

## South Dakota State University Sustainability Focused and Inclusive Courses

UNDERGRADUATE LEVEL				
COURSE TITLE	COURSE NUMBER	COURSE DESCRIPTION	FOCUSED	INCLUSIVE
Forest Ecology and Management Lab	BOT-303L	THE BASICS OF ENVIRONMENTAL FACTORS WHICH CONTROL THE GROWTH OF TREES AND FORESTS AND HOW FORESTS IN NORTH AMERICA ARE MANAGED.		X
Natural Resources Engineering	ABE-434	PRECIPITATION, INFILTRATION, EVAPOTRANSPIRATION AND RUNOFF FROM SMALL AGRICULTURAL WATERSHEDS AND APPLICATION TO DESIGN OF CONSERVATION STRUCTURES, WATER EROSION CONTROL PRACTICES. DESIGN OF DRAINAGE AND IRRIGATION SYSTEMS. FEEDLOT POLLUTION CONTROL PRINCIPLES.		X
Natural Resources Engineering Lab	ABE-434L	PRECIPITATION, INFILTRATION, EVAPOTRANSPIRATION AND RUNOFF FROM SMALL AGRICULTURAL WATERSHEDS AND APPLICATION TO DESIGN OF CONSERVATION STRUCTURES, WATER EROSION CONTROL PRACTICES. DESIGN OF DRAINAGE AND IRRIGATION SYSTEMS. FEEDLOT POLLUTION CONTROL PRINCIPLES.		X
Integrated Natur Resource Mgmt	ABS-475	A CAPSTONE COURSE THAT REQUIRES STUDENTS TO INTEGRATE PREVIOUSLY-LEARNED NATURAL RESOURCE TECHNIQUES AND INFORMATION INTO THE STRATEGIC PLANNING PROCESS. STUDENTS WILL BE DIVIDED INTO SMALL GROUPS FOR PLAN DEVELOPMENT. VARIOUS MAJORS ARE INVOLVED TO ALLOW FOR INTEGRATED COURSE MATERIAL.		X
Integrated Natur Resource Mgmt Lab	ABS-475 L	A CAPSTONE COURSE THAT REQUIRES STUDENTS TO INTEGRATE PREVIOUSLY-LEARNED NATURAL RESOURCE TECHNIQUES AND INFORMATION INTO THE STRATEGIC PLANNING PROCESS. STUDENTS WILL BE DIVIDED INTO SMALL GROUPS FOR PLAN DEVELOPMENT. VARIOUS MAJORS ARE INVOLVED TO ALLOW FOR INTEGRATED COURSE MATERIAL.		X
Global/Multicultural Advertise	ADV-476	THIS COURSE DEVELOPS AN UNDERSTANDING OF GLOBAL AND MULTICULTURAL ADVERTISING AND MARKETING. STUDENTS GAIN EXPERIENCE IN DECISIONS THAT REFLECT AN UNDERSTANDING OF GLOBAL AND MULTICULTURAL MARKETS AND EXPLORE THE SOCIAL AND ETHICAL ISSUES IN SUCH ADVERTISING AND MARKETING.		X
Environmental Law	AGEC-462	INTRODUCTION TO REGULATORY THEORY, EXTERNALITIES AND MARKET FAILURES, DEFINITION OF KEY REGULATIONS AFFECTING AGRIBUSINESS, OVERVIEW OF LOCAL GOVERNMENT LAW, AND DELINEATION OF ENVIRONMENTAL LAWS RELATING TO AGRICULTURE. CURRENT ENVIRONMENTAL ISSUES ARE RELATED TO STATUTORY, ADMINISTRATIVE, AND REGULATORY AUTHORITIES.		X
Resource/Environment Economics	AGEC-472	RESOURCE AND ENVIRONMENTAL ECONOMICS SURVEYS THE ALLOCATION AND CONSERVATION OF NATURAL RESOURCES FROM A PERSPECTIVE OF OPTIMAL USE AND SUSTAINABILITY. EMPHASIS IS PLACED ON ENVIRONMENTAL ECONOMICS INCLUDING THE PROBLEMS OF POLLUTION, POPULATION, AND ECONOMIC GROWTH. METHODS FOR EVALUATING PROJECTS AND PROGRAMS ARE CONSIDERED.	X	
Agricultural Policy	AGEC-479	THIS COURSE EXAMINES THE PROCESS OF DEVELOPING AGRICULTURAL AND FOOD POLICY. TOPICS WILL INCLUDE THE POLICY DEVELOPMENT PROCESS; GLOBAL AND DOMESTIC IMPLICATIONS OF BOTH US DOMESTIC AND INTERNATIONAL TRADE POLICIES; ENVIRONMENTAL AND RESOURCE ISSUES; FOOD SAFETY, SECURITY, AND NUTRITION POLICIES; AND THE INTENDED AND UNINTENDED CONSEQUENCES OF POLICY DECISIONS.		X
Global Citizenship & Diversity	AHSS-111	THIS COURSE ENHANCES STUDENTS' UNDERSTANDING OF DIVERSITY BY EXPLORING THE COMPLEXITY OF DIFFERENCE ACROSS MULTIPLE CONTEXTS TO ASSESS HOW THESE CONSTRUCTS SHAPE SYSTEMS OF INEQUITY AND PRIVILEGE. STUDENTS WILL CONSIDER HOW AN UNDERSTANDING OF DIVERSITY HEIGHTENS THEIR SENSITIVITY TO SOCIAL INJUSTICE, LEADS TO GREATER SOCIAL AWARENESS, AND ENABLES STUDENTS TO CONTRIBUTE TO A MORE INCLUSIVE ENVIRONMENT. THROUGHOUT THE COURSE, STUDENTS WILL REFLECT ON THE ROLE OF BEING AN ENGAGED AND INFORMED CITIZEN.		X
Intro Americ Indian/Indigenous	AIS-100	INTRODUCTION TO INDIGENOUS CULTURES OF NORTH AMERICA WITH EMPHASIS ON THOSE INHABITING THE UNITED STATES. CONTEMPORARY ISSUES FACING INDIAN PEOPLE TODAY ARE COVERED ALONG WITH RELEVANT HISTORICAL, GEOGRAPHICAL, LEGAL, CULTURAL, AND PHILOSOPHICAL INFORMATION.		X
American Indian Literature of the Present	AIS-447	Twentieth-century autobiography, fiction, and poetry by Native American authors. Cross-Listed: ENGL 447.		X
Technology of Surroundings	ARCH-432	LECTURE AND FIELD WORK IN URBAN DESIGN PRINCIPLES, ENVIRONMENTAL RESPONSIBILITIES, AND IMPLEMENTATION OF SITE DESIGN TECHNOLOGIES.		X
Technology of Systems	ARCH-434	THE COURSE BUILDS BOTH AN INTUITIVE AND EMPIRICAL UNDERSTANDING OF THE BASIC PRINCIPLES OF SYSTEMS THINKING IN ARCHITECTURE THROUGH ENVIRONMENTAL STUDY AND INTEGRATIVE ANALYSIS OF BUILDING SERVICE SYSTEM PERFORMANCE.		X
Intro Integrated Ranch Mgmt	AS-215	THIS COURSE INTRODUCES THE BASIC PRINCIPLES OF RANCHING AND THE FOOD AND FIBER SYSTEM. STUDENTS WILL BE EXPOSED TO THE COMPLEXITIES OF MODERN AGRICULTURAL PRODUCTION SYSTEMS. TOPICS INCLUDE: NATURAL RESOURCES AS THE BASIS FOR SUCCESSFUL RANCHING; THE FAMILY AS THE MAJOR SUPPLIER OF LABOR AND CAPITAL; ANIMAL AND AGRONOMIC PRODUCTION SYSTEMS; ECONOMIC AND FINANCIAL FORCES; RISK AND OPPORTUNITY; AGRICULTURAL POLICY AND LAW; THE DECISION MAKING PROCESS; AND STRESS AS THE DRIVING FORCE OF CHANGE. STUDENTS WILL INCORPORATE OUTSIDE READINGS INTO DISCUSSIONS AND PRACTICE PLANNING EXERCISES HELD DURING LAB SESSIONS.		X

Agricultural Waste Management	AS-463	UNDERSTAND AGRICULTURAL OR BIOLOGICAL WASTES. DEVELOP AN UNDERSTANDING OF REGULATORY REQUIREMENTS AND BEST MANAGEMENT PRACTICES THAT ADVOCATE RESPONSIBLE ENVIRONMENTAL STEWARDSHIP. TOPICS INCLUDE PRODUCTION, COLLECTION, HANDLING, TREATING, AND REUSING AGRICULTURAL AND BIOLOGICAL WASTES. COURSE WILL EMPHASIZE WRITTEN AND ORAL REPORTS.		X
Soil and Water Mechanics	AST-333	ENGINEERING PHASES OF SOIL AND WATER CONSERVATION; ELEMENTARY MEASUREMENTS AND SURVEYING AND APPLICATION TO FIELD PROBLEMS; DESIGN AND LAYOUT OF CONSERVATION, DRAINAGE AND IRRIGATION PRACTICES		X
Soil and Water Mechanics Lab	AST-333L	ENGINEERING PHASES OF SOIL AND WATER CONSERVATION; ELEMENTARY MEASUREMENTS AND SURVEYING AND APPLICATION TO FIELD PROBLEMS; DESIGN AND LAYOUT OF CONSERVATION, DRAINAGE AND IRRIGATION PRACTICES		X
Agricultural Waste Management	AST-463	UNDERSTAND AGRICULTURAL OR BIOLOGICAL WASTES. DEVELOP AN UNDERSTANDING OF REGULATORY REQUIREMENTS AND BEST MANAGEMENT PRACTICES THAT ADVOCATE RESPONSIBLE ENVIRONMENTAL STEWARDSHIP. TOPICS INCLUDE PRODUCTION, COLLECTION, HANDLING, TREATING, AND REUSING AGRICULTURAL AND BIOLOGICAL WASTES. COURSE WILL EMPHASIZE WRITTEN AND ORAL REPORTS.		X
Aviation Senior Seminar	AVIA-489	This course will explore contemporary and ethical issues in the aviation industry. Students will examine and solve issues related to global aviation, environmental concerns, technology advances, aviation safety and security practices, labor issues, aviation education, and aviation economics. Students will be required to demonstrate an understanding of information literacy and advanced communications through course work.		X
Introduction to Biotechnology	BIOL-235	PRESENTS A BASIC OVERVIEW OF BIOTECHNOLOGY EMPHASIZING CURRENT DNA AND RNA TECHNOLOGIES AND STRUCTURE AND FUNCTION OF BIOMOLECULES. THE APPLICATION OF THESE TECHNIQUES IN THE FIELDS OF MEDICINE, AGRICULTURE, FORENSICS AND THE ENVIRONMENT IS EMPHASIZED. SCIENTIFIC METHODS, CURRENT GOOD LABORATORY PRACTICES (CGLP), STANDARD OPERATING PROCEDURES (SOP), ENVIRONMENTAL REGULATIONS AND ETHICS OF THE BIOTECHNOLOGY INDUSTRY WILL ALSO BE COVERED.		X
Introduction to Biotechnology Lab	BIOL-235L	PRESENTS A BASIC OVERVIEW OF BIOTECHNOLOGY EMPHASIZING CURRENT DNA AND RNA TECHNOLOGIES AND STRUCTURE AND FUNCTION OF BIOMOLECULES. THE APPLICATION OF THESE TECHNIQUES IN THE FIELDS OF MEDICINE, AGRICULTURE, FORENSICS AND THE ENVIRONMENT IS EMPHASIZED. SCIENTIFIC METHODS, CURRENT GOOD LABORATORY PRACTICES (CGLP), STANDARD OPERATING PROCEDURES (SOP), ENVIRONMENTAL REGULATIONS AND ETHICS OF THE BIOTECHNOLOGY INDUSTRY WILL ALSO BE COVERED.		X
Environmental Law	BLAW-462	INTRODUCTION TO REGULATORY THEORY, EXTERNALITIES AND MARKET FAILURES, DEFINITION OF KEY REGULATIONS AFFECTING AGRIBUSINESS, OVERVIEW OF LOCAL GOVERNMENT LAW, AND DELINEATION OF ENVIRONMENTAL LAWS RELATING TO AGRICULTURE. CURRENT ENVIRONMENTAL ISSUES ARE RELATED TO STATUTORY, ADMINISTRATIVE, AND REGULATORY AUTHORITIES.		X
Forest Ecology and Management	BOT-303	THE BASICS OF ENVIRONMENTAL FACTORS WHICH CONTROL THE GROWTH OF TREES AND FORESTS AND HOW FORESTS IN NORTH AMERICA ARE MANAGED.		X
Grasses and Grasslike Plants	BOT-405	A SYSTEMATIC SURVEY OF GRASSES AND GRASSLIKE PLANT OF THE NORTHERN GREAT PLAINS; FIELD AND LAB PRACTICE IN COLLECTION AND IDENTIFICATION OF GRAMINOID PLANTS; DISCUSSION OF UNIQUE BIOLOGICAL ASPECTS OF GRASSES AND GRASSLIKE PLANTS THAT MAKE THEM ECONOMICALLY AND ECOLOGICALLY SIGNIFICANT.		X
Grasses and Grasslike Plants	BOT-405L	A SYSTEMATIC SURVEY OF GRASSES, AND GRASSLIKE PLANTS OF THE NORTHERN GREAT PLAINS; FIELD AND LAB PRACTICE IN COLLECTION AND IDENTIFICATION OF G GRAMINOID PLANTS; DISCUSSION OF UNIQUE BIOLOGICAL ASPECTS OF GRASSES AND GRASSLIKE PLANTS THAT MAKE THEM ECONOMICALLY AND ECOLOGICALLY SIGNIFICANT.		X
Principle Environment Sci/Engr	CEE-225	INTRODUCTION TO THE BASIC PRINCIPLES OF ENVIRONMENTAL MANAGEMENT, ENVIRONMENTAL SCIENCE AND ENGINEERING, AND NATURAL RESOURCES ENGINEERING. THE CLASS WILL BE TEAM TAUGHT BY FACULTY FROM ENVIRONMENTAL MANAGEMENT, CIVIL AND ENVIRONMENTAL ENGINEERING, AGRICULTURAL AND BIOSYSTEMS ENGINEERING, AND AGRICULTURAL SYSTEMS TECHNOLOGY PROGRAMS. THE COURSE WILL TEACH THE FUNDAMENTAL PHYSICAL, BIOLOGICAL, AND CHEMICAL PRINCIPLES OF ENVIRONMENTAL PROCESSES. THE COURSE WILL ALSO EXPLORE THE IMPACT OF HUMANS AND HUMAN ACTIVITY ON ECOSYSTEMS IN THE ENVIRONMENT.		X
Asphalt Materials/Mix Design	CEE-411	PROPERTIES OF AGGREGATES AND ASPHALTIC MATERIALS RELATED TO ASPHALT MIXES. VARIOUS TYPES OF ASPHALT PAVEMENTS AND MIX DESIGN METHODS. PLANT OPERATIONS, CONSTRUCTION METHODS AND EQUIPMENT USED IN THE PRODUCTION OF ASPHALT. ASPHALT MIX DESIGN AND TESTING WITH AN EMPHASIS ON SUPERPAVE MIX DESIGN METHOD. INTRODUCTION TO RECYCLING AND SUSTAINABLE ASPHALT PAVEMENT MATERIALS.		X
Asphalt Materials/Mix Design Lab	CEE-411L	PROPERTIES OF AGGREGATES AND ASPHALTIC MATERIALS RELATED TO ASPHALT MIXES. VARIOUS TYPES OF ASPHALT PAVEMENTS AND MIX DESIGN METHODS. PLANT OPERATIONS, CONSTRUCTION METHODS AND EQUIPMENT USED IN THE PRODUCTION OF ASPHALT. ASPHALT MIX DESIGN AND TESTING WITH AN EMPHASIS ON SUPERPAVE MIX DESIGN METHOD. INTRODUCTION TO RECYCLING AND SUSTAINABLE ASPHALT PAVEMENT MATERIALS.		X

