

Subject	Title	Sust. Course	Includess Sust.	Catalog Description
AAA	341 Civil Conflicts in Africa		1	The analysis of the nature and dynamics of both non-violent and violent conflicts - civil wars - in Africa, and the efforts to resolve them. The focus will be on selected case studies of African states. Fulfills one of the Issues/Themes requirements. Offered every year. Credits: 3
AAA	490 Practicum: Career-Service in Community Building		1	Agency experience in the community relating practical training and independent study in a specialized area in African American studies. Maximum of six credits. Nine hours of course preparation and permission of instructor and program coordinator. Offered fall and winter semesters. Credits: 1 to 6
AAA	333 Study Abroad- African/African-American Studies - GHANA		1	Of varying focus, the course makes use of the history, culture, and society of a host country in order to highlight disciplinary perspectives in context. To be taught in that country (or countries) as part of an approved study abroad program. By permit only. Credits may vary. Offered as needed. Prerequisites: Specific to course and instructor.
AHS	495 Issues in Health Professions		1	An overview of current issues impacting health care and health care delivery locally, nationally, and internationally. Students will be expected to synthesize materials learned in the health professions major core classes and cognates and to write and present professionally styled presentations.
ANT	204 Introduction to Cultural Anthropology		1	Introduces the discipline of anthropology by examining the diversity of human cultures that have been described by anthropologists over the last 100 years. The principles of anthropology are explained with examples drawn from non-Western culture. Comparisons are drawn with our own. Fulfills one of the Foundation - Social and Behavioral Sciences. Fulfills Cultures - World Perspectives. Offered fall and winter semesters. 3 cr
ANT	215 Origins of Civilization		1	This course examines the consequences of decisions made by our ancestors, the successes and failures of past civilizations, so that we may better understand our own behavior. Development of world civilizations is explored using historic, archaeological and other perspectives that inform us about the past. Fulfills Foundation - Historical Perspectives. Fulfills Cultures - World Perspectives. Offered winter semester. 3 cr.
ANT	308 Field Experience Abroad		1	Of varying focus, the course makes use of the history, culture, and society of a host country in order to highlight disciplinary perspectives in context. To be taught in that country (or countries) as part of an approved study abroad program. By permit only. Credit may vary. 1-6 cr.
ANT	340 Culture and Environment		1	Compares different adaptive strategies of cultures from around the world and seeks understanding of ethical and social values different groups have related to the environment. Attention is focused on how humans relied on cultural mechanisms in the past to adapt and change their physical and natural environment. Fulfills Cultures - World Perspectives. Part of the Sustainability Issue. Offered each semester. Prerequisites: Junior Standing, WRT 150, and either Historical Perspectives or US Diversity. 3 cr.

ANT	345 Perspectives on Globalization	1	The anthropology of globalization examines the emergence of “globalized local cultures.” Students employ the ethnographic approach to understand globalization as the intensification of interconnectedness, in which anthropologists learn that fundamental problems of deep and universal concern to humans everywhere will need to be addressed at local, national, and global levels. Offered fall semester, even years. Fulfills Cultures - World Perspectives. Part of the Globalization Issue. Prerequisite: Junior standing. 3 cr.
ANT	380 Cultural Resource Management		A series of courses providing an in-depth study of a problem in anthropology and the methods of investigating it. Various topics of crosscultural interest, such as human evolution, peasant cultures, preliterate societies, kinship pattern, and culture and personality will be examined. Offered on sufficient demand.
ANT	380 Environmental Archeology		A series of courses providing an in-depth study of a problem in anthropology and the methods of investigating it. Various topics of crosscultural interest, such as human evolution, peasant cultures, preliterate societies, kinship pattern, and culture and personality will be examined. Offered on sufficient demand.
ANT	495 SWS Practicing Anthropology	1	Provides students with a broad and comprehensive perspective on the fundamental assumptions and issues in anthropology. Emphasis on the application of anthropological knowledge to solve social problems. Given the diverse dimensions of current trends in anthropology, students will work to establish their particular interests with the field. Offered winter semester. Prerequisites: Senior standing in anthropology and ANT 405. 3 cr.
ART	423 Animals and Art		This course will explore varied facets of human-animal relationships by exploring representations of animals in visual arts
BIO	104 Biology for the 21st Century	1	Introductory course for nonscience majors designed to provide a biological literacy for making informed personal, social, and environmental decisions. Topics include cell biology, genetics and biotechnology, form and function of the human body, evolution and ecology. Does not count toward a biology major or minor. Fulfills Foundation - Life Sciences with a Lab. Offered every semester. 4 cr.
BIO	105 Environmental Science	1	Study of natural ecosystems, their interrelationships, and human impacts and evolution of humans and environmental determinants of their cultures. Land use, resource and energy utilization, population trends and causative factors, air and water pollution, and economic factors influencing decision-making are emphasized. Does not count toward a biology major or minor. Fulfills Foundation - Life Sciences. Fulfills one of the Issues/Themes requirements. (3-0-0) Offered every semester.
BIO	107 Great Lakes and Other Water Resources	1	A study of our region’s water resources, including the Great Lakes, streams, and groundwater, and relationships of people with these systems. Does not count toward a biology major or minor. Designated lecture and laboratory sections are tailored for prospective elementary teachers. Fulfills Foundation - Life Sciences with a Lab. (3-0-3) Offered fall semester. 4 cr.
BIO	215 General Ecology	1	Population, communities, and ecosystems, including primary productivity and energy flow, materials cycling, succession, population dynamics, and systems modeling. (3-0-3) Offered fall and summer semesters. Prerequisites: BIO 120 and 12 college credits; (BIO 121 recommended). 4 cr.
BIO	308 Wildlife Ecology	1	This course provides an introduction to wildlife ecology including population ecology as it relates to wildlife management and conservation.

BIO	319 Global Agricultural Sustainability	1	Study of the biological and environmental principles at the foundation of agricultural sustainability; how various traditional and modern agricultural practices follow those principles and how social, cultural, and economic factors ultimately control agricultural practices. Cohesiveness with other courses in this theme will be maintained by highlighting a specific geographical region. (3-0-0) Offered fall and winter semester. Prerequisite: Completion of the General Education Life Science Requirement. 3 cr.
BIO	328 Biomedical Ethics	1	Examination of ethical dilemmas encountered in medicine and biomedical research, with an emphasis on obligations of health care workers to their patients. Biology majors may not use both BIO 328 and BIO 338 as elective credit within the major. Part of the Health Issue. (3-0-0) Offered fall, winter, and summer semesters. Prerequisites: Junior standing. 3 cr.
BIO	338 SWS Environmental Ethics	1	Examines philosophical underpinnings of environmental ethics. Explores approaches for understanding sustainability issues, solving ongoing environmental problems, and developing a global environmental ethic. Biology majors may not use both BIO 338 and BIO 362 as elective credit within the major. (3-0-0) Offered fall, winter, and summer semesters. Prerequisites: Junior standing. 3 cr.
BIO	362 Fisheries Biology	1	Study of the anatomy, morphology, and classification of fishes and their biology, ecology, and evolution. Emphasis on species native to the Great Lakes region. (3-0-3) Offered fall semester. Prerequisite: BIO 121; BIO 120 is recommended. 4 cr.
BIO	370 Marine Biology		An exploration into the function, biodiversity and ecology of life in the ocean - the largest of Earth's ecosystems. Marine biology will emphasize principles and processes that underlie and unify vastly different marine communities through ecological and evolutionary perspectives. Course offered fall semester. Prerequisites: BIO 121 and BIO 215. 3.000 Credit hours
BIO	402 Aquatic Insects	1	Advanced study of taxonomic diversity and ecology of aquatic insects, with emphasis on the fauna of local lakes and streams. The role of aquatic insects in stream function and bio-assessment will be emphasized. Students will gain expertise in the scientific collection, curation and identification of aquatic insects.
BIO	407 Biology and Society	1	Biological topics related to biodiversity, sustainability, alternative energy, environmental policy and economics, land use, climate change, historical influences, and cultural/societal attitudes conducted within an international context. The society-based experience is combined with readings, lectures, papers, and discussions.
BIO	408 Wildlife Management	1	An examination of techniques used in the management, research, and conservation of wildlife species. Introduces the fundamental concepts of wildlife management, including wildlife habitat requirements, evaluation of habitat suitability, interpretation of data analysis techniques, and applied techniques of habitat and population management. Offered fall semester. Prerequisite: BIO/NRM 308. 4 cr.
BIO	417 International Field Biology	1	One to three week trips to international locations to study the fauna, flora, ecology of representative ecosystems, climate, geology, paleobiology, environmental problems, and/or human impacts upon the above. The field-based experience is combined with readings, lectures, papers, and discussions. A maximum of six credits from BIO 417 & BIO 418 combined may be applied to the elective credit requirements for the Biology or NRM major. BIO 417 does not satisfy the plant or animal biology requirements, but may be repeated for credit. Offered fall, winter, and spring/summer semesters. Prerequisites: Variable and with permission of instructor. 1-4 cr
BIO	418 Regional Field Biology	1	One to three week trips to U.S. regional locations to study the fauna, flora, ecology of representative ecosystems, climate, geology, paleobiology, environmental problems, and/or human impacts upon the previously listed. The field based experience is combined with readings, lectures, papers, and discussions.

