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Focused Undergraduate Courses

Department	Course Number, Title	Description
Africana Studies	AFRS 2170 Introduction to Health and Environmental Issues in the Africana World	Cultural, social, political, ethical, and psychological dimensions of health and environmental issues affecting the African and African Diaspora peoples globally, and the policy implications.
Anthropology	ANTH 2126 World Population Problems	Examination of various world population "problems," such as growth, migration, fertility, and population aging, in order to learn how cultural, political, economic, and environmental factors influence and are influenced by the population structure of a given society. Cross-listed as ANTH 2126 and SOCY 2126.
Anthropology	ANTH 2127. Environmental Anthropology	Anthropological approaches to environmental issues as they affect people around the world, including the relationships between humans and their natural environments, cultural knowledge about environments, the role of wealth and inequality in environmental interactions, international and global environmental governance, and the effects of these on management decisions and outcomes.
Anthropology	ANTH 3125: Food and Globalization	Relationship of the modern food system to larger complex economic, political, and cultural processes. Topics include: development of the agro-industrial complex; formation of new food preferences, eating practices, and taste publics; emergence of alternative fair trade, organic, local, and slow food movements. Cross-listed as INTL 3125. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Architecture	ARCH 3102. Architecture Design Studio IV	Students interrogate matters of mechanical systems and building envelopes, as well as information systems and new media technologies, foregrounding their impact on sustainability and spatial organization and occupation.
Architecture	ARCH 4050. Architecture Elective - Topics: GeoDesign	Concentrated, in-depth study of selected topic. Topics vary according to faculty expertise and often include contemporary theoretical, social, technological, and design issues. This offering studied practical skills for analyzing complex phenomena (economic, environmental, and social) in metropolitan areas. Ways to better integrate GIS with other digital visualization programs for effective presentations and communications—a useful skill for forging better working relationships with clients/community. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Architecture	ARCH 4302 Environmental Systems Principles	Introduces qualitative and quantitative analytical methods commonly used to assess the impact of environmental forces on occupant thermal and luminous comfort, energy performance, and regional sustainability; interplay between climatic events, patterns of building use, and the architectural variables that inform the appropriate application of building systems technology.
Architecture	ARCH 4305. Building Systems Integration	Comprehensive, systematic integration of building technology systems commonly used in large-scale buildings through case study, analytical, and simulation methods. Topics address the resolution of the building structure, materials, environmental systems, mechanical systems, electrical systems, life safety, building water supply and waste, and conveying systems in building design.

Interdisciplinary Studies	CAPI 3050. Topics in Capitalism Studies: An Environmental History of American Capitalism	Examines how capitalism worked on and in various environments across America from pre-Columbian times to the present. Learn how capitalism altered the environment and how this economic system changed over time in reaction to natural forces. Focus on how people have attempted to make nature valuable and the obstacles they encountered in the process. Learn how a basic knowledge of the environmental sciences can enrich their understanding of history and economics. Topics include: indigenous economic activity, ecological imperialism, agricultural economics, ecosystem services, water history, slavery, western expansion, extractive industries, conservation, preservation, the Dust Bowl, the New Deal, food systems, and climate change.
Civil & Envir. Engineering	CEGR 4246 Energy and the Environment	A quantitative survey of the sources and uses of energy and an analysis of their economic, environmental, and social impacts to society. Addresses how energy and the environment interact and developing solutions to help meet growing demand with less environmental impact. Topics include: COP21 and Kyoto Protocol; energy sources including renewable (solar, wind, geothermal and hydro) versus non-renewable (fossil fuels and nuclear); carbon capture; electric vehicles; water-energy nexus; and economic and environmental implications.
Civil & Envir. Engineering	CEGR 4247 Sustainability	Focuses on sustainability as it applies to civil engineering, including land development choices, infrastructure planning, material selection and disposal, energy sources, and water supply and treatment. Methods of assessing sustainability and incorporating sustainable features in design are reviewed.
Liberal Arts & Sciences	CLAS 3000. Topics in Arts and Sciences: Millennium Fellowship	This offering of the course was specifically for students accepted in the UNC Charlotte cohort of the Millennium Fellowship Program, focused on understanding the UN Sustainable Development Goals and their application to local communities.
Liberal Arts & Sciences	CLAS 3000. Topics in Arts and Sciences: Addressing Climate Change Through Innovative thinking	This offering of the course examined the complexity of global climate change through an interdisciplinary lens. Beyond the science of climate change, topics included the impact of media on perceptions surrounding climate change, economic impacts, policy challenges, vulnerability, and equity concerns.
Electrical & Computer Engineering	ECGR 4090. Special Topics in Elec Engr: Renewable Energy	The offering of the course focused on the challenges of renewable energy systems in terms of engineering analysis, synthesis, and design. Students will understand the potential of renewable energy, the current status of the global and US usage, basic principles of electricity production, storage, and distribution, and ways to improve performance with new materials and device architectures.
Geography & Earth Sciences	ESCI 2101 The Environmental Dilemma	Nature, causes, and responses to major environmental problems. Objectives: examine the nature, interrelatedness, and importance of environmental issues; explore the underlying causes of changing environmental quality and prospects for improvement; and understand current environmental issues and societal response to them. Topics include: Science, Sustainability, and Human-Environment Interaction; Environmental Worldviews and Ethics; Global Systems and Cycles; Sustainable Development and Economic Models; Waste Management, Pollution, Environmental Quality; Biodiversity; and Water Resources.
Geography & Earth Sciences	ESCI 3101 Global Environmental Change	Fundamental principles of the climate, including the physical processes responsible for global climate change; relationships between past, present, and future changes; and societal and environmental impacts. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Geography & Earth Sciences	GEOG 1110. Introduction to Urban and Regional Planning	An overview of current and historical trends in Urban and Regional Planning. Examines how plans and planning have been used to resolve social, environmental, and economic conflicts. Topics include: planning in industrial cities, land use planning, planning and social injustice, economic development, transportation planning, planning for global sustainability.
Geography & Earth Sciences	GEOG 3000. Topics in Regional Geography: Global Environmental Crisis and Migration	The intersection of natural resource exploitation, violent conflicts, and forced migration. Focus on the environment as a source of conflict. Narratives of exploitation and exploration of natural resources at the core of global energy demand and economic expansion, and how the excessive pursuit of accessing these resources is at the heart of many civil wars and violent conflicts. How forced migration (including the budding phenomenon of climate-induced migration) is both a consequence and the cause of these conflicts. Cross-listed as GEOG 3000, INTL 3001, and POLS 3030.

Geography & Earth Sciences	GEOG 3215 Environmental Planning	Interaction and relationships between natural and human-made elements of the environment with emphasis on planning concepts and methodologies used in contemporary environmental planning. The course addresses managing nature and the environment in a sustainable way that allows for economic development without compromising the capacity of life-supporting ecosystems.
Geography & Earth Sciences	GEOG 4000. Topics in Geography: Global Ecosystems, Human Dimensions, and Environmental Dynamics	An intensive study of topics in geography from such areas as urban, manufacturing, planning, retailing activity, transportation, political geography, and environmental geography. This offering of the course addressed the dynamic interactions of ecosystems and human systems from a global geographic perspective.
Geography & Earth Sciences	GEOG 4215 Urban Ecology	An introduction to the emerging field of urban ecology. Explores the biological, physical, and social components of the urban ecosystem at local, regional, and global scales. Emphasis on the interplay among components and the sustainability of cities. Topics include C and N cycles, heat islands, biodiversity, ecosystem services, human health, and quality of life.
Geography & Earth Sciences	GEOL 3105 The Earth's Mineral Resources: Sustainability and the Environmental Impacts of Recovery	The origin, distribution, consumption rates and environmental impacts of mining and processing the Earth's mineral resources. A significant portion of class lectures promote a deeper understanding of the current oil, gas and coal industries and their relationship to the world's energy production and use. The long-term sustainability of these energy systems is also discussed. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Global Studies	INTL 2121. Introduction to Development Studies	The history of development as a discourse and the different economic and political models that have shaped it. Historical models and contexts of development are addressed in order to understand the evolution of development practice. Different agents and institutional architectures of development are examined as are current issues of debate in global development such as: gender and microloans; climate change politics; and the impacts of migration.
Global Studies	INTL 3001. Topics in Development and Sustainability Studies: Thinking Globally, Reading Deeply - Earth Matters	What is at stake for humans living on a planet with dwindling natural resources, rising temperatures and sea levels? This class approaches major contemporary issues through a close reading of a work of fiction to generate inquiry into matters of environmental humanities.
Global Studies	INTL 3001. Topics in Development and Sustainability Studies: Global Environmental Crisis and Migration	The intersection of natural resource exploitation, violent conflicts, and forced migration. Focus on the environment as a source of conflict. Narratives of exploitation and exploration of natural resources at the core of global energy demand and economic expansion, and how the excessive pursuit of accessing these resources is at the heart of many civil wars and violent conflicts. How forced migration (including the budding phenomenon of climate-induced migration) is both a consequence and the cause of these conflicts. Cross-listed as GEOG 3000, INTL 3001, and POLS 3030.
Global Studies	INTL 3125. Food and Globalization	Relationship of the modern food system to larger complex economic, political, and cultural processes. Topics include: development of the agro-industrial complex; formation of new food preferences, eating practices, and taste publics; emergence of alternative fair trade, organic, local, and slow food movements. Cross-listed as ANTH 3125. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Liberal Arts & Sciences	LBST 2101. Western History & Culture: Cities, Nature and Memory	A world of cities is being transformed as a result of a global pandemic, economic dislocation and movements for equality and justice. This course addresses how societies established policies for urban growth, how such growth has transformed ecosystems as residents consumed land, water, food and energy resources, disposed of waste and understood the spread of disease, and how ideas about cities and nature have changed over time. Cities as contested spaces, including as sites of protest, memory and violence. How cities manage ecological challenges, how urban residents claim spaces as their own and the role of race.
Liberal Arts & Sciences	LBST 2102. Global and Intercultural Connections: Globalization, Conflict, and Resolution	Are human rights abuses powering your smart phone? Is war good for the economy? How does equality link to global sustainability? Numerous catalysts of conflict threaten the stability of our globalized world. We will tackle these questions and more while exploring causes of tension and global mechanisms for resolution through text and film.

Liberal Arts & Sciences	LBST 2214. Health & Quality of Life: Food, Health, and Environment	Provide an opportunity for students (1) to learn about how food is linked to health, environment, and culture (2) to understand how food is experienced differently across groups and (3) to explore Charlotte's food system and its complexities.
Liberal Arts & Sciences	LBST 2301 Critical Thinking and Communication: Sustainability and Identity	A study of sustainability as part of the rights and responsibilities of citizenship. Ethical dimensions of citizenship and sustainability in political, social, and religious contexts. Ways in which citizenship and various religious identities evolved to include environmental responsibilities. Possibilities and the limits of sustainability in dealing with environmental degradation and climate change. (Sub-Title changed to/from “Sustainability and Citizenship”). (Course modified by faculty in Sustainability in the Curriculum Workshop)
Liberal Arts & Sciences	LBST 2301 Critical Thinking and Communication: Consuming Natural Resources	Consuming natural resources such as fossil fuels and metals has innumerable environmental impacts, but the associated health and social impacts are often overlooked. This course will examine the regulatory framework governing such activities and the challenges unique to communities affected by mining and drilling activities. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Liberal Arts & Sciences	LBST 2301 Critical Thinking and Communication: Sustainability in the Built Environment	Students will learn to apply critical thinking skills to understand economic, social, and environmental interactions for sustainability in the context of the built environment. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Liberal Arts & Sciences	LBST 2301 Critical Thinking and Communication: Sustainable Water	Students will apply critical thinking skills to understand environmental, social, and economic factors of sustainability in the context of water resources. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Mechanical Engineering & Engineering Science	MEGR 3261. Sustainable Energy	A treatment of global energy challenges, current energy usage, energy carriers, environmental impacts, future energy usage, transitions in energy usage and societal changes, and energy conversion technologies.
Political Science & Public Administration	POLS 3030. Topics in Comparative or International Politics: Global Citizenship	Focus on the concept of global citizenship and examines its usefulness as a guide to action. Students will have the opportunity to apply ideas of global citizenship in developing strategies to address such critical challenges as refugee resettlement, human trafficking, poverty, forced labor, ethnic conflict and global warming.
Political Science & Public Administration	POLS 3030. Topics in Comparative or International Politics: Global Environmental Crisis and Migration	The intersection of natural resource exploitation, violent conflicts, and forced migration. Focus on the environment as a source of conflict. Narratives of exploitation and exploration of natural resources at the core of global energy demand and economic expansion, and how the excessive pursuit of accessing these resources is at the heart of many civil wars and violent conflicts. How forced migration (including the budding phenomenon of climate-induced migration) is both a consequence and the cause of these conflicts. Cross-listed as GEOG 3000, INTL 3001, and POLS 3030.
Sociology	SOCY 2126. World Population Problems	An examination of various world population “problems,” such as growth, migration, fertility, and population aging, in order to learn how cultural, political, economic, and environmental factors influence and are influenced by the population structure of a given society. Cross-listed as ANTH 2126 and SOCY 2126.

