), and alternative government responses to such problems. Approved for LAS Social Science area requirement.

**ECON 3300 - Environmental Economics I**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Application of economic analysis to environmental and natural resources issues and policies. Topics include: benefit-cost analysis, property rights, depletable resources, energy resources, toxic substances, air and water pollution. Prer., ECON 1010 or permission of instructor.

**ECON 3310 - Ecological Economics**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Applies new knowledge in natural and physical sciences and behavior to all economic resources: labor, capital, and natural resources. Uses new analytical tools such as systems thinking and path dependency along with neoclassical analysis. Emphasizes sustainable development, not economic growth. Prer., ECON 1010 or ECON 1050.

**ECON 4250 - Urban Economics**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Economic analysis of why cities exist, where they develop, how they grow, and how different activities are arranged within cities. Explores the economics of urban problems such as: poverty, congestion, pollution, and crime. Prer., ECON 1010 or ECON 1050.

**ECON 4300 - Environmental Economics II**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Application of economic analysis to environmental and natural resources issues and policies. Topics include: ecological economics, sustainable development, forests, fisheries, global warming, and endangered species. Prer., ECON 3300 or permission of instructor.

**ENSC 1500 - Introduction to Energy Science I**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Brief history of human energy use; rudimentary energy concepts and fundamental dimensions; fossil fuels; magnetism and electricity; power plants; and environmental effects of energy production and use. Approved for LAS Natural Science area requirement. GT-SC2. Meets with PES 1500.

**ENSC 1510 - Introduction to Energy Science II**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Brief history of human energy use; rudimentary energy concepts and fundamental dimensions; automobiles; solar energy; wind energy; other alternative energy approaches; environmental effects of energy production and use; and solid waste management. Approved for LAS Natural Science area requirement. GT-SC2. Meets with PES 1510.

**ENSC 1600 - Introduction to Solar Energy**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Brief history of human solar energy use; rudimentary energy concepts and fundamental dimensions; basic physics of the sun; fundamentals of thermal energy transfer and storage; economics and application of solar principles to construction; frequent computer simulation and web activities. Approved for LAS Natural Science area requirement. GT-SC2. Meets with PES 1600.

**ENSC 1620 - Solar Energy Laboratory**

**1** **Credits (Minimum)** **1** **Credits (Maximum)**

Hands-on lab emphasizing experimental techniques and the scientific method applied to the sun’s position and energy output. Both passive and active solar energy systems are modeled. Approved for the LAS Natural Science area requirement. Prer. or Coreq., ENSC 1600. Meets with PES 1620.

**ENSC 2500 - Sustainable Energy Fundamentals**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Past, present, and future of human energy use; rudimentary energy concepts and fundamental dimensions; efficiency of energy conversions; heat transfer; commercial electricity; alternative energy sources; environmental ramifications; energy conservation; computer simulation and web activities. This survey course is designed for science majors and assumes some knowledge of calculus and the physical sciences. Meets with PES 2500.

**ENSC 3610 - Solar Energy Design**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

A study of selected design tools for component sizing and performance prediction of active and passive solar thermal systems. Graphic and computer average monthly performance tools and numerical simulation methods will be covered. Meets with PES 3610.

**ENSC 3650 - Nuclear Energy**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Nuclear structure, radioisotopes, nuclear reactions, fission, and fusion. Emphasis on nuclear power production and its environmental impact.

**ENSC 3670 - Exotic Energy Sources**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

A survey of the technology of wind, geothermal, and ocean energy conversion, including climatic aspects, site selection, mechanics of the energy system, legal aspects, and environmental relationships.

**ENSC 4060 - Introduction to Remote Sensing**

**4** **Credits (Minimum)** **4** **Credits (Maximum)**

This course introduces the basic principles of image interpretation and analysis. Through lab and project work, students will explore a variety of data sources and examine the methodological and logistical considerations central to the acquisition and interpretation of aerial photography and digital imagery. Meets with GES 4060 and GES 5060.

**ENSC 4090 - Image Processing**

**4** **Credits (Minimum)** **4** **Credits (Maximum)**

This is a writing intensive course which provides an introduction to the advanced methods of environmental and natural resource data analysis using remotely sensed imagery. Emphasis will be placed on digital image analysis of freely available data sources. This is a project-oriented course in which students will work through the remote sensing process in entirety – from the design of a research question to presentation of results. No previous programming experience required. Prer., ENSC 4060 or GES 4060. Meets with GES 4090 and GES 5090.

**ENSC 4600 - Advanced Solar Energy**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Fundamental, technical principles of solar energy. Solar radiation; data and models. Radiative and convective heat transfer. Optical properties of materials. Optical and thermal analysis of flat-plate and concentrating collectors. Analysis of active and passive system performance, including high temperature application. Introduction to photovoltaics. Prer., PES 2130 and MATH 2360. (PES 2500 and 3420 are recommended).