BIO	440 Limnology	1	Ecology of lakes and streams with emphasis on the physical, chemical, and biological factors affecting their productivity. (2-0-4) Offered every second fall semester. Prerequisite: BIO 215 or permission of instructor. 4 cr.
BIO	450 Stream Ecology	1	Examines the structure and function of stream ecosystems, with emphasis on the physical, chemical, and biological factors that influence flowing-water habitats. Laboratory focuses on the methods of stream ecology, including collection and analysis of physical, chemical, and biological data. Field work emphasizes local stream ecosystems. (3-0-4) Offered every second fall semester. Prerequisites: BIO 121 and BIO 215 or permission of instructor. 4 cr.
BIO	460 Terrestrial Ecosystem Ecology	1	Investigation of the structure and function of terrestrial ecosystems using a systems approach. Biotic and abiotic processes controlling interactions among biogeochemical cycles in ecosystems will be discussed and examined. Topics will include controls on primary production, evapotranspiration, decomposition, and herbivory; and potential for anthropogenic changes in ecosystem processes. (3-0-3) Offered fall and occasional summer semesters. Prerequisite: BIO 215; NRM 281 recommended. 4 cr.
BIO	470 Conservation Biology	1	Theoretical concepts and research applications in the multidisciplinary and applied science of maintaining the planet's biodiversity at the genetic, species, and ecosystem levels. Topics include distribution, functions, and value of biodiversity; causes and consequences of biodiversity loss; conservation solutions; and social, political, legal, ethical, and economic aspects of biodiversity conservation.
BIO	530 Aquatic Ecosystems and Processes		Aquatic ecosystems play vital functions in our biosphere. Understanding the role of aquatic ecosystems requires knowledge of processes occurring in the air and watersheds, and interactions with aquatic organisms. This lecture/discussion course will be a forum for learning about life and its dynamic interactions in earth's aquatic ecosystems. Crosslisted with WAT 530. Course offered fall semester of odd-numbered years. Prerequisite: Graduate standing or permission of instructor.
BIO	550 Advanced Population Ecology		Advanced exploration of the intrinsic and extrinsic controls of population establishment, growth and decline, cohesion, and structure. Offered fall semester of even-numbered years. Prerequisite: Graduate status in the biology department or permission of instructor.
BIO	570 Landscape Ecology Theory and Applications		Landscape ecology explores the influence of landscape patterns on ecological processes. Topics include landscape patterns, dynamics, and heterogeneity; issues of scale; and spatial analysis. Students will examine various applications of landscape ecology concepts through discussions of peer-reviewed journal articles, computer-based assignments, and project work. Offered fall semester. Prerequisite: Graduate standing or permission of instructor. 3.000 Credit hours
BIO	651 Emerging Issues in Water Resources	1	The most pressing water resource-related issues facing the planet today will be discussed and analyzed. Particular emphasis will be placed on analyzing these problems from a variety of perspectives, including environmental, economic, societal, and political.
BMS	100 Human Health and Disease	1	Presents the basic terminology and concepts of medicine and health maintenance for non-science students. Emphasis is on the interaction of technical concepts of health and disease with the political, economic, legal, and ethical aspects of American society. Fulfills Foundation - Life Sciences. Offered fall, winter and occasionally summer semesters. Three credits.
BMS	105 Basic Nutrition	1	Investigation of the bases of nutrition, from a scientific and social-psychological viewpoint. Problems of malnutrition, food as a social phenomenon, and current controversies in nutrition will be discussed. Offered fall, winter, and occasionally summer semesters. Three credits.

BMS	222 Introduction to Public Health	1	Introduction to the history, philosophy, current concepts, practice, and administration of public health in the United States. Offered fall semester. Three credits.
BMS	223 Public Health Concepts	1	An introduction to the strategies and tactics, both past and present, for the control and eradication of infectious and chronic diseases of humans. Offered winter semester. Three credits. Fulfills one of the Issues/Themes requirements.
BMS	404 Community Nutrition	1	This course will cover the field of community nutrition characteristics, purpose, and job opportunities. It will also discuss the following: the methods used to assess a group or community's nutritional status; the tools to evaluate community intervention programs; the cultural diversity found in the community; and the implications of such diversity for health professionals. Offered Winter Semester. Prerequisite: BMS 105 and Junior standing. Three credits.
BMS	495 Concepts in Wellness	1	This biomedical sciences course will synthesize the materials students have learned from the biomedical sciences core and cognate courses and enable them to write and present professionally styled communications to an audience of their peers and instructors. (3-0-0) Offered fall, winter and occasionally summer semesters. Prerequisites: BMS 208, BMS 212, BMS 290 or BMS 291, and senior standing Offered for SWS credit. Three credits.
BUS	201 Legal Environment for Business	1	The legal, regulatory, and ethical environment in which business operates is explored, with emphasis on the regulation of business, international law, environmental law, ethics, the political and social factors influencing case and statutory law, contracts, employment law, and business organizations. Offered every semester. 3 cr.
BUS	301 International Business and Culture	1	Explores how business is done in a country or region, and how culture influences business and its environment. Reviews country's history, economics, politics, government, arts or education. Explores how business practices may differ from U.S. practices. To be taught in that country as part of a study abroad program. Fulfills Cultures - World Perspectives. Fulfills one of the Issues/Themes requirements. Offered spring/summer. 3 cr.
BUS	677 Business Ethical Problems & Perspectives	1	The study of ethical problems commonly encountered in modern global business environments. Students will study the ethical issues of character, leadership, decision making, organizational governance and social responsibility.
BUS	634 Sustainability Principles & Practices	1	This course, which carries 1.5 credit hours, provides an introduction to, and analysis of, the fundamental theories, concepts, principles, and practices of "sustainability" in the global society in which we live. Students analyze and apply theories to real-world scenarios, including to their current employers and work assignments.
BUS	635 Sustainable Micro, Small, and Medium Enterprises	1	Fundamental theories, concepts, principles, and best practices of sustainability in the context of small enterprises. The course will examine local enterprises, clean technology start-ups, and the development of small enterprises in the developing world.
CD	550 Food, Culture, and the Health Environment		The purpose of this course is to expose students directly to the role of food in culture, society, environment, and economy through readings and hands-on engagement with world foods and food issues as they pertain to clinical dietetics. Course offered fall semester. Prerequisite: Admission to the clinical dietetics program.

CAP	220 Fundamentals in PR		(Restricted to Advertising and Public Relations majors and minors). Basic principles covering the role of public relations in society, public relations principles and their application, procedures for planning and implementing public relations campaigns, the identification of publics and the strategies for influencing them. Course offered every semester. Prerequisites: CAP 105, CAP 115, and WRT 150 with grade of C (not C-) or better. 3.000 Credit hours
CAP	320 Public Relations Management and Cases		The public relations function viewed from the management, consultant, and employee positions through use of text material and case studies. Offered fall and winter semesters. Prerequisites: CAP 220. 3.000 Credit hours
CAP	423 Corporate Communications Writing		An advanced writing course on the research, development, and preparation of corporate communications. Uses desktop publishing. Includes brochures, annual reports, employee newsletters, executive speeches, position papers, backgrounders, corporate memos, customer letters, and crisis communications. Offered fall and winter semesters. 3.000 Credit hours
CAP	495 Ad and PR Campaigns		Planning and presentation of a response to an advertising/public relations problem or objective of an actual organization. Includes liaison with the client organization throughout the semester and presentation to the client at the conclusion of the semester's work. Offered fall and winter semesters. Prerequisites: CAP 310 or CAP 320; senior standing. 3.000 Credit hours
CHM	102 Chemistry and Society	1	A survey of some of the many ways in which chemistry is involved with people's day-to-day existence.
CHM	111 Introduction to Green Chemistry	1	Green Chemistry, also known as sustainable chemistry, is the design of chemical products and processes that reduce or eliminate the use or generation of hazardous substances. The course presents basic concepts of green chemistry and engineering. It is not applicable for chemistry majors or minors. Fulfills Foundation - Physical Sciences. 3 cr.
CHM	311 Green Chemistry and Industrial Processes	1	Green Chemistry is the design of chemicals and processes while eliminating the use and generation of hazardous substances. Focuses on green chemistry principles and their industrial applications: global perspectives on green chemistry performed in industrial settings with no negative environmental consequences and increased benefits to humans and the earth.
CHM	427 Green and Environment Chemistry Laboratory		Students are exposed to the methods used in environmental chemistry analysis and the application of green chemistry principles, benign design, life cycle analysis through experimental design, practical aspects of environmental, and human health issues. A solid understanding of methodology used in environmental laboratories and application of green chemistry is attained. Course offered winter semester. Prerequisites: CHM 221; CHM 241, or CHM 245 and CHM 246.
CHM	442 Synthetic Polymers: Life Cycle and Emerging Sustainable Technologies		Synthetic and analytical approaches to polymer and materials development using the principles of green chemistry. Coverage of how chemists incorporate principles of green chemistry and sustainable technologies into their workflow to assess the life cycles of polymers and materials. Three hours of lecture per week. Offered winter semester of even-numbered years. Prerequisite: CHM 242 or CHM 247