Focused Graduate Courses

Department	Course Number, Title	Description
Architecture	ARCH 5302 Environmental Systems Principles	Introduces qualitative and quantitative analytical methods commonly used to assess the impact of environmental forces on occupant thermal and luminous comfort, energy performance, and regional sustainability; interplay between climatic events, patterns of building use, and the architectural variables that inform the appropriate application of building systems technology.
Architecture	ARCH 6050. Architecture Elective - Topics: GeoDesign	Concentrated, in-depth study of selected topic. Topics vary according to faculty expertise and often include contemporary theoretical, social, technological, and design issues. This offering studied practical skills for analyzing complex phenomena (economic, environmental, and social) in metropolitan areas.
Architecture	ARCH 7103. Design Studio Topical: Sustainable Affordable Housing	Focuses on issues relevant to current architectural practice and/or exploration of architectural theory. This offering of the course will address new models for affordable housing and small business development as well as sustainable, resilient infrastructure. Students will identify barriers (financial, policy, cultural) to this type of development and ways to overcome these barriers.
Geography & Earth Sciences	GEOG 6210. The Restructuring City	Cities worldwide have, over the last 30-40 years, undergone radical transformation. Grounded in both global and local changes of economy, society and state, contemporary urban restructuring challenges the way we understand cities and gives rise to new and complex processes, structures and urban relationships. This course places at center stage the causes and consequences of contemporary urban restructuring and evaluates the theoretical, planning and policy challenges it inevitably presents.
Geography & Earth Sciences	GEOG 6216/8216. Planning for Urban Sustainability	Examine the concept of sustainability critically, comparing its diverse applications and meanings as a guide for decisions in the built environment. Explore the social and physical structures that make radical change difficult, as well as innovations in city planning like ecological footprinting, climate action planning, smart growth, bus rapid transit, energy-efficient technologies, the sharing economy, and grassroots movements for alternative communities.
Civil & Envir. Engineering	INES 8201. Environmental and Ecological Economics	Students will explore the ways in which ecosystem services are measured, valued, and monetized by the society. The course is divided into three lecture modules: (a) environmental economics, (b) risk analysis and management, and (c) ecosystem services and valuation.
Architecture	MUDD 6101. Fundamentals of Urban Design Studio	Explore and test issues focused around the making of sustainable public infrastructure, spatial definition by buildings, and the particular dynamics of civic and social spaces.
Architecture	MUDD 6102. Urban Open Space and Infrastructure Design Studio	Focuses on the sustainable development of neighborhoods, districts, sites and urban open spaces, exploring design process issues as well as the continued acquisition and practice of a variety of technical and graphic skills.
Architecture	MUDD 6205. Modern City: Theories and Forms	Historical survey of urban design from the mid-19th century to the end of the 20th century, focusing on various ideas of urbanism and their impact on the contemporary practice of urban design and development. Topics include the emergence of modern city planning, monumental city, garden city, suburbanization, new urbanism, ecological urbanism, and global city among other paradigms of modern city.
Architecture	MUDD 7102. Advanced Vertical Urbanism	Focuses on site-specific projects in countries outside the USA and emphasizes methods of research and design as well as technological and systemic issues of sustainability in dense and vertical urban environments. Part I takes place outside the USA and initiates work on design projects.
Architecture	MUDD 7103. Global Urban Design Studio	Focuses on site-specific projects in countries outside the USA and emphasizes methods of research and design as well as technological and systemic issues of sustainability in dense and vertical urban environments. Part II is held in Charlotte and completes the design projects commenced abroad.

Inclusive Undergraduate Courses

Department	Course Number, Title	Description
Africana Studies	AFRS 2174. Environmental Literature in Africa and the Caribbean	Introduction to an environment-centered approach in literary and cultural studies through a selection of poems, fictions, plays, and critical literary essays by African and Caribbean writers. Cultural and environmental studies are brought into interdisciplinary dialogue about nature, conservation, and development in Africa and the Caribbean. Explores the contributions of postcolonial studies to eco-criticism and the narratives of environmental justice in developing countries.
Africana Studies	AFRS 2207. Pan Africanism	Study of the Pan-African movement; examination of historical and contemporary efforts of peoples of African descent to unite their struggles for human advancement, political independence, and equality in Africa, the US, the Caribbean, Western Europe, and Afro-Latin American.
Africana Studies	AFRS 2215. Black Families in the US	Critical and comprehensive examination of the life of African American families in the United States including the historical evolution of black families and their relationship with the political-economic structures of American society.
Africana Studies	AFRS 3050. Topics in Africana Studies: Environmental Justice Race and Ethnicity	People of color have often been left out of the Eurocentric environmental narrative. This course will examine key concepts and frameworks from several theoretical perspectives in order to understand and explain the interconnectedness of racialization, representation, identity and their consequent impacts on Black Americans' environmental engagement.
Africana Studies	AFRS 3050. Topics in Africana Studies: Social Justice Movements in the African Diaspora	Study of social movements as collective human behavior that is sustained and intentional in efforts to affect social change, typically from outside of established institutional channels. Understanding the dynamics of social movements. Apply theoretical concepts to a range of social movements that span geography, time, or social context. These include: enslaved people's rebellions, early 20th century radicalism, struggles against colonialism, the U.S. Civil Rights Movement, the Black Power Movement, and recent post-globalization movements. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Africana Studies	AFRS 3050. Topics in Africana Studies: Race and Education	The role education and policy plays in educational inequality while examining the challenges of educating African Americans. Topics include: conceptual approaches to education; historical and contemporary overview of education for African Americans; impact of race and discrimination; analysis of existing curricula; and suggested models for a multi-racial and multi-cultural education.
Africana Studies	AFRS 3218. Racial Violence, Colonial Times to Present.	Examines the ways in which African Americans and Whites used violence both as part of struggles for liberation and freedom as well as repression from the colonial period to the present in the United States. Focuses on the broader processes of social, political, and cultural change and at efforts to build cooperation.
Africana Studies	AFRS 3260. Slavery, Racism, and Colonialism in the African Diaspora.	Explore how race and racism, slavery, and colonialism served as principal institutions and constructs shaping the experience between Africa and the emerging African Diaspora in the New World. Students will consider how the maintenance of Western social, economic, and political superiority materialized as functions of these three important historical developments.
Africana Studies	AFRS 3265. African Economic Development.	Focus on economic theories, planning, production, and resource allocation strategies, capital formation, foreign aid, and multinational corporations in Africa. Examining the domestic and external impediments to growth and development, the course suggests drastic measures as well as policy options necessary for achieving sustainable growth and development in the continent.
Africana Studies	AFRS 3270. Afro-Latin American History	Explores the African Diaspora in Latin America. From slavery, to fighting for freedom in the Spanish-American Wars of Independence, to forging new notions of citizenship in twentieth century Brazil, African-descended peoples have an important place in Latin America's historical past. According special attention to regions with concentrated populations of African-descended peoples, this course reveals the vibrant history of Afro-Latin America. (Course modified by faculty in Sustainability in the Curriculum Workshop)

Africana Studies	AFRS 3278. Race in the History of Brazil	Examining the history of Brazil since Portuguese colonization, this course focuses on questions of race and identity, construction of a slave society, abolition, negotiation of freedom for slaves, and debates around national identity. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Africana Studies	AFRS 4100. African Diaspora Theory	Explores the diverse conceptual and theoretical perspectives in the African Diaspora Studies, with emphasis on the dialectical relationships between social theories and the African Diaspora, especially as these relate to the issues of race, identity, gender, migrations, cultural production, and transnationalism.
Interdisciplinary Studies	AMST 3000. Seminar in AMST: Social Activism in American Culture	Examines the history of protest movements as forces of change in modern American society from the late nineteenth century to the present. We will look at the ideological, political, cultural, and socio-economic origins of selected movements, and explore the movements' origins, rationale, ideas, tactics, and their successes or failures. Topics include: anti-war protest movements, civil rights, the South's protests against civil rights, the women's movement, the gay rights movement, the anti-nuclear movement, the Tea Party, and the Occupy (Wall Street) Movement.
Interdisciplinary Studies	AMST 3000. Seminar in AMST: Food in America	Study the changing dynamic of food as it connects Americans through our rituals with family and friends, through media and advertising, and through our personal behaviors and relationship with food. Other topics include: critical perspectives on gender and food, modified foods, fad diets, and the influence of the fast food industry on individuals and the nation. (Also offered as AMST 3020, or with the subtitle "Southern Foodways").
Interdisciplinary Studies	AMST 3000. Seminar in AMST: America in the Atomic Age	On July 16, 1945, the world was forever changed when the first atomic bomb blast took place in the New Mexico desert. Examine the various effects on American life and culture, including how people learned to cope with the potential destruction posed by the bomb, the secrecy surrounding its development and use, the Cold War, the Space Race, the spin-off stories about alien existence and extraterrestrial visits, and popular films. Discuss key scientists, atomic testing, the use of nuclear energy and medicine, and concerns about the impact of nuclear energy on the environment and humankind. (Also offered as AMST 3020)
Interdisciplinary Studies	AMST 3020. Seminar in American Studies: Know Justice, Know Peace	Explores the tangling of the color line in America from a political and cultural perspective. Analysis of the strategies and tactics activists and community leaders have employed in their assault on disfranchisement and institutional racism. Assess the tensions that emerged between a civil rights movement based on the principle of integration and a black liberation movement which emphasized self-determination and inspired cultural separation. Examine the sanitizing of the black freedom struggle for mainstream consumption and the forging of a new movement culture emboldened by a boy in a hoodie.
Interdisciplinary Studies	AMST 3050. Topics in AMST: Modern American West; American Utopian Fiction	Modern American West: history from 1800 to the present with major themes on conquest, regionalism, environmental change, race and ethnic diversity, economic and political developments, social and cultural trends, and gender and labor relations.
Interdisciplinary Studies	AMST 3100. Intro to American Studies: The 1960s	Challenges to authority, the status quo, and the traditional institutions that had previously defined American life, as the conservative conformity of the 1950's gave way to an increasingly direct and hostile questioning of the American Dream. Topics include the black civil rights movement, feminism, Vietnam War, environmentalism, social justice, youth-based counterculture, and expanding one's consciousness' through drug use.
Anthropology	ANTH 1101. Introduction to Anthropology	Biological and cultural evolution; archaeology; language and culture; comparative study of human social institutions such as kinship, subsistence patterns, religion, politics; methods and theories. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Anthropology	ANTH 2125 Urban Anthropology	Cross-cultural analysis of urban life; rise of early cities; rural-urban differences; migration; ethnicity, urban poverty; effects of urban life on kinship systems; modernization. (Course modified by faculty in Sustainability in the Curriculum Workshop)