 **GES 1000 - Environmental Systems: Climate and Vegetation**

 A general introduction to energy, atmospheric motion, solar radiation, the hydrologic cycle and climate change. Includes consideration of climatic elements as they interact with vegetation, animals, and humans in ecosystems. This class is taught in a variety of learning situations, including lecture, laboratory, web-based and tutorials. Approved for LAS Natural Science area requirement.

**GES 1010 - Environmental Systems: Landforms and Soils**

An introductory survey primarily concerned with the agents and processes of landform shaping and soil genesis. Major emphasis is on the genesis, distribution, and utility of surface features in a variety of learning situations, including lecture, web-based, laboratory, tutorials, and field trips. Approved for LAS Natural Science area requirement.

**GES 1980 - World Regional Geography**

A survey of world regions that explores the diversity of human culture within the wider global context. This issues-oriented class examines the cultural, political, economic and environmental forces that shape each region and the impacts of globalization on our increasingly interconnected world-. Approved for LAS Social Science area and Global Awareness requirements.

**GES 1990 - Introduction to Human Geography**

A systematic introduction to the broad field of human-land interactions and spatial order. Emphasis is placed on the major themes of geographic inquiry including population numbers and distribution, changing resource use, location 42decisions, settlements, transportation, political units, and a geography of the future. Approved for LAS Social Science area and Global Awareness requirements. GT-SS2.

**GES 2000 - Geographic Regions of the World**

An introduction to the world’s geographic realm and their human and physical characteristics. A variety of geographic themes such as population growth, urbanization, economic development and environmental deterioration are set in their regional contexts.

**GES 2010 - Economic Geography: Resources, Development, and the Future**

Introductory consideration of the location of resources, the role of natural resources in economic and technological development and resource utilization and the future. Use of the theory of spatial organization and behavior in economic activity including agriculture, manufacturing, transportation, service activities, urban location, systems of cities, and growth patterns. Case studies.

**GES 2050 - Digital Earth**

Introduces several technologies used to collect, store, manage, analyze, and disseminate information about the earth. These technologies include geographic information systems (GIS), web maps services (WMS), global positioning systems (GPS), cartography, geovisualization, and remote sensing.

**GES 2100 - Humans and Environments**

An overview of global environmental issues including climate change, sustainable agriculture, waste management, deforestation, population and energy. Individual, local, state, regional, national and international decision making tools and implications will be explored through case studies in industrialized and nonindustrialized countries.

**GES 3170 - Saving Place**

Examines basic theories, concepts, and people within the sustainability movement and bioregionalism. Through critical readings, group projects, field trips, and applied research, students will apply ideas and techniques they have learned to real-world case studies.

**GES 3180 - Changing Place**

This course allows students to translate what they have learned about sustainability into campus action. Students identify a campus sustainability issue to address, draft an appropriate initiative to place on the student ballot, and campaign for passage of the measure. Prereq., GES 3170, GES 4800, PHIL 1400, or WEST 4120, or consent of instructor.

**GES 3250 - The Geography of Climate Change**

Students investigate the theory and evidence of climate change from a geographical perspective. The course incorporates the interactions and interrelationships of humans and the environmental system while in the study of global environmental changes in different locations. Students use readings, lectures, discussion, research, computer simulation, and their own critical and analytical thinking skills in the process of forming their own conclusions about the status of climate change in different locations. Written and oral presentation skills will be enhanced as the students present and defend their theory and findings to their peers. Approved for LAS Natural Science area requirement.

**GES 3500 - Nature and Society**

The relationship between nature and society is one of the pillars of geographic inquiry. This course surveys the relationship between nature and society by examining topics including population, energy, conservation, agriculture, and pollution in the context of geographical studies. Prer., GES 1000 or GES 1010 or instructor consent.

**GES 3660 - Applied Community Studies**

A service-learning, community-based research course in which students, professors, and community members work together to reach community-identified goals. Working in teams, students will learn to apply anthropology and human geography research methods in developing effective community outreach programs. Prer., two courses in anthropology, sociology, geography, or education, or permission of instructor. Meets with ANTH 3660.

**GES 3750 - Conservation Biology**

The major focus is the application of biological and ecological principles to preserve biodiversity. Ultimate sources and current worldwide losses of biological diversity are emphasized. Because conservation biology demands multidisciplinary approaches, historical, legal, economic, and ethical issues are also included. Prer., BIOL 1150, BIOL 3700 recommended. Consent of instructor required. Meets with BIOL 3750 and BIOL 5700.

GES 3820 MEX, CENTR AMER, & CARIB

Study of culture and society, and human relationship to the physical environment of Mexico, the Central American countries, and the Caribbean islands. Approved for LAS Global Awareness requirement.

**GES 3830 - Geography of Colorado**

Examines the physical, cultural, and economic environments in the state of Colorado. Includes in-depth analysis of physical as well as human components of the state. Field trips required. Prer., GES 1010 or GES 1990 or instructor consent.