CMB	150 Biotechnology and Society	1	An introduction to biotechnology, focuses on its application in, and impacts on, our society. Scientific, ethical, economic, legal, social and historical aspects of biotechnology will be covered. Class discussions and laboratory investigations of current topics including: cloning; agricultural biotechnology; genetically-modified foods; stem cells; and medical biotechnology highlight the course. Fulfills Foundation - Life Sciences with a Lab. Offered every semester. 4 cr.
CMB	350 Foundations of Brewing		Introduction to history, culture, theory and practice of brewing. Students design and brew a beer of choice. Implications of beer consumption on social, psychological and biological health are emphasized. Effects of human migration, technological advances, economics, culture and globalization on beer production are also addressed. Course offered fall and winter semester. Prerequisite: Junior standing. 0.000 OR 3.000 Credit hours
COM	303 Debate	1	Instruction in techniques of argumentation and debate. Research methodology, logical analysis and argumentation, rhetorical strategies, technique of public presentation.
COM	372 Global Communications	1	A global focus on the relationship between media and society. The nature of global media in a world community. Varieties of media technologies, contents, and effects. How media encourage cross-cultural unity, or increase tensions within and between nations. Fulfills one of the Issues/Themes requirements. Offered fall semester. 3 cr.
COM	410 Senior Seminar in Health Communication	1	This course serves as a bridge between the student's academic and professional careers. The course helps students synthesize their communication education into a view of the dominant themes, issues and trends of the health communication field.
COM	438 Communication Ethics	1	An upper-division course for the study of communications ethics. Students explore how language and innocence are mutually exclusive, examine how rhetoric, ideology, and information bear upon social and personal evil, and consider ethics issues relating specifically to communicative media. Focus is directed to the assessment and development of ethical sense-making.
COM	490 Internship	1	A supervised work experience in an area of a student's potential career interest. Initiated by the student, who plans the work experience with the advisor, the faculty sponsor chosen to supervise the internship, and the supervisor at the worksite.
COM	495 Issues in Communication	1	Selected communications theories are examined in the context of contemporary issues/questions. Seminar-style analysis and application of concepts based on readings selected to support discussions about one or more current critical issues in communication.
COM	634 Ethics in Professional Communication	1	An examination of ethical issues and problems in professional communication. Special attention is given to understanding the connections between the communication industry and society, government, economics, and the law.
CJ	325 Criminal Justice and Human Rights	1	A comparative study of criminal justice in relation to past, current, and emerging human rights claims, violations, protections and enforcement locally, regionally, nationally, and internationally. Part of the Human Rights Issue. Offered winter semester. Prerequisite: Junior Standing. 3 cr.
CJ	380 Mod Slavery: Human Trafficking	1	New course - description not available

CJ	380 Environmental Crime		Focuses on topics not ordinarily dealt with in other courses. Topics will be determined by faculty interest and student request. While the course can be repeated, no more than six credits can be applied to a criminal justice or legal studies major. Offered on sufficient demand. 1.000 TO 9.000 Credit hours
ECO	100 Current Economic Issues	1	Examination of current social issues from an economic perspective, such as drugs, rent control, environmental pollution, poverty, crime, and the distribution of medical care. Recommended for students interested in current issues. Students with any economics course at ECO 200 and above cannot take this course for credit. Fulfills one of the Foundation - Social and Behavioral Sciences. Offered fall and winter semesters. 3 cr
ECO	210 Introductory Macroeconomics	1	Introduction to the study of the national and global economies. Topics include the effects of government taxation and budget deficits on economic growth; ways to alleviate unemployment, inflation and international trade imbalances, and the importance of expectations and decision-making in an uncertain world. Fulfills one of the Foundation - Social and Behavioral Sciences. Offered every semester. Prerequisites: MTH 110 or MTH 122 or MTH 201, sophomore standing recommended. 3 cr.
ECO	336 Urban & Real Estate Economics		Applies economic models and methods for understanding urban real estate markets. Topics include urbanization and urban growth; determinants of land rents and urban spatial structure; characteristics and determinants of real estate markets; location choice; transportation, poverty, crime, and education in cities; relationship between real estate markets and business cycles. Offered winter semester. Prerequisite: ECO 211 or ECO 200. 3.000 Credit hours
ECO	345 Environmental and Resource Economics	1	Develops a systematic economic framework to analyze market and government allocations of natural and environmental resources. Topics include relationships between population growth, land development, and environmental quality; regulatory versus market oriented environmental policies; supplies and prices of mineral and energy resources; harvest and protection of forests and fisheries. Part of the Sustainability Issue. Offered each year. Prerequisites: Junior standing and ECO 200 or ECO
ECO	349 Emerging Markets Issues	1	Emerging Markets Issues. Important problems in emerging markets throughout the world, such as: policies to stimulate growth via international trade; foreign aid and multinational investment in transitional economics; the use of natural resources and agriculture in economic development; and the relationship of economic development to education, health and migration. Fulfills Cultures - World Perspectives. Fulfills one of the Issues/Themes requirements. Offered every other year. Prerequisite: ECO 210 or ECO 200. 3 cr.
ECO	350 Gender and Economics	1	Analysis of gender differences in employment and earnings. Topics include allocation of time between the household and the labor market, employment and family structure, theories of discrimination, antipoverty programs, comparable worth, parental leave, and affirmative action. Historical trends and cross-cultural comparisons are discussed along with current U.S. conditions. Fulfills one of the Issues/Themes requirements. 3 cr.
ECO	369 International Economic Issues	1	Selected topics in both international trade and international finance. Includes preferential trading arrangements such as NAFTA and the European Union; analysis of barriers to trade and arguments for and against protectionism; the influence of exchange rates on capital flows; and the relationship between international trade and economic growth. Fulfills Cultures - World Perspectives. Fulfills one of the Issues/Themes requirements. Offered every year. Prerequisite: ECO 210 or ECO 200. 3 cr.

ECO	380 Health Economics	1	Application of microeconomic tools to health and medical care issues. Topics include demand for health care, economic choices of medical care providers, insurance markets, economic justification for government involvement in the medical care system, various proposals for health care reform in the U.S. and different health care systems in the world. Part of the Health Issue. Offered fall semester. Prerequisites: Junior standing and ECO 211 or ECO 200. 3 cr
ECO	435 Urban Economics	1	Topics include the urbanization process, the city as an economic system, location analysis, poverty, housing, pollution, transportation, and public finance. Fulfills one of the Issues/Themes requirements. Offered fall semester. Prerequisites: ECO 211 or ECO 200. 3 cr
ECO	643 Health Economics	1	This course employs economic tools to understand issues related to health care. Students will learn how to evaluate cost-benefit analysis, assess cost effectiveness, and interpret regression analysis. Microeconomic issues include resource allocation, production efficiencies, market structure, and industry performance. Macroeconomic issues include national policy, equity, and health care reform.
EDF	315 Diverse Perspectives on Education	1	This course will introduce the historical, philosophical, and sociological foundations of education in the United States. Emphasis will be placed on the changing purposes of education historically, the legal and procedural expansion of schooling to an increasingly diverse student population, and the cultural competencies needed to teach all students effectively. Fulfills Cultures - U.S. Diversity. Offered every semester. 3 cr
EGR	306 Urban Sustainability	1	Social, environmental, economic points of view engaged to study how successful cities work. Study approached using assigned reading compared to direct observation and immersion into urban environments. Focus: interaction of built environment with social, natural environment. How engineering decisions about materials used in buildings impact structural integrity, energy use, economics. Offered fall and winter semesters. Part of the Sustainability Issue. Prerequisites: Junior standing, MTH 110
EGR	406 Renewable Energy Systems: Structure, Policy, and Analysis	1	A survey of the technological as well as economic, societal, and public policy issues associated with renewable energy systems. Topics include generation using renewable resources such as solar, wind, hydropower, and biomass as well as advanced energy storage systems and distribution. Energy research and analysis techniques are introduced.
EGR	463 Alternative Energy Systems and Applications	1	Introduction to the current issues of energy for sustainability. Principles of alternative and renewable energy sources including solar thermal, solar photovoltaic, wind, hydropower, biomass, geothermal, hydrogen and nuclear energy. Fundamentals of combustion of hydrocarbon fuels and alternative fuels such as biofuels. Fuel cells and electrochemical energy storage units. Offered fall semester. Prerequisites: EGR 360 or PHY 360 or permission of instructor. 4 cr
EGR	413 Materials for Energy Storage	1	Study of the materials for advanced energy storage. Topics include electrochemical reactions, anode and cathode materials, electrolyte materials, electrochemical testing of materials, typical responses of common materials, and life testing. In addition, tradeoffs in material performance are discussed.
EGR	513 Materials for Energy Storage	1	Study of the materials for advanced energy storage. Topics include electrochemical reactions, anode and cathode materials, electrolyte materials, electrochemical testing of materials, typical responses of common materials, and life testing. In addition, tradeoffs in material performance are discussed. Offered fall semester. Prerequisites: EGR 250 or EGR 257 or by permit. 3 cr
EGR	580 Alternative Energy Systems & Applications		A study of special topics not regularly covered in the curriculum; this course covers alternative energy systems.