Anthropology	ANTH 2131. Introduction to Peace, Conflict, and Identity Studies	Asks what identity is and why it matters in people's lives. Offers a cross-cultural examination of the role of different forms of identity including race, ethnicity, gender, nationalism, and class in causing and resolving conflicts. Case studies from different parts of the world are explored.
Anthropology	ANTH 2141. Introduction to Biological Anthropology	Focuses on the biological diversity among humans and other closely related species, both living and extinct. This course will cover evolution and genetics, primate behavior and ecology, and human evolution. Recognize that humans are a product of both biological and cultural processes. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Anthropology	ANTH 3112 Globalization and Culture	Explores the relationship between processes of globalization and cultural change, considering the breakdown of the connection between lived cultural experience and territorial location. Of special interest are issues of cultural homogenization, cultural hybridization, and emergent cultural identities brought about by the flows of people, ideas, and objects in the contemporary world.
Anthropology	ANTH 3117. Narratives and Conflicts	Focuses on the role these stories play in the historical development of conflicts and the effects they have on efforts to resolve them. Focuses on the role of narratives in the Israeli-Palestinian conflict, Northern Ireland, Bosnia, and South Africa.
Anthropology	ANTH 3135. Origins of Globalization	Analysis of European colonial expansion from the 16th through the 19th centuries, emphasizing the creation of the first global systems of political, economic, and cultural interaction that form the foundation of modern globalization. Using a cross-cultural approach, the course explores the competition and conflict among the great powers and the effects of conquest and colonialism on the indigenous peoples of Africa, Asia, and the Americas.
Anthropology	ANTH 3136. Globalization and Resistance	A cross-cultural analysis of changing patterns of resistance by indigenous peoples to the political, cultural and economic effects of globalization from the colonial period to the present. Using case studies from the Americas, Africa, and Asia, the course examines a variety of indigenous resistance strategies and movements and the socio-political dynamics that have driven them and impacted on their effectiveness.
Anthropology	ANTH 3154 European Prehistory	Prehistory of Europe; Paleolithic, Neolithic, Bronze Age, Iron Age; archaeological methods and theory; ecology and social systems of early European cultures.
Anthropology	ANTH 3157 South American Prehistory	Archaeology of the indigenous cultures in South America from the earliest settlement until the arrival of the Spanish, including Moche, Nasca, and Inca; focus on the Central Andean region including Peru, Bolivia, Chile, and Ecuador; examination of the origins of agriculture, interactions of people and the environment, rise and collapse of states and empires, and the role of religion and warfare in ancient societies.
Anthropology	ANTH 3222 Culture, Health and Disease	Relationship between cultural beliefs and practices and patterns of health and illness in human populations; role of disease in ecology and epidemiology, nutrition, cultural systems of healing, roles of patient and healer, culture and emotional states, role of religion, and magic in healing.
Anthropology	ANTH 4040. Topics in Biological Anthropology: Primates in Peril	Almost 40% of the Earth's species are facing extinction, mostly due to human activities. Explore the fundamental challenges hindering global success of the biodiversity conservation movement with particular attention on nonhuman primates. Students will be introduced to a variety of theoretical approaches from anthropology, ecology, risk management, social justice, and political ecology. Crosslisted as BIOL 4000.
Anthropology	ANTH 4040. Topics in Biological Anthropology: Human-Animal Disease Transfer	Examine the processes that are involved in human-animal disease transfer with particular attention paid to the complex ways in which culture and health articulate to further the spread of these diseases both today and in our human past. We will also incorporate lessons learned from medical anthropology and applied anthropology to conceptualize realistic, structurally-informed solutions that can serve to lessen the spread of these diseases or help find ways to cope with the aftermath. Crosslisted as BIOL 4000.

Anthropology	ANTH 4140. Field Biology of the Primates	The theory and methods utilized in the study of nonhuman primate behavior. This applied behavioral primatology course entails original research projects done at an appropriate venue. Goals include understanding the differences between a research/breeding site and a sanctuary.
Architecture	ARCH 4050. Architecture Elective - Topics: Good Fast Cheap	Concentrated, in-depth study of selected topic. Topics vary according to faculty expertise and often include contemporary theoretical, social, technological, and design issues. This offering studied relationships between designing and building by challenging how project delivery methods can expand innovative possibilities for collaborative design authorship and spatial affects. The final project focused on affordable housing.
Architecture	ARCH 4050. Architecture Elective - Topics: Equity and Social Justice in Architecture	Concentrated, in-depth study of selected topic. Topics vary according to faculty expertise and often include contemporary theoretical, social, technological, and design issues. This offering focused on economics, social forces, attitudes about density, ideas about sustainability, and incentives to encourage good design as forces that affect contemporary urban form. The class studied how local, state and national policies combined to create Charlotte's urban form, and how race was a fundamental contributor.
Architecture	ARCH 4101. Architectural Design Studio VII: Advanced Building Design	This studio conducts an integrated building design project that synthesizes all six themes and many of the graphic methods of the core program. Students interrogate a complex program on a complex urban site through the use of advanced computation methods, including Building Information Modeling.
Architecture	ARCH 4202. Architectural History II: 1750-Present	Global survey of architecture and urbanism from 1750 to the present. Explores key architectural and urban ideas, designers, buildings, and urban projects as well as how they were shaped by their environmental, political, economic, technological, and cultural context.
Architecture	ARCH 4206. Professional Practice	Learning objectives include an understanding of the practice of architecture today, its responsibilities and procedures, and emerging alternative forms of practice and roles of the architect. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Architecture	ARCH 4605. Computational Practice	Capstone course for digital and computational studies in the 5th-Year program. The objectives of the course are to provide the use of advanced digital tools, digital fabrication, advanced visualization techniques, scripting, as well as parametric and building information modeling tools. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Biological Sciences	BIOL 2130 General Biology II	Ecology, evolution, biodiversity, plant and animal structure and function. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Biological Sciences	BIOL 2140L General Biology Laboratory	Population ecology, evolution, phylogenetics, invertebrate biology, animal and plant physiology. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Biological Sciences	BIOL 3144 Ecology	Interrelationships of organisms and their environment. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Biological Sciences	BIOL 3144L Ecology Laboratory	Interrelationships of organisms and their environment. Topics include measuring biodiversity indices, environmental sampling, habitat description, and study design. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Biological Sciences	BIOL 3229 Field Botany	A field course stressing identification, classification and habitat of the vascular plants, particularly of the Piedmont, but also including the Coastal Plain and the mountains of North Carolina. Topics include impact of climate change on plant communities.
Biological Sciences	BIOL 3234 Field Entomology	A field course stressing identification and ecology of insects of the Piedmont of North Carolina.
Biological Sciences	BIOL 3235. The Biology of Insects.	The anatomy, physiology, development, behavior, ecology, and medical and economic importance of insects.
Biological Sciences	BIOL 3236 General Zoology	The morphology, function, development, phylogeny, and ecology of the principal invertebrate and vertebrate types.

Biological Sciences	BIOL 3244. Field Ecology	Employ common field methods to explore native flora and fauna. Field exercises offer a variety of sampling techniques, designs, and protocols to identify and study local plants and animals. Become familiar with most major flora, fauna, and fungi that are native to North Carolina. Campus activities include forest surveys, tracking species to measure urbanization effects, and participate in Earth Month activities.
Biological Sciences	BIOL 4000. Topics in Biology: Primates in Peril	Almost 40% of the Earth's species are facing extinction, mostly due to human activities. Explore the fundamental challenges hindering global success of the biodiversity conservation movement with particular attention on nonhuman primates. Students will be introduced to a variety of theoretical approaches from anthropology, ecology, risk management, social justice, and political ecology. Crosslisted as ANTH 4040.
Biological Sciences	BIOL 4000. Topics in Biology: Environmental Biology	Every organism lives in a dynamic environment, many of which are now impacted by humans. Explore concepts of biodiversity, conservation management, toxicology, epigenetics, and adaptation. Use of new technologies to understand these organism-environment interactions.
Biological Sciences	BIOL 4000. Topics in Biology: Marine Ecology	A study of the factors that influence the abundance, distribution, and diversity of organisms in different marine ecosystems. Factors include abiotic (non-living physical and chemical factors that affect the ability of organisms to survive and reproduce), biotic (living things or the materials that directly or indirectly affect an organism in its environment), and anthropogenic (human origin), which are becoming increasingly more pervasive.
Biological Sciences	BIOL 4000. Topics in Biology: Human-Animal Disease Transfer	Examine the processes that are involved in human-animal disease transfer with particular attention paid to the complex ways in which culture and health articulate to further the spread of these diseases both today and in our human past. We will also incorporate lessons learned from medical anthropology and applied anthropology to conceptualize realistic, structurally-informed solutions that can serve to lessen the spread of these diseases or help find ways to cope with the aftermath. Crosslisted as ANTH 4040.
Biological Sciences	BIOL 4242. The Biology of Birds	Overview of general avian biology, including taxonomy and anatomy, but concentrating on behavior, ecology, and conservation of birds. Focus on birds of the southeastern U.S.
Biological Sciences	BIOL 4244. Conservation Biology	Conservation biology is an integrative field of research and management aimed at understanding and preserving biological diversity. This course will explore a suite of inter-related topics including conservation values, extinction rates, genetic diversity, demography, habitat fragmentation, reserve management, and ecological restoration. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Biological Sciences	BIOL 4258. Epidemics and Plagues	A study of the history, modeling, epidemiology, environmental, and behavioral changes that contributed to the development of selected epidemics and plagues which have dramatically affected plants, agricultural animals, and humans. Hybrid course with class meetings and online assignments.
Business	BUSN 1101 Introduction to Business and Professional Development	Fundamentals of business, including accounting, business analytics, economics, finance, international business, management, management information systems, marketing, and operations and supply chain management. Topics include: cultural awareness, business ethics and corporate social responsibility; valuing diversity equity and inclusion; and consumer behavior.
Interdisciplinary Studies	CAP1 2100. Introduction to Capitalism Studies	Overview of the history and development of capitalism, since its rise and proliferation across the globe, with special attention to the last 300 years. Explore how and why capitalism changed during these centuries and the impacts of these changes on global society. Exploring historical change, but students will be introduced to some of the key analytic tools used in economics and other social sciences. Students in the course will develop a richer understanding of the complex web of causal forces that link the economy, society, and culture.

Civil & Envir. Engineering	CEGR 2154 Design Project Lab	Problem definition, evaluation of design alternatives, design concepts, conceptual design. Topics include: Greenhouse Gas Emissions and Climate Change; Energy Use; Campus Emissions. Outcomes include: ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
Civil & Envir. Engineering	CEGR 3141 Intro. To Environmental Engineering	Environmental engineering concepts, including stream pollution analysis, water and wastewater treatment processes; solid and hazardous waste management practices; pollution problems and controls; mass balance analyses, and review of pertinent legislation.
Civil & Envir. Engineering	CEGR 3143. Hydraulics and Hydrology	Understanding of fluid mechanics as it applies to the environment and to civil engineering works: fluid properties, pressure, closed-conduit flow, pipe network, pumps, open channel flow, weirs, orifices, flumes; precipitation, runoff, groundwater flow, stream flow, flow measurement. Outcomes include: ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
Civil & Envir. Engineering	CEGR 3153. Transportation Laboratory	Design of transportation systems, including highways, airports, pipelines, and mass transit; route layout, geometric design and earthwork calculations; computer-aided system simulation and evaluation. Outcomes include: ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
Civil & Envir. Engineering	CEGR 3155 Environmental Laboratory	Laboratory problems in environmental engineering. Emphasis on analysis and presentation of results as well as on the significance of results as they affect theory and/or practice. Technical report writing and evaluation of different forms of written communication.
Civil & Envir. Engineering	CEGR 3161 Transportation Engineering I	Analysis of transportation facilities; planning, location, economic considerations, safety analysis, and Intelligent Transportation components, with special emphasis on land transportation. Topics include: Environmental Impacts (local and system-wide; Transit Operations; Transportation Demand Analysis; Transportation Planning; Rational and Political Issues.
Civil & Envir. Engineering	CEGR 3201 - Systems and Design	Systems engineering techniques applied to civil engineering problems emphasizing methodological considerations, evaluating alternatives and developing engineering plans carried out by small groups of students. Discuss issues regarding sustainability, ethics, and professional responsibility. Incorporate aspects of sustainability in their design.
Civil & Envir. Engineering	CEGR 3202 - Systems and Design II	Creatively investigate the produce alternative solutions for a comprehensive engineering project resulting in written and verbal class presentations. Outcomes include: ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
Civil & Envir. Engineering	CEGR 3233 Land Development Engineering Studio	Conduct and prepare a site analysis to determine the best use for raw land. Site analysis includes determination of infrastructure constraints, understanding government regulations and how they apply to the development of the site and preparing a conceptual plan for cost determination and feasibility. Apply site constraints to achieve sustainable site designs.
Civil & Envir. Engineering	CEGR 3235 Land Development Engineering - Advanced Site Analysis	Site assessment of land to determine infrastructure needs. Design cost effective infrastructure for residential and commercial developments. Analyze government regulations to determine site design criteria. Prepare a design for each of the major infrastructure components (roads, stormwater, sanitary sewer and water). Goals include: understand environmental and sustainable design concepts.
Civil & Envir. Engineering	CEGR 4142 Water Treatment Engineering	Analysis and design of water and wastewater treatment processes including physical, chemical and biological treatment. Computer-aided design of treatment systems. Topics include regulations, pollution control, and cost and energy use.