**GES 3850 - Historical Geography of the United States**

**GES 3980 - Places and Faces: Geographic Issues in Film**

This advanced world regional course uses contemporary film as a vehicle to explore current global geographic issues. It examines cultural, political and economic issues that shape societies, focusing on marginalized ethnic and racial groups, women and the economically disadvantaged. Approved for LAS Global Awareness requirement. Prer., GES 1980 or consent of instructor..

**GES 4010 - Technology, Development and Economic Geography**

Theory and issues in contemporary economic geography. Explores process leading to interregional change, spatial interaction between places, and the homogenization of economies and cultures.

**GES 4080 - Advanced Geographic Information Systems (GIS)**

Continued application of GIS for spatial analysis. Focuses on ESRI software and complete original research projects. Prer., GES 4050 or consent of instructor. Meets with GES 5080.

**GES 4070 - Geovisualization**

Students will learn the principles, concepts, methods and applications of geovisualization. Students will have hands-on experience in using highly interactive, dynamic and multidimensional geovisualization systems that offer high levels of user experience. Prer., GES 2050.

**GES 4060 - Introduction to Remote Sensing**

This course addresses the basic principles of image interpretation and analysis and introduces considerations central to the acquisition and interpretation of aerial photography and satellite imagery. Additionally, students are introduced to the range of remotely sensed data products available and explore the benefits and limitations of using remotely sensed data. Lectures are complimented by lab components which are designed to introduce students to basic image analysis techniques. Req., GES 2050 or consent of instructor. Meets with ENSC 4060 and GES 5060.

**GES 4050 - Introduction to GIS**

An introduction to Geographic Information Systems (GIS) as a research tool. Students will use ESN software to complete a series of geographic projects. A basic understanding of cartography and computer use is expected. Prer., GES 2050 or consent of instructor. Meets with GES 5050.

 **GES 4100 - Global Positioning System with GIS**

Explores the theory of GPS, provides practical experience using GPS units, and explores the interaction between GIS (Geographic Information System) and GPS through use of ESN, and Trimble Pathfinder software. Prereq., GES 2050 or consent of instructor. Meets with GES 5100.

 **GES 4110 - Introduction to Field Techniques**

A field-based course that introduces students to the multiple techniques used by geographers for data gathering and analysis. These techniques will include elementary surveying, GPS, hydrologic and landform measurements, map and compass use, dendrochronology analysis, and cultural/economic land use mapping. Field trips required.

**GES 4170 - Writing Place**

Provides multiple opportunities to improve geographic writing skills. Explore, write, map, draw, and photograph. Uses the campus land to develop writing about the “sense of place.”

**GES 4260 - Biogeography**

An examination of the distribution of life on the Earth’s surface. The relationship between environmental factors and plant and animal distributions will be the central theme. Changes in distributions through time will also be examined. Required field trip. Prer., GES 1000 or consent of instructor. Meets with GES 5260.

**GES 4270 - Advanced Biogeography**

A project-oriented class with students studying the distribution of plants as related to environmental factors. This class will combine lecture, fieldwork, and data processing, resulting in maps and reports. The geographical area of study will be changed each time. Prer., GES 4260/GES 5260 or instructor consent. Meets with GES 5270.

GES 4320 MOUNTAIN ENVIRONMENTS

Field course emphasizing study of landforms produced by weathering and soils, mass movement, erosional processes under all climatic and altitudinal conditions. Includes Front Range glacial geology and glaciology. Prer., GES 1000 or consent of instructor. Meets with GES 5320.

**GES 4340 - Soils**

Covers the nature and distribution of soils through an investigation of the basics of soil genesis and development. It will stress the environmental components involved in soil production and the geographic distribution of soil types. Prer., GES 1010 or GEOL 1010 or consent of instructor. Meets with GES 5340.

 **GES 4410 - Resource Management and Conservation**

Inventory, policy, and management of natural resources. Nature, significance, distribution, and problems associated with water, forest, wildlife, soils, and recreational resources. Emphasis is on experience in the United States, but other global problems may be included. Meets with GES 5410.

**GES 4420 - Conservation and United States Public Lands**

Examines the legacy of public lands in the U.S. and whether management policies have evolved from an emphasis on resource extraction to one focused upon conservation. Topics will include national parks, forests, recreation, and wildlife conservation. Meets with GES 5420.

**GES 4450 - Analysis of Environmental Systems**

An analysis of the various factors involved in the routing of environmental impact statements. Emphasis will be on analytical procedures associated with the evaluation of environmental systems and applications specific environmental impact problems. Meets with GES 5450.

GES 4460 - Field Studies in Geography
Field investigations focused on a specific aspect of the landscape in a selected area. Topic and credit vary from year to year. Field trips required. Meets with GES 5170.

**GES 4480 - Environmental Problems of Colorado**

A discussion and investigation of the environmental problems of the State of Colorado with an emphasis on land planning and land use, pollution, transportation, energy, and hazards. Programs to alleviate as well as to minimize any further related environmental problems will be developed. Meets with GES 5480.