ENG	382 SWS Nature Writing	1	Focuses on the literature that deals with the relationship between human beings and the natural world. Includes literary non-fiction, nature poetry, environmental fiction, and other forms of literature that illuminate both human and non-human nature. In addition to writing analytical papers, students will try several forms of nature writing. Fulfills one of the Issues/Themes requirements. Offered fall and winter semesters. Prerequisite: WRT 150. 3 cr
ENG	261 Foundations of Language study		An introduction to the principles of linguistics and linguistic analysis, with a focus on the structure and use of English. Coverage includes phonology, morphology, syntax, descriptive and prescriptive grammar, language history, and language variation. Prerequisite for 300/400-level English courses in applied linguistics. Offered fall and winter semester. 3.000 Credit hours
ENG	364 Sociolinguistics		Study of sociolinguistic theories investigating the interaction of language and society. An examination of the social and cultural aspects of language and language use: social stratification, power, gender, race, ethnicity, class, geographic origins, and networks. Offered fall semester. Prerequisites: ENG 261. 3.000 Credit hours
ENG	664 Sociolinguistics and Language Teaching		Introduction to major concepts, theories, findings, and research methods in sociolinguistics as they relate to second and foreign language teaching. Topics include language variation and change; standards, attitudes, and ideologies; world Englishes; language policy and planning; identity; and socialization. Focus on implications for teaching English in domestic and international contexts. Offered winter semester. Prerequisite: ENG 667. 3.000 Credit hours
ENG	665 Second Language Acquisition		An examination of the major theories of second language acquisition and various factors that influence the learning process among different age groups of learners from different first language backgrounds. The relationship between SLA research and its pedagogical implications for teachers is also addressed. Offered winter semester. Prerequisite: ENG 667. 3.000 Credit hours
ENG	670 World Englishes: History and Variation		Examination of the external and internal history of the English language from Old English to present day English with emphasis on the development, change, and variation of regional and social varieties of World Englishes. Includes linguistic and textual analyses of corpora, social media, dictionaries, grammars, and other resources. Offered every other year. Prerequisite: ENG
ENS	201 Introduction to Environmental Studies and Sustainability	1	ENS 201 is an interdisciplinary exploration of the multiple ways by which human society influences, and is influenced by, its natural environment. Economic, political, and socio-cultural dimensions of environmental studies are presented through and interdisciplinary approach. Principles of sustainability are examined. Prerequisite: sophomore standing. 3 cr
ENS	300 Principles of Sustainability		
ENS	305 Sustainability Assessment and Reporting		
ENS	310 How the Biosphere Works		
ENS	311 To Bee or Not to Bee; Honev Bees and Social		

ENS	401 Environmental Problem Solving	1	A problem-solving seminar in Environmental Studies. Attention will be given to vulnerabilities to environmental change, sustainable development, impact and risk assessment, adaptations to and mitigation of environmental problems at various scales. Multidisciplinary student teams will conduct original research and design sustainable practices and solutions for real-life environmental problems. Prerequisites: ENS 201 and junior standing. 3 cr
ENS	410 Landscape Analysis		Landscape analysis is a broadly interdisciplinary study that includes concepts and methods of sustainable physical/human geography, ecology, planning, and architecture. It includes the biophysical and societal causes and consequences of landscape heterogeneity, processes, and evolution. Conceptual and theoretical core of this course links natural sciences with related human disciplines. Crosslisted with GPY and PA 410. Part of the Sustainability Issue. Offered fall semester. Prerequisite: Junior standing. 3.000 Credit hours
ENS	412 Global Environmental Change		The main theme of this course is the changing nature of our environment and human-environmental interactions. Topics include climatic fluctuations, environmental reconstructions, the interaction between humankind and the environment since the prehistoric times, and human-induced environmental change of the last century at the global, continental, and regional scales. Crosslisted with GPY 412. Part of the Sustainability Issue. Offered winter semester. Prerequisite: Junior standing.
ENS	492 Sustainable Agriculture Pract	1	Students will study agricultural systems while being exposed to applied research at the sustainable agriculture project site. Students will investigate models of sustainable food systems that link production to economics, consumption, and nutrition. Course offered fall semester. Prerequisite: ENS 201 or permission of instructor. 3.000 Credit hours
ENS	490 Internship	1	Supervised work experience in an area related to environmental studies.
ENS	491 Practicum		
FIN	330 Ethics in Finance	1	This course relates ethical principles to issues faced by financial professionals in fields such as investment analysis, investment sales, corporate finance and financial institutions. A general background in moral philosophies will be provided. Offered winter semester. Prerequisite: FIN 320. 3 cr
GEO	100 Environmental Geology	1	The relationship between people and their physical geological environment. Topics include geologic hazards, hydrology and human health, mineral and energy resources, and land use planning. Primarily for non-science majors; not for Geology or Earth Science majors. Lectures and field trips. Fulfills Foundation - Physical Sciences. (3-0-0) Offered each semester and in
GEO	103 Oceans	1	Scientific investigation of the oceans and interactions among ocean, atmosphere, and lithosphere. Introduction to the chemistry of seawater, physics of water movement, coastal processes, geological oceanography, changes in the oceanic system through geologic time, and the role of oceans in Earth's geologic evolution.
GEO	105 Living with the Great Lakes	1	Introduction to Earth Science using the Great Lakes as a theme and Lake Michigan as a natural laboratory. Review of the Lakes' geologic setting, origin, and history; climatology and lake levels; physical processes including erosion; water chemistry as a function of geology; human interactions with the Lakes. Lectures and field trips. Fulfills Foundation - Physical Sciences. (3-0-0) Offered in fall semester and in summer. 3 cr
GEO	111 Exploring the Earth	1	Introduction to the study of Earth materials and processes, including minerals, rocks, mineral deposits, weathering, erosion, volcanism, and mountain building.

GEO	202 Hydrosphere for Teachers	1	Introduction to how the hydrosphere works emphasizing a descriptive approach. Includes river, groundwater, glacial, ocean, and shoreline systems and human interaction with those systems.
GEO	203 Water for K-8 Teachers	1	Introduction to how the atmosphere works emphasizing a descriptive approach. Includes daily, seasonal, and long-term changes, weather patterns, and relationships between human activities and the atmosphere.
GEO	300 Geology and the Environment	1	Detailed examination of interactions and connections between people and their geologic environment from an Earth Systems perspective. Using case studies and current events, students investigate complex environmental processes and issues related to the lithosphere, hydrosphere, atmosphere, and biosphere. Students will reach and defend decisions concerning personal, corporate, and governmental actions. Fulfills one of the Issues/Themes requirements; not included in the Geology/Earth Science major or minor. (3-0-0) Offered winter semester. Prerequisites: Junior standing and completion of Natural Sciences Foundation. 3 cr
GEO	320 Geomorphology	1	The patterns and genesis of landforms with emphasis on fluvial processes, climatic factors, and environmental implications. Independent study project or research paper required. Lectures, laboratory, and field trips.
GEO	360 Earth Resources in Transition: Conventional to Sustainable	1	Exploration of transition from conventional to sustainable earth resource issues, technologies, and science. Focuses on one, or a combination, of earth resources: water, energy, or earth materials (minerals and metals). Topics may include water resources, treatment and usage; oil and gas origins, exploration, recovery, and refining; mining and metals recovery.
GEO	425 GIS in Geology	1	Applied geographic information systems (GIS) in geology. Students already familiar with GIS will learn advanced skills and apply GIS skills to specific geology problems in hydrology, field mapping, mineral and land resources, water quality, and other topics based on student interest and background.
GEO	445 Introduction to Geochemistry	1	Topics include crystal chemistry (nuclear/solid-state chemistry), water geochemistry (kinetics) and mineral stability (thermodynamics).
GPY	100 Physical Geography	1	Explores the spatial patterns between landforms, natural systems of flora and fauna, and climate. Designed to increase awareness of the physical environment, its landscape, controls, and processes, and the interrelationships of natural
GPY	101 Sustainability and Place		The concept of sustainability holds that the social, economic, and environmental factors within human communities must be viewed in the context of their geographic locations. Strategies and decisions for sustainable development require understanding of the spatial patterns of human-environmental interactions, scale, and place. GPY 101 provides important place based perspectives on sustainability. Course offered every semester.
GPY	209 Introduction to City and Regional Planning	1	An introductory course for people interested in careers in planning and public administration. The course explores the relationship between the goals of a community and the techniques needed to implement long-term and sustainable strategies. Fulfills one of the Issues/Themes requirements. Offered fall semester. 3 cr
GPY	235 Geography for a Changing Worlds		A survey of geography followed by an examination of specific geographic concepts. Physical, cultural, economic, and related factors will be given more emphasis than place-name geography. Fulfills Foundation - Social and Behavioral Sciences. Fulfills Cultures - World Perspectives. Offered every semester.
GPY	310 Land-use Planning	1	3.000 Credit hours
GPY	312 Urban and Refional Environmental Planning		An introduction to the urban planning strategies that help towns and cities to preserve, restore, and even capitalize on their natural resources. This course investigates threats to clean air, water, and healthy ecosystems in our communities and examines solutions in the form of governmental policies, green designs, and urban inventiveness. Cross-listed with ENS 312 and PA 312. Offered winter semester of odd-numbered years.
GPY	314 Land-Use Planning Law	1	3.000 Credit hours