Water Resources Engineering	CEE-435	TOPICS RELATED TO WATER RESOURCES ENGINEERING INCLUDING: MULTIPLE PURPOSE RIVER DEVELOPMENT, ECONOMIC ANALYSIS OF FLOOD CONTROL MEASURES, ASPECTS OF WATER LAW, ADVANCED TOPICS RELATED TO SURFACE AND GROUND WATER HYDROLOGY AND ADMINISTRATIVE ASPECTS OF WATER RESOURCES PLANNING.		X
Environmental Chemistry	CHEM-482	EXAMINATION OF THE CHEMISTRY AND CHEMICAL PROCESSES OF THE ENVIRONMENT, INCLUDING THE ROLE OF CHEMISTRY IN CURRENT ENVIRONMENTAL ISSUES.		X
Chemical Toxicology	CHEM-484	UNDERSTANDING OF THE PRINCIPLES OF TOXICITY, INCLUDING THE MOLECULAR BASIS FOR TOXICITY AND THE ENVIRONMENTAL FATE AND TRANSPORT OF CHEMICALS IN THE ENVIRONMENT.		X
Sustainable Building Systems	CM-460	THE ANALYSIS OF ENERGY EFFICIENT AND ENVIRONMENTALLY RESPONSIBLE BUILDING DESIGN AND CONSTRUCTION. MATERIAL SELECTION, ENERGY, AND CLIMATE ANALYSIS, AND PRACTICAL APPLICATIONS OF NEW TECHNOLOGY WILL BE COVERED.	X	
Intercultural Communication	CMST-470	A STUDY OF THEORETICAL DIMENSIONS OF INTERCULTURAL COMMUNICATION AS WELL AS SPECIFIC CHARACTERISTICS OF INTERCULTURAL STUDY. EMPHASIS IS PLACED ON COMPLEX, MINDFUL, CREATIVE AND INVITATIONAL COMMUNICATION, WHICH WELCOMES DIVERSITY AND ITS RICHNESS.		X
Dairy Microbiology	DS-301	Microbiological aspects related to production and processing of milk for human use, including role of regulatory agencies, quality standards and HACCP principles. Prerequisites: MICR 231-231L or MICR 233-233L. Corequisites: DS 301L-301. Notes: Odd Spring.		X
Dairy Microbiology LAB	DS-301 L	Microbiological aspects related to production and processing of milk for human use, including role of regulatory agencies, quality standards and HACCP principles. Prerequisites: MICR 231-231L or MICR 233-233L. Corequisites: DS 301L-301. Notes: Odd Spring.		X
Dairy Products Processing II	DS-322	Principles and practices of producing frozen dairy desserts, butter, concentrated milks, and dried milk products. Prerequisites: DS 130; and MICR 231-231L or MICR 233-233L. Corequisites: DS 322L-322. Notes: Even Spring.		X
Dairy Products Processing II LAB	DS-322L	Principles and practices of producing frozen dairy desserts, butter, concentrated milks, and dried milk products. Prerequisites: DS 130; and MICR 231-231L or MICR 233-233L. Corequisites: DS 322L-322. Notes: Even Spring.		X
Dairy Plant Management	DS-421	Discussion, tours, and hands-on activities related to personnel issues, operational planning, facilities design and upkeep, unit operations and controls, accounting and finance, quality, safety, inspections and audits as these areas relate to the overall operation of a dairy processing facility. Prerequisites: Junior standing. Corequisites: DS 421L-421. Notes: Even Fall.		X
Dairy Plant Management LAB	DS-421L	Discussion, tours, and hands-on activities related to personnel issues, operational planning, facilities design and upkeep, unit operations and controls, accounting and finance, quality, safety, inspections and audits as these areas relate to the overall operation of a dairy processing facility. Prerequisites: Junior standing. Corequisites: DS 421L-421. Notes: Even Fall.		X
Dairy Farm Operations I	DS-480	The first course in a two-semester sequence course addressing dairy herd management practices. Dairy farm capital, budgets and credit; factors affecting economic returns of dairy farming; nutrition and feeding of lactating dairy cattle; and nutritional implications related to herd replacements. Prerequisites: (AS 218 or AS 219), DS 130-130L, and (ECON 201 or ECON 202) or Junior standing. Corequisites: DS 480L-480/580L-580. Notes: Odd Fall. DS 481-481L/581-581L - Dairy Farm Operations II and		X
Dairy Farm Operations I LAB	DS-480L	The first course in a two-semester sequence course addressing dairy herd management practices. Dairy farm capital, budgets and credit; factors affecting economic returns of dairy farming; nutrition and feeding of lactating dairy cattle; and nutritional implications related to herd replacements. Prerequisites: (AS 218 or AS 219), DS 130-130L, and (ECON 201 or ECON 202) or Junior standing. Corequisites: DS 480L-480/580L-580. Notes: Odd Fall. DS 481-481L/581-581L - Dairy Farm Operations II and		X
Resource/Environment Economics	ECON-472	RESOURCE AND ENVIRONMENTAL ECONOMICS SURVEYS THE ALLOCATION AND CONSERVATION OF NATURAL RESOURCES FROM A PERSPECTIVE OF OPTIMAL USE AND SUSTAINABILITY. EMPHASIS IS PLACED ON ENVIRONMENTAL ECONOMICS INCLUDING THE PROBLEMS OF POLLUTION, POPULATION, AND ECONOMIC GROWTH. METHODS FOR EVALUATING PROJECTS AND PROGRAMS ARE CONSIDERED.	X	
Photovoltaic Systems Engr	EE-436	FUNDAMENTALS OF HYBRID PHOTOVOLTAIC POWER SYSTEMS. TOPICS MAY INCLUDE: AN OVERVIEW OF ENERGY AND ELECTRICITY USE; SOLAR RESOURCE CHARACTERISTICS; LOAD ASSESSMENT; THE FUNDAMENTALS OF SOLAR CELLS, BATTERIES, POWER ELECTRONICS, AND GENERATORS AND OTHER POWER SOURCES; POWER SYSTEM DESIGN; THE NATIONAL ELECTRIC CODE; AND ENERGY ECONOMICS.		X
Photovoltaic Systems Engr Lab	EE-436L	THIS LAB PROVIDES PRACTICAL EXPERIENCE IN THE DESIGN OF HYBRID PHOTOVOLTAIC POWER SYSTEMS.		X

Intro to Environ Science	EES-275	PRESENTS AN INTRODUCTION AND REVIEW OF THE FACTORS INFLUENCING THE QUANTITY, QUALITY AND DISTRIBUTION OF RESOURCES WITHIN THE ENVIRONMENT, USES OF THE ENVIRONMENT AND RELATION TO HUMAN POPULATION SIZE AND DEMOGRAPHICS, EFFECTS OF NATURAL AND HUMAN DISTURBANCES ON THE ENVIRONMENT AND ECONOMIC AND POLITICAL CONSIDERATIONS FOR ENVIRONMENTAL MANAGEMENT.		X
Disturbance/Restoration Ecol	EES-425	INTRODUCTION TO BASIC CONCEPTS OF DISTURBANCE AND RESTORATION ECOLOGY. DEMONSTRATION AND DISCUSSION OF LINKAGES BETWEEN BASIC BIOLOGY AND MANAGEMENT OF NATURAL RESOURCES.		X
Disturbance/Restoration Ecol Lab	EES-425 L	INTRODUCTION TO BASIC CONCEPTS OF DISTURBANCE AND RESTORATION ECOLOGY. DEMONSTRATION AND DISCUSSION OF LINKAGES BETWEEN BASIC BIOLOGY AND MANAGEMENT OF NATURAL RESOURCES.		X
Biological Invasions	EES-430	ECOLOGICAL FACTORS THAT CONTRIBUTE TO SPECIES INVASION IN TERRESTRIAL AND AQUATIC ECOSYSTEMS WILL BE EXAMINED. IMPACTS TO INVADDED ECOSYSTEMS, MANAGEMENT IMPLICATIONS, AND MITIGATION STRATEGIES WILL BE EXPLORED.		X
Biological Invasions Lab	EES-430 L	ECOLOGICAL FACTORS THAT CONTRIBUTE TO SPECIES INVASION IN TERRESTRIAL AND AQUATIC ECOSYSTEMS WILL BE EXAMINED. IMPACTS TO INVADDED ECOSYSTEMS, MANAGEMENT IMPLICATIONS, AND MITIGATION STRATEGIES WILL BE EXPLORED.		X
Composition II	ENGL-201	Study of and practice in writing persuasive prose, with the aim to improve writing skills in all disciplines. Prerequisites: ENGL 101 or UHON 110. Notes: Course meets SGR #1.		X
Honors Composition II - Writing the Environment	ENGL-201.18	For generations, environmentalists have relied on the power of prose to change the minds and habits of their contemporaries. In the wake of fires, floods, storms, and droughts, environmental writing has gained a new sense of urgency, with authors joining activists in their efforts to educate the public about the grim realities of climate change. But do they make a difference? Have reports of present and future disasters so saturated our airwaves that we no longer hear them? How do writers make us care about the planet amidst all the noise? In this course, students will examine the various rhetorical strategies employed by some of today's leading environmental writers and filmmakers. And while analyzing their different arguments, students also will strengthen their own strategies of argumentation as they research and develop essays that explore a range of environmental concerns.	X	
Technical Communication	ENGL-379	This writing intensive course provides instruction and practice in communicating effectively in technical and professional situations. Students can expect to write and deliver both informal and formal reports, proposals, and other professional documents, using standard and electronic formats and effective, concise, and ethical written and spoken English. Students will develop skills in document design and information literacy while analyzing workplace audiences (including global audiences) and writing collaboratively. Prerequisites: ENGL 201 or ENGL 205 or ENGL 277 or ENGL 283 or ENGL 284.		X
American Indian Literature of the Present	ENGL-447	Twentieth-century autobiography, fiction, and poetry by Native American authors. Prerequisites: ENGL 201 or ENGL 283 are recommended prerequisites. CrossListed: AIS 447.		X
Literature and Human Rights	ENGL-479	In depth study of selected major author (s), works(s), or other aspects of literary history; incorporates a review of current methods of literary criticism and an intensive focus on research and writing within the discipline. To be taken in the student's final on-campus Spring semester. Prerequisites: ENGL 151; Senior standing required; ENGL 201 or ENGL 283 are recommended prerequisites.		X
Student Managed Investment Fund	FIN-420	This course involves hands-on experiential learning of real money management. Students will actively participate in all aspects of security analysis and portfolio management, including understanding investment ethics, generation of trading ideas, investment analysis, asset valuation and allocation, trading of financial securities, and performance report.		X
Global Sourcing	FSRM-473	EXAMINE THE PROCESS OF GLOBALIZATION WITHIN THE FIBER, TEXTILE, APPAREL, AND RETAIL (FTAR) COMPLEX. ANALYZE SIZE, SCOPE, AND COMPONENTS. CONSIDER THE ROLE POLITICS AND SOCIAL RESPONSIBILITIES HAVE WITHIN GLOBAL TRADING REGIONS AND FTAR COMPLEX. DEVELOP SKILLS IN SOURCING.		X
Global Sourcing Lab	FSRM-473L	EXAMINE THE PROCESS OF GLOBALIZATION WITHIN THE FIBER, TEXTILE, APPAREL AND RETAIL (FTAR) COMPLEX. ANALYZE SIZE, SCOPE AND COMPONENTS. CONSIDER THE ROLE POLITICS AND SOCIAL RESPONSIBILITIES HAVE WITHIN GLOBAL TRADING REGIONS AND THE FTAR COMPLEX. DEVELOP COMPUTER SKILLS IN SOURCING.		X
Sustainable Package Design	GDES-312	A STUDIO COURSE THAT EXPLORES SUSTAINABLE PACKAGING DESIGN STRATEGIES AND PRACTICES WITH SPECIAL FOCUS ON ENVIRONMENTALLY, SOCIALLY AND ECONOMICALLY FRIENDLY DESIGN PRODUCTS.	X	
Technology, Society, & Ethics	GE-231	AN EXAMINATION OF TECHNOLOGICAL CHANGE BY MEANS OF CURRENT PROBLEMS AND CASE STUDIES. THE CREATION AND UTILIZATION OF TOOLS, MACHINES, MATERIALS, TECHNIQUES AND TECHNICAL SYSTEMS WILL ALSO BE STUDIED, AS WELL AS THEIR ENVIRONMENTAL IMPACTS.		X
Intercultural Communication	GEOG - 470	A STUDY OF THEORETICAL DIMENSIONS OF INTERCULTURAL COMMUNICATION AS WELL AS SPECIFIC CHARACTERISTICS OF INTERCULTURAL STUDY. EMPHASIS IS PLACED ON COMPLEX, MINDFUL, CREATIVE AND INVITATIONAL COMMUNICATION, WHICH WELCOMES DIVERSITY AND ITS RICHNESS.		X

