Courses Related to Sustainability

ACCT420: Govt and Nonprofit Accounting. Fall and Spring 2016. Provides a broad understanding of fund accounting and financial reporting for various types of governmental and not for profit organizations. Examines the similarities and differences among the fund structures and financial reporting requirement of the two categories of organizations. Types of organizations typically studied include: all governmental organizations, health care organizations, colleges and universities, and voluntary health and welfare organizations.

ADED 611: Adult Development and Learning. Fall 2016. Psychological factors affecting adult development, learning, and motivation. Emphasis on how diverse academic career/experiential backgrounds and objectives affect classroom environments, teaching strategies, and testing and evaluation. The course was developed: a) to help prepare future community college faculty for teaching traditional and non-traditional students through the study of student characteristics, development, interests, and motivation; b) to help students apply appropriate learning models and strategies, using materials and texts from their respective discipline; c) to help future faculty understand how different cultures and backgrounds affect learning; d) to understand the models of adult development.

AFAM 190: Introduction to African American Studies. Fall and Spring 2016. This class introduces students to the interdisciplinary field of African American Studies through an examination of major themes, topics, and events in the African American experience, from pre-colonial Africa to the abolition of racial slavery in the United States. Drawing from a range of primary and secondary readings, students are provided with a foundation for understanding the African American experience. Through course lectures, discussions, and assignments, students are introduced to the many ways in which Africans, who were forcibly transported to the Americas, culturally and linguistically, transitioned to become African Americans, finding, over time and through the process of migrations, social conflicts, and settlements, the courage, creativity, and space to: 1) construct their own unique rituals, traditions and symbols; 2) form kinship and community; and 3) articulate a complex body of political and social ideas that add to the meaning of freedom, citizenship, and democracy in American society and life.

AFAM 343: Communities of Struggle. Fall 2016. This course will allow students to: understand African American attitudes toward and responses to social justice movements across the globe; probe the shifting meaning of Africa and the African Diaspora in the intellectual, political, and social lives of African Americans; identify how the African Diaspora was created and its modern manifestations attendant to identity formations and patterns of forced and voluntary migrations, settlements, and conflicts; address the similarities and differences between African American social movements, at the local and national level, as well as their relationship to social movements across Africa and the African Diaspora; and, finally, demonstrate the impact of social movements elsewhere on African American social movements.

AFAM 350: People and Cultures of Africa. Spring & Fall 2016. The course provides a general overview of the cultural landscape of Africa, its regions, and selected peoples and cultures. At the end of the

course, each student will know and be able to make a presentation on four linguistic groups and cultures, including the persistent issues.

AFAM 393: African American Literature. Fall and Spring 2016. Focuses on representative works in the African American literary tradition. Our goal is to understand the major concerns of the incredibly broad and varied tradition of African American literature, which include not only the sensitive and sometimes difficult topics of enslavement, violation, violence, racism, and heterosexism, but also the topics of triumph, resistance, freedom, love, and sexuality. This semester, we will engage African American literature chronologically, moving through the 1700s to the present. Our aim is to understand the ways in which African American literary texts respond to major historical events of the past. As such, our study of literature will also include the study of history. Our aim is also to connect African American literature of the past to present-day realities. To that end, we will engage African American literature in a back-and-forth manner, often reading older texts alongside contemporary art and current events. We will also continuously put African American literary culture into conversation with African American vernacular and popular culture like the blues, jazz, and hip hop, as well as African American visual art.

AFAM 490: African American Families. Fall 2016. This new seminar course examines how African Americans have been able to form families despite the social, economic and political challenges they have experienced since slavery. AFAM 490 also surveys the well-being of African American families in various areas including: marriage and divorce; education; nutrition and health; incarceration; religion; parenting; and female headed households. It will also attempt to debunk myths about black families. AFAM 490 will enhance your academic scope and further your understanding of the dynamics of African American families.

AGEC 360: Agricultural Economics. Fall and Spring 2016. Upon completing this course, it is expected that the student will gain an introductory understanding of: 1. the history of the discipline of agricultural economics; 2. the U.S. food and fiber industry; 3. the role of government in agriculture and the general economy; 4. consumer behavior; 5. producer behavior; 6. market equilibrium; and 7. U.S. macroeconomic policy goals.

AGMC475: Precision Agriculture. Fall and Spring 2016. Precision Agriculture is the practice of using remote sensing, soil sampling and information management tools to improve production. Precision agriculture is about whole farm management with the goal of optimizing returns on inputs while preserving resources. It relies on growing technologies like satellite imagery, information technology and geospatial tools.

AGRI 108: Rural Sociology. Spring & Fall 2016 The study of rural social groups and interaction in rural and suburban America as well as in rural areas of the world. The influences of basic concepts of society and culture and the relationship of rural population, class, social institutions, and groups on rural social change.

AGRI 323: Wine Fundamentals. Fall 2016. Following completion of this course, students will demonstrate a basic knowledge of wine as an agricultural product, historical origins of wine, major grape varieties, basics of viticulture, influences of geography and geology on wine quality, basic wine chemistry, principles of fermentation and post fermentation processing, major wine-producing regions of the world and their corresponding characteristic wine styles, interpretation of wine labels, sensory evaluation of wines, recommended presentation and food pairing, winemaking as a business, including government regulation, marketing and distribution, and the status of the Kentucky wine industry.

AGRO 110/11: Plant Science. Fall 2016. The goal of this class is to familiarize students with basic plant science principals including: classification, utilization, and physiology of plants. Students will also be introduced to plant and soil relationships along with plant pests

AGRO 310: Pest Management. Fall 2016. Upon successful completion of this course, students will gain an understanding of the characteristics and agronomic impact of the 4 major pest organisms (insects, weeds, pathogens, and vertebrates); to examine various methods of pest control including mechanical, biological, chemical and cultural methods; to become familiar with the laws and regulations governing pesticide labeling, storage and handling, and application; to understand the fate and impact of pesticides in our environment; to prepare for successful completion of the Pesticide License Exam.

AGRO 352: Soil Fertility & Fertilizers. Fall 2016. Students will be able to list nutrients required for plant growth, relative amount present in each plant, what fertilizer forms we use to provide these nutrients, determine how much of each nutrient is needed and how to determine the best options for the producers situation. Students should be able to describe why soil pH is so important, how we are able to change the pH and determine the amount of lime/acid needed to give the correct pH. Students will be able to sample a field (through the means of GPS or traditional), read a soil test report and make recommendations based on those to the producer/landowner.

AGRO 409/410: Weed Science. Fall 2016. To understand the characteristics that enable weed species to compete effectively with crops. To examine the nature of crop/weed interactions with a focus upon weed/crop competition. To explore various weed control methods including mechanical, biotechnological, chemical and cultural practices. To understand herbicide mode of action including the physiological basis for various modes of action and the importance of mode of action in resistance management. To explore the role of soil chemical, physical and biological factors in the efficacy and environmental fate of herbicides. To investigate various weed control strategies for important crops such as field corn, soybeans, tobacco, small grains, forages, and vegetable/fruit crops.

AGRO 418: Path Pathology. Fall 2016. To understand the characteristics that enable weed species to compete effectively with crops. To examine the nature of crop/weed interactions with a focus upon weed/crop competition. To explore various weed control methods including mechanical, biotechnological, chemical and cultural practices. To understand herbicide mode of action including the physiological basis for various modes of action and the importance of mode of action in resistance management. To explore the role of soil chemical, physical and biological factors in the efficacy and environmental fate of herbicides. To investigate various weed control strategies for important crops such as field corn, soybeans, tobacco, small grains, forages, and vegetable/fruit crops.

AGRO 475: Techniques in Physical Soil Description. Fall 2016. After successful completion of this course, students will have basic understanding of soil physical properties and how those are used to classify/group soils together.

AMS 352: Food Processing Unit Operations. Fall 2016. By the end of this course, students should be able to: Explain the basic terms and principles of food processing. Describe the concepts of food processing and preservation and their relationship to food safety and quality. Explain how each type of food processing technique employed to preserve the food. Identify the food processing equipment required to make the most common food products.

AMS 394: Lean Manufacturing. Spring 2014. Upon successful completion of the course, the student should be able to apply the basic principles of lean manufacturing system, investigate origins and underlying principles of the lean production system, develop plant wise lean strategies, originate the goals of lean production for specific areas, design lean facilities, layout, fixtures for production system, solve practical problems of lean production, and implement cellular manufacturing in industries.

ANSC140: Introduction to Animal Science. Fall and Spring2016. This course introduces the discipline of animal science. The class will cover both food and non-food animal topics. Topics will be discussed from a scientific point of view. Topics include: nutrition, reproduction, livestock management practices, health, meat science, and industry overview. After completion of the course, students should have a basic scientific understanding of the different disciplines in animal industry.

ANSC 240/241: Livestock Management. Fall and Spring 2016. Attend lectures, demonstrations, participate in labs and discussions to: Understand livestock management principles. Understand livestock needs and well-being. Understand methods of working safely with livestock. Topics to be covered, but not limited to: safety, restraint, lameness, dehorning, castration, diseases, disease control and prevention, biosecurity, reproduction, nutrition, animal welfare, record keeping, euthanasia.

ANTH 120: Introduction to Cultural Anthropology.Fall & Spring 2016. Through a combination of lectures, discussions, and films students will learn about theories, research methods, and key concepts in cultural anthropology. Cross-cultural readings will help students appreciate the wide range of cultural practices which exist, as well as to enhance student understanding of basic methods and concepts in the discipline. Introduction to Cultural Anthropology, which is an introduction to the cross-cultural study of human behavior and society and covers topics that include language, religion, subsistence, and kinship. It will assist students in attaining the following General Education goal: an appreciation of the complexity and variety of the world's cultures.

ANTH 305: Paleoanthropology. Fall 2016. Students will examine the intersections of natural environmental systems and human biocultural systems by breaking them down into their component parts – such as climate, food sources, and raw materials, and skeletal morphology, brain size, and tool use – and processes – such as natural selection and migration – and seeing how these parts interact to reveal the story of human origins and evolution. The course considers the evolution and dynamics of human biocultural systems and the application of system-level thinking. The course fulfills Colonnade requirements as outlined below.

ASL 400: Deaf Culture and History. Spring & Fall 2016. This course will examine and compare historical, cultural, and social relationships between deaf and hearing people. You will explore how deafness can affect an individual's development in four areas of language, communication, cognition, and psychological emotional growth. You will also perform comparison studies between Deaf World and the hearing world.

ASTR 104: Astronomy/Solar System. Spring & Fall 2016. This course, without pre-requisites, is designed to extend the awareness and comprehension of university-educated students beyond the limited perspective of one tiny planet – into the realm of the universe. As part of its purpose, the course also develops an understanding of the ongoing scientific processes by which the physical universe can be comprehended. Astronomy is the original science, and it offers clear examples of scientific practice and understanding of the universe, beginning on a fundamental level. What is our place in the universe, which would take a billion billion billion billion billion billion earth's to fill?

ASTR 106: Astronomy/ Stellar System. Fall 2016. Upon completion of this course the student will: Understand the development of scientific thought and the scientific method. Understand the scientific method and its use in our understanding of stars, stellar systems and the universe. Understand the development and state of our current knowledge of the evolution, nature and

structure of stars, stellar systems and the Universe. Understand the various types of stars and stellar systems present in the universe and how they combine to form the structure of the Universe. Understand the diversity of objects in the Universe. Gain perspective on Earth's place in the universe and on how understanding the other inhabitants of the universe leads to a greater understanding of Earth.