Civil & Envir. Engineering	CEGR 4145 Groundwater Resource Engineering	Overview of hydrological cycle and principles of saturated and unsaturated subsurface flow. Aquifer types and well hydraulics. Field methods for evaluating hydraulic conductivity. Introduction to contaminant fate and transport. Applications of groundwater modeling.
Civil & Envir. Engineering	CEGR 4147 Stormwater Management	Introduction to the impacts and water quality parameters due to urbanization. Develop a numerical model to analyze water stormwater impacts and evaluate different mitigation methods. Understand and utilize the guiding principles of low impact design (LID) and evaluate the available management practices. Topics include: Urban Sprawl; Smart Growth; Water Quality Parameters; Vegetative Control Methods; and Wetlands.
Civil & Envir. Engineering	CEGR 4242. Wastewater Treatment Design	Analysis and design of wastewater treatment processes. Regulatory requirements, water quality testing, pretreatment, primary treatment, biological processes, nutrient removal, disinfection and tertiary/advanced processes. Outcomes include: ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
Civil & Envir. Engineering	CEGR 4264. Landfill Design and Site Remediation	Principles and regulations pertaining to waste disposal and municipal solid waste landfill siting, design, construction, and operation. Specific focus on design and construction of composite liner, mass flux analysis, and design and operation of leachate and gas collection systems. Outcomes include: ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
Special Ed & Child Development	CHFD 3115. An Ecological Approach to Learning and Development - Early Childhood to PreAdolescence.	Examines learning and development in the context of the child's physical and social environments, including home, neighborhoods, schools, communities, national policies and global influences. Specific attention to the approaches to learning, emotional/social, health/physical, cognitive, and language/communication domains and theories in a multicultural context.
Criminal Justice & Criminology	CJUS 4363. Gender, Race, and Justice.	Examines how racial background, femininities, and masculinities might intersect to influence participants in the criminal justice system. Topics include: perceptions of race for offending and victimization, the notion of gender and offending, women and men as victims of violence and as professionals within the criminal justice system.
Liberal Arts & Sciences	CLAS 3000. Topics in Arts and Sciences: Entrepreneurship and Social Justice	Immersive interrogation of the student as an individual leader and change agent, social and economic value systems, competencies relating to real-world execution of strategies, and of the means by which the student might build a socially responsible identity. The course derives inspiration from historical inquiry into the broad issues of entrepreneurship and social justice.
Liberal Arts & Sciences	CLAS 3000. Topics in Arts and Sciences: Social Justice in Sports	Examines issues related to social justice in sports, including the influence of gender, economics, and geography within sports organizations. The global footprint of sport will be studied and sports leadership principles will be applied to discover how sport can have a positive impact on society and various cultures. Investigation of sport as a vehicle for social justice and worldwide change.
Engineering Technology & Construction Management	CMET 3224. Construction Project Administration	A study of the project management processes used in the design and construction of civil engineering projects. Topics include: the roles and responsibilities of project participants, project delivery methods, engineering and construction contracts, project control and documentation, and dispute resolution mechanisms. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Engineering Technology & Construction Management	CMET 4073. Spec Topics- Construction Mgmt: Stormwater Management Systems	Topics include: stormwater runoff quantity and quality and their impacts on receiving water systems; stormwater runoff flow, volumes, pollutant loads and pollutant concentrations; stormwater best management practices, control structures and conveyance systems for construction sites; emerging challenges and methodologies in stormwater management; regulations and permitting. (Course modified by faculty in Sustainability in the Curriculum Workshop)

Engineering Technology & Construction Management	CMET 4126. Project Scheduling & Control	Methods for planning, scheduling, and controlling construction projects, emphasizing manual and computer based techniques for critical path method scheduling, resource management, construction cost control, and reporting practices. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Communication Studies	COMM 2100. Intro to Communication Theory	Introduces students to traditional and contemporary theories about human communication processes including the nature of theory building, and major theoretical developments within the field of communication. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Communication Studies	COMM 2105. Small Group Communication	Principles of discussion and deliberation in small groups. Practice in organizing, leading, and participating in various forms of group communication. Emphasis on problem solving and group management. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Communication Studies	COMM 2146. Public Relations Ethics	Explores strategies for creating and maintaining an ethical organizational culture and models for determining the ethicality of various public relations actions. Students learn how to articulate persuasive arguments for ethical public relations decisions, as well as understanding laws pertaining to unethical public relations practices. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Communication Studies	COMM 3050. Topics in Comm Studies: Environmental Justice Race and Ethnicity	People of color have often been left out of the Eurocentric environmental narrative. This course will examine key concepts and frameworks from several theoretical perspectives in order to understand and explain the interconnectedness of racialization, representation, identity and their consequent impacts on Black Americans' environmental engagement.
Communication Studies	COMM 3055. Topics in Public Relations: Personal Branding and Professional Social Media Management	Students will develop their personal brand online and learn about professional social media management by creating a social media policy for employees on behalf of an organization of their choice and by participating in a simulation that involves content creation, content scheduling, and budget management. Students will also demonstrate knowledge of ethical and legal considerations regarding social media. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Communication Studies	COMM 3115: Health Communication	Introduction to human communication in a healthcare context. Issues of social support, patient-health professional/caregiver interaction, organizational culture, planning health promotion campaigns, and cultural conceptions of health and illness. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Communication Studies	COMM 3245: Public Relations Writing	Develop the professional-level writing skills expected of entry-level public relations practitioners. Extensive writing exercises in preparing plans, releases, newsletters, brochures, web pages, media kits and other public relations products. Individual and group projects required. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Communication Studies	COMM 3246: Public Relations Strategy	Focus on the planning, problem-solving, and management skills required in the contemporary practice of public relations. Analyze a variety of public relations models and learn to develop problem statements, goals, objectives and tactics, identify and research target publics, and evaluate strategic program results. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Communication Studies	COMM 4145 Communication Campaigns	Lectures, workshops, and guest speakers provide knowledge to enable students to research, design, implement, and complete public relations projects for community-based, not-for-profit organizations. The course is structured and run in a manner similar to a professional public relations agency with students assuming appropriate agency roles. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Middle, Secondary, & K-12 Education	CUYC 3600. Community Engagement Capstone Seminar	Culminating and comprehensive experience for students in the Minor in Urban Youth and Communities. Students synthesize the interdisciplinary theory and experiential learning around urban youth and education, communities, and social justice into a comprehensive community and school-based project lead by the student using practices of participatory action research.

Electrical & Computer Engineering	ECGR 4171 Introduction to Energy Systems	Overview of energy systems: energy types, generation, conversion, storage, transportation/transmission, and utilization. Principles, physical structure, processes, and utilization of fossil fuel, nuclear, and renewables for transportation, thermal, and electrical energy generation are discussed along with associated performance metrics. Topics include: environmental impacts of energy production, life-cycle analysis, energy efficiency, smart grid technologies, and federal and state regulations.
Economics	ECON 1101 Economics of Social Issues	Economic issues without emphasis on theoretical models. Contemporary economic issues such as pollution control, healthcare, unemployment, and crime are studied.
Economics	ECON 2102 Principles of Economics-Micro+	Pricing mechanism of a market economy, the industrial organization of the U.S. economy, problems of economic concentration, the theory of income distribution, and comparative economic systems. Understanding of how individual decisions by households and firms are made and the impact of these decisions on the allocation of scarce resources. Topics include: externalities; cost-benefit analysis; consumer choice; legal, regulatory and environmental issues.
Economics	ECON 3090. Topics in Economics: Energy Economics	Economic issues without emphasis on theoretical models. Contemporary economic issues such as pollution control, healthcare, unemployment, and crime are studied. This offering covered: fossil, nuclear, and renewable energy sources; regulation versus competitive restructuring; and using energy resources efficiently to achieve society's goals.
Economics	ECON 3125 Managerial Economics	Economic decisions of particular interest to business firms (e.g., demand theory and forecasting; cost analysis, and pricing policies). (Course modified by faculty in Sustainability in the Curriculum Workshop)
Economics	ECON 4150 Urban and Regional Economics	Spatial and economic organization of cities and regional areas and their special economic problems. Topics include: economic growth, urban location and land use, poverty, housing, public finance, and urban transportation.
Economics	ECON 4200 Senior Seminar	Integrative capstone course for the Economics major. Review and solidify understanding of economic concepts by applying those concepts to specific economic issues. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Reading & Elementary Education	ELED 3223. Teaching Social Studies and Diversity	Instructional methods for teaching and integrating social studies, economics, history, civics, geography, and diversity in elementary schools. Focuses on problem-solving, critical thinking, and democratic citizenship with strategies for valuing people with differences in learning styles, race, class, culture, gender, and disability.
Reading & Elementary Education	ELED 3292. Theories and Practice for Equity in Urban Education.	Examines ideological, cultural, and systemic structural inequities in various educational settings, including urban education. Focuses on educational theories and practices that promote equity and social change. Also explores socioeconomic class, race, religion, language, and gender, and personal identity.
Engineering Technology & Construction Management	ENER 4140 Energy Management	Study of the understanding and implementation of energy management techniques. Emphasis is on energy efficiency applications in homes, businesses, large buildings and industry. Topics include: energy auditing, energy management, energy cost analysis, energy & electric rate structures, lighting, HVAC systems, motors & drivers, boilers and steam systems, cogeneration, commercial and industrial applications and alternative energy sources.
Engineering Technology & Construction Management	ENER 4250 Analysis of Renewable Energy Systems	System analysis of renewable energy systems: well-to-wheels analysis, lifecycle energy and emissions, total cost, skill sets, methodologies and tool kits needed to analyze various technologies on a consistent basis for a given application. Solar photovoltaics, wind energy, and fuel cell technologies will be covered. Topics include: lifecycle energy and emissions analysis, economics of energy systems and total cost analysis.
Engineering Technology & Construction Management	ENER 4275. Air Conditioning Systems	Functions and operating characteristics of the major components of refrigerating machines, heat pumps, boilers, furnaces, solar collectors, heat exchangers, fans and pumps. Emphasis on sizing, economics and performance characteristics. Topics include: indoor air quality and thermal comfort; safe and environmentally sound methods.

English	ENGL 3212 British Renaissance Literature	Much like we are today, early modern men and women in England bore witness to considerable changes in its physical landscape, shifts in population from rural to urban areas, rapid colonial expansion, and uncertainty about its somewhat unpredictable climate and recurring outbreaks of disease. Early modern men and women writers tried to make sense of a precarious existence in a world where drought, plague, deforestation, and a medical system based largely in private households led them to imagine alternative worlds as well as alternative ways to live in the worlds they inhabited. Explore the how anxieties about topics such as these were reflected in late 16th and 17th century English literature, how these texts were shaped by shifting notions of the relationship between humans and the nonhuman world, and how that relationship was inflected by gender.
English	ENGL 3213. British Literature of the Restoration and 18th Century	The eighteenth century witnessed extraordinary developments in a wide range of fields, including natural science, medicine, and philosophy. At the same time, literature flourished, in great part the result of increasing literacy rates and advancements in printing technologies. Read a variety of genres, from plays and the novel to poetry and nonfiction essays to help us see British culture grappling with modernity, transitioning from old structures into new networks. (Course modified by faculty in Sustainability in the Curriculum Workshop)
English	ENGL 3217 Modern British Literature	Combine the study of general historical movements such as modernism, postmodernism, and contemporary literature with the examination of particular aspects related to imperialism and postcolonialism, gender multiculturalism, Britishness, globalization, violence, and the environment.
English	ENGL 4072. Topics in Literature & Film: Global Cinema	Examine a series of global issues as represented, narrated, and critiqued in contemporary films. Amongst others, we will discuss transnational immigration, industrialization and mass urbanization, warfare, and the destruction of the environment at the planetary scale. Crosslisted as INTL 3000.
English	ENGL 4072. Topics in Literature & Film: Romanticism and the Environment	We will consider how various Romantic period writers made an appeal to a direct experience of and attention to the natural world as central to the development of moral being and therefore a more egalitarian society. We will also examine how this appeal was made during an era of the global expansion of British empire and the rapid growth of industrial methods of labor and production. These developments are at the root of our current globalized world, as well as our current ecological crises, and a critical examination of literature from this period will give us insight into the Romantic period as well as into some of the global challenges we face today.
English	ENGL 4102: British Children's Literature	Survey of British children's literature. Includes: fairy tales; educational tracts; poetry of William Blake, Christina Rossetti, and Robert Louis Stevenson; the novel, such texts as Alice's Adventures in Wonderland, Charlie and the Chocolate Factory, and Harry Potter and the Sorcerer's Stone. (Course modified by faculty in Sustainability in the Curriculum Workshop)
English	ENGL 4112 Modern World Literature	Investigates a series of 20th- and 21st-century works with the objective of studying some of the most important questions at the center of the discipline of world literature: universal values, the dissemination of ideas across borders, the relationship between national literary traditions, translation, and cosmopolitanism. At the same time, it offers the opportunity to explore some of the most salient issues that define the contemporary global moment. Topics include: colonialism, migration, violence, globalization, and the environment. (Course modified by faculty in Sustainability in the Curriculum Workshop)
English	ENGL 4412 Modern World Literature	Investigates 20th- and 21st-century works with the objective of studying some of the most important questions at the center of the discipline of world literature: universal values, the dissemination of ideas across borders, the relationship between national literary traditions, translation, and cosmopolitanism. Topics include colonialism, migration, violence, globalization, and the environment. (Course modified by faculty in Sustainability in the Curriculum Workshop)