**GES 4500 - Water Resources and Water Problems**

A descriptive interpretation and detailed inventory of hydroclimatic data, surface water, and ground water. The use of water is critically evaluated with emphasis on problems associated with geographic maldistribution, appropriation, irrigation, industry, pollution, and regional development. Meets with GES 5500.

**GES 4510 - Hydrology**

Exploration of the principles of hydrology and their application to environmental investigations. Meets with GES 5510.

**GES 4550 - Disasters and Society**

Case studies of slow and quick developing disasters will be discussed in a local, national, cross- cultural, and global framework. Issues covered will include technological hazards, the role of environmental perception, risk-taking, decision- making and the impact legislative changes at the local, state, and national levels. Meets with GES 5550.

**GES 4560 - Cultural and Political Ecology**

Considers how ecological conditions and sociopolitical systems are inherently linked. Major topics include environmental narratives, climate change, the role of technology in society, and sustainable development across a range of geographical contexts. Meets with GES 5560.

**GES 4570 - Militarization, Environment, and Society**

Considers how military activities shape and influence diverse social and physical settings. The course takes a critical look at militarism at home and abroad, during times of war and peace, and the changing role of robotics and sustainability in militarization. Meets with GES 5570.

 **GES 4610 - Urban Geography**

Course addresses topics in urban location, urban morphology and design, urban function, and urban social issues. We analyze why cities look as they do and the role cities play in society. Emphasis is on cities in the United States. Meets with GES 5610.

GES 4620 - Race, Ethnicity, and Place

A geographical perspective of the dynamics and processes of racialization in various U.S. urban contexts. Maps the dynamic relationship between social relationships and the built environment. Meets with WEST 4620.

 **GES 4650 - Restoration Geographies**

Examines landscapes of restoration and their environmental, economic, ethical, and practical implications in order to develop a robust understanding of restoration, and its relationship to geography. Meets with GES 5650.

**GES 4700 - Geographic Issues**

Geographic perspectives or dimensions of selected areas such as pollution, poverty, world conflict, natural hazards, landscape perception or women’s communities will be presented. Topics vary from year to year.

**GES 4730 - Geography of Population**

National and social patterns of population distribution; organization of populations; and methods of census, demographic analysis and mapping. Meets with GES 5730.

**GES 4750 - Recreation, Tourism, and the Environment**

Examines the historical geographies of recreation and tourism, and the environmental and cultural impacts of the ski industry in Colorado, internatioinal ecotourism, and contemporary trends of recreational values and activities. Meets with GES 5750.

 GES 4780 - Global Migration

Provides a global perspective on the nature of migration, the forces behind these patterns, and their effects in sending and receiving societies. Students will delve into several literatures, lead weekly sessions, and introduce perspectives on international migration. Meets with GES 5780

**GES 4800 - Sustainability Seminar**

The Capstone course for the Sustainable Development Minor is designed for seniors in the minor to focus on an inquiry-based project. Independent and small group work is emphasized to contribute to sustainable development efforts on campus and in the community. Prer., Juniors and Seniors only; at least three courses in the Sustainable Development Minor.

**GES 4920 - Geography of Food**

Addresses four geographical topics of food: 1) The political economy of food production; 2) food production and the environment; 3) food and cultures; and, 4) food and nutrition. Students will better appreciate our complex relationship with food. Meets with GES 5920.

**GES 5090 - Image Processing**

This is a writing intensive course which provides and introduction to the advanced methods of environmental and natural resource data analysis using remotely sensed imagery. Emphasis will be placed on digital image analysis of freely available data sources. This is a project-oriented course in which students will work through the remote sensing process in entirety – from the design of a research question to presentation of results. No previous programming experience required. Prereq., GES 4060, GES 5060, or consent of instructor. Meets with GES 4090 and ENSC 4090.

GES 5160 INTGRTNG TECH AND GEOG

A course outlining methods of teaching geography in K-12. Includes discussion of important geographic concepts and their integration into the classroom. Students will develop teaching activities and materials for incorporation into their curriculum. Prer., Consent of instructor.

**GES 5260 - Biogeography**

An examination of the distribution of life on the Earth’s surface. The relationship between environmental factors and plant and animal distributions will be the central theme. Changes in distributions through time will also be examined. Required field trip. Prer., GES 1000 or consent of instructor. Meets with GES 4260.

**GES 5270 - Advanced Biogeography**

A project-oriented class with students studying the distribution of plants as related to environmental factors. This class will combine lecture, field work, and data processing; resulting in maps and reports. Prer., GES 4260, GES 5260 or instructor consent. Meets with GES 4270.

**GES 5280 - Plant Communities of the Western United States**

An examination of plant assemblages in the contiguous United States west of the one-hundredth meridian. The distribution of major plant species will be used to illustrate plant community interactions with environmental factors such as climate and landforms. Prer., GES4260/GEOG 5260. Meets with GES 4280.

**GES 5290 - Plant Communities of Colorado**

An examination of plant assemblages in Colorado. Major plant communities will be examined in the context of environmental factors such as climate and land forms. Required field trip. Prer., GES 4260, GES 5260 or instructor permission. Meets with GES 4290, BIOL 4290, and BIOL 5290.