ASTR 108: Descriptive Astronomy. Fall 2016. We seek to understand the structure of the solar system and its contents, our place within it, its place in the universe, and physical principles that govern its formation and its operation. Our understanding of the physical universe is gained through a scientific study of nature, beginning with observations made from our location on a small, moving planet near a small, moving star, in a large, spinning galaxy, in an enormous, expanding universe.

BIOL 330: Animal Physiology. Fall 2016. A student who successfully passes this course should have the ability to apply physiological concepts to solve physiological problems. Understand the role of evolutionary processes in driving the organization of physiological systems. Describe, identify and explain the major physiological systems and be able to associate anatomical structures with their specific function. Understand the environmental challenges animals face and the processes by which animals deal with these challenges. Relate physiological processes, from the biochemical to the organ system level to the function of the entire animal. Understand some of the regulatory mechanisms employed in physiological systems to result in a relatively constant internal environment (homeostasis).

BIOL 407: Virology. Spring 2017. Emphasis on the molecular aspects of the viral life cycle and pathogenesis.

BIOL 523:Biological Symbiosis and Host-Parasite Associations. Fall 2016.Although all living species interact at least casually with other living species, many have formed intimate associations with each other. With nearly half of earth's biodiversity broadly defined as parasitic, it is critical to understand the magnitude of these associations, the processes involved in shaping them, and the ecological and evolutionary patterns resulting from the associations. The shared evolutionary histories of such species have produced interesting and profound patterns that shape our understanding of ecology and evolution. During this course, major symbiotic systems and arthropod parasite groups will be introduced, and basic principles and theory of biological associations will be explored.

BCOMM 300: American Popular Arts and Cultural History of Broadcasting. Fall 2016. This course examines the social, political, industrial and cultural forces behind the development of broadcasting, as an industry, as a cultural form, and as a social institution. Students should complete this class with a better understanding of how radio, television, and digital media emerged, adapted, and grew, with special emphasis on industry structures, policy, programming, and the social debates that have surrounded this pervasive and vital medium. America's pop culture was born with the advent of

broadcasting in America.

BCOMM 301: Mass Communication Law and Ethics. Fall 2016. An overview of concepts basic to the freedom of expression. Consideration through case study and attention to topical problems of limits on the freedom of expression including various means of regulation: ethics, law and other social controls. Emphasis on broadcasting applications.

CHEM 120: College Chemistry 1. Fall 2016. Through coursework and laboratory exercises, the Department of Chemistry cultivates an understanding of the scientific method and a knowledge of natural science and its relevance in our lives. The creation and development of scientific knowledge through observation, experimentation, and reasoning is used to illustrate scientific theories/concepts/principles. This course fulfills the D.1. (Science/Mathematics) general education requirement. It will help students attain the following general education goal and objectives: 1) an understanding of the scientific method and a knowledge of natural science and its relevance in our lives, 2) explains how scientific knowledge is created, developed, and changed through experimentation and reasoning, 3) demonstrates knowledge in chemistry, including theories, concepts, and principles that explain observations and make predictions.

CHEM 304: Biochemistry for the Health Sciences. Fall 2016. A brief treatment of organic chemistry is used as an introduction to carbohydrates, lipids, proteins and nucleic acids emphasizing their functional roles in the biological system. Specific topics will include bioenergetics, enzymes, acid-based balance, hematology and immunology. The course is offered specifically for students in the four-year nursing program, but is also recommended for students in physical education, recreation, health and safety and other disciplines dealing with human health. This course does not count toward a major or minor in biology or chemistry.

COMM 263: Fundamentals of Communication & Culture. Spring 2017. Provides an overview of communication patterns as influenced by surrounding culture and how culture is created and sustained through communication. It focuses on American multicultural perspectives that impact social and business communication in today's world.

COMM 330: Leadership Communication. Spring 2017.Studies the role that communication plays in various leadership contexts and situations.

COMM 374: Gender Communication. Spring 2017. Examines communication behaviors as affected by gender, including assessment of communication differences reflected in organizational, interpersonal, and mass communication modes.

COMM 463:Intercultural Communication. Spring 2017. Creates an understanding of dimensions of communication theory that apply across cultural boundaries. Emphasis is placed on both theoretical and practical awareness of communication in and between cultures.

COMM 528: Communication in the Nonprofit Sector. Spring 2017. Survey of organizational communication issues and the ways in which they are uniquely situated in and applied to nonprofit organizations and philanthropy.

COMM 566: Corporate and Organizational Advocacy. Spring 2017. Historical overview of corporate and organizational advocacy in the 20th century focusing on the communication process used in corporate advocacy.

CIS 205: Technology in Society and Business. Fall 2016. The advances of digital information technology are continuing to have profound impacts upon business, society, and individuals both at home and abroad. With these advances come many significant ethical, social, and behavioral questions that are at the forefront of the impact of technology on business and society. In order to successfully navigate through today's technology environment users need to explore the "pros and cons" of this myriad of questions about the impact of technology. And because different societies approach these questions from different perspectives, it is also important to compare and contrast these views from around the globe. This course is designed to examine digital information technology's impact today and the questions that it raises in businesses and society. Emphasis will be placed on examining both sides of these questions. The ability to understand these issues and use that knowledge will help WKU students become productive, engaged, and socially responsible digital citizens in today's global society.

CNS 110: Human Relations. Fall & Spring 2014. This course presents theory, concepts, and skills necessary to increase self-awareness and improve relationships in social and academic settings and processes of managing the problems of everyday life including conflict and social demands.

CRIM 546: Gender, Crime, and Justice. Spring 2017. Examines crime, criminal justice, and gender. Explores how constructions of masculinity, femininity, and features of sexuality affect victims, offenders, and professionals in the criminal justice system.

DANC 360: Dance in Culture. Spring 2014. This course presents a survey of world dance forms, emphasizing social, cultural and aesthetic principles defining these forms. Gender, racial, political and religious orientations shaping dance history are examined. Dance, since the beginning of time, has been and continues to be a part of the social, cultural and aesthetic fabric of society. By reading about, discussing, watching and learning the dances of Asia, Africa, Europe, North and South America we will gain an understanding of the roles that dance plays within culture. Exploration of the influences upon dance: politics, race, sex, and economics will help create a more thorough understanding of the history of dance, it's evolution and its relevance in society.

DCS: 363: Narrative, Discourse, and Imprisonment. Spring 2017. An examination of the ways that prison systems shape self and community through narrative and social theory.

ELED 355: Student Diversity. Fall 2016.Course Objectives:Students will justify why knowledge of contextual factors is important as a teacher. Students will defend the use of multicultural education in schools. Students will apply strategies to differentiate for students. Students will demonstrate reflective and critical thought regarding teaching from a multicultural perspective.Students will

evaluate strategies to meet the needs of all students.Students will identify age-appropriate reading materials about diversity for use in the elementary classroom.

Econ 305: Labor Economics. Fall 2016. Labor Economics is designed to provide students with an overview of labor economic theory and its practical applications. The course will concentrate on labor supply and labor demand and how economic conditions, both domestic and global, affect labor markets and individual labor supply and labor demand decisions. Topics of interest include: labor supply and labor demand; immigration and immigration policies; investment in human capital; wage policies of employers; minimum wage legislation; labor market discrimination; public policy; labor unions; and unemployment. Emphasis will be placed on how public policy affects labor markets and how labor markets affect public policy. This course will also focus on how economic decisions of individuals, businesses, and governments affect other individuals. After completion of the course, a student should be able to evaluate how changing economic conditions and public policy will affect the labor market, individuals and businesses.

Econ 375: Moral Issues of Capitalism. Fall 2016. Ideas matter. The implementations of ideas have consequences. This course is designed to give students insight into the moral foundations of capitalism and the implications and consequences of government intervention in markets.

Econ 390: Law & Public Choice. Fall 2016. Presents basic economic issues and analysis related to topics such as property rights, contracts, torts, crime, voter/interest group activity, legislative output, and bureaucracy.

ENG 370: Multicultural Literature in America. Spring 2017. Study of literature written in the U.S. by writers from a variety of racial and ethnic groups.

FACS 292: Diversity in Early Childhood Education. Fall 2016. This course focuses on developing and enhancing the knowledge and skills to work with children and families from diverse development, cultural, racial, and socioeconomic backgrounds. The exploration of the challenges families face in living in a diverse society and who have a child with special needs will also be reviewed. Implications of diversity for practice with various populations are emphasized throughout the course.

FACS 584: Advanced Community Nutrition. Fall 2014. This is a combined didactic and supervised practice course in community nutrition. Special attention is given to the assessment, planning, intervention, and evaluation of programs targeted to populations with high nutritional risk and diverse backgrounds. Students have the opportunity to apply principles of nutrition theory in a variety of functional settings. It also includes an introduction to the programs, policies, and institutions that influence nutrition services at the local, state, and national levels.

FLK 280: Cultural Diversity in the United States. Fall & Spring 2016. In this course, we want to explore America's cultural diversity, and how it shapes the experiences of individuals and groups in the U.S. We will examine culture through the lens of folkloristic understanding in order to gain an insight into how culture influences the way each of us defines what we see as good or bad, right or wrong, beautiful or ugly, normal or abnormal, and most importantly, as acceptable or unacceptable. This process of cultural influence begins in infancy and continues to shape our perceptions throughout our lives. By learning how culture works and how our own cultures can shape our perceptions, we will be able to develop skills that will enable us to understand our cultural differences, even when they do not coincide with our personal beliefs. We will also look at some of the wider issues related to diversity such as worldview, ethnicity, race, gender, and class.

FLK 330: Cultural Connections and Diversity. Fall 2016.Students will learn to recognize the contributions to American culture and society of a variety of social or cultural groups and the ways in which these groups are related and interdependent.These may include immigrant /refugee or ethnic groups from many parts of the world, as well as groups defined by religion,social class,gender, occupation, disability, age,region,subculture, sexual orientation or other factors.Students will also learn to identify ways in which one culture or group may be favored over another, including ethnocentrism, stereotyping, prejudice, discrimination, racism, sexism,homophobia,colonialism and various forms of privilege. Students will learn to recognize that members of all cultures tend to take much of their own culture for granted, and that there is a need to examine one's own culture critically before one can understand other cultures.

FLK 388: Foodways. Fall 2016. Exploration of the relationship between food and culture.

GISC 216: Geotech in a Global Community. Fall and SPring 2017. Introduces the purpose, operation and application of Geographic Information Science technologies in contemporary society. This course cannot be substituted for any other GIS course.

GISC 316: Fundamentals of GIS. Fall and Spring 2017. Fundamentals of GIS data management and cartographic design. Topics include data organization, map projections, scale and accuracy. Hands-on work in geospatial data acquisition, base map development, and map production.

GISC 317: Geographic Information Systems. Fall and Spring 2017. The principles, concepts, and applications of GIS. Topics include raster and vector data models, GIS data sources, data acquisition, storage, management, structured query language, relational databases, GIS analysis, and display.