Sustainable Society	GEOG-111	AN INTRODUCTION TO SUSTAINABILITY THAT ASSESSES HOW HUMAN POPULATION, AFFLUENCE, PRIVILEGE, ENVIRONMENTAL JUSTICE, AND SUSTAINABLE DEVELOPMENT ARE ASPECTS OF SUSTAINABILITY.	X	
Phys Geography Weather/Climate	GEOG-131	AN INTRODUCTION TO THE PHYSICAL PATTERNS OF THE EARTH FOCUSING LOCATION, EARTH-SUN RELATIONSHIPS, PORTRAYAL OF THE EARTH, CARTOGRAPHIC ANALYSIS, AND WEATHER AND CLIMATE PHENOMENA.		X
Phys Geography Weather/Climate Lab	GEOG-131L	AN INTRODUCTION TO THE PHYSICAL PATTERNS OF THE EARTH FOCUSING LOCATION, EARTH-SUN RELATIONSHIPS, PORTRAYAL OF THE EARTH, CARTOGRAPHIC ANALYSIS, AND WEATHER AND CLIMATE PHENOMENA.		X
Phys Geog Natural Landscapes	GEOG-132	AN INTRODUCTION TO EARTH'S NATURAL LANDSCAPES FOCUSING ON LANDFORMS AS SPATIAL FEATURES AND THEIR PROCESSES PLUS CONSIDERATION OF HUMAN-ENVIRONMENTAL INTERACTIONS.		X
Phys Geog Natural Landscapes Lab	GEOG-132L	AN INTRODUCTION TO EARTH'S NATURAL LANDSCAPES FOCUSING ON LANDFORMS AS SPATIAL FEATURES AND THEIR PROCESSES PLUS CONSIDERATION OF HUMAN-ENVIRONMENTAL INTERACTIONS.		X
Geography of North America	GEOG-212	A REGIONAL AND TOPICAL ANALYSIS OF THE GEOGRAPHIC PATTERNS OF THE UNITED STATES AND CANADA. FOCUS IS UPON THE INTERACTION OF GROUPS OF PEOPLE WITH THE NATURAL ENVIRONMENT TO PRODUCE REGIONAL DIFFERENTIATION. GEOGRAPHIC ASPECTS OF THE PHYSICAL GEOGRAPHY, POPULATION, CULTURE GROUPS, ECONOMY, SETTLEMENT SYSTEMS, LAND DIVISION, AND USE OF NATURAL RESOURCES.		X
Land Use and Planning	GEOG-365	GEOGRAPHICAL PATTERNS OF UNITED STATES LAND USE AND LAND COVER, HUMAN OCCUPANCY, LAND TENURE, AND LAND DIVISION. EMPHASIS ON THE ORIGIN AND CONSEQUENCES OF THESE PATTERNS ON THE ENVIRONMENT, RESOURCE USE, AND LAND USE PLANNING.		X
Environment Geography/Sustain	GEOG-415	GEOGRAPHICAL ASPECTS OF ENVIRONMENTAL ISSUES INCLUDING HISTORICAL GEOGRAPHY OF ENVIRONMENTAL PROBLEMS, GLOBAL DRIVING FORCES, LAND ETHICS AND STEWARDSHIP, ENVIRONMENTAL EXTERNALITIES, POPULATION, RESOURCES, CLIMATE CHANGE, AND ENVIRONMENTAL RESTORATION. FOCUS ON CONNECTIONS BETWEEN HUMAN AND NATURAL SYSTEMS; CONSEQUENCE CHAINS BETWEEN CAUSE AND EFFECT; IMPACT OF TIME AND SPACE ON PROBLEM PERCEPTION, ANALYSIS, AND SOLUTION; AND NATURAL AND HUMAN LAWS. TERM PAPER REQUIRED.	X	
Geography of Tourism	GEOG-420	BASED ON FUNDAMENTAL TOURISM PRINCIPLES, THIS COURSE WILL EXAMINE, FROM A GEOGRAPHICAL PERSPECTIVE, THE SOCIAL, CULTURAL, ENVIRONMENTAL AND ECONOMIC COMPLEXITIES ASSOCIATED WITH TOURISM AS A GLOBAL, NATIONAL AND LOCAL PHENOMENON. THIS COURSE WILL ALSO CONSIDER THE POSITIVE AND NEGATIVE FACTORS THAT AFFECT TOURISTS AND DESTINATIONS, AND THE COSTS AND BENEFITS OF TOURISM TO COMMUNITIES AND PLACES, PROVIDING CASE-STUDY EXAMPLES FROM THE UNITED STATES AND AROUND THE WORLD.		X
Population Geography	GEOG-425	GEOGRAPHIC ANALYSIS OF SUCH POPULATION CHARACTERISTICS AS: NUMBERS AND DISTRIBUTION; GROWTH AND CHANGE; COMPOSITION; MORTALITY, FERTILITY, AND THEORIES OF POPULATION CHANGE; POLICY AND FAMILY PLANNING; MIGRATION AND MOBILITY; POPULATION, ENVIRONMENT, FOOD SUPPLY, AND HUMAN WELL BEING. PROBLEMS AND PROSPECTS ARE CONSIDERED IN THE CONTEXT OF EACH TOPIC.		X
Geography of the Future	GEOG-447	A FUTURISTIC ANALYSIS OF EARTH'S NATURAL ENVIRONMENTAL ELEMENTS, NATURAL RESOURCES, POPULATION AND SETTLEMENT, AND CULTURAL INSTITUTIONS AT THE GLOBAL, NATIONAL, AND STATE LEVELS.		X
Sustainable Communities	GEOG-454	THIS COURSE INVESTIGATES THE INTERSECTION OF SUSTAINABILITY AND COMMUNITIES. THIS PRIMARY FOCUS ON THIS COURSE IS THE INTERCONNECTIONS BETWEEN SOCIAL, ECONOMIC, AND ENVIRONMENTAL SYSTEMS AND THEIR REFLEXIVE INTERACTIONS WITH COMMUNITY FORM AND FUNCTION. THE GOAL IS TO EXAMINE POLICIES AND PROGRAMS THAT CAN BE USED TO ACHIEVE SUSTAINABLE COMMUNITIES.	X	
Environmental History of US	HIST-409	EXAMINES THE RELATIONSHIP BETWEEN THE NATURAL ENVIRONMENT AND THE HISTORICAL MOVEMENTS OF HUMANS BY TRACING US ENVIRONMENTAL CHANGES, BEGINNING WITH THE ACTIVITIES OF THE NATIVE AMERICAN PEOPLES THROUGH THE EURO-AMERICAN PRESENCE TO THE COLD WAR ERA.		X
Public Health Science	HLTH-443	STUDY OF ORGANIZATION AND ADMINISTRATION OF PUBLIC AND VOLUNTARY HEALTH AGENCIES. PRINCIPLE FUNCTIONS AND PROGRAM DEVELOPMENT IN VITAL STATISTICS, MATERNAL-CHILD HEALTH, ADULT HEALTH, SANITATION, HEALTH EDUCATION, AND SPECIAL HEALTH PROGRAMS. INTRODUCES THE STUDENT TO PUBLIC HEALTH BY DESCRIBING ITS HISTORY AND ITS BASES IN SOCIOLOGY, ECONOMICS, PHILOSOPHY AND GOVERNMENT. THE RELATIONSHIP OF ENVIRONMENTAL FACTORS TO HEALTH AND ILLNESS IS EXAMINED. THE COURSE WILL PROVIDE THE STUDENT WITH AN UNDERSTANDING OF ADMINISTRATIVE AND POLITICAL PROCESSES OF OPERATION OF HEALTH AGENCIES BY EXAMINING TRADITIONAL AND NEW INNOVATIVE PROGRAMS OF FEDERAL, STATE AND LOVAL HEALTH AGENCIES. COST- BENEFIT, COST-EFFECTIVENESS, AND RISK ASSESSMENT ARE ADDRESSED AS IN THE RELATIONSHIP OF PUBLIC LAW AND POLICIES TO THE DELIVERY OF HEALTH CARE.		X

Geography of Tourism	HMG-420	BASED ON FUNDAMENTAL TOURISM PRINCIPLES, THIS COURSE WILL EXAMINE, FROM A GEOGRAPHICAL PERSPECTIVE, THE SOCIAL, CULTURAL, ENVIRONMENTAL AND ECONOMIC COMPLEXITIES ASSOCIATED WITH TOURISM AS A GLOBAL, NATIONAL AND LOCAL PHENOMENON. THIS COURSE WILL ALSO CONSIDER THE POSITIVE AND NEGATIVE FACTORS THAT AFFECT TOURISTS AND DESTINATIONS, AND THE COSTS AND BENEFITS OF TOURISM TO COMMUNITIES AND PLACES, PROVIDING CASE-STUDY EXAMPLES FROM THE UNITED STATES AND AROUND THE WORLD.		X
Insects and Society	HO-105	THIS NON-TECHNICAL COURSE INTRODUCES A WIDE VARIETY OF WAYS THAT HUMANS INTERACT WITH URBAN AND AGRICULTURAL INSECTS IN TODAY'S WORLD. IT COVERS THE EXTREMELY VALUABLE ROLES WHERE INSECTS ARE ESSENTIAL TO HUMAN SURVIVAL AND COMMERCE. THE COURSE ALSO REVEALS WHERE PESTS ARE RESPONSIBLE FOR BEING DISASTROUS COMPETITORS WITH HUMANS.		X
Forest Ecology and Management	HO-303	THE BASICS OF ENVIRONMENTAL FACTORS WHICH CONTROL THE GROWTH OF TREES AND FORESTS AND HOW FORESTS IN NORTH AMERICA ARE MANAGED.		X
Forest Ecology and Management Lab	HO-303L	THE BASICS OF ENVIRONMENTAL FACTORS WHICH CONTROL THE GROWTH OF TREES AND FORESTS AND HOW FORESTS IN NORTH AMERICA ARE MANAGED.		X
Non-Chemical Weed Management	HO-345	THIS COURSE EXPLORES WEED MANAGEMENT OPTIONS WITHOUT THE USE OF SYNTHETIC HERBICIDES. BIOLOGICAL AND ECOLOGICAL RELATIONSHIPS BETWEEN CROPS AND WEEDS ARE CHARACTERIZED. SITE SPECIFIC AND SUSTAINABLE WEED MANAGEMENT SYSTEMS ARE EXPLORED WITH EMPHASIS ON MECHANICAL, CULTURAL, AND BIOLOGICAL METHODS. ENVIRONMENTALLY SUSTAINABLE WEED MANAGEMENT METHODS ARE DISCUSSED IN ORGANIC AND NON-ORGANIC FARMING.	X	
Production/Wine Beer Spirits	HO-426	Students will learn the procedures required for the biological and agricultural production of wine, beer and spirits coupled with the science of fermentation and the methodology required for the tasting of wine and beer for flavor/odor identification per industry guidelines. Lecture topics of student inquiry include: (1) the brewing of beer and the functional contributions of its ingredients, (2) wine production from vine to bottle, (3) the distillation of spirits and (4) the marketing, pairing and service of wine, beer and spirits. This course is designed for students/graduates who will potentially go into the business of not only growth and production, but also marketing and serving wine, beer and spirits. Laboratory investigation includes hands-on opportunities involving the production of beer and wine. Students will experiment with production parameters and investigate quality defects. Wine and beer quality will be assessed through laboratory testing coupled with taste testing without consumption (taste and spit) both per industry specifications. Students will develop skills in identifying specific flavors/odors such as oak, butter or lemon in wine and similar tasting techniques in beer		X
Production/Wine Beer Spirits Lab	HO-426L	Students will learn the procedures required for the biological and agricultural production of wine, beer and spirits coupled with the science of fermentation and the methodology required for the tasting of wine and beer for flavor/odor identification per industry guidelines. Lecture topics of student inquiry include: (1) the brewing of beer and the functional contributions of its ingredients, (2) wine production from vine to bottle, (3) the distillation of spirits and (4) the marketing, pairing and service of wine, beer and spirits. This course is designed for students/graduates who will potentially go into the business of not only growth and production, but also marketing and serving wine, beer and spirits. Laboratory investigation includes hands-on opportunities involving the production of beer and wine. Students will experiment with production parameters and investigate quality defects. Wine and beer quality will be assessed through laboratory testing coupled with taste testing without consumption (taste and spit) both per industry specifications. Students will develop skills in identifying specific flavors/odors such as oak, butter or lemon in wine and similar tasting techniques in beer		X
Organic Plant Production	HO-447	THIS COURSE PROVIDES A DETAILED OVERVIEW OF ORGANIC FARMING FOR BOTH SMALL SCALE SUBURBAN AND URBAN SETTINGS. THE TOPICS COVERED WILL INCLUDE: ORGANIC CERTIFICATION, SOIL AND NUTRIENT MANAGEMENT, PEST AND DISEASE ID AND MANAGEMENT, HIGH-TUNNEL MANAGEMENT, AND MARKETING.	X	
Public Health Science	HSC443	STUDY OF ORGANIZATION AND ADMINISTRATION OF PUBLIC AND VOLUNTARY HEALTH AGENCIES. PRINCIPLE FUNCTIONS AND PROGRAM DEVELOPMENT IN VITAL STATISTICS, MATERNAL-CHILD HEALTH, ADULT HEALTH, SANITATION, HEALTH EDUCATION, AND SPECIAL HEALTH PROGRAMS. INTRODUCES THE STUDENT TO PUBLIC HEALTH BY DESCRIBING ITS HISTORY AND ITS BASES IN SOCIOLOGY, ECONOMICS, PHILOSOPHY AND GOVERNMENT. THE RELATIONSHIP OF ENVIRONMENTAL FACTORS TO HEALTH AND ILLNESS IS EXAMINED. THE COURSE WILL PROVIDE THE STUDENT WITH AN UNDERSTANDING OF ADMINISTRATIVE AND POLITICAL PROCESSES OF OPERATION OF HEALTH AGENCIES BY EXAMINING TRADITIONAL AND NEW INNOVATIVE PROGRAMS OF FEDERAL, STATE AND LOCAL HEALTH AGENCIES. COST- BENEFIT, COST-EFFECTIVENESS, AND RISK ASSESSMENT ARE ADDRESSED AS IN THE RELATIONSHIP OF PUBLIC LAW AND POLICIES TO THE DELIVERY OF HEALTH CARE.		X
Interior Design Studio IV	ID-352	THIS STUDIO EXPLORES LEARNING ENVIRONMENTS, VARYING LARGELY IN SCALE, AND EMPHASIZES SUSTAINABLE DESIGN. PROJECTS INVESTIGATE THE DESIGN PROCESS, WITH EMPHASIS ON PROGRAMMING, CONCEPT DEVELOPMENT, PLANNING AND SPATIAL ARTICULATION THAT SUPPORT AND ENHANCE CLIENT NEEDS.		X

Ecology and Built Landscape	LA-101	AN INTRODUCTION TO THE PROFESSION OF LANDSCAPE ARCHITECTURE, WITH EMPHASIS ON LANDSCAPE APPRECIATION, ENVIRONMENTAL CONCERNS, CONSERVATION, LANDSCAPE RESILIENCE, LAND ETHICS, STEWARDSHIP, AND THE CONNECTION BETWEEN NATURAL AND CULTURAL FACTORS IN THE BUILT AND NATURAL ENVIRONMENTS.	X	
Public/Social Place Design	LA-341	STUDENTS LEARN THE COMPLEXITY OF DESIGNING IN THE PUBLIC REALM, INCLUDING ISSUES OF ACCESS, EQUITY, DIVERSITY, ENVIRONMENTAL AND SOCIAL JUSTICE, SUSTAINABILITY, AND OTHER SOCIAL CHALLENGES. FUNCTION, DIVERSE USER NEEDS, PEDESTRIAN AND VEHICULAR CIRCULATION SYSTEMS, AND LAND USE ARE ADDRESSED.		X
Planting/Ecological Design	LA-352	PREPARATION OF PLANTING DESIGNS, PLANS, AND SPECIFICATIONS FOR PROJECTS OF INCREASING COMPLEXITY. EMPHASIS ON NORTHERN PLAINS LANDSCAPES. FOCUS ON USE OF NATIVE PLANTS AND SUSTAINABLE DESIGN. PROJECTS FROM SMALL RESIDENTIAL SCALE TO LARGER REGIONAL SCALE. DESIGN APPLICATIONS EMPHASIZING THE SPACE FORMING POTENTIAL AND FUNCTIONAL USE OF NATURAL AND MAN- MADE PLANT GROUPS.		X
Capstone Studio	LA-452	AN ADVANCED DESIGN STUDIO WITH AN EMPHASIS ON ENVIRONMENTAL DESIGN, LAND USE ETHICS, CURRENT ISSUES IN LANDSCAPE DESIGN AND PROFESSIONAL PRACTICE. SENIOR EXIT EXAMINATION REQUIREMENT IS COMPLETED DURING THIS CLASS.		X
Engineering Design Methods	ME-230	INTRODUCTION TO THE ENGINEERING DESIGN PROCESS, INCLUDING DEVELOPMENT OF THE PROBLEM STATEMENT, MODELING, RESEARCH, COST/BENEFIT ANALYSIS, AND INTERACTION OF SYSTEM COMPONENTS. DESIGN OPTIMIZATION TECHNIQUES WILL BE USED TO DRIVE DESIGN DECISIONS. THE COURSE WILL INCORPORATE CONSIDERATION OF ECONOMIC, SOCIAL, ENVIRONMENTAL AND MANUFACTURING CONSTRAINTS WITHIN THE ENGINEERING DESIGN PROCESS. DESIGN PROJECTS WILL BE USED TO INSTILL THESE CONCEPTS.		X
Engineering Design Methods Lab	ME-230 L	INTRODUCTION TO THE ENGINEERING DESIGN PROCESS, INCLUDING DEVELOPMENT OF THE PROBLEM STATEMENT, MODELING, RESEARCH, COST/BENEFIT ANALYSIS, AND INTERACTION OF SYSTEM COMPONENTS. DESIGN OPTIMIZATION TECHNIQUES WILL BE USED TO DRIVE DESIGN DECISIONS. THE COURSE WILL INCORPORATE CONSIDERATION OF ECONOMIC, SOCIAL, ENVIRONMENTAL AND MANUFACTURING CONSTRAINTS WITHIN THE ENGINEERING DESIGN PROCESS. DESIGN PROJECTS WILL BE USED TO INSTILL THESE CONCEPTS.		X
Renewable Energy Systems	ME-416	STUDENTS WILL LEARN TO APPLY THE PRINCIPLES OF ENERGY CONVERSION, ENERGY CONSERVATION, AND VALUE ENGINEERING TO THE ANALYSIS OF ENERGY CONVERSION SYSTEMS, RENEWABLE ENERGY GENERATION EQUIPMENT AND SYSTEMS. STUDENTS WILL BECOME FAMILIAR WITH ENERGY CONSUMPTION REQUIREMENTS FOR CONVENTIONAL SYSTEMS AND THE APPLICATIONS OF RENEWABLE ENERGY SYSTEMS TO PROVIDE ALTERNATIVE ENERGY SOURCES. ENERGY EFFICIENCY AND GLOBAL ENVIRONMENTAL SUSTAINABILITY ARE EMPHASIZED. A BACKGROUND IN BASIC THERMODYNAMICS IS ASSUMED.	X	
HVAC System Design	ME-439	ANALYSIS OF HEATING, VENTILATING, AND AIR CONDITIONING REQUIREMENTS. DESIGN OF HEATING, VENTILATING, AND AIR CONDITIONING SYSTEMS. ECONOMIC, ENERGY, AND ENVIRONMENTAL CONSIDERATIONS. USE OF COMPUTERS AS DESIGN AIDS.		X
HVAC System Design Lab	ME-439 L	ANALYSIS OF HEATING, VENTILATING, AND AIR CONDITIONING REQUIREMENTS. DESIGN OF HEATING, VENTILATING, AND AIR CONDITIONING SYSTEMS. ECONOMIC, ENERGY, AND ENVIRONMENTAL CONSIDERATIONS. USE OF COMPUTERS AS DESIGN AIDS.		X
People and the Environment	NRM-110	ECOLOGICAL APPROACH TO CONSERVATION; HUMAN'S PAST AND PRESENT IMPACT ON WORLD ENVIRONMENTS; WISE USE OF NATURAL RESOURCES, INCLUDING SOIL, WATER, AIR, FORESTS, RANGELANDS, ENERGY, WILDLIFE, AND FISHERIES.	X	
Conservation Planning and Mgmt	NRM-221	THIS COURSE WILL INTRODUCE KEY CONCEPTS AND ACCEPTED PRACTICES IN CONSERVATION PLANNING AND MANAGEMENT. FOCUS WILL BE DIRECTED TO UNDERSTANDING THE NECESSARY TOOLS NEEDED TO DEVELOP ECOSYSTEM BASED CONSERVATION PLANS.	X	
Laws & Policies in NRM	NRM-300	THIS COURSE WILL INTRODUCE AND DISCUSS MAJOR ENVIRONMENTAL LEGISLATION WHICH INFLUENCES NATURAL RESOURCE MANAGEMENT AGENCIES. SIGNIFICANT TIME WILL BE SPENT STUDYING VARIOUS ACTS; AGENCIES RESPONSIBLE FOR IMPLEMENTING COMPONENTS OF THESE ACTS; FUNDING AND REPORTING REQUIREMENTS UNDER THESE ACTS; MANAGEMENT ACTIVITIES LINKED TO THESE ACTS.		X
Principles of Ecology	NRM-311	BASIC PRINCIPLES OF ECOLOGY INCLUDING THE SUB DISCIPLINES OF PHYSIOLOGICAL ECOLOGY, POPULATION ECOLOGY, COMMUNITY ECOLOGY, EVOLUTIONARY ECOLOGY, AND ECOSYSTEMS ECOLOGY FROM BOTH A THEORETICAL AND APPLIED ASPECT.		X
Park Interpretation	NRM-321	This course will introduce principles and applications of environmental communication, education, and interpretation for managing natural resources.		X
Conserv/Mgmt Endanger Wildlife	NRM-350	THIS COURSE FOCUSES ON THE CONSERVATION AND MANAGEMENT OF NATIVE AND NONGAME WILDLIFE, WITH SPECIAL EMPHASIS ON SPECIES THAT ARE THREATENED. TOPICS TO BE COVERED INCLUDE: WILDLIFE LAWS, HISTORICAL DEVELOPMENT OF ENDANGERED/NONGAME PROGRAMS, THE ENDANGERED SPECIES ACT, THE USFWS ENDANGERED SPECIES PROGRAM, RESEARCH/MANAGEMENT STRATEGIES, PUBLIC EDUCATION AND INVOLVEMENT, ROLE OF ZOOS, AND CAPTIVE BREEDING PROGRAMS.		X