 GES 5500 TPCS IN WATER RES MGMT

Experience of water resource management in the United States, prospects for the future and problem solving techniques. Critical analysis of issues important in the western United States. Meets with GES 4500.

GEOL 1503 GEOL DEV OF COLO & WEST

Three lectures and one field trip or laboratory per week. An outline of the development, through time, of the geology of Colorado. Includes a summary of the evolution of life. Last part of course is devoted to history of development of economic resources, including placer and hard rock mining, coal, oil and gas production, and oil shale. This is a course for non majors designed as a follow-up for those who have had GEOL 1010. Approved for LAS Natural Science area requirement.

GEOL 3520 OCEANOGRAPHY

Oceans and their basins, water masses, circulation patterns, climate regulation, life zones, bottom sediments, and resources. Geologic aspects of the sea, both modern and ancient.

**GEOL 3700 - Environmental Geology**

**4** **Credits (Minimum)** **4** **Credits (Maximum)**

Interaction of industrial society with earth resources and geologic processes. Investigation of geologic hazards to engineering systems and problems related to resource development. Evaluation of criteria for urban planning, land utilization, waste disposal, and resource conservation. Approved for LAS Natural Science area requirement.

**GEOL 5910 - Engineering Geology**

**4** **Credits (Minimum)** **4** **Credits (Maximum)**

Intensive literature review and field investigations leading to a recognition of the engineering and construction problems associated with natural hazards and earth materials such as mass movement, dam location, highway development, and building construction. Basic courses in physics, mathematics, and geology recommended. Will require additional field work. Meets with GEOL 4910.

HIST 1410 LATIN AMERICA SINCE 1810

Survey of the political, social, and economic development of Latin America since 1810. Approved for LAS Humanities area and Global Awareness requirements. GT-HI1.

HIST 1530 US: EMERG MOD AMER 1865- 1920

Survey of the economic, social and political development of industrial America from the reconstruction through World War I. GT-HI1.

**HIST 3950 - Environmental History: The West and the World**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

A seminar dealing with global environmental history, with particular emphasis being given to the environmental history of the American West.

HIST 4690 COLORADO HISTORY

A history of Colorado from prehistoric Indians to nuclear projects. Topics covered will include exploration and conquest, the mountain men, settlement and pioneer life, Indians, mining, economic and political developments, exploitation and preservation of the environment, and recent trends.

**ID 4100 - A Sense of Place**

**1** **Credits (Minimum)** **3** **Credits (Maximum)**

Focuses on the character of a particular place. An understanding of these places will be accomplished through an analysis of selected aspects such as history, culture, literature, art and geography.

PHIL 1020 - Introduction to Ethics

3 Credits (Minimum) 3 Credits (Maximum)

Introductory study of major philosophies on the nature of the good for humans, principles of evaluation, and moral choice. Some attention is given to contemporary topics such as violence and abortion. Approved for LAS Humanities area requirement. GT-AH3.

**PHIL 1400 - Introduction to Sustainability and Environmental Ethics**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

This introductory course explores the nature, scope, and complexity of environmental challenges facing us. It utilizes Western and non-Western philosophical and ethical perspectives. Examined topics include: wilderness preservation, global climate change, water usage, ecological restoration, ethical eating, and environmental justice. Approved for LAS Global Awareness requirement.

**PHIL 4140 - Philosophy, Globalization, and Sustainability**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

The philosophical significance of ecology for establishing an environmental ethic. Application of environmental ethics to such issues as responsibilities to future generations, the problem of the moral standing of nonhuman species and wilderness, and the deficiencies of cost-benefit analysis as a basis for decision making. Prer., Previous course in philosophy. Meets with PHIL 5140.

**PES 1500 - Introduction to Energy Science I**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Brief history of human energy use; rudimentary energy concepts and fundamental dimensions; fossil fuels; magnetism and electricity; power plants; and environmental effects of energy production and use. GT-SC2. Meets with ENSC 1500.

**PES 1510 - Introduction to Energy Science II**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Brief history of human energy use; rudimentary energy concepts and fundamental dimensions; automobiles; solar energy; wind energy; other alternative energy approaches; environmental effects of energy production and use; and solid waste management. GT-SC2. Meets with ENSC 1510.

**PES 1600 - Introductory Solar Energy**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Brief history of human solar energy use; rudimentary energy concepts and fundamental dimensions; basic operation of the sun; fundamentals of thermal energy transfer and storage; economics and application of solar principles to construction; frequent computer simulation and web activities. Approved for the LAS Natural Science area requirement. GT-SC2. Meets with ENSC 1600.

**PES 1620 - Solar Energy Laboratory**

**1** **Credits (Minimum)** **1** **Credits (Maximum)**

Hands-on lab class emphasizing experimental techniques and the scientific method applied to solar phenomena(position and intensity) and both passive and active solar energy systems. Approved for the LAS Natural Science area requirement. Prer. or Coreq., PES 1600. Meets with ENSC 1620.