GISC 417: GIS Analysis and Modeling. Fall 2016.This course develops expertise with a broad range of spatial analysis and modeling functions using geographic information systems. A problem-oriented approach stresses the utility of GIS analysis to a variety of elds such as agriculture, business, climate, geology, natural resource management, weather, urban planning, etc.

GISC 423: Transport, Location, and GIS. Fall 2016. In this course, we will explore some selected issues related to urban applications of GIS. We will mainly explore the relationships between the organization of space economy and transportation in urban areas as well as the mobility & accessibility issues in every-day life of urbanized areas. Students will develop analytical capabilities,including data collection, data analysis, and mapping, by using a number of GIS techniques for transportation,urban management, locational analysis and business geographics.

GEOG. 110: World Regional Geography. Spring & Fall 2016. This course is an introduction to geographical concepts as they apply to the worlds regions. During the semester we will conduct a general survey of the political, social, economic, physical, and ecological systems of the world while applying the five main themes of geography: Location, Place, Human Environmental Interaction, Movement, and Regions. The text and associated lectures are intended to help you develop an appreciation of the complexity and variety of the world's cultures as well as the complex geophysical differences of the world. We will explore the world by focusing on the interconnections of six different world regions to better understand how we influence and are influenced by these seemingly distant places. You will be challenged to view the world in new and innovative ways and to think critically about current global issues.

GEOG 200: Latin America Past and Present. Fall 2016. This course helps students to develop an appreciation of the complexity and variety of the world's societies and cultures. During this course, it is expected that students will acquire a familiarity with the general history and geography of the Latin American region, as well as the social, environmental, economic, and political pressures that have affected it up to the present day.

GEOG 330: Introduction to Cultural Geography. Fall 2016.The learning outcomes are framed by the "Five Themes of Cultural Geography," which include region, mobility, globalization, nature-culture, and cultural landscape. By the conclusion of the semester, students enrolled in this course will:Have a deeper understanding of cultural interrelationships and the geographic linkages that connect them to global society,Have the intellectual tools to examine the complexities of social and cultural diversity and the critical thinking skills that are essential for effective civic engagement as an informed member of society,Be able to engage in meaningful discussions, based in evidence and argument, about complex and nuanced real-world social and cultural problems in a geographic context. Among the topics that will be explored are; demographics, cultural diffusion, race and ethnicity, folk and popular culture,language, religion, material and non-material culture, cultural landscapes, and place-situated identity.

GEOG 352: Geography of Kentucky. Fall 2016. This course focuses on the human and natural resources in the Commonwealth of Kentucky. We will examine Kentucky's cultural and physical landscapes, demographics, environmental issues, urban and rural geography, as well as economic and historical geography. We will also explore Kentucky within its regional, national and international contexts.You will be challenged to view Kentucky in new and innovative ways and to think critically about current geographical issues in the Commonwealth.

GEOG 360: Geography of North America. Fall 2016.Analysis of selected problems related to natural conditions, land use, settlement patterns, and regional structure of the United States and Canada.

GEOG 461: Karst Environments. Fall 2016. Provides a fundamental understanding of karst, focusing on the processes, landforms, and evolution of karst landscapes over time, with an emphasis on the characterization, distribution, and function of various karst environments.

GEOG 465: Geography of East Asia. Fall 2016. Analysis of selected contemporary geographic issues in East Asia. Emphasis is on a synthesis of various geographic factors and phenomena, including physical, cultural, political, social, and economic systems.

Geog 480: Urban Geography. Fall 2016. We will examine the nature and evolution of cities and engage in critical analyses of urbanization from a variety of perspectives--- environmental, cultural, economic, and social. During the semester we will also consider cities in their geographic contexts, their relationships to suburban and non-metropolitan areas, from local to global scales

GERO 495 & GERO 581: Global Aging. Fall 2016. This course will serve as an introduction to population aging around the world. Throughout the semester, you will become familiar with how people age differently in various cultures and how individuals, governments, and organizations are and will need to change policies and programs to meet the needs of the increasing number of older adults.

GWS 200: Introduction to Gender and Women's Studies. Spring & Fall 2016. This class introduces students to the interdisciplinary field of Gender & Women's Studies. Drawing on historical perspectives and socio-cultural analysis, this course will consider some of the major issues that have concerned Gender & Women's Studies, including the social construction of gender with race, ethnicity, class, and sexuality. We will be concerned with the ways in which these constructions and intersections shape women's lives.

GERO 501: Perspectives in Aging. Fall 2016. This course provides an overview of issues, theories, and concepts in Gerontology, includes individual and societal aging; disciplinary perspectives of adaptations and changes to aging.

GWS 545: Feminist Knowledge & Social Change. Fall 2016. Examination of both feminist knowledge and research as political practices that have the goal of improving the lives of women and challenging

rigid configurations of race, class, gender, and other elements of difference.

GWS 535: Roots of Feminism. Fall 2016. Upon completion of this course, students will be able to identify key writings in the evolution of Western feminism; understand intersections of gender, race, class, and sexuality in feminist theory; formulate critical arguments on the ideas of pioneering feminists.

GWS 555:Global Perspectives of Women. Spring 2017. In this course, students explore global and cross cultural perspectives on women and feminism. We will consider feminist perspectives on a range of national and international issues affecting all people, with an emphasis on the realities women face. We will also analyze the feminist debates surrounding Western concepts of feminism using a comparative perspective, including attention to women's strategic organizing in different geographic andcultural contexts.

HCA 247: Contemporary Healthcare Issues.Spring 2017. An introductory course addressing contemporary issues confronting the healthcare delivery system, patients, and medical professionals in American society.

HCA 347: International Healthcare. Spring 2017. Cross country comparisons, including concepts of illness and healing within different cultural contexts; differing approaches to critical issues including access, quality of care, and cost containment; and methods of organization, financing and structuring of providers in various countries.

HMD 211: Human Nutrition. Spring & Fall 2016. This course information and skills to improve understanding of various factors that enhance health, well-being, and quality of life are addressed. Course objectives marked with an asterisk are linked to this general education goal.

HIST 310: Comparative Slavery. Spring 2017. . Examines slavery among people of African descent emphasizing the origins, politics, economics, and legacies of African slavery in the Americas, Asia, the Caribbean, and Africa.

HIST 379: Ghandi: Global Legacy. Fall 2016. An exploration of the full range of Gandhi's political, spiritual, and moral concerns, beginning with his early years in South Africa and tracing Gandhi's transformation from a local activist to a leader with global influence.

HIST 380: Human Rights in History. Fall 2016. This course examines the historical origins of human rights, key disputes surrounding the content and legitimacy of human rights, and the enforcement of international humanitarian law in theory and practice.

HIST 390: Blacks in the South. Fall 2016. Topics will include slavery, resistance, labor, literature, religion, inequality, leadership and the Civil Rights Movement.

HIST 420: History of Sexuality. Spring 2017. Survey of how past societies and cultures have interpreted human sexual behavior and identities.

HIST 453: American Women's History. Spring 2017. Social, cultural, and political history of American women from pre-colonial times to the present.

HON 251: Citizen & Self. Fall & Spring 2017. A focus on the theoretical knowledge and practical skills that will lay the foundation for becoming an effective citizen. Students will participate in large group lecture and small group seminars.

HON 301: Solution Through $100 Solution. Spring 2017. The goal is to allow students to participate in and lead discussions on various aspects of issues of contemporary, historical or intellectual significance. The topic of the course is selected by the faculty member offering the Colloquia.

JOUR 301: Press Law and Ethics. Spring 2017. An in-depth study of concepts basic to freedom of expression, with emphasis on libel, privacy, free-press and fair-trial guidelines, access to government information, and obscenity. Attention is given to attendant ethical considerations.

HMD 211: Human Nutrition. Spring 2017. Study of nutrients essential to human life and well-being. Nutrients are studied relative to their function in metabolism, sources in food, and relationship to health.

KIN 508: Adaptive Physical Education. Spring 2017. In-depth study of instruction of disabled children in mainstream and/or special physical education classes. Knowledge and skills necessary to assess, plan intervention, and instruct mild, moderate, severely/profoundly disabled children in physical education.

PE 100: Life Fitness & Wellness. Tracy Lane. Spring & Fall 2014. This class is designed to help students understand the components of Health Related Fitness and Wellness, increase their knowledge of healthy lifestyle choices, access their own fitness/wellness levels, design and implement a program that will help the student meet his/her goals, identify health risk factors and understand preventable disease risk management, and to have a better understanding of physical activity and be able to select appropriate activities for personal development.

PHIL 208: Philosophy of the Public Space. Fall 2016. An exploration of how public spaces (squares, malls, streets, parks, and sidewalks) shape citizenship by enabling and disabling public discourse and political participation.

PHIL 320: Ethics. Fall 2016. An introduction to ethical issues using classical and contemporary texts. Among issues that may be treated are justice, rights, responsibilities, punishment, and obligations regarding the environment.

PH 100: Personal Health. Spring & Fall 2016. This course examines behaviors and environmental conditions that enhance or hinder an individual's health status. In addition to exploring social and

environmental factors, students are encouraged to think critically about behavioral choices that impact ones' health. Students assess their individual behavior in the light of current scientific knowledge concerning mental health; drugs alcohol and tobacco; health care; selection of health products; prevention of disease; nutrition; exercise, and stress management. This course meets Category F General Education requirement and helps students understand the factors that enhance health, well-being, and quality of life."

PH 165: Drug Abuse. Spring & Fall 2016. This course is an introduction to students in the issues of societal and personal attitudes towards drug use, misuse, and abuse. This course will provide the student a variety of approaches to drugs and drug use in the behavioral, pharmacological, historical, social, legal and clinical perspectives. This course meets the category F General Education requirement and helps students understand the factors that enhance health, wellbeing, and quality of life.

PH 365: Human Secuality. Fall 2016. Examines sociological, physiological, and psychological aspects of human sexuality in relation to family life, courtship, marriage, reproduction, education, and aging. Includes information on sexual assault, sexually transmitted infections (STIs), and HIV/AIDS.

PH 402: Worksite Health Promotions. Dr. Cecilia Watkins. Spring 2016.This course is designed to increase the student's awareness of how the worksite affects employees' health, the modifiable lifestyle risk factors that affect employees' health and the best strategies for designing effective worksite health promotion programs that can improve employees' health.

PH 447: Human Values and the Health Sciences. Spring 2014. This class will offer an analysis of the difficult ethical, legal, and social dilemmas confronting the health care delivery system, patients, medical practitioners and other health care professionals in contemporary American society.

PH 484: Community Organization/Health Education. Spring 2014 This course is designed to increase the student's awareness of the role the health educator plays in solving community health problems. Strategies include proper methods and techniques of communication, processes by which a community identifies its needs, the importance of cultural and social factors in community organization and development, and legislative advocacy.

PH 447: Human Values/ Health Science. Spring 2017. An analysis of the difficult ethical, legal, and social dilemmas confronting the health care delivery system, patients, medical practitioners and other health care professionals in contemporary American society.

PH 464: Women's Health. Spring 2017.An analysis of the major health problems of contemporary women, with a special emphasis on health promotion, disease prevention, and consumer health concerns.

PH 468: Sexuality Education. Spring 2017. Forces that impact on the adoption of various curricula and

the development of new curricula are examined. Students are taught to utilize scientific and cultural considerations in preparing and adopting curricula for different populations.