Entomology	NRM-405	AN INTRODUCTION TO THE GENERAL BIOLOGY AND CLASSIFICATION OF INSECTS. COURSE EMPHASIS PLACED ON TAXONOMY, METHODS OF IDENTIFICATION, AND ECOLOGICAL ROLE OF INSECTS. STUDENTS WILL BECOME FAMILIAR WITH BASIC INSECT ANATOMY AND MORPHOLOGY, CLASSIFICATION AT THE ORDER LEVEL WITH EXEMPLARY FAMILIES THAT INCLUDE TAXA OF AGRICULTURAL OR ENVIRONMENTAL INTEREST, AND ACQUIRE AN ABILITY TO SIGHT RECOGNIZE PARTICULAR SPECIES THAT HAVE AGRICULTURAL, ENVIRONMENTAL, WILDLIFE, AND HUMAN AND LIVESTOCK HEALTH IMPORTANCE.		X
Entomology Lab	NRM-405L	AN INTRODUCTION TO THE GENERAL BIOLOGY AND CLASSIFICATION OF INSECTS. COURSE EMPHASIS PLACED ON TAXONOMY, METHODS OF IDENTIFICATION, AND ECOLOGICAL ROLE OF INSECTS. STUDENTS WILL BECOME FAMILIAR WITH BASIC INSECT ANATOMY AND MORPHOLOGY, CLASSIFICATION AT THE ORDER LEVEL WITH EXEMPLARY FAMILIES THAT INCLUDE TAXA OF AGRICULTURAL OR ENVIRONMENTAL INTEREST, AND ACQUIRE AN ABILITY TO SIGHT RECOGNIZE PARTICULAR SPECIES THAT HAVE AGRICULTURAL, ENVIRONMENTAL, WILDLIFE, AND HUMAN AND LIVESTOCK HEALTH IMPORTANCE.		X
Ecosystem Ecology	NRM-464	STUDY OF ENERGY AND MATERIAL FLOWS THROUGH THE LIVING (PLANTS, ANIMALS, MICROBES) AND NON-LIVING (SOILS, ATMOSPHERE) COMPONENTS OF ECOLOGICAL SYSTEMS. DISCUSSION OF THE MAJOR ELEMENTS CYCLES AND PATTERNS OF ENERGY FLOW THROUGH ECOSYSTEMS, INCLUDING HOW THOSE FLUXES AND THEIR CONTROLS DIFFER FOR DIFFERENT ECOSYSTEMS. LINKAGES BETWEEN ECOSYSTEM STRUCTURE AND FUNCTION WILL BE EMPHASIZED.		X
Leadership and Management	NURS-454	THIS COURSE FOCUSES ON THREE AREAS: MANAGEMENT THEORY, LEADERSHIP THEORY AND POLITICAL AND ECONOMIC ISSUES WITHIN PROFESSIONAL NURSING PRACTICE. RESOURCE MANAGEMENT, CHANGE THEORY, ORGANIZATION AND OTHER GROUP BEHAVIOR WILL BE DISCUSSED. CONFLICT RESOLUTION, NEGOTIATION, AND GROUP PROCESS SKILLS ARE ALSO ADDRESSED. THE PROFESSIONAL VALUE OF "SOCIAL JUSTICE" OR UPHOLDING MORAL, LEGAL, AND HUMANISTIC PRINCIPLES IS THE VALUE-BASED BEHAVIOR CENTRAL TO THIS COURSE.		X
Vulnerable Populations:Nursing	NURS-461	THIS COURSE EXAMINES HEALTH DETERMINANTS AND HEALTH DISPARITIES FROM THE NURSING PERSPECTIVE. THE REGISTERED NURSE STUDENT WILL EVALUATE FACTORS INFLUENCING VULNERABLE POPULATIONS AND UNDERSTAND RESULTING HEALTH CARE ISSUES. THE STUDENT WILL EXPLORE DISPARITIES WITHIN SOCIAL, CULTURAL, POLITICAL, ECONOMIC, AND ENVIRONMENTAL CONTEXTS USING A COLLABORATIVE APPROACH.		X
Food, People & Environment	NUTR-111	THE SURVEY OF GLOBAL FOOD CULTURES, THEIR STEWARDSHIP OF NATURAL RESOURCES, AND THEIR IMPACTS ON THE ENVIRONMENT. IT WILL ALSO EXPLORE THE ETHICAL ISSUES OF CHOICES IN POST-HARVEST FOOD PROCESSING AND THEIR INTERACTIONS WITH THE ENVIRONMENT. THE COURSE WILL ALSO COVER TOPICS RELATED TO THE LAND-GRANT PHILOSOPHY.	X	
Human Nutrition	NUTR-315	The science of food, the nutrients and other substances therein, their action, interaction, and balance in relation to health and disease and the processes by which the organism ingests, digests, absorbs, transports, utilizes and excretes food substances. Prerequisites: CHEM 106 or CHEM 107 or CHEM 112.		X
Nutrition Assessment	NUTR-322	Study of nutritional screening and assessment, including nutrition-focused physical exam. Review of principles of dietetics and the role of the professional dietitian. Prerequisites: NUTR 315.		X
Medical Nutrition Therapy I	NUTR-423	This course introduces the role of nutritional intervention in pathological conditions. Students will demonstrate the ability to screen for nutritional risk, collect data for nutritional assessment and calculate and/or define diets for common conditions. Prerequisites: NUTR 322 and NUTR 422. Corequisites: NUTR 423L-423/523L-523.		X
Medical Nutrition Therapy I LAB	NUTR-423L	This course introduces the role of nutritional intervention in pathological conditions. Students will demonstrate the ability to screen for nutritional risk, collect data for nutritional assessment and calculate and/or define diets for common conditions. Prerequisites: NUTR 322 and NUTR 422. Corequisites: NUTR 423L-423/523L-523.		X
Medical Nutrition Therapy II	NUTR-425	Continuation of NUTR 423-523. Prerequisites: NUTR 423-423L/523-523L. Corequisites: NUTR 425L-425/525L-525.		X
Medical Nutrition Therapy II LAB	NUTR-425 L	Continuation of NUTR 423-523. Prerequisites: NUTR 423-423L/523-523L. Corequisites: NUTR 425L-425/525L-525.		X



Production/Wine Beer Spirits	NUTR-426	Students will learn the procedures required for the biological and agricultural production of wine, beer and spirits coupled with the science of fermentation and the methodology required for the tasting of wine and beer for flavor/odor identification per industry guidelines. Lecture topics of student inquiry include: (1) the brewing of beer and the functional contributions of its ingredients, (2) wine production from vine to bottle, (3) the distillation of spirits and (4) the marketing, pairing and service of wine, beer and spirits. This course is designed for students/graduates who will potentially go into the business of not only growth and production, but also marketing and serving wine, beer and spirits. Laboratory investigation includes hands-on opportunities involving the production of beer and wine. Students will experiment with production parameters and investigate quality defects. Wine and beer quality will be assessed through laboratory testing coupled with taste testing without consumption (taste and spit) both per industry specifications. Students will develop skills in identifying specific flavors/odors such as oak, butter or lemon in wine and similar tasting techniques in beer		X
Production/Wine Beer Spirits Lab	NUTR-426L	Students will learn the procedures required for the biological and agricultural production of wine, beer and spirits coupled with the science of fermentation and the methodology required for the tasting of wine and beer for flavor/odor identification per industry guidelines. Lecture topics of student inquiry include: (1) the brewing of beer and the functional contributions of its ingredients, (2) wine production from vine to bottle, (3) the distillation of spirits and (4) the marketing, pairing and service of wine, beer and spirits. This course is designed for students/graduates who will potentially go into the business of not only growth and production, but also marketing and serving wine, beer and spirits. Laboratory investigation includes hands-on opportunities involving the production of beer and wine. Students will experiment with production parameters and investigate quality defects. Wine and beer quality will be assessed through laboratory testing coupled with taste testing without consumption (taste and spit) both per industry specifications. Students will develop skills in identifying specific flavors/odors such as oak, butter or lemon in wine and similar tasting techniques in beer		X
Environmental Ethics	PHIL-454	PRESENTS HUMANITY'S RELATIONSHIP TO THE ENVIRONMENT, ITS RESPONSIBILITY TO NATURE, AND ITS OBLIGATIONS TO FUTURE GENERATIONS, ATTENDING TO BOTH THEORY AND APPLICATIONS, INCLUDING THE DEBATE OVER CAUSES OF ENVIRONMENTAL CRISIS, THE VALUE OF ENDANGERED SPECIES, THE WILDERNESS, AND NATURAL OBJECTS; THE SERIOUSNESS OF THE GROWING GLOBAL POPULATION AND OBLIGATIONS TO FEED THE POOR, THE FEASIBILITY OF SUSTAINING AN ECOLOGICAL RESPONSIBLE SOCIETY.	X	
American Political Issues	POLS-102	PROVIDES AN IN-DEPTH EXPLORATION OF A PARTICULAR PROBLEM OR ISSUE, SUCH AS ENVIRONMENTAL CONTROL, MINORITIES OR POVERTY. STUDENTS LEARN THE BASIC SKILLS NEEDED TO SUCCEED AS A POLITICAL SCIENCE MAJOR.		X
Politics of Inequality	POLS-360	THIS COURSE CONFRONTS THE INEQUALITY PRESENT IN THE AMERICAN POLITICAL SYSTEM. SOME OF THE TOPICS THAT WILL BE ADDRESSED INCLUDE ECONOMIC, POLITICAL AND SOCIAL INEQUALITY. THE COURSE MATERIAL EXPLORES AND ANALYZES THE CAUSES AND EFFECTS OF INEQUALITY, THE ROLE OF POLITICAL ACTORS AND INSTITUTIONS IN BOTH PERPETUATING AND REMEDYING INEQUALITY, AND CONTEMPORARY CURRENT EVENTS RELATING TO ISSUES OF INEQUALITY.		X
Insects and Society	PS-105	THIS NON-TECHNICAL COURSE INTRODUCES A WIDE VARIETY OF WAYS THAT HUMANS INTERACT WITH URBAN AND AGRICULTURAL INSECTS IN TODAY'S WORLD. IT COVERS THE EXTREMELY VALUABLE ROLES WHERE INSECTS ARE ESSENTIAL TO HUMAN SURVIVAL AND COMMERCE. THE COURSE ALSO REVEALS WHERE PESTS ARE RESPONSIBLE FOR BEING DISASTROUS COMPETITORS WITH HUMANS.		X
Principles of Geology	PS-243	THE EARTH'S LAND AND NATURAL RESOURCES, THEIR CHARACTERISTICS AND ECONOMIC USES TOGETHER WITH THE WATER AND ENERGY RESOURCES CONTAINED IN THEM ARE EXAMINED UNDER THE PRINCIPLE OF STEWARDSHIP. A FUNDAMENTAL EMPHASIS USING INFORMATION DERIVED FROM THE SCIENTIFIC METHOD TO ARRIVE AT INTELLIGENT STEWARDSHIP PERSPECTIVES AND PRACTICES PREVAILS THROUGH THE COURSE.		X
Non-Chemical Weed Management	PS-345	THIS COURSE EXPLORES WEED MANAGEMENT OPTIONS WITHOUT THE USE OF SYNTHETIC HERBICIDES. BIOLOGICAL AND ECOLOGICAL RELATIONSHIPS BETWEEN CROPS AND WEEDS ARE CHARACTERIZED. SITE SPECIFIC AND SUSTAINABLE WEED MANAGEMENT SYSTEMS ARE EXPLORED WITH EMPHASIS ON MECHANICAL, CULTURAL, AND BIOLOGICAL METHODS. ENVIRONMENTALLY SUSTAINABLE WEED MANAGEMENT METHODS ARE DISCUSSED IN ORGANIC AND NON-ORGANIC FARMING.	X	
Entomology	PS-405	AN INTRODUCTION TO THE GENERAL BIOLOGY AND CLASSIFICATION OF INSECTS. COURSE EMPHASIS PLACED ON TAXONOMY, METHODS OF IDENTIFICATION, AND ECOLOGICAL ROLE OF INSECTS. STUDENTS WILL BECOME FAMILIAR WITH BASIC INSECT ANATOMY AND MORPHOLOGY, CLASSIFICATION AT THE ORDER LEVEL WITH EXEMPLARY FAMILIES THAT INCLUDE TAXA OF AGRICULTURAL OR ENVIRONMENTAL INTEREST, AND ACQUIRE AN ABILITY TO SIGHT RECOGNIZE PARTICULAR SPECIES THAT HAVE AGRICULTURAL, ENVIRONMENTAL, WILDLIFE, AND HUMAN AND LIVESTOCK HEALTH IMPORTANCE.		X