**PES 2500 - Sustainable Energy Fundamentals**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Past, present, and future of human energy use; rudimentary energy concepts and fundamental dimensions; efficiency of energy conversions; heat transfer; commercial electricity; alternative energy sources; environmental ramifications; energy conservation; computer simulation and web activities. This survey course is designed for science majors and assumes some knowledge of calculus and the physical sciences. Meets with ENSC 2500.

**PES 3650 - Nuclear Physics and Energy Technology**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Nuclear structure, radioisotopes, nuclear reactions, fission, and fusion. Emphasis on nuclear power production and its environmental impact. Prer., PES 3130.

**PES 3670 - Wind Energy**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

A survey of the technology of wind energy conversion, including climatic aspects, site selection and tower height, generator and propeller design, control systems, and legal aspects.

### PSC 1010 - Introduction to Global Politics

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Introductory analysis of the contemporary international system and major state and non-state actors in world politics. Considerable attention is given to internal political features and to the problems/perceptions of the various actors that shape their external behavior. Approved for LAS Social Science area and Global Awareness requirements.

PSC 2100 - Politics and Policy in State and Local Communities

3 Credits (Minimum) 3 Credits (Maximum)

 Focuses on regional, state, and local government where politics is face to face and where political decisions regularly affect our daily lives. The political systems that teach children, issue building permits, collect garbage, determine welfare eligibility, operate parks, issue drivers licenses, and enforce traffic rules. Approved for LAS Social Science area requirement.

**PSC 4290 - International Environmental Politics**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Study of the ways in which the international community reacts to environmental problems of a transboundary nature. Examination of theoretical frameworks used, policies developed, actors involved and analysis of a number of important cases and issues in international environmental politics. Meets with PSC 5290.

**PSC 4350 - Environmental Policies and Administration**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Resources in the American economy; consideration of constitutional, political, and geographic factors in the development of resources policy; organization, procedures, and programs for administration and development of natural resources.

**PSC 4540 - Land Use Law**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

A legal studies public law course involving the rights and obligations of land owners and the various levels of government. Issues range from environmental protection, zoning, to land development and “Taking” property without compensation. Jr/Sr level preferred. Prer., PSC 4460 or consent of instructor.

PSC 4570 - Middle Eastern Politics

Introduces the complex web of political, social, economic, and cultural life of Middle Eastern politics. Looks at historical developments of the region in order to better understand the current political diversity in the Middle East. The study of this region is important today as it faces new challenges with globalization, political identity crises, and foreign intervention. Approved for LAS Global Awareness requirement. Prer., PSC 1010. Sophomore standing or higher.

**PSC 5290 - International Environmental Politics**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Study of the ways in which the international community reacts to environmental problems of a transboundary nature. Examination of theoretical frameworks used, policies developed, actors involved and analysis of a number of important cases and issues in international environmental politics. Meets with PSC 4290.

SOC 1110 INTRO TO SOCIOLOGY

General survey of the field of sociology. Sociology as a science; society and culture; social groups; social institutions; social interaction; social change. Approved for LAS Social Science area requirement. GT-SS3.

**SOC 2220 - Communities in a Global Environment**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Examines the challenges in developing sustainable communities within a framework that is sensitive to both social and environmental justice. Special attention is devoted to the impact of the process of globalization on community development and organization. Approved for LAS Social Science area requirement. GT-SS3.

**SOC 2225 - Communities in a Global Environment: Service Learning Component**

**1** **Credits (Minimum)** **1** **Credits (Maximum)**

This service-learning component is taken in conjunction with SOC 2220, Communities in a Global Environment. The student must volunteer as an intern in a community organization related to the substantive content of SOC 2220. Coreq., SOC 2220.

SOC 2500 SOCIAL PROBLEMS

An introduction to the sociological perspective on social issues and problems such as deviance, race and ethnic relations, aging, crime and delinquency, war, drug abuse, alienation, mental illness, etc. Approved for LAS Social Science area requirement. GT-SS3.

SOC 3220 URBAN & COMMUNITY SOC

The city in terms of its social structure, residential and institutional patternings, processes of interaction, demographic processes and patterns of growth and change. Prer., SOC 1110 or consent of instructor.

SOC 4200 SOCIOLOGY OF POVERTY

Consideration of structural origins of poverty; the underclass and the dual economy. Analysis and evaluation of consequences of poverty, especially in relation to family, children, and career. Review of antipoverty programs. Meets with WEST 4200.

**SOC 4380 - Globalization and Development**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Analyzes societies and cultures in light of increasing global interdependency. Studies the interaction between local and global levels in the development process and impacts on areas such as economic organization, technology, environments, political systems, transnational organizations, and everyday life. Comparison of alternative responses to globalization and development. Approved for LAS Global Awareness requirement. Meets with SOC 5380 and WEST 4380.