PH 585: International Health. Spring 2017. Analyzes international health problems, including the development and administration of the World Health Organization. Covers critical health problems of both developed and underdeveloped countries. Emphasizes effective intervention strategies.

PS 538: Ethics & Bureaucracy. Fall 2016. After completing this course, you should be able to: 1. Explain how ethics contribute to good public governance. 2. Describe the ethical aspects of public policymaking. 3. Define the four dimensions of ethics – duties, virtues, principles, and benefits to society – and apply them to facilitate ethical decisions on public issues. 4. Explain the importance of ethics in fostering professionalism and maintaining an ethical culture in organizations.

PSYC 350: Social Psychology. Fall & Spring 2016. We will gain abilities to understand how the situations we are in cause us to think and act. Instead of seeing behavior as caused solely by a person's personality, we will learn how the situation works in combination with personality to make people do the things that they do. We also will practice using our new knowledge of social psychology to critically interpret and offer new perspectives on the world around us. These new abilities will allow us new insight into the nature of our lives, and allow us a more accurate understanding of within and cross-cultural differences in behavior. Understanding the psychological principles at work behind behavior makes it obvious that we as humans share far more similarities than differences. It also helps to clarify how we can work with others, all over the world, to achieve the basic goals and needs that all people have. One important goal of this course is to provide the opportunity to become better critical thinkers capable of uncommon insight into human behavior. I urge you to seize this opportunity, so you can better become the person you want to be.

PSYC 482: Psychology of Sexuality. Spring 2017. Explores psychological, social, emotional, spiritual and cultural aspects of sexuality including sexual development across the life span, consensual and coercive sexual behavior, sex and gender, sexual orientation, sexuality and religious traditions, and sexuality education.

PSYC 572: Organizational Psychology. Dr. Amber Schroeder. Spring 2014. Upon completion of this course, students will be able to describe theories, concepts, and main issues, as well as design programs and policies related to job performance (including organizational citizenship behavior and counterproductive work behavior), motivation, job satisfaction, organizational commitment, work stress, organizational justice, leadership, groups and teams, organizational theory, and organizational culture.

R**EC 200: Introduction to Recreation.** Spring & Fall 2016. This course will help you better understand

the concepts and relationships between leisure, recreation, play, and work from a historical, sociocultural, and individual perspective. The course will provide you with opportunities to explore personal and societal values associated with leisure and recreation; the impact of work and economics on recreation and leisure in contemporary society; the relationship between leisure behavior and the natural environment; leisure and equity; ethical questions associated with the use of leisure as a social good; and the similarities and differences of how society views leisure, recreation, and play from a regional, national, and international perspective. This course is designed to encourage students to think critically, understand contexts, reflect and take action.

Rec 220: Understanding NonProfit Sector. Fall and spring 2016. Survey of nonprofit organizations emphasizing: history, ethics, personnel and volunteer management, human development, program development, risk management, customer service, and career development.

Rec 302: Recreation Leadership. Fall 2016. Leadership in recreation with emphasis placed on history, theory, decision-making, group management, communication and motivation. Course will facilitate leadership experiences.

Rec 306: Program Planning & Evaluation. Fall 2016. Through participation in this class, the student will be able to … identify and understand the role and content of leisure programs and services. understand the congruence between an organization's mission and its program plan. identify and utilize program planning/design processes. apply several methods of needs assessment and utilize information gained from assessment to guide program planning. understand and apply evaluation methods to leisure programs. understand the various tournament structures and their appropriateness for different settings.

REC 435: Expedition Planning. Spring 2017. Students will learn principles and techniques for planning, designing, and implementing outdoor expedition programs including: clothing and equipment selection and care, backcountry menu and ration planning, safety and risk management protocols, acquiring permits, route planning, judgment and decision making skills, environmental ethics, motivation, and group development.

Rec 460: Grant Writing for Nonprofit Organizations. Spring 2017. Thorough investigation of the grant writing process and the application of related skills. Includes how to research, identify, plan, organize, write and submit grants.

RSA 560: Issues in Nonprofit Administration. Fall 2016.Upon completion of this course, students should be able to: Demonstrate the relationships between the nonprofit sector, voluntary action, and philanthropy; Discuss the historical and philosophical foundations of the nonprofit sector; Describe the critical nature of nonprofit governance and leadership on the success of nonprofit organizations and develop strategies for successful governance and leadership; Develop strategies for effective board and committee development; 1 Understand and be able to articulate the concept of organizational effectiveness, and explain how strategic management contributes to organizational

performance and effectiveness.

SRSC 515: Utopias, Dystopias, and Intentional Communities. Fall 2016.By the end of the course, students will be able to: Analyze the ways that the utopian and/or dystopian impulse responds to social problems; Critique contemporary attitudes and practices regarding nature, science, and progress; 3. Integrate theory and criticism in ways that illuminate a range of utopianand dystopian issues, especially notions of the commons and of progress; 4. Imagine their own intentional community. (Commons Project).

SRSC 570: Freedom Dreams. Fall 2016. This online course examines the global dispersals and interactions of people from across the African Diaspora, from ancient to modern times. Their exploits, challenges, and struggles over a wide expanse of time are considered in ways that link as well as differentiate past and present social, economic, and political conditions. In addition to personalities of renown, emphasis is given to the everyday lives of working class people and their plights, struggles, and distinct visions of freedom. Students will discover how, by contesting the legitimacy and consequences of physical terror, economic exploitation, and cultural misappropriation, marginalized communities actually developed the philosophies, repertoires of collective action, and aesthetic traditions that lay at the core of social justice movements across the modern world.

SOCL 100: Introductory Sociology. Every Spring & Fall . This course emphasizes the fundamental concepts and principles of Sociology including culture, socialization, interaction, social groups and stratification, effects of population growth, and technology in society and social institutions.

SOCL 210: Self in Society. Fall. We all like to think to some degree or another that we are islands unto ourselves, setting our own courses of action, or in the case of this class, interactions. However, sociology tells us that individuals' interactions are very much affected by the social context in which they are acted out. Furthermore, individual actions can affect other's actions, or society. In this course you will learn the theoretical perspectives and concepts that are used to understand the self in society. We will evaluate the accuracy, authority, bias and relevance of the information that actors use to develop lines of action. We will trace the effects that pragmatism and symbolic interaction ideas have had on social thought. We will engage each of these goals through reading, writing and speaking.

SOCL 312: Collective Behavior and Social Movements. Fall 2014. Analysis of collective behavior and social movements, focusing on individual participation and social consequences.

SOCL 350: Systems of Social Inequality. Spring 2017. Analysis of the social origins, development, and persistence of inequality as a human system present in all societies. Course covers systems of stratification in the US (class, race, gender, ethnicity, etc.) used to differentially distribute social rewards. Some sections require a service-learning project.

SOCL 355: Sociology of Gender. Fall & Spring. Our major objective this semester is to examine how women's and men's roles and identities in our society, in every society, are socially constructed. I want you to come away from this class with a greater appreciation for the pervasive influence of gender in your own life and in the very organization and working of society. I would also like you to

gain an understanding of the diversity and complexity of gendered experiences in terms of social class, race, sexual preference, and age. We will examine everything from patterns of interaction between men and women at the micro level to the gendered nature of social institutions at the macro level. Please note that this course is an approved elective for the Women's Studies minor.

SPED 350: Collaboration and and Inclusive School/ Communities. Spring 2017.The course provides an overview of methods which facilitate collaboration across disciplines to support diverse learners in regular classroom and community settings. Field experiences are required.

SPED 424: Inclusion Collaboration and Diversity. Spring 2017.Develops and enhances communication in the collaboration roles of key stakeholders working with at-risk, identified, and diverse students in the special education process. Field experience required.

SPS: 300: Systems Thinking. Spring 2017.An introduction to the systems dynamics worldview, the characteristics of complex systems, and the process of using the systems thinking perspective to solve problems in business organizations.

SUS 276: Displaced Persons. Spring 2017.Analysis of individual and host country crises and concerns surrounding displaced persons (DPs). Examination of the integration process and exploration of careers associated with assistance agencies. Includes a service learning project with a displaced person(s) in the local community.

SUS 295: Pop Culture & Gender. Spring 2017. Through the study of signs and narrative structures, this course investigates contemporary Western popular culture's concepts of gender.

SWRK 101: Foundations of Human Services. Spring & Fall 2016. Students explore the human experience using theories of the social and behavioral sciences with an emphasis on values and ethics that form the foundation for the social work profession. This course requires students to analyze various social problems and conceptualize the ways in which individual and societal values, economic forces, and political influences impact social welfare policy development and service delivery. Through classroom interaction and service learning, students increase knowledge and self-awareness related to many aspects of diversity as it relates to social policy development, intervention and delivery of services.

SWRK 205: Introduction to Social Work. Spring & Fall 2014. SWRK 205 provides an introduction to the social work profession and its value, skill, and knowledge bases. The history, mission, and current status of the social work profession are explored. This introductory course emphasizes appreciation of and respect for human diversity as a core concern of professional social work practice.

SWRK 501: Cultural Competency in Social Work. Fall 2016. This course employs the framework for cultural competence as a method of probing for understanding the range of issues surrounding culturally competent practice, the realities of social contexts and the scope of human rights and social and economic justice. Culture is central to the social work profession and cultural competence is

essential to social work education and practice.

SWRK 523: Rural Community Organizing and Development. Spring 2017. Teaches knowledge, skills, and values of advanced macro level social work practice with a focus on complex skills in community development, economic development, and organizational change within the rural community.

SWRK 612: Social Work in Diverse Rural Communities. Fall 2016. The purpose of this course is to introduce students to select diversity related issues encountered by rural social work practitioners. Often, the experiences of diverse clients serviced by rural social work practitioners are underrepresented in the social work research literature. Therefore this course is designed to augment students' knowledge and understanding of applying advanced generalist skills to promote ethical and responsible social work practice behaviors with diverse rural populations. A broad definition of diversity will be applied in this course including but not limited to race, gender, class, religion, nationality, geographic setting, age, sexual orientation, language, disability, country of origin, and political orientation.

WTTI 200: Water Supply & Wastewater Control. Maggie Mahan. Spring 2014. At the end of this course, the student will be able to identify and explain the components of the hydrologic cycle, describe the different sources of water used by humans, relate water quality to human activities, and illustrate the processes that make water safe to drink and/or return to the environment.

Total: Graduate = 19

Undergraduate = 109

Sustainability Courses

AGRI 101: Science of Agriculture. Spring & Fall 2016. Topics covered in this class will include the following: World Agriculture; US & KY Agriculture, an introduction to Plant Science, types of plants, photosynthesis, the Greenhouse Effect, plant reproduction, soils/fertilizers, conservation and sustainability, introduction to Animal Science, diseases, food safety, animal rights/welfare.

AGRI 493(G): Sustainable Agriculture. Spring 2014. This course will focus on agriculture's dependence

upon limited resources and agriculture's contribution to environmental degradation. It will encourage students to consider ways of managing crops, livestock, soils, water, and other farm resources for sustained agricultural production; to examine the principles of reducing and recycling products, to explore opportunities for lessening agriculture's dependence upon non-renewable energy, mineral, and chemical resources, to study conditions resulting in contamination of water, land, and air with agriculture soil, nutrients, pesticides, and waste products; to consider the balance of diversity resulting from the loss of biodiversity and the potential of genetic engineering of food crops and livestock; to review the roles of agricultural agencies, institutions, and special interest groups in promoting sustainable agriculture; and to explain impacts of global warming on agriculture.