Entomology Lab	PS-405L	AN INTRODUCTION TO THE GENERAL BIOLOGY AND CLASSIFICATION OF INSECTS. COURSE EMPHASIS PLACED ON TAXONOMY, METHODS OF IDENTIFICATION, AND ECOLOGICAL ROLE OF INSECTS. STUDENTS WILL BECOME FAMILIAR WITH BASIC INSECT ANATOMY AND MORPHOLOGY, CLASSIFICATION AT THE ORDER LEVEL WITH EXEMPLARY FAMILIES THAT INCLUDE TAXA OF AGRICULTURAL OR ENVIRONMENTAL INTEREST, AND ACQUIRE AN ABILITY TO SIGHT RECOGNIZE PARTICULAR SPECIES THAT HAVE AGRICULTURAL, ENVIRONMENTAL, WILDLIFE, AND HUMAN AND LIVESTOCK HEALTH IMPORTANCE.		
Environmental Soil Chemistry	PS-412	FUNDAMENTALS OF SOIL CHEMICAL PROPERTIES AND PROCESSES IMPORTANT FOR THE SOUND MANAGEMENT OF SOIL RESOURCES. TOPICS INCLUDE SORPTION/ DESORPTION OF INORGANIC AND ORGANIC COMPOUNDS, BIOAVAILABILITY OF NUTRIENTS AND CONTAMINANTS, OXIDATION/REDUCTION, PHASE EQUILIBRIA, SOIL ORGANIC MATTER, SOIL MINERALOGY, ION EXCHANGE, AND SALINE/SODIC SOILS.		X
Production/Wine Beer Spirits	PS-426	Students will learn the procedures required for the biological and agricultural production of wine, beer and spirits coupled with the science of fermentation and the methodology required for the tasting of wine and beer for flavor/odor identification per industry guidelines. Lecture topics of student inquiry include: (1) the brewing of beer and the functional contributions of its ingredients, (2) wine production from vine to bottle, (3) the distillation of spirits and (4) the marketing, pairing and service of wine, beer and spirits. This course is designed for students/graduates who will potentially go into the business of not only growth and production, but also marketing and serving wine, beer and spirits. Laboratory investigation includes hands-on opportunities involving the production of beer and wine. Students will experiment with production parameters and investigate quality defects. Wine and beer quality will be assessed through laboratory testing coupled with taste testing without consumption (taste and spit) both per industry specifications. Students will develop skills in identifying specific flavors/odors such as oak, butter or lemon in wine and similar tasting techniques in beer		X
Production/Wine Beer Spirits Lab	PS-426L	Students will learn the procedures required for the biological and agricultural production of wine, beer and spirits coupled with the science of fermentation and the methodology required for the tasting of wine and beer for flavor/odor identification per industry guidelines. Lecture topics of student inquiry include: (1) the brewing of beer and the functional contributions of its ingredients, (2) wine production from vine to bottle, (3) the distillation of spirits and (4) the marketing, pairing and service of wine, beer and spirits. This course is designed for students/graduates who will potentially go into the business of not only growth and production, but also marketing and serving wine, beer and spirits. Laboratory investigation includes hands-on opportunities involving the production of beer and wine. Students will experiment with production parameters and investigate quality defects. Wine and beer quality will be assessed through laboratory testing coupled with taste testing without consumption (taste and spit) both per industry specifications. Students will develop skills in identifying specific flavors/odors such as oak, butter or lemon in wine and similar tasting techniques in beer		X
Insect Ecology & Biol Control	PS-431	THIS COURSE WILL EXAMINE THE ECOLOGICAL RELATIONSHIPS BETWEEN INSECTS AND THEIR ENVIRONMENT. TOPICS WILL INCLUDE NATURAL HISTORY; POPULATION DYNAMICS; INTERACTIONS BETWEEN INSECTS AND THEIR FOOD PLANTS, PREDATORS, AND DISEASES; INSECT EVOLUTIONARY ECOLOGY; AND INSECT AGROECOLOGY. THESE TOPICS WILL ALSO BE EXPLORED IN THE CONTEXT OF THE BIOLOGICAL CONTROL OF ARTHROPOD AND WEED PESTS BY NATURAL ENEMIES.		X
Insect Ecology & Biol Control Lab	PS-431 L	THIS COURSE WILL EXAMINE THE ECOLOGICAL RELATIONSHIPS BETWEEN INSECTS AND THEIR ENVIRONMENT. TOPICS WILL INCLUDE NATURAL HISTORY; POPULATION DYNAMICS; INTERACTIONS BETWEEN INSECTS AND THEIR FOOD PLANTS, PREDATORS, AND DISEASES; INSECT EVOLUTIONARY ECOLOGY; AND INSECT AGROECOLOGY. THESE TOPICS WILL ALSO BE EXPLORED IN THE CONTEXT OF THE BIOLOGICAL CONTROL OF ARTHROPOD AND WEED PESTS BY NATURAL ENEMIES.		X
Organic Plant Production	PS-447	THIS COURSE PROVIDES A DETAILED OVERVIEW OF ORGANIC FARMING FOR BOTH SMALL SCALE SUBURBAN AND URBAN SETTINGS. THE TOPICS COVERED WILL INCLUDE: ORGANIC CERTIFICATION, SOIL AND NUTRIENT MANAGEMENT, PEST AND DISEASE ID AND MANAGEMENT, HIGH-TUNNEL MANAGEMENT, AND MARKETING.		X
Environmental Soil Mgmt	PS-462	MANAGEMENT SYSTEMS DESIGNED TO MAINTAIN SOIL PRODUCTIVITY AND ENVIRONMENTAL QUALITY ARE EXAMINED. SOIL PROBLEMS IMPORTANT IN PRODUCTION SYSTEMS AND ENVIRONMENTAL MANAGEMENT INCLUDING COMPACTION, EROSION, AND NONPOINT POLLUTION ARE ANALYZED BASED ON UNDERLYING ENVIRONMENTAL AND AGRONOMIC PRINCIPLES. COMPUTER SIMULATION MODELS ARE USED AND APPLIED TO SOIL PROBLEMS.		X
Environmental Soil Mgmt	PS-462L	MANAGEMENT SYSTEMS DESIGNED TO MAINTAIN SOIL PRODUCTIVITY AND ENVIRONMENTAL QUALITY ARE EXAMINED. SOIL PROBLEMS IMPORTANT IN PRODUCTION SYSTEMS AND ENVIRONMENTAL MANAGEMENT INCLUDING COMPACTION, EROSION, AND NONPOINT POLLUTION ARE ANALYZED BASED ON UNDERLYING ENVIRONMENTAL AND AGRONOMIC PRINCIPLES. COMPUTER SIMULATION MODELS ARE USED AND APPLIED TO SOIL PROBLEMS.		X
Environmental Psychology	PSYC-244	THIS COURSE SURVEYS THE EMPIRICAL AND THEORETICAL WORK ON THE INFLUENCE OF THE PHYSICAL ENVIRONMENT ON HUMAN BEHAVIOR AND EXPERIENCE. TOPICS INCLUDE THE USE OF SPACE, STRESSORS AND ESTHETICS AS RELATED TO HUMAN BEINGS, THE OPTIMUM DESIGN OF BUILDINGS, HOMES AND INSTITUTIONS, AND THE EFFECT OF HUMANS ON THE NATURAL ENVIRONMENT. DESIGNED FOR BOTH PSYCHOLOGY MAJORS AND NON-MAJORS.		X

Cross Cultural Psychology	PSYC-364	THIS COURSE PROVIDES AN OVERVIEW OF CROSS-CULTURAL PSYCHOLOGY WHICH IS THE COMPARATIVE STUDY OF THE EFFECTS OF CULTURE AND DIVERSITY ON HUMAN PSYCHOLOGY. STUDENTS LEARN ABOUT WAYS THAT PSYCHOLOGISTS MAY ENGAGE IN MORE CULTURALLY SENSITIVE AND INCLUSIVE SCHOLARSHIP, RESEARCH, AND PRACTICE. IN DOING SO, STUDENTS ALSO INCREASE AWARENESS OF SELF AND OTHERS. STUDENTS ARE INTRODUCED TO KEY THEORIES, RESEARCH METHODS, SCIENTIFIC FINDINGS, AND APPLICATIONS OF CROSS CULTURAL PSYCHOLOGY WHILE CHALLENGED TO ENGAGE IN CRITICAL THINKING.		X
Social Psychology of Prejudice	PSYC-443	PREJUDICE IS AN ADVANCED EXAMINATION OF THE CAUSES AND CONSEQUENCES OF PREJUDICE PASSED UPON GROUP CHARACTERISTICS OF RACE AND ETHNICITY; SEXUAL ORIENTATION, AND PHYSICAL APPEARANCE. CLASSIC AND MODERN THEORIES OF PREJUDICE ARE PRESENTED. STUDENTS PRESENT THEIR IDEAS ON HOW PREJUDICE TOWARD STIGMATIZED GROUPS CAN BE ADDRESSED.		X
Intro to Range Management	RANG-205	BASIC PRINCIPLES AND APPLICATION OF RANGE SCIENCE INCLUDING ECOSYSTEM STRUCTURE, FUNCTION AND MANAGEMENT. WATER AND NUTRIENT CYCLES, ENERGY FLOW, PLANT PHYSIOLOGY, GRAZING MANAGEMENT AND GRAZING SYSTEMS WILL BE DISCUSSED. IDENTIFICATION AND MANAGEMENT OF IMPORTANT RANGE PLANTS IN THE NORTHERN GREAT PLAINS ARE INCLUDED. RANGE IMPROVEMENTS SUCH AS SEEDING, FERTILIZATION, BRUSH CONTROL AND PRESCRIBED BURNING WILL BE INTRODUCED.		X
Intro Integrated Ranch Mgmt	RANG-215	THIS COURSE INTRODUCES THE BASIC PRINCIPLES OF RANCHING AND THE FOOD AND FIBER SYSTEM. STUDENTS WILL BE EXPOSED TO THE COMPLEXITIES OF MODERN AGRICULTURAL PRODUCTION SYSTEMS. TOPICS INCLUDE: NATURAL RESOURCES AS THE BASIS FOR SUCCESSFUL RANCHING; THE FAMILY AS THE MAJOR SUPPLIER OF LABOR AND CAPITAL; ANIMAL AND AGRONOMIC PRODUCTION SYSTEMS; ECONOMIC AND FINANCIAL FORCES; RISK AND OPPORTUNITY; AGRICULTURAL POLICY AND LAW; THE DECISION MAKING PROCESS; AND STRESS AS THE DRIVING FORCE OF CHANGE. STUDENTS WILL INCORPORATE OUTSIDE READINGS INTO DISCUSSIONS AND PRACTICE PLANNING EXERCISES HELD DURING LAB SESSIONS.		X
Wildland Ecosystems	RANG-321	STRUCTURE, FUNCTION AND MULTIPLE-USE MANAGEMENT OF THE MAJOR WILDLAND ECOSYSTEMS OF NORTH AMERICA. ECOLOGICAL CONCEPTS AND RENEWABLE RESOURCE MANAGEMENT STRATEGIES WILL BE EXAMINED.		X
Habitat Conservation & Mgmt	RANG-374	AN OVERVIEW OF MAJOR LAND-USE PRACTICES AND HOW THESE PRACTICES AND CONSERVATION PROGRAMS INFLUENCE ECOSYSTEM SERVICES. STUDENTS WILL EXPLORE THE BALANCE BETWEEN PRODUCTION AND CONSERVATION OF HABITAT TO ACHIEVE SPECIFIC WILDLIFE CONSERVATION AND MANAGEMENT GOALS. MANAGEMENT TOOLS SUCH AS FIRE, HERBICIDES, BIOCONTROL AGENTS, MECHANICAL TREATMENT, AND LIVESTOCK GRAZING WILL BE DISCUSSED. EMPHASIS WILL BE PLACED ON HOW THE MANAGEMENT OF OTHER RESOURCES CAN BE INTEGRATED WITH THOSE OF WILDLIFE.		X
Habitat Conservation & Mgmt Lab	RANG-374 L	AN OVERVIEW OF MAJOR LAND-USE PRACTICES AND HOW THESE PRACTICES AND CONSERVATION PROGRAMS INFLUENCE ECOSYSTEM SERVICES. STUDENTS WILL EXPLORE THE BALANCE BETWEEN PRODUCTION AND CONSERVATION OF HABITAT TO ACHIEVE SPECIFIC WILDLIFE CONSERVATION AND MANAGEMENT GOALS. MANAGEMENT TOOLS SUCH AS FIRE, HERBICIDES, BIOCONTROL AGENTS, MECHANICAL TREATMENT, AND LIVESTOCK GRAZING WILL BE DISCUSSED. EMPHASIS WILL BE PLACED ON HOW THE MANAGEMENT OF OTHER RESOURCES CAN BE INTEGRATED WITH THOSE OF WILDLIFE.		X
Environmental Ethics	REL-454	PRESENTS HUMANITY'S RELATIONSHIP TO THE ENVIRONMENT, ITS RESPONSIBILITY TO NATURE, AND ITS OBLIGATIONS TO FUTURE GENERATIONS, ATTENDING TO BOTH THEORY AND APPLICATIONS, INCLUDING THE DEBATE OVER CAUSES OF ENVIRONMENTAL CRISIS, THE VALUE OF ENDANGERED SPECIES, THE WILDERNESS, AND NATURAL OBJECTS; THE SERIOUSNESS OF THE GROWING GLOBAL POPULATION AND OBLIGATIONS TO FEED THE POOR, THE FEASIBILITY OF SUSTAINING AN ECOLOGICAL RESPONSIBLE SOCIETY.		X
Social Problems	SOC-150	A STUDY OF PRESENT DAY PROBLEMS IN CONTEMPORARY SOCIETIES, SUCH AS RACISM, SEXISM, AGEISM, ALCOHOLISM, DRUG ADDICTION, PHYSICAL AND MENTAL HEALTH, WAR AND ENVIRONMENTAL ISSUES - THEIR SIGNIFICANCE AND CURRENT POLICIES AND ACTION.		X
Working w/ Diverse Populations	SOC-283	THIS COURSE PROVIDES AN OVERVIEW OF THE EXPERIENCE OF SELECTED CULTURAL AND RACIAL GROUPS IN HUMAN AND SOCIAL SERVICES. IT PROMOTES AN UNDERSTANDING OF GROUP DIFFERENCES AND THE IMPACT OF THOSE DIFFERENCES ON THE DELIVERY OF HUMAN SERVICES. STUDENTS WILL LEARN HOW TO APPLY PRACTICAL SKILLS AND METHODOLOGIES RELATED TO EFFECTIVE HUMAN RESOURCE WORK IN DIVERSE EMPLOYMENT SETTINGS AND SOCIAL SERVICE DELIVERY TO MEMBERS OF DIVERSE POPULATION.		X
Population Studies	SOC-462	A STUDY OF HUMAN POPULATIONS WITH RESPECT TO SIZE, DISTRIBUTION, AND STRUCTURE, WITH EMPHASIS ON THEORIES OF POPULATION GROWTH AND DECLINE, POPULATION POLICIES, AND IMPACTS ON THE ENVIRONMENT.		X
Intro Wildlife & Fish Mgmt	WL-220	AN INTRODUCTION TO THE BASIC PRINCIPLES USED IN THE MANAGEMENT OF WILDLIFE AND FISH POPULATIONS, THEIR HABITATS, AND THEIR HUMAN USERS. THE COURSE IS DIRECTED TOWARD THE PRESENTATION OF GENERAL CONCEPTS THAT ARE INTEGRAL TO UNDERSTANDING THE DISCIPLINE.		X
Principles Wildlife Management	WL-411	APPLICATION OF ECOLOGICAL PRINCIPLES OF THE MANAGEMENT OF WILD BIRDS, MAMMALS, AND HERPS. HISTORY AND DEVELOPMENT OF WILDLIFE MANAGEMENT AS A SCIENCE; CHARACTERISTICS OF, AND FACTORS AFFECTING WILDLIFE POPULATIONS; TECHNIQUES AND THEORIES OF MANAGEMENT; AND, WILDLIFE CONSERVATION.		X