	ENGR 1201 Introduction to Engineering Practices and Principles I	An introduction to the different disciplines within engineering; the college's computing system; academic, personal and professional development; teamwork; project planning; engineering design; engineering calculations; and oral and written communication skills within a multi-disciplinary format. Outcomes include an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
Geography & Earth Sciences	ESCI 1101. Earth Sciences-Geography	Basic geographical principles and processes in physical geography and the earth sciences: geographic locational methods, earth-sun relationships, earth radiation balance, atmospheric temperature and pressure, interpretation and simple forecasting of weather from mapped data, interpretation of soil-moisture and evapo-transpiration balances, soil, climate systems, and biomes. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Geography & Earth Sciences	ESCI 1101L. Earth Sciences-Geography Laboratory	Experimental study and investigation of the basic principles and processes in physical geography and the earth sciences; geographic locational methods, earth-sun relationships, earth radiation balance, atmospheric temperature and pressure, interpretation and simple forecasting of weather from mapped data, interpretation of soil-moisture and evapotranspiration balances, soil, climate systems and biomes.
Geography & Earth Sciences	ESCI 2010. National Parks: Science Behind the Scenery	A discussion of the geological, environmental, and policy aspects of America's national parks, which preserve some of the finest landscapes and scenic beauty in the world. Students learn about the geological processes that created the landscapes in Yellowstone, Yosemite, and the Grand Canyon, as well as many other parks and monuments. The role the parks play as protectors of endangered species, habitats, and undeveloped lands are also discussed.
Geography & Earth Sciences	ESCI 2210. Field Methods in the Earth and Environmental Sciences	Field techniques used in studies of earth and environmental sciences. Skills related to the collection and presentation of scientific data emphasized. Topics include assessment of aquatic resources, groundwater, soils, forests, and climate. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Geography & Earth Sciences	ESCI 3000. Topics in Earth Sciences: Plant Geography	Explores the spatial and temporal distribution and variety of plant life on earth. Distribution patterns may reflect former geologic or climatic conditions, as well as modern interactions between organisms and their environment. Fossils provide valuable information on the past ranges of plants including paleoecological information that may help explain changing vegetation patterns. Because very few biological communities escape the effects of human activities, the role humans have played in the ecology and distribution of terrestrial plants will be a focus of the course. Current issues of biological diversity will also be explored.
Geography & Earth Sciences	ESCI 3150. Natural Environments of North America	Regional geomorphology and ecology of North America with emphasis on development, maintenance, and interaction of the geomorphic and ecological provinces.
Geography & Earth Sciences	ESCI 3190. Biogeography	The patterns of life across the Earth and the causes of those patterns, with an emphasis on ecological patterns and historical patterns of biodiversity. The origin of the Earth's biological diversity and methods for conserving that biodiversity.
Geography & Earth Sciences	ESCI 3205 Water Resources	The distribution of fresh water and its relevance to society and ecosystems. Fundamentals of the science of water, human use and influence on water, and issues of water management, policy, and law.
Geography & Earth Sciences	ESCI 4000 Topics in Earth Sciences: Freshwater Ecosystems	Only 3% of Earth's water is freshwater and of this water, approximately 0.3% is found in surface waters such as lakes, rivers, and streams. This water however, is of critical importance as sources of drinking water, irrigation, and home to a diversity of freshwater organisms. Learn and understand basic concepts and approaches in freshwater ecology. Understand how environmental variability influences these concepts across spatial scales. Understand and incorporate how humans influence patterns and processes in freshwater ecosystems.
Geography & Earth Sciences	ESCI 4140 Hydrologic Processes	Examines the movement and storage of water and energy in its various phases. Topics include: reservoirs and fluxes of water and energy at the planetary scale; the Hydrologic Cycle; climate system; analytic and field skills required by today's environmental science profession.

Geography & Earth Sciences	ESCI 4146 The Business of Ecological Restoration	The science, business, and implementation of ecological restoration projects. Topics include: the basics of stream and wetland regulations, restoration, funding, design, construction, and long-term land conservation.
Geography & Earth Sciences	ESCI 4155 Fluvial Processes	Hydrologic and geomorphic study of the transport of water and earth materials within stream systems. Topics include: erosion, mass wasting, open channel flow, sediment transport, flooding, stream channel morphology, morphometry of drainage basins, watershed systems, effects of land use change, restoration of fluvial systems, watershed management decisions.
Geography & Earth Sciences	ESCI 4201 Hydroclimatology	Exploration of the climatic, meteorological, and geographic processes that determine water availability for human use and vegetation growth across Earth's ecosystems. Precipitation in tropical and extratropical weather systems; climate and land-surface factors that drive runoff, evaporation and photosynthesis; effects of long-term climate and CO2 changes.
Geography & Earth Sciences	ESCI 4222 Watershed Science	Examinations of the cycling of water and chemical elements in natural and perturbed watersheds with emphasis on linkages between the hydrologic and biogeochemical processes which control runoff water quality. Topics include: runoff processes, evapo-transpiration, nutrient export and stream, riparian and hyporheic zone hydrochemical dynamics.
Engineering Technology & Construction Management	ETCE 2221 Construction Means and Methods	Study of the construction means, methods, and equipment used to develop a civil engineering design into a completed structure or system. Topics include: characteristics, capabilities, and limitations of crews and equipment; selection of individual resources and systems; and analysis based on economics and performance. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Engineering Technology & Construction Management	ETCE 2410 Intro to Environmental Engineering Technology	Provides an overview of the environmental field, including laws and regulations, water quality, hydraulic and hydrologic fundamentals, water and wastewater treatment, groundwater contamination, and solid waste management.
Engineering Technology & Construction Management	ETCE 3242. Hydraulics & Hydrology	A study of the fundamental principles of hydraulics and their application in engineering practice, including the fundamentals of fluid flow through orifices, tubes and pipes, in open channels, and over weirs, pump design, network analysis, and modeling. Topics include: The Hydrologic Cycle; Surface Runoff and Rainfall; Storm Water Management.
Engineering Technology & Construction Management	ETCE 3271 Building Systems	Basic theory and practical application of heating, ventilation, air conditioning, plumbing and electrical systems in construction. Study of National Fire and Plumbing Codes. Topics include: renewable energy systems; thermal comfort; sustainable building solutions.
Engineering Technology & Construction Management	ETFS 3113. Fire Safety in the Built Environment.	Describes how an acceptable level of fire safety and resilience can be obtained during the design stage of a structure, and maintained during the service life of the structure through the enforcement of fire safety regulations. Topics include: fire safety strategies, regulations and their enforcement, egress design and maintenance, passive and active fire protection systems, hazardous materials and facilities, and the performance-based approaches to fire safety. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Engineering Technology & Construction Management	ETFS 4123 Community Threat Assessment and Mitigation	Focuses on the emergency service's responsibility while conducting major operations involving multi-alarm units, and natural and man-made disasters that may require interagency or jurisdictional coordination. Emphasis is on threat assessment and mitigation strategies of potential large scale disasters including but not limited to earthquakes, hurricanes, terrorism, hazardous materials releases, tornadoes, and floods.
Engineering Technology & Construction Management	ETGR 2230. Occupational Safety.	Overview of occupational safety. Topics include: ergonomics, industrial hygiene, accident causation, hazardous materials, health- and safety-related organizations, code compliance, national standards that address health and safety, ethical behavior, and risk assessment. Provide safety knowledge and skills needed to perform duties as environmental, health, and safety (EHS) professionals.

Engineering Technology & Construction Management	ETGR 4301. Environmental Pollution Control.	The major aspects of preventing and controlling air, water, and solid-waste pollution and disposal. Topics include: environmental standards and regulations, engineering controls, remediation techniques, sampling and monitoring, and environmental toxicology. Demonstrate the environmental knowledge needed to function as an environmental, safety, and health (EHS) practitioner.
Engineering Technology & Construction Management	ETGR 4302. Industrial Hygiene.	Characterizing chemical, physical, and biological hazards in the workplace. Topics include: occupational standards and regulations, indoor air quality, ionizing and non-ionizing radiation, thermal stress, sampling/monitoring techniques, personal protective equipment, engineering controls, and ethical behavior. Provide industrial hygiene knowledge and skills needed to perform duties as environmental, health, and safety (EHS) professionals.
Geography & Earth Sciences	GEOG 1103. Spatial Thinking	Overview of spatial thinking fundamentals and how geospatial technology can be used to illustrate these notions. Spatial thinking combines: (1) concepts of space, (2) tools of representation, and (3) processes of reasoning, to better structure spatially explicit phenomena, and generate hypothesis to understand and explain those issues. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Geography & Earth Sciences	GEOG 2000. Topics in Geography: Environmental Anthropology	Anthropological approaches to environmental issues as they affect people around the world, including the relationships between humans and their natural environments, cultural knowledge about environments, the role of wealth and inequality in environmental interactions, international and global environmental governance, and the effects of these on management decisions and outcomes.
Geography & Earth Sciences	GEOG 2000. Topics in Geography: Biodiversity of the NC Piedmont	A survey of the biodiversity and ecosystems of the North Carolina Piedmont, with special emphasis on the species that occur where people live. Students will gain an understanding of what biodiversity is, how it is measured, how it varies across space and time, and why it matters. The course will culminate with a discussion of how biodiversity can be maintained in human-dominated landscapes in the Piedmont.
Geography & Earth Sciences	GEOG 2160. The South	The culture, environment, population, and economy of the southeastern U.S.; emphasis on current trends and future implications.
Geography & Earth Sciences	GEOG 2165 Patterns of World Urbanization	Introduction to cities of the world including examination of urban systems within different culture areas as well as the internal structure of different cities within the context of traditional and innovative theories of development geography. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Geography & Earth Sciences	GEOG 3000. Topics in Regional Geography: Plant Geography	Explores the spatial and temporal distribution and variety of plant life on earth. Distribution patterns may reflect former geologic or climatic conditions, as well as modern interactions between organisms and their environment. Fossils provide valuable information on the past ranges of plants including paleoecological information that may help explain changing vegetation patterns. Because very few biological communities escape the effects of human activities, the role humans have played in the ecology and distribution of terrestrial plants will be a focus. Current issues of conservation and biological diversity are also explored.
Geography & Earth Sciences	GEOG 3000. Topics in Regional Geography: Hazards and Disasters	The nature, impact, and social responses to environmental hazards and disasters. Focus is on the origin and characteristics of disasters, lessons learned from many of the great disasters, and how society anticipates and responds to disasters.
Geography & Earth Sciences	GEOG 3105. Geography of the Global Economy	Examination of the globalization of economic activity with focus on the geographic patterns of international production, trade, and foreign direct investment, and environmental impacts of global production, as well as underlying dynamics driven by transnational corporations and nation states within a volatile technological environment.
Geography & Earth Sciences	GEOG 3115. Urban Transportation Problems	Problems associated with moving goods, people and information in urban areas. Topics include: mass transit and pollution problems.