GPY	316 Introduction to Transportation Planning	1	This course is an introduction to transportation planning. It explores the planning, land use and policy implications of city and regional transportation as it relates to urbanism, energy use, public health and safety, sustainability and economic development. Offered winter semester of odd-numbered years. 3 cr
GPY	324 Urbanization	1	Examines the process of urbanization and its impact on various cultures and its long-term comprehensive sustainability. Considers the dynamic growth of urbanization in third world countries and the significant increase in global urbanization, emphasizing the evolution of cities over time, space, and vastly different social, political, and cultural environments. Fulfills Cultures - World Perspectives. Fulfills one of the Issues/Themes requirements. Offered fall semester. 3 cr
GPY	335 Globalization and Development		Development involves positive and negative social, political, economic, cultural, and environmental changes for people living in a region or a country. GPY 335 explores the complex geography of the processes associated with development and in particular global development. Offered winter semester. 3.000 Credit hours
GPY	350 Geopolitics, Energy, and Environment of Russia and Eurasia		This course examines the unique role of Russia and Central Eurasia in the world's energy, water, and food security and many global geopolitical processes of the 21st century. With its complex ethno-cultural composition and vast deposits of oil, gas, coal, and uranium, this region is strategically important for the US. Fulfills Cultures - World Perspectives. Part of the Globalization Issue. Offered winter semester. Prerequisite: Junior standing.
GPY	361 People, Environment, and Development in the Amazon	1	This course explores natural resource use and human settlement over time in the Amazon Basin, from early tribal societies to the present. Topics include extractive economies, trade in animal and forest products, conservation and development initiatives, and the changing demands for resources in urban centers of Amazonia today.
GPY	362 A Geography of World Agriculture and Farmers	1	A geography of the world's agricultural practices and development at different scales, from traditional methods to industrial agriculture with an emphasis on farming societies. Topics include indigenous agriculture and crop domestication, agroforestry and plantation systems, land use and rural societies, export crops, aquaculture and livestock, and drug cultivation. Fulfills Cultures - World Perspectives. Part of Globalization Issue. Offered fall semester. Prerequisite: Junior standing. 3 cr
GPY	363 World Forests and Their Use	1	A geography of the world's forests and their use, from traditional to industrial practices over space and time. Topics include the local, national and international exploitation of forests, forest societies, foods, fuel and medicines, timber, protected areas, and the challenge of sustainable forest use in different regions and environments. Fulfills one of the Issues/Themes requirements. Offered fall semester. 3 cr
GPY	381/4 Sustainable Urban and Regional Planning in the Netherlands		Of varying focus, the course makes use of the history, culture, and society of a host country in order to highlight disciplinary perspectives in context. To be taught in that country (or countries) as part of an approved study abroad program. By permit only. Credit may vary.
GPY	410 Landscape Analysis	1	Landscape analysis is a broadly interdisciplinary study that includes concepts and methods of sustainable physical/human geography, ecology, planning, and architecture. It includes the biophysical and societal causes and consequences of landscape heterogeneity, processes and evolution. Conceptual and theoretical core of this course links natural sciences with related human disciplines.

GPY	412 Global Environmental Change	1	The main theme of this course is the changing nature of our environment and human-environmental interactions. Topics include climatic fluctuations, environmental reconstructions, the interaction between humankind and the environment since the prehistoric times, and human-induced environmental change of the last century at the global, continental and regional scales. Cross-listed with ENS 412. Fulfills one of the Issues/Themes requirements. Offered winter semester. Prerequisites: GPY
HNR	235 SWS Democracy & Pol Thinking	1	Course explores the idea of democracy and its alternatives, with a focus on citizen participation, political judgment, and basic values of freedom, equality, and tolerance. The course pays special attention to the possibilities of and obstacles to student participation in politics, including the student's role in campus government. Fulfills one of the Foundation - Social and Behavioral Sciences. Offered fall semester. 3 cr
HNR	241 The Earth, A Global View	1	Course has two objectives: (1) understanding Earth as one global, holistic, delicately balanced dynamic system; and (2) understanding the critical interdependence between humans and Earth systems. Required field trip. Fulfills Foundation - Physical Sciences with a Lab. See University Honors College. (3-0-3) Offered fall and winter semesters. 4 cr
HNR	242 Plants and People	1	Plants are the dominant organisms on the landscape and are often taken for granted. The ecology, structure, function, genetics, and variety of plants are studied in order to develop an appreciation of the dependence of humans upon them for food, oxygen, shelter, medicines, and pleasure. Fulfills Foundation - Life Sciences with a Lab. Offered fall and winter
HNR	203 Food For Thought	1	Temporary course - description not available.
HNR	280 Theory & Practice of Rights I	1	Temporary course - description not available.
HNR	264 Theory & Practice of Rights II		This is the second of a three-part foundational interdisciplinary sequence on the theory and practice of rights in the United States and around the globe. It examines debates about the meaning of human rights and their value for addressing injustices in western and nonwestern contexts. Fulfills one of the Foundation - Social and Behavioral Sciences. Course offered winter semester. Prerequisites: HNR 263, first-year honors student. Corequisite: HNR 265. 3.000 Credit hours
HNR	265 Theory & Practice of Rights III		This is the third of a three-part honors foundational interdisciplinary sequence on the theory and practice of rights in the United States and around the globe. It explores the experience of and resistance to human rights violations in particular cultural contexts. Fulfills one of the Foundation - Social and Behavioral Sciences. Fulfills Cultures - World Perspectives. Fulfills one of the issues requirements. Course offered winter semester. Prerequisites: HNR 263, first-year honors student. Corequisite: HNR 264. 3.000 Credit hours
HNR	280 Social Product Innovation	1	Temporary course - description not available.
HNR	281 Ghanaian Life and Culture	1	Of varying focus, the course makes use of the history, culture, and society of a host country in order to highlight disciplinary perspectives in context. To be taught in that country (or countries) as part of an approved study abroad program. By permit only. Credit may vary. 3 cr
HNR	311 SWS Prob Solving-Sustain Sols	1	An intensive, in-depth study of a special problem or topic. The seminar, taken in the junior or senior year, is a Capstone for the liberal arts component of the student's education. It provides an occasion for considering the ways in which liberal arts disciplines impinge upon each other. Fulfills Cultures - World Perspectives. 3 cr

HNR	313 Designing Social Ventures		An intensive, in-depth study of a special problem or topic. The seminar, taken in the junior or senior year, is a Capstone for the liberal arts and sciences component of the student's education. It provides an occasion for considering the ways in which liberal arts and sciences disciplines impinge upon each other. Fulfills one of the Issues requirements. Prerequisites: Junior standing.
HNR	313 Global Petroleum Systems		An intensive, in-depth study of a special problem or topic. The seminar, taken in the junior or senior year, is a capstone for the liberal arts and sciences component of the student's education. It provides an occasion for considering the ways in which liberal arts and sciences disciplines impinge upon each other. Prerequisites: Junior standing 3.000 Credit hours
HNR	313 Design Thinking		An intensive, in-depth study of a special problem or topic. The seminar, taken in the junior or senior year, is a capstone for the liberal arts and sciences component of the student's education. It provides an occasion for considering the ways in which liberal arts and sciences disciplines impinge upon each other. Fulfills one of the Issues requirements. Prerequisites: Junior standing 3.000 Credit hours
HTM	202 International Tourism	1	Introduction to international tourism focusing on the socio-economic effects of international tourism along with the inherent public-private interaction. International tourism is more than a set of industries, but rather an activity that encompasses human behavior, uses of resources (public and private), and interaction with other people, economies, and environments. Fulfills Cultures - World Perspectives. Offered fall semester. Prerequisites: HTM 101 suggested. 3 cr
HTM	235 Tourism and Recreation Management		An introduction to the dynamic domestic (U.S.) tourism and recreation / leisure industries, focusing on their strong linkages to both non profit and for profit oriented providers. Emphasis is given to entrepreneurship, economic development, sustainability, career opportunities, and the management of organizations. Offered on sufficient demand. 3.000 Credit hours
HTM	268 Adventure Tourism		An introductory course exploring the rapidly growing and diverse market for activity-based tourism. This class reviews the provision, management, and philosophy of outdoor activities and controlled adventure as well as identifying the motives and characteristics of the adventure traveler. 3.000 Credit hours
HTM	368 Geotourism	1	A study of geotourism, tourism that sustains or enhances the geographic character of a place. Topics include: community development, land use and planning, conservation of resources, tourist satisfaction and marketing, with the purpose of sustaining or enhancing the environment, culture, aesthetics, heritage, and the well-being of a places residents. Part of the Sustainability Issue. Offered fall and winter semesters. Prerequisites: Junior standing and HTM 202 (Recommended). 3 cr
HTM	333 Hospitality Facilities Management		The management of the hospitality facility with emphasis on preventive maintenance, energy, sustainability, and security. Offered fall semester. Prerequisite: HTM 101. 3.000 Credit hours