Principles Wildlife Management Lab	WL-411L	APPLICATION OF ECOLOGICAL PRINCIPLES OF THE MANAGEMENT OF WILD BIRDS, MAMMALS, AND HERPS. HISTORY AND DEVELOPMENT OF WILDLIFE MANAGEMENT AS A SCIENCE; CHARACTERISTICS OF, AND FACTORS AFFECTING WILDLIFE POPULATIONS; TECHNIQUES AND THEORIES OF MANAGEMENT; AND, WILDLIFE CONSERVATION.		X
Principle Fisheries Management	WL-412	FISHERIES MANAGEMENT AS A SCIENCE WITH AN EMPHASIS ON FRESHWATER FISHES AND ECOSYSTEMS. EMPHASES INCLUDE BIOTA, HABITAT, AND HUMAN MANAGEMENT.		X
Principle Fisheries Management Lab	WL-412 L	FISHERIES MANAGEMENT AS A SCIENCE WITH AN EMPHASIS ON FRESHWATER FISHES AND ECOSYSTEMS. EMPHASES INCLUDE BIOTA, HABITAT, AND HUMAN MANAGEMENT.		X
Upland Game Ecology/Mgmt	WL-415	UPLAND GAME BIRDS AND MAMMALS AS COMPONENTS OF ECOSYSTEMS. EFFECTS OF FARMING; INDUSTRY; SOCIAL CHANGE; TECHNOLOGY; AND FEDERAL, STATE, AND PRIVATE PROGRAMS ON GAME AND NON-GAME SPECIES. TECHNIQUES FOR INDIVIDUAL SPECIES MANAGEMENT.		X
Upland Game Ecology/Mgmt Lab	WL-415L	UPLAND GAME BIRDS AND MAMMALS AS COMPONENTS OF ECOSYSTEMS. EFFECTS OF FARMING; INDUSTRY; SOCIAL CHANGE; TECHNOLOGY; AND FEDERAL, STATE, AND PRIVATE PROGRAMS ON GAME AND NON-GAME SPECIES. TECHNIQUES FOR INDIVIDUAL SPECIES MANAGEMENT.		X
Waterfowl Ecology/Management	WL-419	ANALYSIS OF ECOLOGICAL AND SOCIO-ECONOMIC FACTORS AFFECTING WATERFOWL HABITAT AND WATERFOWL POPULATIONS. STATE AND FEDERAL PROGRAMS AFFECTING WETLAND DRAINAGE AND PRESERVATION. FIELD INSPECTION OF WATERFOWL HABITAT IN THE NORTH- CENTRAL STATES.		X
Waterfowl Ecology/Management Lab	WL-419 L	ANALYSIS OF ECOLOGICAL AND SOCIO-ECONOMIC FACTORS AFFECTING WATERFOWL HABITAT AND WATERFOWL POPULATIONS. STATE AND FEDERAL PROGRAMS AFFECTING WETLAND DRAINAGE AND PRESERVATION. FIELD INSPECTION OF WATERFOWL HABITAT IN THE NORTH- CENTRAL STATES.		X
Ecology of Fishes and Habitat	WL-429	STUDY OF FISH AS AN ORGANISM AND THE INTERRELATIONS OF FISH WITH OTHER ORGANISMS AND WITH THEIR HABITAT.		X
Ecology of Fishes and Habitat Lab	WL-429 L	STUDY OF FISH AS AN ORGANISM AND THE INTERRELATIONS OF FISH WITH OTHER ORGANISMS AND WITH THEIR HABITAT.		X
Human Dimensions in NRM	WL-430	INTERACTIONS AMONG VARIOUS STAKEHOLDERS, RESOURCE MANAGEMENT AGENCIES, AND THE WILDLIFE AND FISHERIES RESOURCES ARE STUDIED. TOPICS SUCH AS PUBLIC ATTITUDES AND EXPECTATIONS; AGENCY STRUCTURE, ADMINISTRATION, AND POLICY; TANGIBLE AND INTANGIBLE VALUES OF FISH, WILDLIFE, AND THEIR HABITATS; THE CONCEPT OF BIOPHILIA AS MOTIVATION FOR RESOURCE USE; PUBLIC RELATIONS; THE PHILOSOPHY AND ETHICS OF RESOURCE USE AND MANAGEMENT; AND, WILDLIFE AND FISHERIES LAW AND ITS ENFORCEMENT ARE INCLUDED.		X
Advanced Fisheries Management	WL-431	ADVANCED MANAGEMENT AND ECOLOGY OF PUBLIC AND PRIVATE WATER BODIES THROUGH MANIPULATION OF HABITAT, ORGANISMS, AND HUMAN USERS. THE COURSE WILL ADDRESS WATER BODY DESIGN AND CONSTRUCTION, LIMNOLOGY, HYDROLOGY, CHANNEL MORPHOLOGY, WATER QUALITY, BIOLOGICAL PRODUCTION, FISH MANAGEMENT, TROUBLESHOOTING, AND POND AND STREAM OPPORTUNITIES.		X
Advanced Fisheries Management Lab	WL-431 L	ADVANCED MANAGEMENT AND ECOLOGY OF PUBLIC AND PRIVATE WATER BODIES THROUGH MANIPULATION OF HABITAT, ORGANISMS, AND HUMAN USERS. THE COURSE WILL ADDRESS WATER BODY DESIGN AND CONSTRUCTION, LIMNOLOGY, HYDROLOGY, CHANNEL MORPHOLOGY, WATER QUALITY, BIOLOGICAL PRODUCTION, FISH MANAGEMENT, TROUBLESHOOTING, AND POND AND STREAM OPPORTUNITIES.		X

### GRADUATE LEVEL

COURSE TITLE	COURSE NUMBER	COURSE DESCRIPTION	FOCUSED	INCLUSIVE
Natural Resources Engineering	ABE-534	PRECIPITATION, INFILTRATION, EVAPOTRANSPIRATION AND RUNOFF FROM SMALL AGRICULTURAL WATERSHEDS AND APPLICATION TO DESIGN OF CONSERVATION STRUCTURES, WATER EROSION CONTROL PRACTICES. DESIGN OF DRAINAGE AND IRRIGATION SYSTEMS. FEEDLOT POLLUTION CONTROL PRINCIPLES.		X
Natural Resources Engineering Lab	ABE-534L	PRECIPITATION, INFILTRATION, EVAPOTRANSPIRATION AND RUNOFF FROM SMALL AGRICULTURAL WATERSHEDS AND APPLICATION TO DESIGN OF CONSERVATION STRUCTURES, WATER EROSION CONTROL PRACTICES. DESIGN OF DRAINAGE AND IRRIGATION SYSTEMS. FEEDLOT POLLUTION CONTROL PRINCIPLES.		X
Adv Hydrology in Agriculture	ABE-732	SMALL WATERSHED HYDROLOGY PRINCIPLES. UNIT HYDROGRAPH THEORY. INFILTRATION AND EVAPOTRANSPIRATION PROCESSES. SMALL WATERSHED SURFACE RUNOFF SIMULATION. SOIL EROSION PRINCIPLES.		X
Global/Multicultural Advertise	ADV-576	THIS COURSE DEVELOPS AN UNDERSTANDING OF GLOBAL AND MULTICULTURAL ADVERTISING AND MARKETING. STUDENTS GAIN EXPERIENCE IN DECISIONS THAT REFLECT AN UNDERSTANDING OF GLOBAL AND MULTICULTURAL MARKETS AND EXPLORE THE SOCIAL AND ETHICAL ISSUES IN SUCH ADVERTISING AND MARKETING.		X
Environmental Law	AGEC-562	INTRODUCTION TO REGULATORY THEORY, EXTERNALITIES AND MARKET FAILURES, DEFINITION OF KEY REGULATIONS AFFECTING AGRIBUSINESS, OVERVIEW OF LOCAL GOVERNMENT LAW, AND DELINEATION OF ENVIRONMENTAL LAWS RELATING TO AGRICULTURE. CURRENT ENVIRONMENTAL ISSUES ARE RELATED TO STATUTORY, ADMINISTRATIVE, AND REGULATORY AUTHORITIES.		X

Resource/Environment Economics	AGEC-572	RESOURCE AND ENVIRONMENTAL ECONOMICS SURVEYS THE ALLOCATION AND CONSERVATION OF NATURAL RESOURCES FROM A PERSPECTIVE OF OPTIMAL USE AND SUSTAINABILITY. EMPHASIS IS PLACED ON ENVIRONMENTAL ECONOMICS INCLUDING THE PROBLEMS OF POLLUTION, POPULATION, AND ECONOMIC GROWTH. METHODS FOR EVALUATING PROJECTS AND PROGRAMS ARE CONSIDERED.	X	
Agricultural Policy	AGEC-579	THIS COURSE EXAMINES THE PROCESS OF DEVELOPING AGRICULTURAL AND FOOD POLICY. TOPICS WILL INCLUDE THE POLICY DEVELOPMENT PROCESS; GLOBAL AND DOMESTIC IMPLICATIONS OF BOTH US DOMESTIC AND INTERNATIONAL TRADE POLICIES; ENVIRONMENTAL AND RESOURCE ISSUES; FOOD SAFETY, SECURITY, AND NUTRITION POLICIES; AND THE INTENDED AND UNINTENDED CONSEQUENCES OF POLICY DECISIONS.		X
Media Tech VI	ARCH-521	STUDENTS WILL DEVELOP THE SKILLS NECESSARY TO PRODUCE PROFESSIONAL CONTRACT DOCUMENTS, CONSTRUCTION DOCUMENTS AND OUTLINE SPECIFICATIONS, WITH AN EMPHASIS ON SUSTAINABLE BUILDING TECHNOLOGIES. COMPUTER AIDED DRAFTING (CAD) AND BUILDING INFORMATION MODELING (BIM) WILL BE COVERED.		X
Technology of Surroundings	ARCH-532	LECTURE AND FIELD WORK IN URBAN DESIGN PRINCIPLES, ENVIRONMENTAL RESPONSIBILITIES, AND IMPLEMENTATION OF SITE DESIGN TECHNOLOGIES.		X
Technology of Systems	ARCH-534	THE COURSE BUILDS BOTH AN INTUITIVE AND EMPIRICAL UNDERSTANDING OF THE BASIC PRINCIPLES OF SYSTEMS THINKING IN ARCHITECTURE THROUGH ENVIRONMENTAL STUDY AND INTEGRATIVE ANALYSIS OF BUILDING SERVICE SYSTEM PERFORMANCE.		X
Architectural Practice I	ARCH-571	THIS COURSE INTRODUCES REGULATIONS AS THEY RELATE TO ARCHITECTURAL REGISTRATION, INCLUDING BUILDING CODES AND ORDINANCES, PROFESSIONAL SERVICE CONTRACTS, ENVIRONMENTAL REGULATION, AND OTHER LEGAL RESPONSIBILITIES CONNECTED WITH THE PROFESSION.		X
Technology of Envelopes	ARCH-631	INTRODUCTION TO BUILDING SYSTEMS, DAYLIGHTING, ENVIRONMENTAL SYSTEMS, BUILDING SERVICES, AND SUSTAINABLE TECHNOLOGIES WITH AN EMPHASIS ON THE BUILDING EXTERIOR SURFACE.		X
Technology of Interiors	ARCH-632	INTRODUCTION TO TECHNOLOGICAL ISSUES OF INTERIOR SYSTEMS AND CONSTRUCTION INCLUDING PLUMBING SYSTEMS, MECHANICAL AIR HANDLING, LIGHTING, FINISH MATERIALS, AND SUSTAINABLE PRACTICES IN INTERIOR DESIGN.		X
Architectural Practice III	ARCH-671	THIS COURSE WILL COVER THE RESPONSIBILITIES ARCHITECTS HAVE TO SOCIETY. TOPICS INCLUDE SUSTAINABILITY, COMMUNITY OUTREACH, COLLABORATION, LEADERSHIP, ETHICS, AND PROFESSIONAL JUDGMENT.		X
Agricultural Waste Management	AS-563	UNDERSTAND AGRICULTURAL OR BIOLOGICAL WASTES. DEVELOP AN UNDERSTANDING OF REGULATORY REQUIREMENTS AND BEST MANAGEMENT PRACTICES THAT ADVOCATE RESPONSIBLE ENVIRONMENTAL STEWARDSHIP. TOPICS INCLUDE PRODUCTION, COLLECTION, HANDLING, TREATING, AND REUSING AGRICULTURAL AND BIOLOGICAL WASTES. COURSE WILL EMPHASIZE WRITTEN AND ORAL REPORTS.		X
Agricultural Waste Management	AST-563	UNDERSTAND AGRICULTURAL OR BIOLOGICAL WASTES. DEVELOP AN UNDERSTANDING OF REGULATORY REQUIREMENTS AND BEST MANAGEMENT PRACTICES THAT ADVOCATE RESPONSIBLE ENVIRONMENTAL STEWARDSHIP. TOPICS INCLUDE PRODUCTION, COLLECTION, HANDLING, TREATING, AND REUSING AGRICULTURAL AND BIOLOGICAL WASTES. COURSE WILL EMPHASIZE WRITTEN AND ORAL REPORTS.		X
Environmental Law	BLAW-562	INTRODUCTION TO REGULATORY THEORY, EXTERNALITIES AND MARKET FAILURES, DEFINITION OF KEY REGULATIONS AFFECTING AGRIBUSINESS, OVERVIEW OF LOCAL GOVERNMENT LAW, AND DELINEATION OF ENVIRONMENTAL LAWS RELATING TO AGRICULTURE. CURRENT ENVIRONMENTAL ISSUES ARE RELATED TO STATUTORY, ADMINISTRATIVE, AND REGULATORY AUTHORITIES.		X
Grasses and Grasslike Plants	BOT-505	A SYSTEMATIC SURVEY OF GRASSES AND GRASSLIKE PLANT OF THE NORTHERN GREAT PLAINS; FIELD AND LAB PRACTICE IN COLLECTION AND IDENTIFICATION OF GRAMINOID PLANTS; DISCUSSION OF UNIQUE BIOLOGICAL ASPECTS OF GRASSES AND GRASSLIKE PLANTS THAT MAKE THEM ECONOMICALLY AND ECOLOGICALLY SIGNIFICANT.		X
Grasses and Grasslike Plants	BOT-505L	A SYSTEMATIC SURVEY OF GRASSES, AND GRASSLIKE PLANTS OF THE NORTHERN GREAT PLAINS; FIELD AND LAB PRACTICE IN COLLECTION AND IDENTIFICATION OF G GRAMINOID PLANTS; DISCUSSION OF UNIQUE BIOLOGICAL ASPECTS OF GRASSES AND GRASSLIKE PLANTS THAT MAKE THEM ECONOMICALLY AND ECOLOGICALLY SIGNIFICANT.		X
Asphalt Materials/Mix Design	CEE-511	PROPERTIES OF AGGREGATES AND ASPHALTIC MATERIALS RELATED TO ASPHALT MIXES. VARIOUS TYPES OF ASPHALT PAVEMENTS AND MIX DESIGN METHODS. PLANT OPERATIONS, CONSTRUCTION METHODS AND EQUIPMENT USED IN THE PRODUCTION OF ASPHALT. ASPHALT MIX DESIGN AND TESTING WITH AN EMPHASIS ON SUPERPAVE MIX DESIGN METHOD. INTRODUCTION TO RECYCLING AND SUSTAINABLE ASPHALT PAVEMENT MATERIALS.		X
Asphalt Materials/Mix Design Lab	CEE-511L	PROPERTIES OF AGGREGATES AND ASPHALTIC MATERIALS RELATED TO ASPHALT MIXES. VARIOUS TYPES OF ASPHALT PAVEMENTS AND MIX DESIGN METHODS. PLANT OPERATIONS, CONSTRUCTION METHODS AND EQUIPMENT USED IN THE PRODUCTION OF ASPHALT. ASPHALT MIX DESIGN AND TESTING WITH AN EMPHASIS ON SUPERPAVE MIX DESIGN METHOD. INTRODUCTION TO RECYCLING AND SUSTAINABLE ASPHALT PAVEMENT MATERIALS.		X
Water Resources Engineering	CEE-535	TOPICS RELATED TO WATER RESOURCES ENGINEERING INCLUDING: MULTIPLE PURPOSE RIVER DEVELOPMENT, ECONOMIC ANALYSIS OF FLOOD CONTROL MEASURES, ASPECTS OF WATER LAW, ADVANCED TOPICS RELATED TO SURFACE AND GROUND WATER HYDROLOGY AND ADMINISTRATIVE ASPECTS OF WATER RESOURCES PLANNING.		X