Geography & Earth Sciences	GEOG 3120. Fundamentals Geographic Info Systems	Development, current state-of-the-art and future trends in geographic information processing with emphasis on data gathering, storage, and retrieval, analytical capabilities and display technologies. A laboratory component includes development and completion of an applied GIS research project. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Geography & Earth Sciences	GEOG 3190. Biogeography	The patterns of life across the Earth and the causes of those patterns, with an emphasis on ecological patterns and historical patterns of biodiversity. The origin of the Earth's biological diversity and methods for conserving that biodiversity is also discussed.
Geography & Earth Sciences	GEOG 3200. Land Use Planning	Land use planning, with emphasis on basic planning processes, implementation techniques and strategies, and issues confronting contemporary urban and rural planning.
Geography & Earth Sciences	GEOG 3205 Internal Structure of the City	What is a city? How do cities form? What contributes to urbanization? Is there something unique about the urban? Does the physical environment have independent causal powers (i.e., does the environment determine society)? Or do social relations exist independently of the physical environment? This course examines the internal structure of cities by considering theoretical frameworks geographers have used to understand old and new urban challenges, alongside empirical engagements with themes of particular interest to urban geographers such as sustainability, transportation, housing, retail and manufacturing, and gentrification, among others. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Geography & Earth Sciences	GEOG 3220 Renewable Energy and Regional Energy Markets	Examination of production, consumption, and distribution of energy; including traditional sources, such as oil, coal, natural gas, and nuclear energy; and renewable sources, including hydroelectric, wind, solar, and biofuels, with special attention to regional energy resources. Energy markets and models are also examined with reference to environmental impacts in both domestic and international contexts.
Geography & Earth Sciences	GEOG 3250 World Food Problems	Magnitude, consequences, major causes and potential solutions to the world's food problems.
Geography & Earth Sciences	GEOG 3260. Medical Geography	Traditional aspects of medical geography including disease mapping, disease ecology and statistical association and more recent social scientific topics, including disease diffusion, healthcare facilities planning and spatial behavior. Crosslisted as HLTH 3000.
Geography & Earth Sciences	GEOG 4000. Topics in Geography: Applied Research in Geography	Provide students with geographic research experience, both qualitative and quantitative. Goals include: understanding of the relationships between transit, local development, housing values and residential mobility; research ethics.
Geography & Earth Sciences	GEOG 4000. Topics in Geography: Place-based Geographic COVID-19 Research Perspectives and Realities for Practice	COVID-19 emerged suddenly, changing daily life within a matter of months. Apply a place-based, geographic lens for understanding the diffusion of the disease, inequities of disease burden, the response, and implications for the future, incorporating UNCC researcher perspectives from multiple disciplines and including guest lectures from those involved directly in response.
Geography & Earth Sciences	GEOG 4000. Topics in Geography: Immigrant Foodways	As people move in the world, food plays a central role in shaping identity, reproducing myth and ritual, and connecting diasporic communities. This mobility establishes dynamic foodways and gives rise to new food landscapes through which we can understand temporally connected sites of intense interaction. Investigating the dynamics of food production and consumption in a transnational world. Recognizing the centrality of culinary culture in migrant identities. Focus on the role of food habits, rituals, and practices in producing and sustaining shared identities and places.
Geography & Earth Sciences	GEOG 4131 Environmental Modeling with GIS	Theories and practices of modeling the environment with GIS. Topics include: types of spatial modeling frameworks; GIS data sources and measurement technologies for environmental modeling; development, calibration, and validation of environmental models; 3-dimensional modeling and visualization of physical processes; and spatial analysis of human-environment interactions.

Geography & Earth Sciences	GEOG 4132. Spatial Modeling for Social and Economical Applications	Theories and practices of spatial modeling with social and economical applications. Topics include: overview of modeling in human geography, socioeconomic data sources, and building and evaluating spatial models. Examples of models covered in class and lab exercises include: spatial accessibility, interaction, diffusion, tipping points, and segregation.
Geography & Earth Sciences	GEOG 4160. Geography of Transportation Systems	Geographical and human factors that affect the movement of goods and people from place to place. Emphasis on transportation routes and networks, commodity flow patterns, and the locational implications of freight rates.
Geography & Earth Sciences	GEOL 1200. Physical Geology	A study of the basic geological principles and processes in the earth sciences; the earth as a planet; treatment of physical processes shaping the earth; earth materials and landforms. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Geography & Earth Sciences	GEOL 3190 Environmental Geology	Aspects of geology with direct or indirect impact on society. Topics include: slope stability, earthquake hazards, solid waste disposal, flooding, ground water problems, soil loss, sediment pollution, watershed dynamics, water and soil pollution, and radioactive waste disposal.
Geography & Earth Sciences	GEOL 3190L Environmental Geology Laboratory	Aspects of geology with direct or indirect impact on society. Topics include: slope stability, earthquake hazards, solid waste disposal, flooding, ground water problems, soil loss, sediment pollution, watershed dynamics, water and soil pollution, and radioactive waste disposal. Laboratory section is designed around multiple off-campus field trips.
Geography & Earth Sciences	GEOL 4000. Selected Topics in Geology: Physical Hydrogeology	Quantitative introduction to physical groundwater hydrology including aquifer materials, storage, flow, the vadose zone, and sustainability.
Geography & Earth Sciences	GEOL 4145 Hydrogeology	Fundamentals of physical and chemical groundwater hydrology. Principles of flow, transport, and chemical reactions in aquifers and the vadose zone, including groundwater-surface water interactions. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Global Studies	HGHR 2100 Introduction to Holocaust, Genocide, & Human Rights Studies: War Peace, Justice, & Human Survival	Examines the Nazi Holocaust and its origins in Western thought and practice. Analyzes the psychological, cultural, and political roots of other genocides and forms of mass violence. Explores modern concepts of human rights and the role of human rights activism.
History	HIST 3000. Topics in US History: An Environmental History of American Capitalism	Examines how capitalism worked on and in various environments across America from pre-Columbian times to the present. Learn how capitalism altered the environment and how this economic system changed over time in reaction to natural forces. Focus on how people have attempted to make nature valuable and the obstacles they encountered in the process. Learn how a basic knowledge of the environmental sciences can enrich understanding of history and economics. Topics include: pre-Columbian indigenous economic activity, ecological imperialism, agricultural economics, ecosystem services, water history, slavery, the history of the body, western expansion, the extractive industries, monetary history and theory, conservation, preservation, the Dust Bowl, the New Deal, food systems, and climate change.
History	HIST 3002. Topics in Non-Western History: Radical Dissent - The life and times of Mahatma Gandhi	Examines the life and ideas of Mohandas Gandhi. His idea of non-violent dissent based on the force of truth were central not only to the Indian independence movement but also to radical political movements and dissenters across the globe whether Martin Luther King and the Civil Rights Movement in the United States to Nelson Mandela and the anti-apartheid movement in South Africa. Focusing on the kind of radical critiques that he offered: both of the existing methods of resistance and of the structure of modern industrial civilization.
History	HIST 3104. Britain in the Age of Industry and Empire, 1815-1914	For most of the century that spanned the defeat of Napoleon and the outbreak of the First World War, Britain possessed the largest industrial economy and the biggest empire that the world had ever seen. Yet London, which became the imperial capital to a quarter of the world's people, also nurtured radicals who sought to overturn these very changes. Explore this dynamic by focusing on three interconnected themes: technological and environmental change, culture, and imperialism.

History	HIST 3154. Globalization in African History.	Examines the effects of globalization. Some argue that globalization offers a means to help poor people out of poverty while spreading democracy; others claim it has led to greater disparities and wealth for the few. Focus on the most recent history of globalization and its impact on Africa. Examine the ways in which globalization has impacted Africa, economically, politically, socially, and culturally.
History	HIST 3190. Slavery, Racism, and Colonialism in the African Diaspora.	Explores how race and racism, slavery, and colonialism served as principal institutions and constructs shaping the experience between Africa and the emerging African Diaspora in the New World. Consider how the maintenance of Western social, economic, and political superiority materialized as functions of these three important historical developments. Crosslisted with LTAM 3260.
History	HIST 3218. Racial Violence, Colonial Times to Present.	Examines the ways in which African Americans and Whites used violence both as part of struggles for liberation and freedom as well as repression from the colonial period to the present in the United States. Focuses on the broader processes of social, political, and cultural change and at efforts to build cooperation.
History	HIST 4600. Senior Research Seminar: Pre-Modern Plagues, Health and Science	Plagues were a common feature of the pre-modern world. They were viewed as divinely sent, blamed on climate or smells, and treated as a natural disaster. Medicine and Scientific understanding though was not simplistic. It was based on a complex understanding of the world. How did a radically different understanding of health and disease affect the world?
History	HIST 4600. Senior Research Seminar: Race in Latin America	Examines the importance of race in Latin America, with a special focus on the roles that Indigenous and Afro-descendants have played in the history of the region. Topics include: racial inequality between Indians, Afro-descendants, and whites; race- and ethnicity-based social movements, institutions and policies; scientific racism; comparative perspectives with the USA and other nations; intellectual debates; artistic currents; religious practices; and the relationship between racial and other inequalities.
Public Health Sciences	HLTH 2102. Foundations of Public Health	Introduction to the field of public health, including its history, content areas, scope, and paradigms of professional practice.
Public Health Sciences	HLTH 2103. Foundations of Global Health	Introduction to the study of global health and its theories, perspectives, methods, and evidence. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Public Health Sciences	HLTH 3000. Topics in Public Health: Medical Geography	Traditional aspects of medical geography including disease mapping, disease ecology and statistical association and more recent social scientific topics, including disease diffusion, healthcare facilities planning and spatial behavior. Crosslisted as GEOG 3260.
Public Health Sciences	HLTH 3103 Behavior Change Theories and Practice	Overview of theoretical approaches to health behavior adherence and compliance, including increasing health enhancing behaviors and sustaining healthy behaviors over time.
Public Health Sciences	HLTH 3106. Determinants of Health	Introduction and examination of socioeconomic, behavioral, biological, environmental, and other factors that impact human health.
Public Health Sciences	HLTH 3215. Social Determinants of Health and Health Disparities	An introduction and examination of key historical events and current issues related to poverty, race/ethnicity, and health disparities, including social, economic, and political issues in ethnic and racial communities, with a special emphasis on theories, concepts, and methods to address the issues.
Public Health Sciences	HLTH 4103 Environmental Health	Introduction to environmental and occupational health issues and their implications for individual and population health.
Public Health Sciences	HLTH 4104. Epidemiology	Introduction to basic principles and methods used in epidemiology to detect and control disease in populations.
Global Studies	INTL 1101. Introduction to International Studies	An introductory, interdisciplinary survey of the field of international studies. Attention will focus on the economic, geo-political and socio-cultural issues affecting relationships in an increasingly interdependent global system.
Global Studies	INTL 2100 Introduction to Holocaust, Genocide, & Human Rights Studies: War Peace, Justice, & Human Survival	Examines the Nazi Holocaust and its origins in Western thought and practice. Analyzes the psychological, cultural, and political roots of other genocides and forms of mass violence. Explores modern concepts of human rights and the role of human rights activism.

Global Studies	INTL 2131. Introduction to Peace, Conflict, and Identity Studies	Asks what identity is and why it matters in people's lives. Offers a cross-cultural examination of the role of different forms of identity including race, ethnicity, gender, nationalism, and class in causing and resolving conflicts. Case studies from different parts of the world are explored.
Global Studies	INTL 3000. Topics International Studies: Issues in Global Cinema	Examine a series of global issues as represented, narrated, and critiqued in contemporary films. Amongst others, we will discuss transnational immigration, industrialization and mass urbanization, warfare, and the destruction of the environment at the planetary scale. Crosslisted as ENGL 4072.
Global Studies	INTL 3001. Topics In Development and Sustainability Studies: Fundamentals of International Law in an Age of Globalization	In an era of globalization the obligation of states to create standards of behavior is crucial for world peace and understanding. Addresses the fundamentals of international law as it relates to the everchanging nature of globalization forces. Topics include: climate agreements, biodiversity treaties; corporate environmental responsibility; food security. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Global Studies	INTL 3001. Topics In Development and Sustainability Studies: Religion & Food	Food has always been an important, although underexplored, element of religion. The study of food can reveal the beliefs, practices, and values a tradition holds dear. This course explores the relationship between religion and food by examining the role food plays in various religious traditions as well as the construction of food as an ethical category. We will read religious myths relating to food, discuss food and ritual, the way food is used to shape gender and social roles, and the ways in which food is used as a tool or indicator of morality. Cross-listed with ANTH 2020 and RELS 2000.
Global Studies	INTL 3003. Topics in Peace, Conflict, and Identity Studies: Ethnic Conflict in a Changing World	Ethnic conflict remains one of the most prevalent types of conflict in the modern world. Ethnic conflict has claimed the lives of millions, has caused many to become refugees, and has destroyed countries, political systems, and economies. What are the underlying causes of ethnic disputes? Why do some conflicts remain in the form of peaceful negotiations and some turn violent? How does ethnic conflict spread across regions, how can it be managed and what are the possible solutions? Cross-listed with POLS 3030.
Global Studies	INTL 3003. Topics in Peace, Conflict, and Identity Studies: Global Citizenship	Explores the question of what it means to be a citizen in today's increasingly interconnected world. It focuses on the concept of global citizenship and examines its usefulness as a guide to action. Apply ideas of global citizenship in developing strategies to address such critical challenges as refugee resettlement, human trafficking, poverty, forced labor, ethnic conflict and global warming.
Global Studies	INTL 3003. Topics in Peace, Conflict, and Identity Studies: Peacebuilding in Divided Societies	Explores the various methods, techniques, and approaches to peacebuilding that can be applied in the midst of deep-rooted conflicts in multi-ethnic and divided societies. Case studies (such as Israeli-Palestinian conflict, Cyprus, Northern Ireland, and South Africa) will be critically reviewed and examined to distill essential elements of building peace during on-going conflict.
Global Studies	INTL 3003. Topics in Peace, Conflict, and Identity Studies: Human Rights and Conflict	Examines the philosophical and legal debates about human rights. Explains the principles of human rights law and provides a solid grounding in the United Nations and regional systems for human rights protection and promotion. Explores the links between human rights, humanitarian practice and violent conflict as well as the human rights dimensions of conflict resolution. Cross-listed with POLS 3030.
Global Studies	INTL 3003. Topics in Peace, Conflict, and Identity Studies: Global Racisms	We often hear that race is a social construct and that racism is structural. This course considers what those terms mean in a global historical context. We will investigate how racism is related to global capitalism, the world system, and contemporary global health and environmental crises.
Global Studies	INTL 3111. Politics and Culture in Literature	Exploration of different types of political systems across the world and the ways in which the cultures and values of those systems are reflected in literature. The relationship between politics and literature will be examined with particular reference to such topics as human rights, gender roles and war. The political systems selected for consideration will be representative of different geographic regions and philosophies.
Global Studies	INTL 3112 Globalization and Culture	Explores the relationship between processes of globalization and cultural change, considering the breakdown of the connection between lived cultural experience and territorial location. Of special interest are issues of cultural homogenization, cultural hybridization, and emergent cultural identities brought about by the flows of people, ideas, and objects in the contemporary world.