HTM	402 Tourism Policy Issues	1	This course provides a comprehensive overview of the theories of tourism development as well as an analytical approach to worldwide development issues. The roles of stakeholders are evaluated and there is a focus throughout on the applied theoretical discussions regarding development and sustainable management of tourism destinations and attractions. Offered winter semester. Prerequisites: HTM 202 or Permission of instructor. 3 cr
IDS	180		This is an interdisciplinary special topics course. Focus will vary by semester and instructor. Course offered fall and winter semesters. 1.000 TO 3.000 Credit hours
ITC	100 Introduction to Intercultural Competence	1	This course introduces students to the concept of cultural competence, and provides them with the knowledge and application of skills necessary to succeed in diverse settings. This course examines theories of intercultural engagement and then requires students to consider how they might apply knowledge in diverse practical settings. Fulfills Cultures - U.S. Diversity. 3 cr
ITC	490 Practicum: Intercultural Learning Experience	1	The course is an application of intercultural principles in a public or community setting. Students will engage in both cohort learning activities as well as individual experiential placements. Students on qualifying semester study abroad programs can complete the practicum concurrently with participation in the cohort. Offered fall and winter semester. Prerequisite: ITC 100, and filing of application for certificate in Intercultural Competence. 3 cr
ITC	495 Culminating Seminar in Intercultural Competence	1	This is the culminating course required for completion of the Intercultural Competence Certificate. Students identify issues of cultural conflict in their communities or academic disciplines, and develop plans for how these issues might be addressed through cultural understanding or training. Offered winter semester. 3 cr
LIB	201 Diversity in the United States	1	Explores how the intersections of race, ethnicity, gender, sexual orientation, class, religion and physical abilities affect the material lives and media representations of various cultural groups in the United States. Engages historical and current debates regarding issues of immigration, meritocracy, segregation, the economy, the environment, and identity. Fulfills one of the Foundation - Social and Behavioral Sciences. Fulfills Cultures - U.S. Diversity. Offered fall and winter semesters. 3 cr
LIB	322 Wicked Problems of Sustainability	1	Sustainability, as a wicked problem, is an intractable, on-going and high-stakes issue. This course engages students in participatory research on the inextricably linked dimensions of sustainability, such as economics, environment and social equity. Students will work with community partners to address specific interdisciplinary problems of sustainability.
LIB	323 Design Thinking		Design Thinking is an iterative, project-based, problem-solving process valued in organizations both locally and internationally. As interdisciplinary teams, students in this course will use the Design Thinking process to better facilitate the chaos of innovation by collaborating with stakeholders to meet real world needs. Part of the Information, Innovation, and Technology Issue. Offered fall and winter semesters. Prerequisite: Junior standing. 3.000 Credit hours
LIB	330 The Idea of Nature	1	n historical and cross-cultural examination of how nature has been interpreted by science, philosophy, religion, literature, and art. Fulfills one of the Issues/Themes requirements. Offered winter semester. 3 cr
LIB	341 Leadership for Social Change	1	An examination of the theory and practice of leadership in social change movements, focused on developing personal and organizational capacities for leadership in a liberal education context. Students identify a contemporary social issue and create an action plan for resolution, addressing that issue with at least one action step. Part of the Information, Innovation, and Technology Issue. Offered fall and winter semesters. Prerequisite: Junior standing. 3 cr
LIB	342 Food Matters	1	This course offers an interdisciplinary exploration of the relationship between food systems and food we consume every day. Analysis of competing information and integration of evolutionary, historical, socio-political, cultural and environmental factors shaping our current food systems lead back to the basics of nutrition, agricultural practices and equitable food

MGT	340 Business, Social Change and Ethics	1	Examines the process of business development and the ethical questions that process raises. Particular attention is paid to the questions raised by market pressures, bureaucratic organization and income stratification. Fulfills one of the Issues/Themes requirements. Offered every semester. 3 cr
MGT	438 Business Ethics	1	An inquiry into the relevance of the classical ethical literature to the resolution of everyday business problems. Particular emphasis will be placed on the practical usefulness of the Socratic tradition. That tradition requires that we attend to clarifying our own values as well as those of others. We will read a number of Socratic Dialogues, respond to a variety of business cases, and attend to the relationship between them and the process of understanding ourselves. Fulfills one of the Issues/Themes requirements. Prerequisite: MGT 331. 3 cr
MGT	355 The Diversified Workforce	1	An examination of the experiences of different groups in the U.S. workforce, including race, ethnicity, gender, age, disability, and sexual orientation. Cultural differences are explored and a consideration is given to the ways in which organizational norms operate to include or marginalize different groups of people. Fulfills Cultures - U.S. Diversity. Fulfills one of the Issues/Themes requirements. 3 cr
MGT	466 International Management and Multinational Corporations	1	A study of the managerial challenges of conducting business in a global economy. Emphasis on cultural differences and their impact on the situations and issues managers confront when working internationally. Requires senior status or approval of instructor. Fulfills one of the Issues/Themes requirements. Fulfills Cultures - World Perspectives. Prerequisite: Senior status. 3 cr
MGT	672 Creativity and Social Entrepreneurship	1	This course provides applied sustainable development tools and best practices that businesses and non-profit organizations can use to address social entrepreneurship issues using innovative, interdisciplinary, and sustainable approaches.
MKT	350 Marketing Management	1	An introduction to marketing. Provides a general understanding and appreciation of the forces operating, institutions employed, and methods followed in marketing products and services both domestically and internationally.
MKT	352 Marketing Research	1	Detailed examination of business research procedures and applications. Problem definition, research design, data collection, sampling techniques, costs, etc. Case problems and projects.
MKT	354 Distribution Institutions and Logistics	1	An integrated study of supply chain and distribution channels, and their institutions in the global marketplace. Topics include an introduction to the supply chains, system design, advantages and disadvantages of various channel institution types, and the functional dimensions of supply chain and distribution management.
MKT	370 New Product Development	1	This course teaches students how to develop a successful new product or service. Student teams experience the whole process involved in bringing a new product from idea to launch. Emphasis is on the application of fundamental marketing and entrepreneurial principles required to achieve continuous innovation and sustainable competitive advantage.
MKT	375 Marketing Ethics	1	The ethical implications of several current marketing public policy issues will be discussed, including consideration of each issue with regard to the responsibility of business in society. Guidelines for ethical decision-making, principles of ethical leadership, and ethical behavior in corporate governance will also be reviewed.
MKT	451 Marketing Strategy	1	A methodical analysis of a significant number of marketing cases selected from actual business experience to illustrate the application of sound principles to market planning, sales forecasting, and market management. Offered fall and winter semesters.

MKT	651 Marketing Management	1	Focuses on developing an understanding of the role of markets and marketing in the macroeconomic environment, and on providing marketing managers with the knowledge and tools they will need to successfully analyze product markets and develop marketing strategies that will provide sustainable competitive advantage.
MKT	680 Social Media	1	In-depth analysis of selected current topics and problems in marketing. Content will vary from semester to semester among the many subareas of marketing management, physical distribution, systems analysis/design, application, model building and theory; this course focuses on social media.
NRM	140 The Climatic Factor	1	A study of the atmosphere, broad aspects of weather and climate, microclimatology, and the geography of climate and effects on terrain, vegetation, and people. (3-0-2) Offered fall and winter semesters. 4 cr
NRM	150 Introduction to Natural Resources	1	Survey of natural resource issues and environmental problems. The course will use an integrated approach involving concepts from natural and social sciences to provide a foundation for understanding past, present, and future natural resource issues including biodiversity, land use, water and air pollution, human population, energy use, and waste management. (0-3-0) Offered fall and winter semesters. 3 cr
NRM	240 Principles of Climatology	1	The atmosphere, broad aspects of weather and climate, microclimatology, and paleoclimatology. Instrumentation, data presentation, ecoclimate, and microclimatological field observations. Lecture, laboratory, and field trips. (3-0-2) 4 cr
NRM	281 Principles of Soil Science	1	Aspects of the physical, chemical, and biological properties of soils. (3-0-3) Offered fall semester. 4 cr
NRM	300 Ethical Recreation: Leave No Trace	1	This three-day backpacking course covers how increasing recreational use of public lands can impact biophysical resources and visitors' experience. Students will apply the principles and practices of the Leave No Trace (LNT) program which are designed to reduce the effects of wildland recreation. LNT certification possible upon successful completion. Offered spring semester. Prerequisites: Completion of the General Education Life Sciences requirement. Junior standing. Permit required. 1 cr
NRM	308 Wildlife Ecology	1	This course provides an introduction to wildlife ecology including population ecology as it relates to wildlife management and conservation. Offered winter semester. Prerequisite: BIO 215. 4 cr
NRM	320 Introduction to Resource Systems	1	Basic principles, terminology, and methodology for the analysis and modeling of resource systems, including natural environments and human ecosystems. (2-0-3) Offered winter semester. Prerequisites: BIO 215 and MTH 122. 3 cr
NRM	330 Environmental Pollution	1	Investigation of causes and effects of water, soil and air pollution. Prevention and management of pollution will be discussed and examined from natural and social science perspectives. Design of impact assessment studies, data interpretation and laboratory methods. Topics may include waste disposal, acid deposition, climate change, toxicology, and risk assessment. (2-0-3) Offered winter semester. Prerequisite: CHM 109 or CHM 116. 3 cr
NRM	380 Renewable Energy Management and Molding		Lecture, discussion, laboratory, or field experience (or any combination of the preceding) in specific areas of resource management. Prerequisites: Variable.
NRM	380 Livelihoods, Resources, and Development		Lecture, discussion, laboratory, or field experience (or any combination of the preceding) in specific areas of resource management. Prerequisites: Variable. 0.000 TO 9.000 Credit hours