AGRO 110: Plant Science. Spring 2017. The goal of this class is to familiarize students with the basic plant science principles including: classification, utilization, and physiology of plants. Students will also be introduced to plant and soil relationships along with plant pests.

AGRO 320: Crop Physiology. Spring 2017.Effects of various physiological and environmental factors on crop production are discussed.

AGRO 350(1): Introduction to Soils. Fall & Spring 2016. Upon successful completion of this course, students will be able to define the basic physical properties of a soil and how those relate to agricultural production. Examples would include: soil conservation; water holding capacity, water movement, etc. Students will be able to define the basic chemicalproperties of soil and how those relate to agricultural production. Examples would include: soil fertility, soil pH, etc. Students will be able to define the basic biological properties of a soil and how those relate to agricultural production. Examples would include: organic matter, microorganisms, composting, etc.

AGRO 452: Soil Mircobiology. Spring 2017. Soil microbial populations and systems and their influence on plant nutrition, soil organic matter, its decomposition and other soil microbial biochemical processes are presented.

AGRO 474G: Soil Management & Conservation. Spring 2016. This course is designed to show students how soil management can be enhanced through proper conservation methods & techniques. This course will begin by looking at ancient civilizations and problems that were created by mismanagement of their soils. As the course progresses, students will learn new techniques and advancements in soil conservation. At the end, the student will be able to apply these principles into a farm plan project.

ANTH 366: Archeology of Environmental Change. Spring 2017. This course will reveal how the deep time historical perspective of archaeology can contribute to a better understanding of humans' relation to the environment and demonstrate how some of the environmental challenges facing humanity today can be better approached through an attempt to understand how past societies dealt with similar circumstances in the past. Concretely, we will examine the methods for recording environmental change and discuss case studies of the varied responses of past human societies to environmental change in different geographic regions and time periods with varying sociopolitical and economic systems. We will also explore aspects of resilience and rigidity of societies and issues of environmental sustainability. In order to accomplish this, this course will draw upon an increasingly

large body of empirical evidence from different regions of the world and from different time periods and explore a rapidly growing body of knowledge that is explicitly inter-disciplinary, at the interface between archaeology, ecology, geography, environmental studies, geomorphology, and many other disciplines. Therefore, this course will appeal to a broad range of students interested in human-environment relationships and sustainability.

AGRI 494: Contemporary Agriculture Issues. Fall, 2014. Analysis of contemporary agricultural issues as viewed by consumers, advocacy groups, and producers. Topics to include: animal welfare/animal rights, biotechnology, food safety, tobacco, hemp, environmental issues, and population growth and sustainability.

BIOL: 113(4): General Biology. Fall & Spring 2016.An introductory course in biology for the non-science major, which emphasizes the diversity and organization of life integrated with major principles and new discoveries.

BIOL 122(3): Biological Concepts: Evolution, Diversity, and Ecology. Fall & Spring 2016. This is an introductory course in college biology that emphasizes evolutionary patterns and processes, diversity of life on earth, ecological principles, and conservation and management.

BIOL 222: Plant Biology & Diversity. Fall 2016. To become familiar with the origin, diversification, basic morphology, anatomy, adaptations, and evolutionary relationships of oxygenic photoautotrophic organisms (cyanobacteria, algae, and plants), with an emphasis on flowering plants.

BIOL 223: Animal Diversity. Fall 2016. Understand the evolutionary relationships between major groups of animals. 2. Understand the major physiological systems vital for maintaining homeostasis. Ability to name morphological characteristics that differentiate the major groups of animals. 4. Familiarity with scientific research and literature.

BIOL 280: Introduction to Environmental Sciences. Fall & Spring 2016. This course will help students gain an appreciation of science as a process, define causes of environmental problems, evaluate the sustainability of solutions to environmental problems, and assess the value of biodiversity.

BIOL 315: Ecology. Fall & Spring 2016. Ecology is the scientific study of interactions among organisms and their environment. As a field of study, it comprises the theory of ecology and the application of ecological principles. Ecology is multidisciplinary, encompassing information from behavior, biogeography, conservation, economics, environmental science, evolution, genetics, mathematics, natural resource management, physiology, and other. This course will draw on diverse information, and will emphasize concepts, critical thinking, and connections.

BIOL 316: Evolution. Spring 2016. Study of the genetic, behavioral and ecological mechanisms leading to evolutionary change, and the role of evolutionary theory as a unifying framework in biology.

BIOL 325: Insect Biodiversity. Dr. Keith 325. Fall 2015, 2016. This course examines the diversity of one of the most fascinating groups of organisms on the planet- the insects. Their evolution, basic structure, and growth are covered as well as lifestyles, particularly in groups with unusual behaviors

or effects on humans. Students will gain an appreciation for and a broad understanding of these incredibly diverse animals, and will be able to recognize all of the orders and most of the most important or common families on a global scale.

BIOL 332: Principles of Wildlife Ecology and Management. Fall 2016. Learning objectives: 1. You will learn the meaning of wildlife and its management. 2. You will learn the history of wildlife management in the U.S. 3. You will learn the role wildlife plays in ecology at different levels of organization. 4. You will learn how different elements of wildlife habitat are managed and why.5. You will learn how humans interact with wildlife, good and bad, and about the phenomena that contribute to depletion of wildlife populations. 6. You will learn about the economics of wildlife ecology and management. 7. You will learn learn how to assess management models and the basic harvest models currently in use.

BIOL 348: Plant Taxonomy. Spring 2017.Identification of local plant species and survey of major vascular plant families emphasizing morphological diversity, evolutionary relationships and economic uses.

BIOL 477: Marine Biology. Fall 2016. The marine environment and marine organisms are examined within a framework of basic biological principles and processes that are fundamental to all forms of life in the sea, including evolution, ecology, biodiversity, biogeography, behavior, and physiology.

BIOL 497: Aquatic Field Ecology. Fall 2016. Course Purpose: Aquatic Field Ecology is intended to provide a holistic background in aquatic sciences, with an emphasis with running water systems and freshwater lakes. Course Objectives: 1. Physical and chemical properties of water. 2. Hierarchical organization of riverine systems.3. Linking macrobiological riverine communities to physical properties.4. Origin of lakes, mixing properties, and the connection between heat and light. 5. Carbon and oxygen patterns in lakes, and 6. Primary productivity patterns.

BIOL 526: Physiological Ecology. Spring 2017.Study of the physiological adaptations of organisms that enhance their survival and/or permit them to exploit extreme environments.

BIOL 543: Environmental Science Concepts..Fall 2016. Learning Outcomes: from this class students should be able to explain the major biological features involved in understanding the cause, result, and potential solutions for environmental problems, recognize the roles of research, education, activism, and policy in understanding the problems and deriving environmental solutions, demonstrate ability to use biological information to connect local issues to global problems and potential solutions, discuss & write critically about the biological basis of problems and solutions.

BA 545: Survey Business Sustainability. Spring 2017.Survey course exploring the definition of and key issues concerning business sustainability. Provides overview of regulations regarding issues of sustainability as applied to business organizations. Introduces international standards and other global issues of sustainability which affect businesses. Explores compliance approaches, important metrics and best practices businesses use in addressing sustainability issues. Discussion of political, environmental, other pressures surrounding these issues especially as related to current and future

standards, regulations, and best business practices. Corporate social responsibility.

BA 546: Sustainable Business Operation. Spring 2017.Exploration and development of definitions of sustainability and sustainable operations. The value chain perspective is taken to implement sustainability measures and different motivations for companies to engage in sustainable efforts.

CE300: Floodplain Management. Fall 2016. At the end of this course, students should be able to: Assess flood risk to properties. Formulate methods of funding flood mitigation projects. Determine whether a property is in compliance with national floodplain management regulations. Describe emergency procedures and operations prior to, during, and following floods. Describe the behavior of flood sources in response to the hydrologic cycle and climate change. Describe flood mitigation approaches. Pass the Certified Floodplain Manager (CFM) exam.

CE 352: Intro to Environmental Engineering. Fall 2016. At the end of the course, each student should be able to: Describe the basics of environmental chemistry. Apply mass and energy transfer to solve environmental engineering problems. Apply simple mathematical models to assess population growth. Calculate incremental risks for exposure to pollutants through various routes. Describe the types, sources, and health effects of surface and groundwater pollutants. Analyze the DO in streams with the classic Streeter-Phelps oxygen sag equation. Identify the functions of different processes comprising water and wastewater treatment systems. Describe solid waste management as related to resource recovery and sustainable engineering. Describes the types and sources of air pollutants and describe current air quality standards. Calculate air pollution concentrations using basic Gaussian models.

CE 461: Hydrology. Spring 2017. A study of the physical laws affecting the occurrence, distribution, movement, storage, and contamination of water in watersheds. Qualitative analysis and quantitative modeling of precipitation, evapotranspiration, infiltration, groundwater, and stream flow. Models of contamination of rivers, lakes, soils, and groundwater. Applications to engineering design under extreme events, and environmental engineering.

CE 410: Soil Mechanics. Fall 2016. A study of soils and their properties. Stress-strain analysis, horizontal and vertical stress distribution, consolidation and settlement, soil classification, static and dynamic lateral earth pressure, permeability and flow nets, bearing capacity and slope stability. Course Objective: To introduce the student to basic principles of soil mechanics and geotechnical engineering including both theory and practice.

CNS 605: Social and Cultural Diversity in Higher Education. Fall 2014: A sustainable community must be characterized by equity, respect for diversity, and a full participation by all members. This includes concepts of social justice, human dimensions, and attitudes and values in sociocultural contexts.

Sustainability calls students to reflect on personal values within the context of a larger society and grasp how their choices can affect others. This course is designed to examine the individual and organizational issues of social and cultural diversity in U.S. higher education and to focus on the development of the awareness, knowledge, and skills necessary to be a multiculturally competent student affairs/higher education practitioner. Further, the course provides structured opportunities for students to think more critically about difference in U.S. society and higher education; to evaluate cultural pluralism and analyze social inequalities; and to explore their own and others' social identity groups while building pluralistic skills, dispositions and multicultural competencies.

DCS 300: Public Problem Solving. Fall 2016. Public Problem Solving is an investigation of historical perspectives and theoretical dimensions of public problem solving with attention to the development of collective power, capacities, and responsibilities. The course explores the process by which problems arise and how they function within a system or series of systems. The methods employed for achieving this emerge out of both the natural and social sciences, in particular community-based research (CBR), which involves qualitative strategies and comparative interpretation. The course adopts the notion that CBR increases the knowledge and understanding of public problems and integrates the information gained with empowerment, social capital, and policy change to improve the health and quality of communities. The collaborative approach of CBR equitably involves all partners in the research process, recognizes the unique strengths that each brings, and integrates theory with practice. "Public problems" refer to any of a range of multifaceted problems with shifting conditions and complex interdependencies and integrate the natural and social systems. For example, how do we move beyond sustainability in terms of the ecological and social environment? What factors create resilience among communities?