Biol Princ of Environ Engr	CEE-725	ECOLOGY, ENERGETICS AND KINETICS OF BIOCHEMICAL SYSTEMS. ANALYSIS AND MODELING OF SUSPENDED GROWTH AND FIXED FILM BIOLOGICAL PROCESSES USED IN ENVIRONMENTAL ENGINEERING.		X
Chemical Toxicology	CHEM-584	UNDERSTANDING OF THE PRINCIPLES OF TOXICITY, INCLUDING THE MOLECULAR BASIS FOR TOXICITY AND THE ENVIRONMENTAL FATE AND TRANSPORT OF CHEMICALS IN THE ENVIRONMENT.		X
Multicult Cslg & Human Relatns	CHRD-731	THIS COURSE AIMS TO PROVIDE AN UNDERSTANDING OF THE CULTURAL CONTEXT OF RELATIONSHIPS, ISSUES AND TRENDS IN A MULTICULTURAL AND DIVERSE SOCIETY RELATED TO SUCH FACTORS AS CULTURE, ETHNICITY, NATIONALITY, AGE, GENDER, SEXUAL ORIENTATION, MENTAL AND PHYSICAL CHARACTERISTICS, EDUCATION, FAMILY VALUES, RELIGIOUS AND SPIRITUAL VALUES, SOCIOECONOMIC STATUS AND UNIQUE CHARACTERISTICS OF INDIVIDUALS, COUPLES, FAMILIES, ETHNIC GROUPS, AND COMMUNITIES.		X
Sustainable Building Systems	CM-560	THE ANALYSIS OF ENERGY EFFICIENT AND ENVIRONMENTALLY RESPONSIBLE BUILDING DESIGN AND CONSTRUCTION. MATERIAL SELECTION, ENERGY, AND CLIMATE ANALYSIS, AND PRACTICAL APPLICATIONS OF NEW TECHNOLOGY WILL BE COVERED.	X	
Dairy Farm Operations I	DS-580	The first course in a two-semester sequence course addressing dairy herd management practices. Dairy farm capital, budgets and credit; factors affecting economic returns of dairy farming; nutrition and feeding of lactating dairy cattle; and nutritional implications related to herd replacements. Prerequisites: (AS 218 or AS 219), DS 130-130L, and (ECON 201 or ECON 202) or Junior standing. Corequisites: DS 480L-480/580L-580. Notes: Odd Fall. DS 481-481L/581-581L - Dairy Farm Operations II and		X
Dairy Farm Operations I LAB	DS-580L	The first course in a two-semester sequence course addressing dairy herd management practices. Dairy farm capital, budgets and credit; factors affecting economic returns of dairy farming; nutrition and feeding of lactating dairy cattle; and nutritional implications related to herd replacements. Prerequisites: (AS 218 or AS 219), DS 130-130L, and (ECON 201 or ECON 202) or Junior standing. Corequisites: DS 480L-480/580L-580. Notes: Odd Fall. DS 481-481L/581-581L - Dairy Farm Operations II and		X
Resource/Environment Economics	ECON-572	RESOURCE AND ENVIRONMENTAL ECONOMICS SURVEYS THE ALLOCATION AND CONSERVATION OF NATURAL RESOURCES FROM A PERSPECTIVE OF OPTIMAL USE AND SUSTAINABILITY. EMPHASIS IS PLACED ON ENVIRONMENTAL ECONOMICS INCLUDING THE PROBLEMS OF POLLUTION, POPULATION, AND ECONOMIC GROWTH. METHODS FOR EVALUATING PROJECTS AND PROGRAMS ARE CONSIDERED.	X	
Photovoltaic Systems Engr	EE-536	FUNDAMENTALS OF HYBRID PHOTOVOLTAIC POWER SYSTEMS. TOPICS MAY INCLUDE: AN OVERVIEW OF ENERGY AND ELECTRICITY USE; SOLAR RESOURCE CHARACTERISTICS; LOAD ASSESSMENT; THE FUNDAMENTALS OF SOLAR CELLS, BATTERIES, POWER ELECTRONICS, AND GENERATORS AND OTHER POWER SOURCES; POWER SYSTEM DESIGN; THE NATIONAL ELECTRIC CODE; AND ENERGY ECONOMICS.		X
Photovoltaic Systems Engr Lab	EE-536L	THIS LAB PROVIDES PRACTICAL EXPERIENCE IN THE DESIGN OF HYBRID PHOTOVOLTAIC POWER SYSTEMS.		X
Photovoltaics	EE-735	THIS COURSE WILL COVER MODERN SILICON PHOTOVOLTAIC (PV) DEVICES, INCLUDING THE BASIC PHYSICS, IDEAL AND NONIDEAL MODELS, DEVICE PARAMETERS AND DESIGN, AND DEVICE FABRICATION. THE EMPHASIS WILL BE PLACED ON CRYSTALLINE AND MULTICRYSTALLINE DEVICES, BUT THIN FILMS WILL ALSO BE INTRODUCED. PV APPLICATIONS AND ECONOMICS WILL ALSO BE DISCUSSED.	X	
Organic Photovoltaics	EE-737	ORGANIC PHOTOVOLTAIC PROVIDES A VARIETY OF INTERESTING AND NEW PROPERTIES WHICH FACILITATE SOLAR ENERGY UTILIZATION. THE OBJECTIVES OF THIS COURSE ARE TO INTRODUCE MATERIAL PROPERTIES OF POLYMERS, SMALL MOLECULES, DYES, AND NANOMATERIALS FOR PHOTOVOLTAICS; DESCRIBE DEVICE MECHANISMS AND BEHAVIOR OF ORGANIC PHOTOVOLTAICS; UNDERSTAND THE PHOTOPHYSICAL PROCESSES IN ORGANIC PHOTOVOLTAICS; AND INTRODUCE DIFFERENT PROCESSING TECHNIQUES FOR DEVICE FABRICATION.	X	
Disturbance/Restoration Ecol	EES-525	INTRODUCTION TO BASIC CONCEPTS OF DISTURBANCE AND RESTORATION ECOLOGY. DEMONSTRATION AND DISCUSSION OF LINKAGES BETWEEN BASIC BIOLOGY AND MANAGEMENT OF NATURAL RESOURCES.		X
Disturbance/Restoration Ecol Lab	EES-525 L	INTRODUCTION TO BASIC CONCEPTS OF DISTURBANCE AND RESTORATION ECOLOGY. DEMONSTRATION AND DISCUSSION OF LINKAGES BETWEEN BASIC BIOLOGY AND MANAGEMENT OF NATURAL RESOURCES.		X
Biological Invasions	EES-530	ECOLOGICAL FACTORS THAT CONTRIBUTE TO SPECIES INVASION IN TERRESTRIAL AND AQUATIC ECOSYSTEMS WILL BE EXAMINED. IMPACTS TO INVADDED ECOSYSTEMS, MANAGEMENT IMPLICATIONS, AND MITIGATION STRATEGIES WILL BE EXPLORED.		X
Biological Invasions Lab	EES-530 L	ECOLOGICAL FACTORS THAT CONTRIBUTE TO SPECIES INVASION IN TERRESTRIAL AND AQUATIC ECOSYSTEMS WILL BE EXAMINED. IMPACTS TO INVADDED ECOSYSTEMS, MANAGEMENT IMPLICATIONS, AND MITIGATION STRATEGIES WILL BE EXPLORED.		X
Student Managed Investment Fund	FIN-520	This course involves hands-on experiential learning of real money management. Students will actively participate in all aspects of security analysis and portfolio management, including understanding investment ethics, generation of trading ideas, investment analysis, asset valuation and allocation, trading of financial securities, and performance report.		X

Environment Geography/Sustain	GEOG-515	GEOGRAPHICAL ASPECTS OF ENVIRONMENTAL ISSUES INCLUDING HISTORICAL GEOGRAPHY OF ENVIRONMENTAL PROBLEMS, GLOBAL DRIVING FORCES, LAND ETHICS AND STEWARDSHIP, ENVIRONMENTAL EXTERNALITIES, POPULATION, RESOURCES, CLIMATE CHANGE, AND ENVIRONMENTAL RESTORATION. FOCUS ON CONNECTIONS BETWEEN HUMAN AND NATURAL SYSTEMS; CONSEQUENCE CHAINS BETWEEN CAUSE AND EFFECT; IMPACT OF TIME AND SPACE ON PROBLEM PERCEPTION, ANALYSIS, AND SOLUTION; AND NATURAL AND HUMAN LAWS. TERM PAPER REQUIRED.	X	
Geography of Tourism	GEOG-520	BASED ON FUNDAMENTAL TOURISM PRINCIPLES, THIS COURSE WILL EXAMINE, FROM A GEOGRAPHICAL PERSPECTIVE, THE SOCIAL, CULTURAL, ENVIRONMENTAL AND ECONOMIC COMPLEXITIES ASSOCIATED WITH TOURISM AS A GLOBAL, NATIONAL AND LOCAL PHENOMENON. THIS COURSE WILL ALSO CONSIDER THE POSITIVE AND NEGATIVE FACTORS THAT AFFECT TOURISTS AND DESTINATIONS, AND THE COSTS AND BENEFITS OF TOURISM TO COMMUNITIES AND PLACES, PROVIDING CASE-STUDY EXAMPLES FROM THE UNITED STATES AND AROUND THE WORLD.		X
Population Geography	GEOG-525	GEOGRAPHIC ANALYSIS OF SUCH POPULATION CHARACTERISTICS AS: NUMBERS AND DISTRIBUTION; GROWTH AND CHANGE; COMPOSITION; MORTALITY, FERTILITY, AND THEORIES OF POPULATION CHANGE; POLICY AND FAMILY PLANNING; MIGRATION AND MOBILITY; POPULATION, ENVIRONMENT, FOOD SUPPLY, AND HUMAN WELL BEING. PROBLEMS AND PROSPECTS ARE CONSIDERED IN THE CONTEXT OF EACH TOPIC.		X
Sustainable Communities	GEOG-554	THIS COURSE INVESTIGATES THE INTERSECTION OF SUSTAINABILITY AND COMMUNITIES. THIS PRIMARY FOCUS ON THIS COURSE IS THE INTERCONNECTIONS BETWEEN SOCIAL, ECONOMIC, AND ENVIRONMENTAL SYSTEMS AND THEIR REFLEXIVE INTERACTIONS WITH COMMUNITY FORM AND FUNCTION. THE GOAL IS TO EXAMINE POLICIES AND PROGRAMS THAT CAN BE USED TO ACHIEVE SUSTAINABLE COMMUNITIES.	X	
Environmental History of US	HIST-509	EXAMINES THE RELATIONSHIP BETWEEN THE NATURAL ENVIRONMENT AND THE HISTORICAL MOVEMENTS OF HUMANS BY TRACING US ENVIRONMENTAL CHANGES, BEGINNING WITH THE ACTIVITIES OF THE NATIVE AMERICAN PEOPLES THROUGH THE EURO-AMERICAN PRESENCE TO THE COLD WAR ERA.		X
Geography of Tourism	HMG-520	BASED ON FUNDAMENTAL TOURISM PRINCIPLES, THIS COURSE WILL EXAMINE, FROM A GEOGRAPHICAL PERSPECTIVE, THE SOCIAL, CULTURAL, ENVIRONMENTAL AND ECONOMIC COMPLEXITIES ASSOCIATED WITH TOURISM AS A GLOBAL, NATIONAL AND LOCAL PHENOMENON. THIS COURSE WILL ALSO CONSIDER THE POSITIVE AND NEGATIVE FACTORS THAT AFFECT TOURISTS AND DESTINATIONS, AND THE COSTS AND BENEFITS OF TOURISM TO COMMUNITIES AND PLACES, PROVIDING CASE-STUDY EXAMPLES FROM THE UNITED STATES AND AROUND THE WORLD.		X
Production/Wine Beer Spirits	HO-526	Students will learn the procedures required for the biological and agricultural production of wine, beer and spirits coupled with the science of fermentation and the methodology required for the tasting of wine and beer for flavor/odor identification per industry guidelines. Lecture topics of student inquiry include: (1) the brewing of beer and the functional contributions of its ingredients, (2) wine production from vine to bottle, (3) the distillation of spirits and (4) the marketing, pairing and service of wine, beer and spirits. This course is designed for students/graduates who will potentially go into the business of not only growth and production, but also marketing and serving wine, beer and spirits. Laboratory investigation includes hands-on opportunities involving the production of beer and wine. Students will experiment with production parameters and investigate quality defects. Wine and beer quality will be assessed through laboratory testing coupled with taste testing without consumption (taste and spit) both per industry specifications. Students will develop skills in identifying specific flavors/odors such as oak, butter or lemon in wine and similar tasting techniques in beer		X
Production/Wine Beer Spirits Lab	HO-526L	Students will learn the procedures required for the biological and agricultural production of wine, beer and spirits coupled with the science of fermentation and the methodology required for the tasting of wine and beer for flavor/odor identification per industry guidelines. Lecture topics of student inquiry include: (1) the brewing of beer and the functional contributions of its ingredients, (2) wine production from vine to bottle, (3) the distillation of spirits and (4) the marketing, pairing and service of wine, beer and spirits. This course is designed for students/graduates who will potentially go into the business of not only growth and production, but also marketing and serving wine, beer and spirits. Laboratory investigation includes hands-on opportunities involving the production of beer and wine. Students will experiment with production parameters and investigate quality defects. Wine and beer quality will be assessed through laboratory testing coupled with taste testing without consumption (taste and spit) both per industry specifications. Students will develop skills in identifying specific flavors/odors such as oak, butter or lemon in wine and similar tasting techniques in beer		X
Organic Plant Production	HO-547	THIS COURSE PROVIDES A DETAILED OVERVIEW OF ORGANIC FARMING FOR BOTH SMALL SCALE SUBURBAN AND URBAN SETTINGS. THE TOPICS COVERED WILL INCLUDE: ORGANIC CERTIFICATION, SOIL AND NUTRIENT MANAGEMENT, PEST AND DISEASE ID AND MANAGEMENT, HIGH-TUNNEL MANAGEMENT, AND MARKETING.	X	