NRM	380 Managing Soil Health		Lecture, discussion, laboratory, or field experience (or any combination of the preceding) in specific areas of resource management. Prerequisites: Variable. 0.000 TO 9.000 Credit hours
NRM	386 Ecological Restoration & Management	1	This course will introduce students to ecological restoration and examines the practical methods and techniques used in ecosystem restoration and management.
NRM	395 GIS Applications in Resource Management	1	Explores applications of Geographic Information Systems (GIS) in natural resources management. Students will work on projects and examine several case studies in which GIS is used for the management of natural resources, including watershed analysis, environmental impact of timber sales, habitat loss, and endangered species conservation. (2-0-3) Offered fall semester. Prerequisite: GPY 307 or NRM 250. 3 cr
NRM	407 Natural Resources and Society: Study Abroad	1	Natural resources topics related to biodiversity, sustainability, alternative energy, environmental policy and economics, land use, climate change, historical influences, and cultural/societal attitudes conducted within an international context. The society-based experience is combined with readings, lectures, papers, and discussions. 1-4 cr
NRM	417 International Field Studies in Resource Ecology & Mgmt	1	Intensive field work related to natural resources ecology, conservation, preservation, and management conducted within an international context. The field-based experience is combined with readings, lectures, papers, and discussions.
NRM	420 Wildland Recreation Management	1	Learn about the challenges of managing wildland recreation that both meets the needs of users and preserves the ecological health of ecosystems. Learn techniques to manage dispersed recreation that occurs on public lands and waters and how to limit their impact on visitors and soil, vegetation, water, and wildlife. (3-0-0) Offered fall semester. 3 cr
NRM	450 Applied Spatial Analysis of Natural Resources	1	The course focuses on environmental and natural resource applications of computer-based spatial analysis concepts and techniques. Students will analyze contemporary environmental challenges using, for example, advanced geographic information systems (GIS) tools, image interpretation and analysis, simulation modeling, and spatial analysis.
NRM	451 Natural Resource Policy	1	Study of how natural resource policy is developed and implemented in the United States. Focuses on public policies toward renewable resources such as forests, biodiversity, land, recreation, and water. Includes foundations of the American legal system, choice of policy instruments, and basic methods of policy analysis. Part of the Sustainability Issue. (4-0-0) Offered fall and winter semesters. Prerequisites: Junior standing and completion of Natural Science Foundation; OR permission of instructor. 3 cr
NRM	452 Watershed and Wetland Management	1	Theory and application of wild land and urban hydrology, including the values of watersheds and wetlands as domestic ecosystems. (3-0-3) Offered fall semester. Prerequisites: GEO 111, MTH 122, and NRM 250. 4 cr
NRM	462 Forest Ecosystem Management	1	Traditional forestry practices will be introduced, with emphasis on how established practices can be integrated with the concepts of sustainable forestry and ecosystem management. The presentation, discussion, and synthesis of new approaches to the management of forest ecosystems will be especially stressed. (3-0-3) Offered winter semester. Prerequisite: NRM 250.
NRM	486 Restoration Ecology	1	Lecture, discussion, laboratory, or field experience (or any combination of the preceding) in specific areas of resource management.
NRM	496 NRM Issues in Southwest	1	Temporary course - description not available.
NRM	495 SWS Trends in NRM	1	A comprehensive and integrative analysis of the fundamental assumptions, issues, and problems of natural resources management. Examines the historical roots of natural resource management, identifies factors that caused natural resource management to change, and explores proposals for managing natural resources in the future. (0-4-0) Offered fall and winter semesters. Prerequisites: Completion of 20 credits in NRM, STA 215. 4 cr

NRM	552 Fisheries Management	1	An introduction to the principles of fisheries science and management, focusing on the process and tools for managing fish populations and their habitat as well as emphasizing quantitative methods for fisheries assessment.
OSH	300 Introduction to Occupational Safety and Health	1	An overview of safety and health concepts (accidents, legal accountability, hazard recognition/remediation, countermeasures, and risk) as they apply in a variety of occupational settings.
OSH	310 Hazard Recognition and Control	1	A study of general and mechanical hazards found in the workplace and methods of controlling them to limit employee exposure.
OSH	316 Health and Safety Techniques	1	Laboratory experience designed to expose students to various monitoring tools used in the development and maintenance of a comprehensive safety program in an occupational setting.
OSH	326 Principles of Industrial Hygiene	1	A study of industrial hygiene methods, measurement, and equipment.
OSH	350 Behavioral Aspects of Safety	1	An examination of various pathways in psychology, their impact on the individual, on safety, and the application of basic psychological principles in the safety profession.
OSH	410 Ergonomic Safety Engineering	1	An examination of various ergonomic engineering and human factors engineering methods used by safety specialists to reduce injury producing work conditions. Topics covered include systems safety analysis, fault tree analysis, MORT, as these tools relate to an effective ergonomic program.
OSH	414 Environmental Safety and Health Regulations	1	A study of laws addressing environmental pollution and hazardous waste management. (3-0-0) 3 cr
OSH	416 Advanced Industrial Hygiene	1	A study of laws addressing environmental pollution and hazardous waste management.
OSH	440 Safety and Health Program Development	1	An examination of the concepts and tools used in safety program development and implementation for a variety of work settings
OSH	495 Safety and Health Administration	1	An integrative exploration of the administrative function of a comprehensive safety program with emphasis on operations analysis, design, implementation, and evaluation.
PA	380 Disaster Relief/Emerg Prepared	1	Disaster relief and emergency preparedness.
PA	552 Law & Ethics in Local Government	1	Advanced-level workshop directed toward public sector professionals focusing on specific public sector problems and policies.
PA	641 Economic and Community Development	1	Describes and evaluates ways to coordinate the efforts of public agencies, private businesses, and nonprofit organizations to address planning, economic development, and employment issues more comprehensively. Included in this analysis are public and private programs basic to economic development; state and federal enabling legislation and regulations; local ordinance and public/private partnership alternatives.
PA	670 International NGO Management	1	Theory and cases in international nongovernmental organizations (INGO) management. Analysis of various types and various roles played by INGOs. Relationship between INGOs and other actors in international development such as multilateral and bilateral donors, host governments, local NGOs and local communities. Resource generation and management. Assessment and improvement of INGO performance.
PA	550 Applications of Sustainability Principles to	1	Advanced-level workshop directed toward public sector professionals focusing on specific public sector problems and policies. Format and scheduling are flexible and may include weekend sessions. Topics will vary and prerequisites may be established.

PA	671 Building Sustainable Communities	1	Provides an overview of ecological, energy, climatic and consumption issues impacting local communities. Through a multidisciplinary approach, students study the relationship among society, organizations, and the natural environment. Students examine how local governments and nonprofit organizations develop sustainable built landscapes, educate about sustainable best practices, and foster green economic development.
PA	672 Building Sustainable Public-Serving Organizations	1	Provides guidelines for local government and nonprofit managers who are transitioning their organizations to sustainable methods and practices. Students learn how to measure and analyze an organization's environmental footprint and social impact. They are also introduced to change management techniques useful for implementing new sustainability practices.
PAS	554 Community Service Learning Project/Phys Asst Prof Issues II	1	These workshops provide students with timely, interesting, and diverse content that complements learning in their graduate courses and exposes them with the topics, trends and thought leadership currently engaging the Johnson Center for Philanthropy. Through the workshops, students have the opportunity to interact with both local and visiting practitioners and thought leaders.
PAS	620 Community Service Learning Project/Clinical Rotations II	1	Second course to transition students from didactic to clinical training. Students will be assigned to a combination of clinical rotations selected from: family practice, internal medicine, OB/GYN, geriatric medicine, pediatrics, psychiatric medicine, emergency medicine, surgery, rural medicine, underserved medicine, and clinical electives.
PED	376 Sport Facility and Event Management		This course examines the principles of facility operations and event management in the industry of Sport Management. This class provides students with an in-depth investigation of the unique challenges and opportunities that are routinely faced by a business manager in the context of events at sport and entertainment venues. Course offered fall semester. 3.000 Credit hours
PED	380 Facility and Event Management	1	Study of special problems in physical education upon consultation with advisor and approval of department chair.
PH	500 Introduction to Public Health	1	Introduction to the history, philosophy, current concepts, practice, and administration of public health in the United States.
PH	505 Social/Behavior Public Health		This course examines the broad foundation in public health theory and tools for its application within the larger scope of public health research and practice. The course will provide an understanding of how both social and behavioral theory is essential in the creation of effective intervention approaches. Course offered winter semester. Prerequisite: Admission to the master of public health program. 3.000 Credit hours
PH	520 Environmental and Occupational Health		Presents basic concepts of environmental health and occupational health. Students will explore the biological, chemical, and physical factors from the environment (community and occupational) that impact the health of the public at a global and local level. Topics covered include air and water quality and industrial hygiene. Course offered winter semester. Prerequisite: Admission to the master of public health program. 3.000 Credit hours
PH	540 Public Health Law and Ethics		This course investigates elements of legal and ethical theories in public health. Students will use a case study approach to scrutinize ethical and legal issues in public practice, administration, and research. Course offered spring/summer semester. Prerequisite: Admission to the master of public health program. 3.000 Credit hours