Global Studies	INTL 3135. Origins of Globalization	Analysis of European colonial expansion from the 16th through the 19th centuries, emphasizing the creation of the first global systems of political, economic, and cultural interaction that form the foundation of modern globalization. Using a cross-cultural approach, the course explores the competition and conflict among the great powers and the effects of conquest and colonialism on the indigenous peoples of Africa, Asia, and the Americas.
Global Studies	INTL 3136. Globalization and Resistance	Cross-cultural analysis of changing patterns of resistance by indigenous peoples to the political, cultural and economic effects of globalization from the colonial period to the present. Using case studies from the Americas, Africa and Asia, the course examines a variety of indigenous resistance strategies and movements and the socio-political dynamics that have driven them and impacted on their effectiveness.
Global Studies	INTL 3137 International Human Rights	Introduces the historical foundations and current practices of the international human rights regime. Discussions center on three topics: 1) conceptual and historical origins of the international regime designed to protect human rights, 2) patterns of and explanations for human rights violations over time and space, and 3) potential international and domestic solutions to protect human rights. Cross-listed with POLS 3137. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Software & Information Systems	ITSC 3688. Computers and Their Impact on Society	A study of current topics (software piracy, hacking, professional conduct) in computer science and the impact of computers on various subsets (home, government, and education) of society. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Communication Studies	JOUR 2160. Introduction to Journalism	Introduction to the basics of print journalism. Students cover a variety of stories designed to develop news and feature reporting/writing skills. Emphasis is placed on generating story ideas, making ethical news judgments, diversity issues in journalism, gathering information, and writing and editing articles. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Communication Studies	JOUR 3160. Advanced News Reporting and Writing	This advanced journalism course continues the study of reporting and writing techniques introduced in JOUR 2160. Course covers news reporting and writing, with emphasis on the print media. Students survey a variety of news sources to become familiar with current events and the various approaches and styles of coverage. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Applied Physiology, Health & Clinical Sciences	KNES 3236. Theory and Foundations of Adventure Education	An exploration of the history, philosophical foundations, proposed outcomes, and operational theories that are common in outdoor adventure education.
Liberal Arts & Sciences	LBST 2101. Western History & Culture: Capitalism in Historical Perspective	Overview of the history and development of capitalism, since its rise and proliferation across the globe, with special attention to the last 300 years. Explore how and why capitalism changed during these centuries and the impacts of these changes on global society. Develop a richer understanding of the complex web of causal forces that link the economy, society, and culture. The course emphasizes that capitalism is not natural or trans-historical, but rather is a social process, with a history of change over time.
Liberal Arts & Sciences	LBST 2102. Global and Intercultural Connections: The Paradoxical 20th Century	Since 1900 the world has changed at an unprecedented rate. In many ways, these changes have brought progress, including new discoveries in science and technology, advances in civil rights, national independence for people once under foreign rule, and higher standards of living and longer life expectancies for many. Yet these changes have also brought tragedy, such as entrenched poverty, deadly epidemics, two world wars and hundreds of smaller ones, numerous cases of genocide, environmental damage, terrorism, and the threat of nuclear war.

Liberal Arts & Sciences	LBST 2102. Global and Intercultural Connections: Food Fight	The history and politics of what we eat. How have humans over time come to manipulate the growing of plants and marketing of food and food-like substances? Why do epidemics of starvation and obesity seem to exist simultaneously? Can our current food choices and agricultural system sustain us in the future? This course examines the long and complicated global history of food, from the rise of industrial agriculture, to GMOs, biofuels, the global food system, and current food and farming movements. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Liberal Arts & Sciences	LBST 2102. Global and Intercultural Connections: Geography	Each of the larger "global neighborhoods" (also known as world regions) possesses a particular combination of environmental, cultural, and organizational qualities which are imprinted on the landscape, giving each world region its own traditional attributes, social settings, and characteristics.
Liberal Arts & Sciences	LBST 2102. Global and Intercultural Connections: African Studies	Examine and analyze the concept and effect of globalization in diverse issue areas in an effort to derive the potential positive or negative impacts globalization has on various parts of the world. Using appropriate theoretical tools, the issue areas will encompass trade, outsourcing of American jobs overseas, Islam and other religions, terrorism (including the 9/11 incidence), nationalism, conflict and security, poverty, women and development, weapons proliferation, health, and the environment. The course will also examine various cultures and how they function and interact with others in a diverse world.
Liberal Arts & Sciences	LBST 2102. Global and Intercultural Connections: Great War/Global War	The First World War as a lens through which students examine how what began as a European war became the most transformative event of the twentieth century. Global origins of WWI, paying particular attention to how national rivalries and international tensions were intensified through global trade and conquest during the Belle Époque. Inherent contradictions and practices of "total war" forced the belligerent nations to expand the scope of battle around the globe in their search for additional natural resources, more manpower, and new allies. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Liberal Arts & Sciences	LBST 2211. Ethical Issues in Personal, Professional, and Public Life: Poverty, Inequality and Justice	Understanding of the causes and consequences of poverty and inequality in the United States to learn and explore different ethical theories and frameworks and to apply these ethical principles to contemporary social issues.
Liberal Arts & Sciences	LBST 2213. Science, Technology & Society: Geography	Investigates the nature of the earth sciences, tools and technology used by geoscientists to study the earth, and how the earth sciences have influenced humans and history. Other issues discussed include science vs. pseudo-science, ethics in the geosciences, and the public perception of earth scientists.
Liberal Arts & Sciences	LBST 2214. Health & Quality of Life: Money, Health, and Happiness	A critical and ethical look at the interconnections between money, health, and happiness. Are people who have more money healthier or happier? What is happiness? What is health? How have social and economic histories shaped the layout of inequities? Will future structures reduce or exacerbate social, economic and health inequality?
Liberal Arts & Sciences	LBST 2214. Health & Quality of Life: Food Ethics and Quality of Life	Analyze what it means to eat food verses foodish products. Study the ethics of the food industry from manufacturing to factory farming and the government regulations and subsidies that affect the food industry. Consider the future of food and infer the effects of GMOs and argue for or against issue of cloning of animals to sustain the ever-growing global demand for food. Research the fast food industry and discuss its impact on the obesity epidemic and low-wage earners.
Liberal Arts & Sciences	LBST 2301 Critical Thinking and Communication: Infectious Diseases	Although heart disease, cancer, and stroke account for about one-half of all deaths in the U.S., infectious diseases (influenza/pneumonia) remain among the top ten leading causes of death. In low-income countries, infectious diseases (above all HIV/AIDS, lung infections, tuberculosis, diarrheal diseases and malaria) together claim more lives than cardiovascular diseases. Explore the persistent threat of infectious disease from antibiotic resistance to zika in an increasingly urbanized world.
Liberal Arts & Sciences	LBST 2301 Critical Thinking and Communication: A Good Life	Ways in which "a good life" has been understood in Western thought. What is a good life? How does one go about living it? How is happiness defined and understood? What are the problems we humans must address?

Liberal Arts & Sciences	LBST 2301 Critical Thinking and Communication: Environmental Literature of Gender and Race	Understanding of how to use ecocritical and ecofeminist literature to think about gender, sexuality, race, and class. Emphasize how the environment shapes gender identities and the ways in which environmental literature represents the experiences of African and Afro-Latin American women. Provide analytical tools on how to think about some of the ongoing problems of gender, class, and race in relation to the natural environment. Where do our notions of justice come from? How do societies determine their values?
Liberal Arts & Sciences	LBST 2301 Critical Thinking and Communication: Race, Gender and Class	Focus on the social construction of race, gender, and class as identities in a larger social context. Explore these social constructions of race through a sociological lens. Examine how these social constructions of identities intersect and relate to various social issues, and how they are used to perpetuate inequality, division, and oppression.
Liberal Arts & Sciences	LBST 2301 Critical Thinking and Communication: Citizenship	The concept of citizenship with an emphasis on scholarly understandings of the rights and responsibilities of citizenship. Explore the historical, ethical, and political foundations of voluntary service for issues such as poverty, homelessness, and social justice. Includes a service component that allows students to explore the relations of citizenship and public service.
Liberal Arts & Sciences	LBST 2301 Critical Thinking and Communication: Catastrophe, Culture, and Society	What is a disaster? Are they natural or a result of social arrangements? Why are some people more vulnerable to disasters than others? What can we learn about past disasters to help us better prepare for the future? Critically examine the human dimensions of disasters through an anthropological perspective. Topics may include flooding, famine, industrial disasters, public health epidemics, and other forms of catastrophe.
Liberal Arts & Sciences	LBST 2301 Critical Thinking and Communication: Resistance as Religious	Historical overview of resistance actions and movements rooted in religious identities and ideologies. Special attention is paid to the current environmental resistance movements led by religious and non-religious communities who often operate in partnership. We will also explore the religious nature of secular environmental groups.
Liberal Arts & Sciences	LBST 2301 Critical Thinking and Communication: Ecological Identity	Exploring diverse cultural identities and landscapes around the United States and assessing how they impact or are impacted by their physical environment. Undertake a geographic inquiry process by spatially analyzing and mapping data using a geographic information system (GIS).
Liberal Arts & Sciences	LBST 2301 Critical Thinking and Communication: Money and Consumption	Examines the counternarratives that contribute to our ideas of consumerism/consumption (e.g., the minimalist movement, digital currency, debt, financial literacy programs, etc.). Critically analyze the rhetorical strategies of people who write about money-related issues; how various texts aim to help us construct our attitudes towards money; and how new technologies and global economic issues are shifting conversations about money and the consumerism it supports in our culture.
Liberal Arts & Sciences	LBST 2301 Critical Thinking and Communication: Rhetoric of Farm Animal Activism	Explores how conflicting perceptions of farm animals and food production were and are shaped by the media and markets (via food packaging, product marketing, school campaigns, children's stories, etc.) and complicated by the rhetoric of animal advocacy groups (via social media campaigns, protests, food blogs, classroom instruction, merchandise, etc.). Examine the rhetorical arguments surrounding food and farm animal activism, looking at the construction of arguments and their consequences for the consumer.
Liberal Arts & Sciences	LBST 2301 Critical Thinking and Communication: Urban Problems and Urban Solutions	Explore urbanization from a cross cultural perspective in an attempt to develop students' ability to think critically and communicate in ways appropriate to the discipline of Anthropology. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Global Studies	LTAM 3260. Slavery, Racism, and Colonialism in the African Diaspora.	Explore how race and racism, slavery, and colonialism served as principal institutions and constructs shaping the experience between Africa and the emerging African Diaspora in the New World. Consider how the maintenance of Western social, economic, and political superiority materialized as functions of these three important historical developments. Crosslisted with HIST 3190.