DH 303: Community Dental Health. Fall 2016. Preventive dentistry applies the philosophy and principles of prevention to dental health education and private practice with emphasis on the diverse role of the dental hygienist in each area. The epidemiological characteristics of local diseases including dental caries and periodontal diseases are identified, as well as characteristics of systemic diseases. Biostatistics is introduced in the methodology of the collection and interpretation of data. Instructional methods for group presentations are also developed. The class will meet for three hours each week. An additional hour per week will be necessary for the development, implementation, and evaluation of the community project. Public Health and the Environment: Describe influences of community water supplies on health and disease in industrialized and non-industrialized areas. Define

the roles of the governmental, voluntary, and private sectors in the health care system. Describe the impact of the environment on international, national, state, and local health problems. Describe the effects of chemical manipulation of water supplies on the environment.

Econ 430:Environment & Resource Economics. Fall 2016.Ordinary economic activity affects the quality and availability of natural resources. The use of those resources in ordinary economic activity can have local to global impacts on the environment. The main objective of this course is for you to learn how to think critically about issues relating to environmental and resource economics from the local, regional, state, federal, and international levels. Upon completion of this course, you should be able to identify the role of na.ture as the provider of raw materials, discuss the impact of economic activity on the quality of the natural environment, explain the economic rationale for government involvement in environmental and resource sustainability issues, evaluate alternative policies, and discuss what the impact of such involvement will be.

EOHS 580: Solid and Hazardous Wastes.Spring 2017.Management of solid and hazardous wastes in the environment. Emphasis on regulatory compliance, control and remediation technologies, and environmental pathways.

ENVE 520: Introduction to Environmental Education. Spring 2017.This course will provide students with an introduction to the field of environmental education, including basic history and philosophy, methodologies, resources for educators, and current trends in the field.

ENVE 560: Investigating Environmental Issues. Dr. Terry Wilson. Spring 2014. Specifically designed for teachers and other educators, course focuses on the identification and evaluation of specific environmental issues, leading to possible environmental/service action projects by their students, with attention to the potential outcomes of such projects on the physical environment, other humans, and other living things.

ENV 120:Introduction to Occupational Safety and Health. Spring 2017. An introduction to the principles of occupational safety and health. A survey course covering the basic principles and techniques of accident investigation and prevention.

ENV 280: Introduction to Environmental Science. Fall & Spring 2016. An introductory course devoted to the study of environmental issues. This course provides a general understanding of the application of science to solve contemporary environmental challenges. Online activities and experiences emphasize critical thinking, environmental responsibility, and global awareness.

ENV 360:Air Pollution Control. Fall 2014. This course examines air pollution sources, nature, and behavior of air pollutants, air sampling and analysis, dispersion and diffusion in the atmosphere, air pollution meteorology, and methods and equipment for community air pollution control. Topics in indoor air quality, modeling, and prediction, air quality control regulations, control strategies for stationary and mobile sources.

ENV 380: Principles of Environmental Toxicology. Spring 2017. The purpose of this course is to provide students with a background to apply the principles of environmental toxicology and explain how public health may be impacted by environmental contaminants. As such, the emphasis will be on the basic principles of environmental toxicology in relation to human and ecosystem health. This course will survey the major classes of environmental toxicants, their fate in the environment, and effects on human health and ecosystems. The course will focus on developing a knowledge base of basic principles of environmental toxicology. To apply these principles, students will develop and complete a local environmental toxicology project within this region of Kentucky or within their region of residence. The project will have a local focus with global implications for a diverse world.

ENV 410: Water Treatment Processes. Fall 2016. Students will: Explain the principles of water supply, treatment, use, pollution control,and sustainability through class exercises, lecture, discussion, and projects. Assess the importance of water treatment on public health through a discussions and course exercises. Use water quality and processes terminology in assignments, discussions, and exercises.Describe water quality and water quality management by completing laboratory exercises. Apply concepts of hydrology to assess a local stream or river. Interpret water flow data collected for a stream in the Bowling Green area. Measure water flow in local streams.Apply fundamentals of science to measure water quality of surface waters. Conduct water sampling. Describe various classes of water pollutants.Evaluate the status of a local stream against water quality standards when given a data set of water quality parameters. Provide a description of the clean water act when given questions on a test. Discuss the safe drinking water act through class exercises.Explain the process of water and wastewater treatment following tours of local facilities.Describe the importance of water and wastewater treatment on a test. Apply mathematical solutions to water and water quality challenges when given problem sets throughout the semester. Collect data, conduct data analysis, and produce laboratory reports when given a laboratory exercise. Describe the main considerations for protecting public health in the operation of a water distribution system when given a problem on a test. Apply computer applications to assess water quality, water runoff, and aspects of water treatment. Evaluate a local watershed through the process of field reconnaissance, water quality measurements, assessments, and data analysis. Develop the ability to present results and recommendations in a professional format to include: reports, presentations, arguments, and discussion.Participate in experiential learning.

ENV 460 Environmental Management. Fall 2016. This course provides students with a working

knowledge of environmental management techniques, standards, permitting and programs that used to protect our air, water, and land resources.

ENV 480: Hazardous & Solid Waste. Spring 2017. Includes the physical, chemical, and biological stressors associated with both hazardous and solid waste. Emphasis on characterization and remediation efforts.

GEOG 100: Introduction to the Physical Environment. Fall & Spring 2016 This course presents introductory materials related to the physical environment. These include: the atmosphere (weather and climate), the hydrosphere (water bodies and rivers), and the lithosphere (earth's interior and surface topography). A basic understanding of the spatial relationships within the natural environment; and how these relationships affect people is the overall objective of this course.

GEOG 103: Our Dynamic Planet. Spring & Fall 2016. This course is an investigation of the natural world around us, with an emphasis on the processes that shape that world. Throughout our lives we experience and are influenced by the natural world, and the new view provided by study of these phenomena can be profoundly enriching. Areas of special emphasis in the course are the landscapes below us, the atmosphere above us, and how their processes impact our daily lives. We will study the critical role that water plays for us and Kentucky's world-renowned karst landscape.

GEOG 226: Our Dangerous Planet. Fall 2016. Introduction to how normal Earth processes concentrate their energies to create devastating impacts. Students will understand the physical processes behind and the spatial dimension of Earth's natural hazards and disasters with a special emphasis on surviving them. These disasters include tectonic, oceanic, and atmospheric hazards. The semester will include a discussion of how climate change may affect the risk and severity of some of these hazards.

GEOG 227: Our Vulnerable Planet. Fall 2016. Explore how anthropogenic processes such as climate change, pollution, urban sprawl, deforestation, and desertification impact the people on Earth and its ecosystems.

GEOG. 280: Environmental Science and Sustainability. Fall 2016. This course will introduce the study of environmental science and the role of the interrelationship between humans and their environment in contemporary ecological issues. Specifically, students will gain a general understanding of the principles of environmental science, functions of ecological systems, contemporary environmental conditions and problems, techniques for investigating ecological systems, and theories on humanity's place in the world's ecosystem.

GEOG 300: Writing in the Geosciences. Fall and Spring 2017.Students conduct investigations into writing, reading, and research conventions in the geosciences and receive advanced instruction in planning, drafting, arranging, revising, and editing geoscience-specific essays and research projects.

GEOG 310: Global Hydrology. Fall 2016. An introduction to descriptive and quantitative hydrology. The hydrologic cycle, precipitation, evaporation, and transpiration will be covered under descriptive

hydrology. Hydrographs, runoff relations, groundwater, and storage routing will be covered under quantitative hydrology. Consideration is given to use and management of water as a resource.

GEOG. 344: Environmental Ethics. Fall 2016. This course will examine the ethical considerations of our interactions with the Planet Earth and allow students to better understand the philosophical issues involved. Students will examine ethical and environmental theory, environmental policy evaluations, the philosophy of technology, and the relevance of environmental ethics in everyday life. Technology causes massive pollution, toxic waste build-up

GEOG 378: Food, Culture, and Environment. Fall 2016. Exploration of geographical patterns of agricultural production and cuisine through the intersection of environment, technology and culture.

GEOG 380: Global Sustainability. Spring 2017. Environmental concerns pose growing challenges to how humans interact with the Earth, and, subsequently, the importance of informing an environmentally minded citizenry is also increasing. Moreover, arriving at a way of life wherein tomorrow's generations will have an opportunity to thrive in their environment comparable to that currently enjoyed by the present generation is considered essential to the stability of our future, and indeed, of all life on Earth. An understanding of the basic ecological, social, and economic processes involved in this balancing act between current and future needs is crucial to making informed decisions toward that end. The purpose of this course is to provide an in-depth analysis at the concepts of sustainability, with the goal that students be able to propose applications that are relevant, both locally and globally, to their lives in the 21st century.

GEOG 385: Planning for Global Change. Spring 2014. An analysis of advanced topics and results of global change on planning for cities, regions, and communities.

GEOG 427:Water Resource Management. Spring 2017.Discusses environmental, economic, political, and social implications of water usage, as well as emerging trends in water availability, pollution, regulation, and technology.

GEOG. 474(G): Environmental Planning. Spring, 2014. A project-based class that focuses on exploring best practices in sustainable planning and land-use.

GEOG 475 & GEOS 510: Climate Change. Spring 2014. This course deals with the complex topic of climate change, which is an intensely debated, and often misunderstood topic from both the scientific and policy perspectives. Moreover, the ways by which people learn about and interpret climate

change data and information affects their attitude and behaviors. This course is designed to explore the science of climate change, including the geographical, physical, and environmental drivers causing major changes, such as the modern warming trend. Additionally, this course will explore how the communication of climate change science influences the public perception and the direction of scientific research. Special emphasis will be placed on reflective thinking and writing, science interpretation and communication, service learning, and the practical application of scientific findings.

GEOG 495: Karst Water Chemistry.Spring 2017. Permission of instructor.Supervised research or internship with faculty, government, community, or private concerns. May be repeated for a maximum of 12 credit hours in the major, with a maximum of 6 credit hours permitted in minor programs.

GEOL. 111 (Lab113): The Earth. Spring & Fall 2016. This course fosters the skills that lead to an understanding of natural aspects and environments of the Earth, scientific methods and basic geological principles. In particular, this course explores the interaction among geology, people and environment including Earth materials, internal and external physical, chemical, and biological processes that are responsible for forming and shaping the Earth, and Earth's evolution through deep times and present geologic time. This class gives you the background information needed to make educated decisions regarding our planet.GEOL. 315 (G): Energy, Climate, and Carbon. Fall & Spring 2016. This class examines our current reliance upon carbon-based sources of energy, the affect of fossil-fuel emissions on climate, and current efforts to limit fossil-fuel emissions and global climate change. The course is particularly focused on carbon-capture technologies and geological carbon sequestration.

GEOL 112: Earth History. Spring 2017. Geologic study of Earth history: major land, sea, and life patterns throughout geologic time. Topics include the development of geology as a science, nature and significance of the fossil record, basic stratigraphic relations, theories concerning the origin of Earth and the solar system, prehistoric life, paleogeography, and global tectonics.

GEOL 311: Oceanography. Spring 2017. A course in basic fundamentals pertaining to the geological, chemical, physical and biological aspects of the marine environment. Topics for discussion include the topography, structure and history of the ocean basins and their margins, ocean waters and oceanic circulation, tides and waves, marine geochemistry, ocean sediments and sedimentation, near-shore geologic processes and the ocean as a biogeochemical system. The resources of the ocean and the

influence of humans are also considered.