Renewable Energy Systems	ME-516	STUDENTS WILL LEARN TO APPLY THE PRINCIPLES OF ENERGY CONVERSION, ENERGY CONSERVATION, AND VALUE ENGINEERING TO THE ANALYSIS OF ENERGY CONVERSION SYSTEMS, RENEWABLE ENERGY GENERATION EQUIPMENT AND SYSTEMS. STUDENTS WILL BECOME FAMILIAR WITH ENERGY CONSUMPTION REQUIREMENTS FOR CONVENTIONAL SYSTEMS AND THE APPLICATIONS OF RENEWABLE ENERGY SYSTEMS TO PROVIDE ALTERNATIVE ENERGY SOURCES. ENERGY EFFICIENCY AND GLOBAL ENVIRONMENTAL SUSTAINABILITY ARE EMPHASIZED. A BACKGROUND IN BASIC THERMODYNAMICS IS ASSUMED.	X	
HVAC System Design	ME-539	ANALYSIS OF HEATING, VENTILATING, AND AIR CONDITIONING REQUIREMENTS. DESIGN OF HEATING, VENTILATING, AND AIR CONDITIONING SYSTEMS. ECONOMIC, ENERGY, AND ENVIRONMENTAL CONSIDERATIONS. USE OF COMPUTERS AS DESIGN AIDS.		X
HVAC System Design Lab	ME-539 L	ANALYSIS OF HEATING, VENTILATING, AND AIR CONDITIONING REQUIREMENTS. DESIGN OF HEATING, VENTILATING, AND AIR CONDITIONING SYSTEMS. ECONOMIC, ENERGY, AND ENVIRONMENTAL CONSIDERATIONS. USE OF COMPUTERS AS DESIGN AIDS.		X
Ecosystem Ecology	NRM-564	STUDY OF ENERGY AND MATERIAL FLOWS THROUGH THE LIVING (PLANTS, ANIMALS, MICROBES) AND NON-LIVING (SOILS, ATMOSPHERE) COMPONENTS OF ECOLOGICAL SYSTEMS. DISCUSSION OF THE MAJOR ELEMENTS CYCLES AND PATTERNS OF ENERGY FLOW THROUGH ECOSYSTEMS, INCLUDING HOW THOSE FLUXES AND THEIR CONTROLS DIFFER FOR DIFFERENT ECOSYSTEMS. LINKAGES BETWEEN ECOSYSTEM STRUCTURE AND FUNCTION WILL BE EMPHASIZED.		X
Landscape Ecology	NRM-706	STUDY OF THE STRUCTURE FUNCTION AND MANAGEMENT OF LANDSCAPE ECOSYSTEMS. INTEGRATES THE STUDY OF PLANTS, ANIMALS AND THE PHYSICAL ENVIRONMENT AT LARGER SPATIAL SCALES, AND APPLICATION OF THESE CONCEPTS TO LAND MANAGEMENT ISSUES. AN UNDERSTANDING OF ECOLOGICAL PRINCIPLES IS RECOMMENDED PRIOR TO ENROLLMENT.		X
Landscape Ecology Lab	NRM-706 L	STUDY OF THE STRUCTURE FUNCTION AND MANAGEMENT OF LANDSCAPE ECOSYSTEMS. INTEGRATES THE STUDY OF PLANTS, ANIMALS AND THE PHYSICAL ENVIRONMENT AT LARGER SPATIAL SCALES, AND APPLICATION OF THESE CONCEPTS TO LAND MANAGEMENT ISSUES. AN UNDERSTANDING OF ECOLOGICAL PRINCIPLES IS RECOMMENDED PRIOR TO ENROLLMENT.		X
Cultural Humility: Healthcare	NURS-675	THIS COURSE WILL PROVIDE STUDENTS THE TOOLS NECESSARY TO CULTIVATE AND INTEGRATE CULTURAL HUMILITY INTO THEIR PROFESSIONAL PRACTICE. THIS COURSE WILL BE GROUNDED IN THE LAKOTA VALUES OF FORTITUDE, WISDOM, COURAGE, GENEROSITY, HONOR, RESPECT, AND HUMILITY. STUDENTS' AWARENESS, SKILLS, AND KNOWLEDGE WILL BE ENHANCED REGARDING THE DIMENSIONS AND COMPLEXITIES INVOLVED IN CARING FOR PERSONS FROM DIVERSE CULTURAL BACKGROUNDS.		X
Medical Nutrition Therapy I	NUTR-523	This course introduces the role of nutritional intervention in pathological conditions. Students will demonstrate the ability to screen for nutritional risk, collect data for nutritional assessment and calculate and/or define diets for common conditions. Prerequisites: NUTR 322 and NUTR 422. Corequisites: NUTR 423L-423/523L-523.		X
Medical Nutrition Therapy I LAB	NUTR-523L	This course introduces the role of nutritional intervention in pathological conditions. Students will demonstrate the ability to screen for nutritional risk, collect data for nutritional assessment and calculate and/or define diets for common conditions. Prerequisites: NUTR 322 and NUTR 422. Corequisites: NUTR 423L-423/523L-523.		X
Medical Nutrition Therapy II	NUTR-525	Continuation of NUTR 423-523. Prerequisites: NUTR 423-423L/523-523L. Corequisites: NUTR 425L-425/525L-525.		X
Medical Nutrition Therapy II LAB	NUTR-525 L	Continuation of NUTR 423-523. Prerequisites: NUTR 423-423L/523-523L. Corequisites: NUTR 425L-425/525L-525.		X
Production/Wine Beer Spirits	NUTR-526	Students will learn the procedures required for the biological and agricultural production of wine, beer and spirits coupled with the science of fermentation and the methodology required for the tasting of wine and beer for flavor/odor identification per industry guidelines. Lecture topics of student inquiry include: (1) the brewing of beer and the functional contributions of its ingredients, (2) wine production from vine to bottle, (3) the distillation of spirits and (4) the marketing, pairing and service of wine, beer and spirits. This course is designed for students/graduates who will potentially go into the business of not only growth and production, but also marketing and serving wine, beer and spirits. Laboratory investigation includes hands-on opportunities involving the production of beer and wine. Students will experiment with production parameters and investigate quality defects. Wine and beer quality will be assessed through laboratory testing coupled with taste testing without consumption (taste and spit) both per industry specifications. Students will develop skills in identifying specific flavors/odors such as oak, butter or lemon in wine and similar tasting techniques in beer		X



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Entomology	PS-505	AN INTRODUCTION TO THE GENERAL BIOLOGY AND CLASSIFICATION OF INSECTS. COURSE EMPHASIS PLACED ON TAXONOMY, METHODS OF IDENTIFICATION, AND ECOLOGICAL ROLE OF INSECTS. STUDENTS WILL BECOME FAMILIAR WITH BASIC INSECT ANATOMY AND MORPHOLOGY, CLASSIFICATION AT THE ORDER LEVEL WITH EXEMPLARY FAMILIES THAT INCLUDE TAXA OF AGRICULTURAL OR ENVIRONMENTAL INTEREST, AND ACQUIRE AN ABILITY TO SIGHT RECOGNIZE PARTICULAR SPECIES THAT HAVE AGRICULTURAL, ENVIRONMENTAL, WILDLIFE, AND HUMAN AND LIVESTOCK HEALTH IMPORTANCE.		X
Entomology Lab	PS-505L	AN INTRODUCTION TO THE GENERAL BIOLOGY AND CLASSIFICATION OF INSECTS. COURSE EMPHASIS PLACED ON TAXONOMY, METHODS OF IDENTIFICATION, AND ECOLOGICAL ROLE OF INSECTS. STUDENTS WILL BECOME FAMILIAR WITH BASIC INSECT ANATOMY AND MORPHOLOGY, CLASSIFICATION AT THE ORDER LEVEL WITH EXEMPLARY FAMILIES THAT INCLUDE TAXA OF AGRICULTURAL OR ENVIRONMENTAL INTEREST, AND ACQUIRE AN ABILITY TO SIGHT RECOGNIZE PARTICULAR SPECIES THAT HAVE AGRICULTURAL, ENVIRONMENTAL, WILDLIFE, AND HUMAN AND LIVESTOCK HEALTH IMPORTANCE.		X
Environmental Soil Chemistry	PS-512	FUNDAMENTALS OF SOIL CHEMICAL PROPERTIES AND PROCESSES IMPORTANT FOR THE SOUND MANAGEMENT OF SOIL RESOURCES. TOPICS INCLUDE SORPTION/ DESORPTION OF INORGANIC AND ORGANIC COMPOUNDS, BIOAVAILABILITY OF NUTRIENTS AND CONTAMINANTS, OXIDATION/REDUCTION, PHASE EQUILIBRIA, SOIL ORGANIC MATTER, SOIL MINERALOGY, ION EXCHANGE, AND SALINE/SODIC SOILS.		X
Production/Wine Beer Spirits	PS-526	Students will learn the procedures required for the biological and agricultural production of wine, beer and spirits coupled with the science of fermentation and the methodology required for the tasting of wine and beer for flavor/odor identification per industry guidelines. Lecture topics of student inquiry include: (1) the brewing of beer and the functional contributions of its ingredients, (2) wine production from vine to bottle, (3) the distillation of spirits and (4) the marketing, pairing and service of wine, beer and spirits. This course is designed for students/graduates who will potentially go into the business of not only growth and production, but also marketing and serving wine, beer and spirits. Laboratory investigation includes hands-on opportunities involving the production of beer and wine. Students will experiment with production parameters and investigate quality defects. Wine and beer quality will be assessed through laboratory testing coupled with taste testing without consumption (taste and spit) both per industry specifications. Students will develop skills in identifying specific flavors/odors such as oak, butter or lemon in wine and similar tasting techniques in beer		X
Production/Wine Beer Spirits Lab	PS-526L	Students will learn the procedures required for the biological and agricultural production of wine, beer and spirits coupled with the science of fermentation and the methodology required for the tasting of wine and beer for flavor/odor identification per industry guidelines. Lecture topics of student inquiry include: (1) the brewing of beer and the functional contributions of its ingredients, (2) wine production from vine to bottle, (3) the distillation of spirits and (4) the marketing, pairing and service of wine, beer and spirits. This course is designed for students/graduates who will potentially go into the business of not only growth and production, but also marketing and serving wine, beer and spirits. Laboratory investigation includes hands-on opportunities involving the production of beer and wine. Students will experiment with production parameters and investigate quality defects. Wine and beer quality will be assessed through laboratory testing coupled with taste testing without consumption (taste and spit) both per industry specifications. Students will develop skills in identifying specific flavors/odors such as oak, butter or lemon in wine and similar tasting techniques in beer		X
Organic Plant Production	PS-547	THIS COURSE PROVIDES A DETAILED OVERVIEW OF ORGANIC FARMING FOR BOTH SMALL SCALE SUBURBAN AND URBAN SETTINGS. THE TOPICS COVERED WILL INCLUDE: ORGANIC CERTIFICATION, SOIL AND NUTRIENT MANAGEMENT, PEST AND DISEASE ID AND MANAGEMENT, HIGH-TUNNEL MANAGEMENT, AND MARKETING.	X	
Adv Integrated Pest Management	PS-721	THE BIOLOGICAL AND ECOLOGICAL BASIS OF INTEGRATED PEST MANAGEMENT FOR MIDWESTERN CROP INSECTS AND THE UNDERSTANDING OF ECONOMIC THRESHOLDS ARE EMPHASIZED. PEST SCOUTING TECHNIQUES FOR MAJOR CROP PESTS AND SIMULATED MANAGEMENT DECISIONS ARE DISCUSSED.		X
Environmental Soil Physics	PS-743	THE EXCHANGE OF ENERGY AND WATER AT SOIL SURFACES, INFILTRATION AND REDISTRIBUTION OF WATER AND SOIL PHYSICAL PROPERTIES RELATED TO PLANT GROWTH. EMPHASIS ON APPLICATIONS IN DEVELOPMENT AND UTILIZATION OF SOIL AND WATER RESOURCES IN A MANNER CONSISTENT WITH PRESERVATION OF ENVIRONMENTAL QUALITY.		X

Environmental Soil Physics Lab	PS-743L	THE EXCHANGE OF ENERGY AND WATER AT SOIL SURFACES, INFILTRATION AND REDISTRIBUTION OF WATER AND SOIL PHYSICAL PROPERTIES RELATED TO PLANT GROWTH. EMPHASIS ON APPLICATIONS IN DEVELOPMENT AND UTILIZATION OF SOIL AND WATER RESOURCES IN A MANNER CONSISTENT WITH PRESERVATION OF ENVIRONMENTAL QUALITY.		X
Environmental Health	PUBH-733	THIS COURSE EXAMINES CAUSES AND APPROACHES TO CONTROL ENVIRONMENTAL HEALTH PROBLEMS INCLUDING CONSIDERATION OF HUMAN HEALTH RISKS AND EFFECTS OF BIOLOGICAL, CHEMICAL, AND PHYSICAL AGENTS AFFECTING INDIVIDUALS AND COMMUNITIES. TOPICS INCLUDE THE ENVIRONMENTAL REGULATORY FRAMEWORK; IDENTIFICATION OF SUSCEPTIBLE POPULATIONS; APPROACHES TO ENVIRONMENTAL RISK ASSESSMENT, ABATEMENT, PROTECTION, AND PREVENTION; ENVIRONMENTAL JUSTICE PRINCIPLES AND STAKEHOLDER INTERESTS; AND THE PUBLIC HEALTH BASIS FOR ENVIRONMENTAL HEALTH POLICY DECISIONS.		X
Public Health Toxicology	PUBH-767	THIS COURSE DESCRIBES HOW SELECTED CLASSES OF ENVIRONMENTAL CONTAMINANTS INTERACT WITH CELLULAR PROCESSES, BIOCHEMICAL REACTIONS, ORGANS, TISSUES AND THE ENDOCRINE SYSTEM. STUDENTS WILL EXPLORE THE INFLUENCES ON INDIVIDUALS, POPULATIONS AND ECOSYSTEMS AND IDENTIFY KEY PUBLIC HEALTH PREVENTION, REMOVAL TECHNIQUES, AND RISK COMMUNICATION STRATEGIES WITH A FOCUS ON RURAL AND UNDERSERVED POPULATIONS.		X
Population Studies	SOC-562	A STUDY OF HUMAN POPULATIONS WITH RESPECT TO SIZE, DISTRIBUTION, AND STRUCTURE, WITH EMPHASIS ON THEORIES OF POPULATION GROWTH AND DECLINE, POPULATION POLICIES, AND IMPACTS ON THE ENVIRONMENT.		X
Upland Game Ecology/Mgmt	WL-515	UPLAND GAME BIRDS AND MAMMALS AS COMPONENTS OF ECOSYSTEMS. EFFECTS OF FARMING; INDUSTRY; SOCIAL CHANGE; TECHNOLOGY; AND FEDERAL, STATE, AND PRIVATE PROGRAMS ON GAME AND NON-GAME SPECIES. TECHNIQUES FOR INDIVIDUAL SPECIES MANAGEMENT.		X
Upland Game Ecology/Mgmt Lab	WL-515L	UPLAND GAME BIRDS AND MAMMALS AS COMPONENTS OF ECOSYSTEMS. EFFECTS OF FARMING; INDUSTRY; SOCIAL CHANGE; TECHNOLOGY; AND FEDERAL, STATE, AND PRIVATE PROGRAMS ON GAME AND NON-GAME SPECIES. TECHNIQUES FOR INDIVIDUAL SPECIES MANAGEMENT.		X
Waterfowl Ecology/Management	WL-519	ANALYSIS OF ECOLOGICAL AND SOCIO-ECONOMIC FACTORS AFFECTING WATERFOWL HABITAT AND WATERFOWL POPULATIONS. STATE AND FEDERAL PROGRAMS AFFECTING WETLAND DRAINAGE AND PRESERVATION. FIELD INSPECTION OF WATERFOWL HABITAT IN THE NORTH- CENTRAL STATES.		X
Waterfowl Ecology/Management Lab	WL-519 L	ANALYSIS OF ECOLOGICAL AND SOCIO-ECONOMIC FACTORS AFFECTING WATERFOWL HABITAT AND WATERFOWL POPULATIONS. STATE AND FEDERAL PROGRAMS AFFECTING WETLAND DRAINAGE AND PRESERVATION. FIELD INSPECTION OF WATERFOWL HABITAT IN THE NORTH- CENTRAL STATES.		X
Ecology of Fishes and Habitat	WL-529	STUDY OF FISH AS AN ORGANISM AND THE INTERRELATIONS OF FISH WITH OTHER ORGANISMS AND WITH THEIR HABITAT.		X
Ecology of Fishes and Habitat Lab	WL-529 L	STUDY OF FISH AS AN ORGANISM AND THE INTERRELATIONS OF FISH WITH OTHER ORGANISMS AND WITH THEIR HABITAT.		X
Advanced Fisheries Management	WL-531	ADVANCED MANAGEMENT AND ECOLOGY OF PUBLIC AND PRIVATE WATER BODIES THROUGH MANIPULATION OF HABITAT, ORGANISMS, AND HUMAN USERS. THE COURSE WILL ADDRESS WATER BODY DESIGN AND CONSTRUCTION, LIMNOLOGY, HYDROLOGY, CHANNEL MORPHOLOGY, WATER QUALITY, BIOLOGICAL PRODUCTION, FISH MANAGEMENT, TROUBLESHOOTING, AND POND AND STREAM OPPORTUNITIES.		X
Advanced Fisheries Management Lab	WL-531 L	ADVANCED MANAGEMENT AND ECOLOGY OF PUBLIC AND PRIVATE WATER BODIES THROUGH MANIPULATION OF HABITAT, ORGANISMS, AND HUMAN USERS. THE COURSE WILL ADDRESS WATER BODY DESIGN AND CONSTRUCTION, LIMNOLOGY, HYDROLOGY, CHANNEL MORPHOLOGY, WATER QUALITY, BIOLOGICAL PRODUCTION, FISH MANAGEMENT, TROUBLESHOOTING, AND POND AND STREAM OPPORTUNITIES.		X
Wetlands Ecology/Mgmt	WL-712	BOTANICAL, ZOOLOGICAL, HYDROLOGICAL, PEDOLOGICAL, AND BIOGEOCHEMICAL COMPONENTS OF WETLAND SYSTEMS ARE STUDIED. COURSE INCLUDES THE MANAGEMENT OF WETLANDS FOR VARIOUS FUNCTIONAL VALUES, GOVERNMENT JURISDICTION IN WETLAND REGULATION, AND WETLAND CLASSIFICATION. NORTH AMERICAN WETLAND SYSTEMS ARE DISCUSSED WITH EMPHASIS ON NORTHERN GLACIATED PRAIRIE WETLANDS.		X
Wetlands Ecology/Mgmt Lab	WL-712 L	BOTANICAL, ZOOLOGICAL, HYDROLOGICAL, PEDOLOGICAL, AND BIOGEOCHEMICAL COMPONENTS OF WETLAND SYSTEMS ARE STUDIED. COURSE INCLUDES THE MANAGEMENT OF WETLANDS FOR VARIOUS FUNCTIONAL VALUES, GOVERNMENT JURISDICTION IN WETLAND REGULATION, AND WETLAND CLASSIFICATION. NORTH AMERICAN WETLAND SYSTEMS ARE DISCUSSED WITH EMPHASIS ON NORTHERN GLACIATED PRAIRIE WETLANDS.		X