**SOC 4385 - Globalization and Development: Service Learning Component**

**1** **Credits (Minimum)** **1** **Credits (Maximum)**

This service-learning component is taken in conjunction with SOC 4380, Globalization and Development. The student must volunteer as an intern in a community organization related to the substantive content of SOC 4380. Coreq., SOC 4380.

**SOC 4220 - Sustainable Urban Development**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Study of theories and practical applications of sustainable urban development at the local, regional, national, and international levels. Focuses on the sociological dimensions of urban sustainability including social, racial and regional inequalities, power structures, and ideology. Course emphasizes fieldwork and collaborative learning in local settings. Prer., Consent of instructor. Meets with SOC 5220.

**SOC 4225 - Sustainable Urban Development: Service Learning Component**

**1** **Credits (Minimum)** **1** **Credits (Maximum)**

This service-learning component is taken in conjunction with SOC 4220, Sustainable Urban Development. The student must volunteer as an intern in a community organization related to the substantive content of SOC 4220. Coreq., SOC 4220.

SOC 4700 GLOBAL FEMINISMS

Identifies broad trends and changes in feminist interpretations and approaches to sexual politics, race, migration, religion, geopolitics, and globalization. A global look at women’s oppression and strategies of resisting subordination through various transnational feminist praxis, theory, and case studies. Approved for LAS Social Science area and Global Awareness requirements. Meets with SOC 5700 and WEST 4700. Prer., SOC 1110 or instructor permission.

### SOC 5220 - Sustainable Urban Development

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Study of theories and practical applications of sustainable urban development at the local, regional, national, and international levels. Focuses on the sociological dimensions of urban sustainability including social, racial and regional inequalities, power structures, and ideology. Course emphasizes fieldwork and collaborative learning in local settings. Prer., Consent of instructor. Meets with SOC 4220.

### WEST 3150 - Power, Privilege, and Social Difference

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Examines the processes and conditions that produce the systems of differences and privilege shaping our lived experiences. Critically analyzes the prevailing cultural ideologies surrounding class, race, gender, sexuality, and ability. Emphasizes awareness, respect, justice, and resolution. Approved for LAS Cultural Diversity requirement. Prer., SOC 1110 or equivalent. Meets with SOC 3250.

### WEST 3220 - Native Communities

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Examines the development and current nature of indigenous populations world-wide, with in-depth analyses of Native America. Includes issues of social structure, collective identity, cultural survival, and access to resources. Also examines consequences of public policy and development policy. Prer., WEST 2010, SOC 1110, or SOC 2500. Meets with SOC 3270

### WEST 3400 - Gender and Race Theory

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Examines foundational and contemporary theories of race, gender, class, and sexuality within both a domestic and global context, with particular focus on the concepts of oppression, privilege, intersectionality, resistance, and social change. Prer., WEST 2010

### WEST 3420 - North American Indians

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

A survey of the native cultures of America north of Mexico. Examines major institutions by culture area and type of social organization. Approved for LAS Cultural Diversity requirement. Prer., ANTH 1040 or ANTH 2400 or consent of instructor. Meets with ANTH 3420.

WEST 3480 GLOBAL WOMEN'S ISSUES

Examines global women’s issues from an interdisciplinary perspective. The transnational approach considers key ideas related to gender, race, class, and sexuality, with a focus on power and inequality. Topics include globalization, politics, identity, religion, culture, media, and violence. Approved for LAS Humanities area and Global Awareness requirements.

### WEST 3900 - Special Topics Intermediate

**1** **Credits (Minimum)** **7** **Credits (Maximum)**

Allows intermediate study of a specific topic. Courses will vary and can be repeated for credit up to 9 credits as long as the topics are different. Prer., WEST 2010.

**WEST 4120 - Indigenous Views on Sustainability: All My Relations**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

When Native people come together they say “All my relations,” a phrase that lies at the heart of indigenous views on sustainability. This course explores its meaning and many of its implications for connectedness, relatedness, and sustainability. Approved for LAS Cultural Diversity and Social Science requirements. Prer., Junior or Senior standing.

### WEST 4200 - Sociology of Poverty

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Consideration of structural origins of poverty; the underclass and the dual economy. Analysis and evaluation of consequences of poverty, especially in relation to family, children, and career. Review of anti-poverty programs. Meets with SOC 4200.

**WEST 4380 - Globalization and Development**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Analyzes the evolution of global interdependency, studies the interaction between local and global levels in the development process and impacts on areas such as economic, cultural, technological, environmental, ideological, political systems. Discusses transnational organizations, global women’s agency, social justice movements, human rights networks. Approved for LAS Global Awareness requirement. Meets with SOC 4380 and SOC 5380.

### WEST 4400 - Indigenous Peoples and Cultures of the Southwest

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Intensive study in cultural anthropology of the indigenous peoples and cultures of the Southwest. Prer., Consent of instructor. Meets with ANTH 4400.