GEOL 315: Energy, Climate, and Carbon. Spring and Fall 2017. Energy, Climate and Carbon investigates our current reliance upon carbon-based sources of energy, the effect of fossil-fuel emissions on the environment and climate at local-to-global scales, and current efforts to limit fossil-fuel emissions and global climate change. The course is particularly focused on carbon-capture technologies, geological carbon sequestration and renewable energy resources.

GEOL 350:Petrology. Spring 2017. The study of the origin, characteristics, occurrence, and classification of igneous and metamorphic rocks, and of the processes that lead to their formation. Their occurrence in relation to plate tectonics is stressed. Laboratory work includes petrographic study of igneous and metamorphic rocks in hand specimen and in thin section.

GEOL 360: Sedimentology and Stratigraphy. Introduces sedimentary processes, including sediment origins, erosion, transportation, deposition, and diagenesis. Sedimentation patterns and stratigraphic architecture are studied in the context of depositional and tectonic settings.

GEOL 408: Structural Geology. Spring 2017. This course introduces the mechanics, characteristics, occurrences, and resultant structures associated with the major processes of deformation of the earth's crust. Major structural regions of North America are discussed. The laboratory emphasizes graphical and mathematical solutions of structural problems.

GEOL. 415: Environmental Geology. Fall 2016. This class explores the interrelationships of geologic processes, earth materials, and human activities. Assessment of geologic factors with respect to site selection, energy production, land use, waste disposal, planning, water resources, engineering practices, and the recognition and control of geologic hazards.

GEOL 445: Aqueous Geochemistry. Spring 2017. An introduction to geochemical processes of surface and groundwater including concentrations of ions and organic compounds, chemical equilibria, and analytical techniques. Carbonate and clay minerals will be studied in detail.

GEOL 471: Natural Resource Management. Fall 2016. This course is directed towards natural resource management on U.S. public lands but provides the needed technical information required for private and/or international land management. The goal is to maximize sustainability and long-term resilience. We will also examine policy implications and pressures upon resource management as well so that a holistic understanding results.

GEOL 485: Geology of Fossil Fuels. Spring 2017. Formation of coal, petroleum, and natural gas including depositional setting, source materials, and processes of thermal maturation. Stratigraphic and structural relations, modes of occurrence, exploration techniques, and resource evaluation are emphasized.

GEOS 471 (G): Quality of Life. Fall 2016. Effective natural resource management is of growing concern as populations increase and new uses are sought for public lands. This course is directed towards natural resource management on US public lands but provides the needed technical information

required for private and/or international land management. The goal is to maximize sustainability and long-term resilience. Resource decision-making is not made in a vacuum. We will also examine policy implications and pressures upon resource management as well so that a holistic understanding results.

GEOS 543: Concepts of Environmental Studies. Spring 2015. Provides students a fundamental understanding of the inter-relationship between the science and technical disciplines that contribute to our understanding of the environment as a whole. Students are exposed to the unique challenges facing environmental scientists, both from a practitioner and researcher perspective. Students learn to utilize their discipline-specific background in conjunction with an understanding of the roles and impacts of other disciplines to solve environmental problems.

GWS 575: Gender Justice Sustainability. Spring 2017.A multidisciplinary examination of political and economic implications of global sustainability, with particular attention to gender and justice.

HORT 301/302, Landscape Plants/Laboratory. Fall 2016.Students learn how to reduce environmental and economic costs by the careful selection of trees and shrubs for landscapes and then maintaining those landscapes.

HORT 312: Horticulture. Spring 2017. Emphasis is given to principles of growth, development and management of major horticulture plants. Special consideration is given to major horticultural crops of Kentucky..

HORT 407: Plant Propagation. Spring 2017. Plant propagation is studied and practiced as an art and a science. Sexual and asexual techniques include propagation by seed, cuttings, grafting, layering, division and tissue culture.

HORT 412: Modern Fruit Production. Spring 2017. Production, harvesting, post-harvest handling, and marketing of the major tree and small fruits of the temperate region. Emphasis is given to those crops adaptable to Kentucky.

HORT 475 (G): Local Foods. Spring 2014. Class gains an understanding of the current industrialized food system, and explores the sustainability of local foods, and seeks to define “local.”

JOUR 481 & GEOG 475: Environment and Media. Spring 2017. Environmental concerns pose growing challenges to how humans interact with the Earth, and, subsequently, the importance of informing an environmentally minded citizenry is also increasing. The purpose of this course is to introduce students to effective methods for researching and reporting on the environment, the importance of accurately portraying environmental issues in an objective manner, and the significant environmental issues in Kentucky. Special emphasis will be placed on public policy about water and energy resources in Kentucky.

LEAD 325: Leading Change. Spring 2017. Study of processes and skills impacting a leader's ability to

implement change, emphasizing the analysis of various existing models to produce sound solutions.

LEAD 330: Leadership Ethics & Decision-Making. Fall 2016. Study of contemporary ethical and decision-making issues facing leaders; emphasis on examining and analyzing ethical issues for sound leadership solutions.

LEAD 395: Contemporary Leadership Issues. Spring 2017. Analysis of contemporary issues from a leadership perspective.

LEAD 450: Leadership in a Global Context. Fall 2016. Study and analysis of cultural impacts on successful leadership in various geographical areas. Focus on cultural theories and models that influence leadership across contexts.

LEAD 500. Effective Leadership Studies. Fall & Spring 2016. An in-depth investigation of the basics of effective leadership including current and historical leadership theories. Assessment of leadership styles will be a key component.

LEAD 525: Leadership Ethics. Spring 2017. Study of contemporary ethical issues facing leaders with an emphasis on examining and analyzing ethical issues for sound solutions.

METR 121: Meteorology. Fall & Spring 2016. An introduction to the elements of the atmosphere, severe storms, atmospheric environmental issues, the interdependence between human life and the atmosphere, and rudimentary forecasting of basic weather systems.

METR 122: Aviation Meteorology. Spring 2017. The emphasis of the course will be on weather elements and their measurements, weather instruments, weather codes needed by aviators, weather effects upon flying, and weather hazards of aviation.

METR 324: Weather Analysis & Forecasting. Spring 2017. Analysis of the atmosphere using satellite and radar imagery. Weather forecasting techniques using surface and upper air data are also examined.

METR 432: Synoptic Meteorology. Spring 2017. Addresses the analysis and prediction of large-scale weather systems, such as extra-tropical cyclones, fronts and jet streams through the application of fundamental dynamical concepts of meteorology.

METR 437: Mesoscale Meteorology. Spring 2017. Addresses the analysis and prediction of convective and mesoscale phenomena, such as mesoscale convective systems, severe thunderstorms, tornadoes and hurricanes.

METR 439: Atmospheric Modeling. Spring 2017. An introduction to numerical weather and climate modeling techniques and models, with focus on modeling fundamentals, including dynamics, physical parameterizations, grids and resolutions, model structures and components. Includes hands-on experience with designing numerical experiments, configuring and running model simulations,

post-processing model outputs, and visualization.

METR 460: Climate Telecommunications. Spring 2017. Analysis of the climate impacts and physical mechanisms of atmospheric and oceanic teleconnections that commonly affect weather patterns in the northern hemisphere.

MKT 420: Sustainability Marketing. Spring 2014. This course integrates marketing fundamentals with environmental, social, and economic principles of sustainability. Consumer awareness issues began in the 1970s. The emphasis on these issues has cycled in importance several times since then. Marketing strategy plays a key role in a firm's ability to address consumer demands related to these issues in a genuine manner. In this course, students analyze current sustainability trends that influence market applications and the influence of marketing on sustainability trends.

PH 381: Community Health. Fall and Spring 2016. This course is an introduction to students in the issues of foundations of health, the nation's health, health care delivery, and environmental health and safety. Upon conclusion of this course students will be able to describe and compare the history of community health to the current state of the nation's health, understand and define the terms health, community health, and public health, explain the difference between personal health and community health, provide information and list the organizations that contribute to the current health status of Americans, list factors that influence personal health and a community's health, identify the prevention and health promotions strategies that can affect the current and future health problems, describe the organizational structure of local, state, and national health organizations, explain how Healthy People 2020 goals and objectives can affect community health, identify environmental concerns and the impact of these concerns on human health.

PH 385: Environmental Health. Fall and Spring 2016. Students will gain an understanding of the aspects of environmental health. They will develop a foundation of environmental health ethics and knowledge for professional growth. Students will gain an understanding of environmental health concepts such as water and air quality, food safety, radiation, waste, and environmental toxicity.

PH 510: Watershed Management and Science. Fall 2016. Students who successfully complete this class will be able to explain methods to analyze, summarize, and report water quality data for public health protection, including the use of descriptive and statistical techniques, critique methodologies, research, and results based on water quality and watershed principles presented in the course materials, when given case studies and journal articles, describe and evaluate methods for assessing, preventing, and controlling the risks of water quality threats to human and ecosystem health, explain management functions of environmental health science professionals in the reduction and communication of human and ecosystem health risks related to waterborne contaminants, describe and explain local, state, federal, and global water quality laws, regulations, standards, guidelines, and policy for the protection of human and ecosystem health., summarize major global water issues in relation to environmental justice, disease, and sustainability of water resources and in the protection of human and ecosystem health, communicate in written, graphical, and oral methods the use of equipment for theprotection of water quality and human health, use critical thinking skills to evaluate

water information and public health, and collect, analyze, and evaluate water quality information and threats with the use of scientific instruments, technology, computer tools, and water quality models.

PH 548: Community Health Organization. Fall and Spring 2016.Social, political and economic forces that exacerbate health inequities in different communities; various organizational strategies for effective solution. Review and analysis of community organization and mobilization processes, legislative advocacy, cultural competency, and the role of mass media in conceptualization of public health issues. Transportation requirements for field trips will be provided.

PH 571: Air Quality Management. Fall 2016.Examines the origins, dispersion, control and effects of air pollution; indoor air pollution; and the history of air quality control management. Provides a balanced account of air quality control regulations including the provisions and implications of the Federal Air Quality regulations, standards, setting, policy implementation and technical and management aspects of air quality control.

PH 577: Environmental Toxicology. Spring 2017. The purpose of this course is to provide students with a background to apply advanced principles of environmental toxicology. Students will explain how public health may be impacted through routes of exposure to environmental contaminants. As such, the emphasis will be on evaluating environmental toxicants in relation to ecosystem and human health, and techniques used in managing the risk of environmental toxicants. We will begin the course by discussing basic scientific principles related to environmental toxicology. The course will culminate with students completing a final project to assess an environmental toxicant of global cancer.

PH 584: Principles of Environmental Health. Spring 2016. Environmental health science is interdisciplinary and its goal is to prevent, reduce or eliminate environmental exposures that may lead to adverse health outcomes in communities, It is not possible to understand and solve environmental health problems when such problems are viewed from a narrow focus. However, it is very possible to improve how humans interact with our global environment through sustainable developments. The following objectives are presented as a guide to the specific skills and/or knowledge that should be acquired from attending lectures, participating in discussions and carefully reading, studying and performing the assignments. The objectives serve two purposes. They constitute an outline, which initially conveys the major points of the material to be studied and as a review to determine if sufficient gains have been made in skills and/or understanding.