PH	630 Health and Disease Disparities			Presents patterns, causes, and possible solutions to health disparities. The course will identify the role of race, ethnicity, and socioeconomic status in health research and access and utilization of health services. Course offered winter semester. Prerequisite: Admission to the master of public health program. 3.000 Credit hours
PHI	102 Ethics	1		What is good? What is evil? Are there objective standards for right and wrong? What are these objective standards? How can they be applied to important contemporary moral problems? This course considers the answers philosophers give to these and related questions.
PHI	320 Social and Political Philosophy			Analyzes the intellectual appropriation of the concept of freedom over time. Emphasis will be given to the dynamic interaction between freedom and social control in classics of Western philosophy from ancient times to modernity. Authors include Plato, Epicurus, Aristotle, Aurelius, Augustine, Hobbes, Rousseau, and Marx. Part of Human Rights Issue. Offered fall and winter semesters. Prerequisite: Junior standing. 3.000 Credit hours
PHI	325 Ethics in Professional Life	1		Examination of ethical principles and practice in business, medicine, education, law, and government. This course aims at providing students with the intellectual framework for an ethical analysis of situations which arise within various professions. Also seeks to foster mutual understanding across professional lines.
PLS	103 Issues in World Politics	1		Analysis and discussion of contemporary issues in world politics as a vehicle for introducing core concepts in comparative politics, such as democracy, dictatorship, civil society, power, nationalism, political economy, social policy, identity politics, and development. Students will gain basic familiarity with the institutions, actors, and processes that influence world politics. Fulfills one of the Foundation - Social and Behavioral Sciences. Fulfills Cultures - World Perspectives. Offered every semester. 3 cr
PLS	105 Introduction to Human Rights	1		Introduction to the historical and conceptual development of human rights as moral, legal, and cultural constraints on the behavior of states in relation to their citizens. Analysis is theoretical, exploring philosophical arguments surrounding the historical development of human rights and their current role in legal, cultural, literary and political products. Fulfills Foundation - Philosophy and Literature. Offered fall and winter semesters. 3 cr
PLS	302 Women, Politics, and Public Policy	1		This course explores the ways that gender influences government and policy decisions. Students will explore many gendered issues and the relevant policy responses. Topics include domestic violence, reproductive policies, divorce and the family, marriage and the family, poverty, class, and compensation. Offered winter semester. Prerequisite: PLS 102 or Junior Standing. 3 cr
PLS	303 Introduction to US Environmental Policy	1		This course examines the decision making processes to cope with modern environmental problems. The course focuses on both domestic and international environmental issues with special attention to interests, ideas, and institutions.
PLS	310 Politics and Health Policy	1		Explores contemporary issues in health policy and politics. Students will develop an understanding of the historical context, institutions, participants, and issues that structure health policy. Special emphasis on the politics of health care reform in the 1990s. Offered fall semester. Prerequisite: PLS 102 or junior standing. 3 cr
PLS	311 International Conflict and Conflict Resolution	1		Analysis of the causes of war and conditions for peace. Topics also include peacekeeping operations and the outcomes and ethics of war. Fulfills one of the Issues/Themes requirements. Offered fall and winter semesters. Prerequisite: PLS 211 or junior standing. 3 cr

PLS	316 Human Rights in International Politics	1	An analysis of human rights as an increasingly influential principle in international relations, and the friction between sovereignty and international standards of behavior. Topics covered within class may include the theoretical origins of human rights, international norms, international law, sovereignty, interventionism, particularly viewed through historical and contemporary human rights cases. Offered fall semester. Prerequisite: PLS 103 or PLS 211 or junior standing. 3 cr
PSY	355 Psychology and Culture	1	Exploration of the interaction between ecological and cultural variables and psychological processes. Topics include cultural influences on perception and cognition, personality, cognitive and social development, social relations, interpersonal and intergroup behavior, and psychopathology. Fulfills Cultures - World Perspectives. Offered fall and winter semesters.
PSY	362 Environmental Psychology	1	Study of the relationships between the physical environment, natural and human-made, and the behavior of human beings. The course focuses on the perceptual, cognitive, and motivational aspects of the human-environmental interaction. Offered occasionally. 3 cr
SOC	205 Social Problems	1	Examines a range of social conditions, arrangements, and behaviors typically defined as problems in modern society. Applies sociological analysis to understand how problems arise from the organization of society, and the processes by which conditions become identified as social problems, and how ideology and power shape responses to social problems. Fulfills one of the Foundation - Social and Behavioral Sciences. Fulfills Cultures - U.S. Diversity. Offered every semester.
SOC	351 Urban Sociology	1	Explores urban theory (Chicago School, political economy, and cultural approaches); the evolution of cities; suburbanization, race relations, street life, sustainability (economic, social and environmental), redevelopment, urban politics, and international comparisons. Readings focus on theory, specific cities, and environmental concerns. Part of the Sustainability Issue. Offered fall semester. Prerequisites: SOC 201 and Junior standing. 3 cr
SOC	350 SWS Family & Gender Dev World	1	A comparative examination of the impact of development on families and gender roles in third world countries. Will include consideration of general issues (e.g., factors affecting family reproduction decisions, women in the formal and informal labor force, etc.) and in-depth study of gender and family in one or more countries. Cross-listed with WGS 350. Fulfills Cultures - World Perspectives. Fulfills one of the Issues/Themes requirements. Offered winter semester. Prerequisite: WRT 150 with a grade of C (not C-) or better. 3 cr
SOC	377 Globalization: Structures and Movements		Examines and critiques the historical origins, economic and technological foundations, institutional arrangements, ideological underpinnings, collective movements, and controversial outcomes of 'transnationalism' and 'globalization.' Sociological analysis emphasizes macrolevel institutions that shape globalization, social conflicts arising from its effects, and the consequences of global change on individuals, groups, and organizations. Offered winter semester. Prerequisite: SOC 201 or SOC 280 or SOC 205. 3.000 Credit hours
SOC	385 Social Class Inequality	1	Focus on the historical, socioeconomic, and political construction of class inequality in the United States from a critical perspective. Includes attention to cultural and global context. Fulfills one of the Issues/Themes requirements. Offered fall and winter semesters. Prerequisite: Junior standing. 3 cr
SW	150 Human Needs in Complex Societies	1	Common human needs are examined and a number of historical responses to these needs are placed in a societal context. Cultural forces which affect resource allocation patterns and service delivery systems are analyzed. Fulfills one of the Foundation - Social and Behavioral Sciences. Offered fall, winter, and spring/summer semesters. Note: SW 150 is a prerequisite for all social work courses. 3 cr

SW	340 Human Behavior and the Social Environment I	1	The course provides knowledge, values and skills employed in assessing groups, organizations, and communities. Emphasis is focused on the social systems perspective, social work values, and ethics and the issues related to the diversity of context. The course presents theories and knowledge necessary to practice in macro-settings (groups, organizations, communities and society). Offered fall semester. Corequisites: SW 317 and SW 319.
SW	341 Human Behavior and the Social Environment II	1	This course provides biological, psychological and social knowledge about human growth and development within life cycle stages. Emphasis is on the development of an individual within a family or small group as experienced within larger social systems. The assessment process within each developmental stage is related to the work of a generalist practitioner. Offered winter semester. Prerequisites: SW 340; Corequisites: SW 316, SW 318, and SW 348. 3 cr
SW	351 Cross Cultural Service Learning	1	The focus of this course is on the unique culture(s) within the United States and taught using a service-learning approach. Students explore the themes of social welfare development. Students explore the themes of social services, politics, policies and the history of the assigned culture. The course includes a two or three-week experiential learning component in a specific location in the United States. The advanced practice social worker will recognize the interconnectedness between social work, social justice, and civic/global responsibility. Offered spring/summer semester. Prerequisite: Accepted into the BSW program. 3 cr
SW	354 Social Work: International Service	1	The focus of this course is on international social work policy and practice. Students interact with various communities using a service-learning approach. The students explore the themes of social services, politics, policies and the history of the assigned culture. The course includes a two or three-week experiential learning component in an international location. The advanced practice social worker will recognize the interconnectedness between social work, social justice, and civic/global responsibility. Offered spring/summer semester. Prerequisite: Permission of instructor. 3 cr
SW	300 Pluralism in American Society	1	Pluralism in American society is explored through analysis of cross cultural practices and values, with an emphasis on the commonalities and differences for individuals, groups, organizations, and communities. The social welfare response in the context of US diversity will be a primary focus. Fulfills one of the Issues/Themes requirements. Offered fall and winter
SW	630 Social Work: Global Service Learning	1	The focus of this course is on international social work policy and practice. Students interact with various communities using a service-learning approach. The students explore the themes of social services politics, policies and the history of the assigned culture. The course includes a two or three-week experiential learning component in an international location. The advanced practice social worker will recognize the interconnectedness between social work, social justice, and civic/global responsibility.
SW	631 Cross Cultural Service Learning	1	The focus of this course is on the unique culture(s) within the United States and taught using a service-learning approach. Students explore the themes of social welfare development. Students explore the themes of social services, politics, policies and the history of the assigned culture. The course includes a two or three-week experiential learning component in a specific location in the United States. The advanced practice social worker will recognize the interconnectedness between social work, social justice, and civic/global responsibility.
SW	676 Community and Social Planning	1	A review of professional practice in social planning and community organization. Exploration of a range of theories, concepts, and applications. Includes focus on power, influence, inter-organizational relationships and action strategies, development and use of structure and leadership.

WGS	335 Women, Health & Environment	1	This course is an overview of contemporary women's health issues focusing on the interconnectedness between health and the environment. Topics include reproductive issues, pesticides, sustainable development, occupational hazards, health insurance, and breast cancer. Discussions and readings will focus on the impact of race, class, and sexuality on women's health. Part of the Sustainability Issue. Offered fall semester in even-numbered years. Prerequisite: Junior Standing. 3 cr
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