### WEST 4700 - Global Feminisms

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Identifies broad trends and changes in feminist interpretations and approaches to sexual politics, race, migration, religion, geopolitics, and globalization. A global look at women’s oppression and strategies of resisting subordination through various transnational feminist praxis, theory, and case studies. Approved for Social Science area and Global Awareness requirements. Meets with SOC 4700 and SOC 5700.

*\*Nursing & Health\**

**HSCI 4090 - Food, Culture, Community, and Health**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

This course focuses on the history and culture of food, how our lifestyle choices, inlcuding the way we eat, impact our planet, and what we can do to promote healthier and more sustainable communities. Prer., HSCI 2070, CHEM 1030. Meets with HSCI 6140.

HSCI 4920 COMMUNITY NUTRITION

Introduces students to the complex elements of nutritional assessment across the lifespan. Includes socioeconomic, cultural and psychological factors influencing nutrition. Spring only. Prer., HSCI 2070 or BIOL 2050, HSCI 4080; Coreq. or prer., BIOL 4830 or CHEM 4830, HSCI 3950. Health Sciences majors or Nutrition minors or Sports Health and Wellness minors only.

**HSCI 6140 - Food, Culture, Community, and Health**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

This course focuses on the history and culture of food, how our lifestyle choices, inlcuding the way we eat, impact our planet, and what we can do to promote healthier and more sustainable communities. Prer., HSCI 2070, CHEM 1030. Meets with HSCI 4090.

**HSCI 3630 - Culture and Health**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Explores health/illness concepts of various populations and introduces cross cultural assessment skills. Cultural health belief systems, biological variation and patterns of adaptation to the environment are included. Req., HSCI 3201, HSCI 3520 or Co-req., or consent of instructor.

**HSCI 6120 - Health Science Leadership**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Focus is on the leadership and administrative development of the health professional and impact as a local and global citizen. Will include leadership styles, policy and procedure development, legal issues, hiring practices, communication skills, and personal and professional global impact.

**HSCI 1080 - Outdoor Adventure Fundamentals**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Explores the foundations of adventure-based outdoor recreation. Students will learn techniques for enjoying outdoor environments. Topics include: navigation, weather patterns, wilderness travel, camping, backpacking, food, clothing, ethics, mental preparation, judgment and decision making. Information is taught in the classroom and in the field. A three-day expedition is required of all students enrolled.

**NURS 7070 - Population-based Health Care for Improving the Nation’s Health**

**4** **Credits (Minimum)** **4** **Credits (Maximum)**

Explore theoretical foundations of reflective practice within population-based health care. Provide overview of principles, practices and influences of epidemiology, biostatistics, culture, and socioeconomics on health and health care delivery. Analyze environmental/occupational health concepts. Prer., Admission to DNP Program or department approval.

*\*Public Affairs\**

PAD 3268 - Contemporary Issues in Social and Public Policy

3 Credits (Minimum) 3 Credits (Maximum)

 Examines a number of social policy issues and the social, economic, and political factors that influence policymaking and implementation. Provides an overview of the American system of social and public policy with emphasis on social welfare policy including health, education, welfare (income security policy), and criminal justice. Provides theoretically based models for analysis and presentation of social policy in legislative, administrative, and agency arenas.

P AD 5004 ECON & PUBLIC FINANCE

Uses economics to explore public and private sector roles, and the allocation of resources in the public sector. Introduces the concepts of public goods, market failure, and externalities. The effects of taxation and subsidies on consumer and firm behavior are analyzed. Also covers cost benefit analysis and national, state, and local budgeting methods.

**PAD 5120 - Nonprofits and Public Policy**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Examines the intersection of public policy and the nonprofit world and the ways in which each affects the other. Looks at current policy issues that relate to the nonprofit sector such as conversion of nonprofit to for-profit status, regulation of the nonprofit sector, issues of financial management, the roll of nonprofits to devolution and privatization of government services, tax exemptions, “Charitable choice,” donor control and governance, and the future of the sector. Also investigates the ways nonprofits have affected the policy process and public policies by exploring the factors that shape social movements, nonprofit advocacy, strategies of influence, and the role of nonprofits in social movements such as Civil Rights and the environment.

**PAD 5006 - Ethics and Leadership**

**3** **Credits (Minimum)** **3** **Credits (Maximum)**

Examines theories of leadership applied to the public and nonprofit sectors and the skills and processes employed by effective leaders. Also considers ethical theories as applied to problems in the public and nonprofit sectors; emphasizes critical thinking to address value conflicts, notably in the context of a pluralistic society; and teaches moral reasoning as a practical professional skill.

P AD 5628 URBAN SOCIAL PROBLEMS

Examines local government from the perspective of sociology and group dynamics. Could include some or all of the following subjects: neighborhoods and community groups, class and race relations, community crime, social service issues, immigration, the underclass in American society, and related urban social problems.

 PAD 6600 - Special Topics in Public Administration

**1** **Credits (Minimum)** **6** **Credits (Maximum)**

Courses with this number cover a variety of special topics relevant to public or nonprofit administration. Course may be taken for credit more than once, provided subject matter is not repeated.