REC 235: Outdoor Recreation Activities. Spring & Fall 2016. This course will acquaint the student with a variety of outdoor recreation activities. Skill development, environmental values and impact considerations of outdoor experiences will be emphasized. Field trips and a weekend campout are required. This course will introduce the student to selected outdoor activities and provide experience in these activities by active participation and to encourage development of environmental stewardship behavior in a sustainable outdoor world.

Rec 332: Outdoor Recreation. Fall 2016. At the termination of this course, students will: 1. Identify areas of education, which are best taught in the outdoors. 2. Be able to identify the terminology,

philosophy and theories associated with outdoor education. 3. Be aware of resources available for outdoor education in a sustainable society. 4. Be able to identify and discuss native flora and fauna of Kentucky (Eastern Woodlands Biome). 5. Be able to utilize various field guides for identification of flora and fauna. 6. Have completed workshops related to sustainability awareness (Project Wild, Project Wet, KDFWR Angling). 7. Have completed reading and exam for Aldo Leopold's A Sand County Almanac 8. Have completed Water Quality Training Workshop and collected related field data.

REC 482: Recreation and Youth Development. Fall 2016.Upon completion of this course each student should be able to: Demonstrate a comprehensive knowledge of familial, community, recreation, education, peer, and recreation influences on youth development; Design experiences that clearly reflect application of knowledge based on positive youth development; Briefly examine the historical events leading to PYD; Describe characteristics and components of positive youth development; Identify factors associated with youth delinquency; Explain the role recreation plays in the development of youth; Describe developmental assets and role resiliency plays in positive youth development; Identify what is necessary for youth to be successful contributing members of society; Articulate and apply youth development principles, values and language in working with youth in recreation settings; Articulate the best practices and concerns facing youth in the 21st century.

REC 482: Recreational Volunteerism. Fall 2016. The course incorporates experiential learning through the study and application of volunteerism. The course design allows students the opportunity to develop a greater understanding of volunteer management through lecture, observation, and hands-on experiences that demonstrate the contributions of volunteerism in meeting essential needs of people and improving the volunteer management system. The course content explores theories that promote the idea that human beings are interconnected, interrelated, mutually interdependent, and become involved in reciprocal interactions and exchanges in the process of living. Emphasis is placed on essential preparations for successful volunteer management. A 25 hour volunteer service requirement is used as a springboard to deepen understanding of human need and approaches to working with those individuals giving their time to meet those needs.

REC 328: Inclusive Recreation. Spring 2017. Upon completion of this course each student should be able to demonstrate, articulate, identify; understand attitude development to include examination of personal attitudes toward persons with disabilities; demonstrate an understanding of how to influence and improve attitudes of other people in regard to working with persons with disabilities; demonstrate an understanding of appropriate and sensitive terminology and perspective to working and interaction with individuals with disabilities; articulate the social psychological effects of differences; identify various constraints impacting individuals with disabilities; demonstrate a full understanding of the Americans with Disabilities Act; identify and understand various theoretical

approaches to facilitating participation for people with disabilities; understand and actively apply principles of advocacy to include facilitation of accessibility and integration for individuals with disabilities; investigate legal and political involvement influencing issues of diversity as they relate to recreation and inclusion; articulate trends and issues as related to inclusive recreation; examine the role of media in portraying persons with disabilities; and understand individual characteristics for people with various disabilities.

REC 330: Principles of Outdoor Recreation. Spring 2017. This class examines the outdoor recreation movement and the role of federal, state, and community agencies in response to outdoor recreation demands. Students will learn theory and practical application of outdoor recreation concepts with emphasis on philosophies, principles, policies, economics, trends and problems. Course objectives include the following: understand and apply techniques of recreation assessment and planning related to the demand for and capacity of recreation and park services in resource-based facilities; demonstrate a solid knowledge base about outdoor recreation in the United States; understand the various functions and mandates of outdoor recreation management agencies; develop a personal philosophy of the place of the natural environment in leisure; understand and apply methods of management related to outdoor recreation; understand the development of recreation resource policy; understand how and why people respond to given resources and management practices; investigate multicultural perspectives as related to outdoor recreation and the environment; demonstrate critical thinking and the ability to apply knowledge through written and oral communication.

REC 335: Outdoor Skills-Land. Spring & Fall 2017. This course provides the foundation for skill development necessary for environmentally responsible outdoor recreation. It is one of four classes in the professional semester Outdoor Leadership curriculum. It is a part of the curriculum recognized by the Wilderness Education Association and the Leave No Trace program which are both nationally recognized programs, teaching and practicing outdoor ethics.

REC 337: Outdoor Skills-Water. Spring & Fall 2017. Skill development in self-propelled waterbased activities and related environmental practices. Focuses on outdoor leadership development. Overnight, multi-day camping required. This course provides the foundation for aquatic skill development necessary for leadership in an environmentally responsible and sustainable manner. This occurs in field settings and increases students' outdoor leadership ability by developing/enhancing skills. This is the second class in the outdoor leadership curriculum.

RELS 408: Religion and Ecology. Spring 2017. This course is distinguished by a special focus on the treatment of nature as something one experiences and can discuss in relation to questions about Climate Change. Besides producing short videos for presenting on the final day of class, students will spend the semester looking at the link between different ways of responding to Climate Change in Santa Fe. Gottlieb's Oxford Handbook on Religion and Ecology will be used to advance knowledge on lessons from Judaism, Christianity, Islam, Buddhism, Hinduism, Chinese religions, Jainism and other

world religions.

SOCL 240: Global Social Problems. Fall & Spring 2016. By the end of this course, students should be able to: explain how sociologists approach the study of global social problems; identify how social problems in our society (and others) are connected to larger global issues; apply sociological theories that vary in how they define the source of the underlying problem, including the structural functionalist perspective and the conflict perspective; and critically evaluate current interventions and proposed solutions to specific global social problems and assess the consequences for various actors at the local and global levels.

SOCL 270: Community, Environment, and Development. Fall and Spring 2016. This course will help you attain these general education goals--by the end of the course, you will be able to recognize the interconnections of events and processes unfolding in different localities around the world; analyze the tensions between the projects of local communities and economic globalization; identify the consequences of decision-making for various localities and developments at the global scale; and consider and evaluate various alternatives for how everyday life might be organized.

SOCL 360: Rural & Urban Communities. Fall & Spring 2016. Study the structure and function of community life and the process of balancing community needs and resources.

SOCL 362: Race, Class, and Gender. Fall 2016. This course is about the interconnected effects of race, class and gender on people in America.

SOCL 375: Diversity in American Society. Fall & Spring 2016. Sociological analyses of ways societal institutions create and shape intergroup diversity. Focuses on the elements of social organization and their relationships to diversity.

SOCL 376: Sociology of Globalization. Fall 2016. the course objectives are: 1. Understand the place of globalization within the overall study of sociology. 2. Understand how the global economy is organized and how globalization is theoretically and philosophically grounded. 3. Identify the winners and losers in the globalization process, their options for the future, and our own role (as individuals) in this increasingly globalized world. 4. Evaluate the growing prominence of diverse forms of resistance to globalization.

SRSC 510: Perspectives on Social Justice. Fall 2016. Student Learning Outcomes: Students will identify and explain key positions and arguments concerning social justice; demonstrate a clear understanding of multiple positions related to complex social justice issues; articulate how concepts of social justice affect contemporary problems of sustainability and community development; and develop and defend their own positions and arguments as they relate to social justice and contemporary social justice issues.

SRSC 540: Community Building Sustainability. Spring 2017. SRSC 540 provides a study of the

intersections between community-building and sustainability through critical interdisciplinary approaches that focus on social justice. This course analyzes community-building, often understood as: “activities, practices, and policies that foster positive connections among individuals, groups, organizations, neighborhoods, and geographic and functional communities”- building stresses the benefits of greater inclusion of diverse groups in research and decision- making. Sustainability has no singular agreed upon meaning, but generally connects the environment, economics, social relationships, and social justice.

SRSC 590: Sustainability Symposium. Spring 2017. During the online portion of the course as well as our time together in May, we will explore the three themes of the SRSC—social justice, community, and environmental sustainability. During the last half of the semester you will also prepare your Comprehensive Exam Reading List as well as your symposium essay and presentation. The on-site portion (includes experiences in eastern Kentucky) runs from May 12-18 and concludes with symposium, at which you will present your Comprehensive Exam essay.

SUST 514: Environmental Justice in Public Spaces. Fall 2016. Environmental Justice and Public Spaces examines the ideas of public space and environmental justice through review and critical examination of classic (American) and contemporary literature. First, we will explore the idea of public space and the diversity of definitions and boundaries that are used to describe the concept. We will then examine the environmental justice movement, environmental racism, and how these issues are related to public space practice and policy, environmentalism, and sustainability. The course will culminate with an examination of current practices that provide both hope and practical inspiration for approaches and solutions to issues of public space and environmental justice

SUST 518: Organizational Change for Sustainability. Spring 2017. An examination of approaches to organizational change for comprehensive sustainable performance, including analysis of institutional barriers and examples of successful change strategies.

SWRK 330: Human Behavior in the Social Environment I. Spring& Fall 2016. This course uses an ecosystems framework as a method of inquiry for assessing human behavior within the context of individual, family, group, community, and organizational resources. The focus is upon a normative strengths perspective that is empowerment centered. Emphasis is placed on understanding and supporting various lifestyles, family forms, and life choices. Students are encouraged to develop a value system that respects difference, as well as the social work code of ethics. Using a bio-psychosocial theoretical framework, basic concepts of human development are introduced, with the life cycle serving as an organizational focus. Using a multi-theoretical framework, we consider how spirituality/religion, age, culture, race, ethnicity, social class, sexual orientation, gender, spirituality, biology, and the social environment impact human development. We additionally consider how our theoretical frameworks empower social workers to advocate for economic and social justice. These frameworks are also used to understand the functioning of individuals as members of families, groups, communities, and larger social organizations, in order to intervene effectively at various system levels. Course objectives are achieved through the use of experiential exercises, class

discussions, didactic presentations, and/or films, which encourage students to develop skills in critical thinking.

SWRK 331: Human Behavior in the Social Environment II. Spring & Fall 2016. This course focuses on human behavior in the social environment with an emphasis on the mezzo and macro levels, including families, groups, organizations, communities, and cultures. The importance of diversity and the environment as factors in influencing human behavior will be highlighted. Additionally, students will examine the forms and mechanisms of oppression and discrimination and learn how apply strategies of advocacy and social change that advance social and economic justice.

SWRK 395: Social Welfare Policy and Issues. Spring 2014. An understanding of the historical perspectives of social welfare policies as they impact current policy issues is the focus of the course. This is combined with an examination of the processes of policy formulation. Models of policy analysis assist students in identifying the impact of policy on citizens representing a diversity of backgrounds.

SWRK 530: Foundations of Social Welfare Policy. Spring 2016. This course is designed to provide social work students in the foundation year of the MSW Program with an introduction to key concepts, knowledge, and policy practice skills related to social policy, social welfare, and the American society. The foundation for understanding social welfare policy and programs is the ability to analyze social problems. Students will become familiar with the meaning of social problems, social welfare policy, and the means by which policy shapes past and contemporary social welfare institutions and programs. To facilitate the learning process, students will review the impact of historical, political, and economic issues on the development of social welfare and social policies in the United States.

Total: Graduate = 24 Undergraduate =102