Mathematics & Statistics	MATH 4051. Computer Exploration and Generation of Data	A project course based on four to five projects that utilize spreadsheet technology. Assigned project topics include: Dynamical Models and Difference Equations (Epidemics, Harvesting Models, Population Dynamics, Predator-Prey Models); Optimization (inventory control, apportionment algorithms); Business Simulations (Net Present Value Comparisons and Risk Evaluation, Sensitivity Analyses).
Mechanical Engineering & Engineering Science	MEGR 2499 Introduction to Energy Engineering	Provide basic understanding of energy technologies, energy sources, energy demand, their role in modern society, and environmental impact. Topics include emissions formation and control, and renewable power systems.
Mechanical Engineering & Engineering Science	MEGR 3094 Special Topics in Energy Engineering: Fundamentals of Wind Energy Systems	The specific topics serve as the vehicle for teaching engineering analysis, synthesis and design. This course will cover state of the art in wind energy systems: types of systems, mechanical drive components, foundations, aerodynamic components, and electrical components.
Mechanical Engineering & Engineering Science	MEGR 3260. Clean Coal Technology	This course will cover the basics of coal combustion, pollutant formation, measurement of emissions; emissions regulations, measurement of power plant performance, and options for performance improvement of existing and the newly-constructed power-generation fleet.
Geography & Earth Sciences	METR 1102 Introduction to Meteorology	Aspects of meteorology, including solar radiation, temperature, pressure and wind, stability, global circulations, precipitation processes, weather systems, severe weather, and current environmental issues. Basic physical principles, meteorological terminology, societal impacts, weather analysis and career options within the field of meteorology are explored.
Geography & Earth Sciences	METR 4205 Climate Dynamics	Topics include: global climate, climate variability, and dynamics within the climate system, with a focus on the role of the atmosphere in the climate system. El Niño provides the main example of how climate variability can affect weather, and seasonal weather forecasting.
Geography & Earth Sciences	METR 4220. Atmospheric Chemistry	Survey of major topics in atmospheric chemistry, including fundamental properties of the atmosphere, tropospheric chemistry, air pollution, acid rain, stratospheric chemistry and the ozone hole, and the role of chemistry in the Earth's climate.
Geography & Earth Sciences	METR 4240. Boundary-Layer Meteorology	Examines the flow of mass, energy, and moisture within the planetary boundary layer, including their exchange at the earth's surface and theories of interaction. Topics include: air pollution and its transport; interaction of the atmosphere with underlying surfaces (i.e., soils, vegetation, oceans, glaciers).
Management	MGMT 3140 Management and Organizational Behavior	Study of the role of manager with an emphasis on understanding the behavioral and administrative theories and concepts needed to succeed in contemporary organizations. Topics covered in the course include motivation, leadership, managing teams, and teamwork. Includes units on: Ethics, Corporate Responsibility, and Sustainability; Diverse Workforce.
Management	MGMT 3280 Strategic Management	Capstone course that emphasizes the synthesis and application of concepts from the functional business courses so students develop an understanding of organizations from the perspective of top level executives. Focuses on the role of top management in leading, planning, and decision-making to form effective organizational strategies that integrate internal processes and the economic, technological, ethical, political, and social forces affecting the organization. Goals include make students more conscious of the importance of ethical principles and corporate social responsibility.
Management	MGMT 3282 Managerial Ethics	A study of the impact of management decisions on customers, employees, creditors, shareholders, community interests, ecology, and government (including taxes and the regulatory environment). The objective is to provide future managers with a systematic way of analyzing the impact of management decisions on larger society. Includes units on: Environmental Sustainability; Human Rights; Supply Chain Ethics;

Marketing	MKTG 3110 Marketing Concepts	Designed to acquaint the student with the marketing concept, various aspects of the marketing-external environment interface, and interrelatedness with other functional areas. Provides marketing majors with a foundation for further study, while offering non-marketing majors a survey of marketing's function in business organizations. Includes units on: social and ethical responsibilities; diversity; environmental issues.
Marketing	MKTG 3221 Consumer Behavior and Strategy	Examination of consumer decision-making processes in the purchase, usage, and disposal of goods, services, and ideas. Emphasis on understanding consumption related behaviors and the development and evaluation of marketing strategies intended to influence those behaviors globally across different markets. This includes examination of cultural, social, legal, political, financial, and geographical environments that influence consumer behavior and the effectiveness of marketing mix strategies.
Nursing	NURN 4440. Community Health Nursing	Development of competencies for the nursing care management of culturally diverse individuals, families, and populations within communities with emphasis on the nurse's role in health promotion and maintenance. Particular focus on risk identification and reduction throughout the life span.
Nursing	NURS 2100. General Nutrition.	A solid knowledge base of general nutrition viewed from a life cycle perspective. Exploration of behavioral aspects and scientific concepts related to nutrition.
Nursing	NURS 2200. Human Growth and Development	Study of the developing person through the lifespan by examining the relationship of selected environmental and social factors to human growth and development. Consideration of the meaning of health and illness to the individual, the family, and the community within the context of life as a continuing, dynamic process from conception through death.
Nursing	NURS 4240. Population Focused Nursing	Examination and analysis of concepts and theories related to care of populations from a perspective of social justice. Focuses on health indicators and risk reduction in diverse groups across the lifespan and development of community partnerships within healthcare systems.
Business Information Systems & Operations Management	OPER 3100 Operations Management	Introduction to and development of the management functions in manufacturing and non-manufacturing organizations. A systems approach to the organizational environment, the basic operating functions, the problems and decisions a manager encounters and solution techniques and models. Topics include Lean and Sustainable Supply Chains.
Philosophy	PHIL 3390. Topics in Ethics/Aesthetics: Animal Ethics	Considers humans' relationship with animals. Explore humans' reliance upon animals for companionship, entertainment, experimentation, clothing materials, and food sources. How realistically do we balance humans' and animals' interests? Is there ever an ethical justification to oppress the vulnerable? We apply--among other ethical and political concepts, speciesism (and its connection with other -isms), capability theory, citizenship theory, and principles of law.
Philosophy	PHIL 3390. Topics in Ethics/Aesthetics: Environmental Ethics	When is human interference with nature ethically defensible? Cover a diverse range of environmental philosophy, including anthropocentrism, sentient-centrism, biocentrism, and ecocentrism. Balance theory with practice/policy to consider what really works, with a special emphasis on vulnerable communities and individuals who are most affected by our actions within the natural world. Topics include animal ethics, ecofeminism, social justice, food ethics, technology ethics.
Philosophy	PHIL 3940. Philosophy of Education	Explore the philosophy of education theories of John Dewey and approaches to education that take into account the problems faced by America's schools, including the effect of race, class, and gender on school culture. Look specifically at the role that philosophy can and should play in education.
Philosophy	PHIL 3990. Topics in Identity/Society: Ethics of Food Policy	Considers humans' relationship with and government/political/corporate control and influence over our food. Explore topics including: access (e.g. food deserts and privilege), sustainability, federal subsidies, labeling and certifications (e.g. GMOs, organics), public health, advertising tactics, CAFOs, humane slaughter laws, and dietary ethics (e.g. humane/eco labeling, locavore movement).

Philosophy	PHIL 4990. Topics in Philosophy: Indigenous Feminisms	Focus on Indigenous feminist writings that aim toward maintaining and respecting indigenous ways of life, and address the detrimental consequences of U.S. and Canadian settler colonialism. Theoretical analysis of settler colonialism, Indigeneity, gender, and institutional racism. Examine present-day colonial formations through state-sponsored child and family welfare services, patterns of incarceration, high rates of sexual violence, and the displacement of Indigenous peoples from their traditional lands. Examine state-based efforts to address the needs of Indigenous communities, and collective strategies of resistance practiced by Indigenous women.
Political Science & Public Administration	POLS 3030. Topics in Comparative or International Politics: Human Rights and Conflict	Examines the philosophical and legal debates about human rights. Explains the principles of human rights law and provides a solid grounding in the United Nations and regional systems for human rights protection and promotion. Explores the links between human rights, humanitarian practice and violent conflict as well as the human rights dimensions of conflict resolution. Cross-listed with INTL 3003.
Political Science & Public Administration	POLS 3030. Topics in Comparative or International Politics: Ethnic Conflict in a Changing World	Ethnic conflict remains one of the most prevalent types of conflict in the modern world. Ethnic conflict has claimed the lives of millions, has caused many to become refugees, and has destroyed countries, political systems, and economies. What are the underlying causes of ethnic disputes? Why do some conflicts remain in the form of peaceful negotiations and some turn violent? How does ethnic conflict spread across regions, how can it be managed and what are the possible solutions? Cross-listed with INTL 3003.
Political Science & Public Administration	POLS 3030. Topics in Comparative or International Politics: Accountability and Global Justice	Former heads of state, previously considered immune or "untouchable," are increasingly found liable and accountable for infringing upon the rights of individuals or perpetrating gross violations of domestic and international law. Focus on acts of genocide, crimes against humanity, and other breaches of international human rights law. Look at case studies in the international arena, and examine the role of international tribunals and domestic national courts.
Political Science & Public Administration	POLS 3108. Social Movements and Interest Groups	Analysis of the nature of social movements and interest groups and their role in the American political system. Emphasis on membership recruitment and mobilization, campaigns, lobbying, and influence on parties, public opinion, and public policy. Evaluation of the extent to which these organizations enhance the voices of ordinary citizens versus those of corporations and citizens of high social status.
Political Science & Public Administration	POLS 3137 International Human Rights	Introduces the historical foundations and current practices of the international human rights regime. Discussions center on three topics: 1) conceptual and historical origins of the international regime designed to protect human rights, 2) patterns of and explanations for human rights violations over time and space, and 3) potential international and domestic solutions to protect human rights. Cross-listed with INTL 3137. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Political Science & Public Administration	POLS 3164. U.S.-Latin American Relations	Addresses the always-complicated and often-conflictive relationship between Latin American and the United States. Particular attention to critical contemporary issues such as the drug trade, immigration, international trade, humanitarian aid and U.S. policy toward Cuba. Cross-Listed as LTAM 3164.
Political Science & Public Administration	POLS 3177 Social and Political Philosophy	Philosophical concepts involved in understanding and evaluating the basic structure of societies (e.g., economic, educational, legal, motivational, and political) including equality, fraternity, freedom, and rights. Relevance to contemporary social and political issues stressed. Cross-listed as LEGL 3810 and PHIL 3810.
Psychological Science	PSYC 2137 Introduction to Positive Psychology	Examines the principal concepts, applications, and research paradigms of positive psychology in reference to various contexts such as everyday people, cross-cultural perspectives, adjustment to chronic illness, surviving natural disasters, terrorist attacks, and civil war.
Psychological Science	PSYC 2155. Psychological Approaches to Diversity	Examines processes and consequences of stereotyping of different cultures and demographic subgroups (e.g., disabled and racial/ethnic groups) and their social implications.

Psychological Science	PSYC 2165. Introduction to Community Psychology.	Social forces, particularly within the context of organizations and/or communities, that affect the development of psychopathology and/or personal competency, with emphasis on preventing psychopathology and increasing competency. Topics include: assessment of organizations, communities, and other environments; methods of instituting organizational and community change; evaluating the effects of community interventions; social policy analysis; and ethical issues involved in community work.
Psychological Science	Comm 3001. Topics in Psychology: Community Psychology Learning Community	Readings are designed to enhance their understanding of community psychology Community field trips allow students to better understand community change efforts. Includes readings that have an explicit focus on sustainability and the intersection between the environment, economy and concepts taught in the class. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Religious Studies	RELS 2101. Intro to Western Religions	Examine the historical origins of Judaism, Christianity, and Islam and the impact of globalization on their pre-modern, modern, and post-modern articulations. Special emphasis is placed on each tradition's response(s) to global environmental degradation and climate change. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Religious Studies	RELS 2120. Christianity	What is Christianity? How has the idea of what being Christian means changed over time and across cultures? This course will survey the global development of the Christian tradition from antiquity to the present, paying special attention to the diversity of Christian communities' beliefs and practices. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Systems Engineering & Engineering Management	SEGR 2110. Systems Engineering Concepts	Introduction to systems engineering concepts through various application problems. Focus on systems engineering problems that utilize programming skills. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Systems Engineering & Engineering Management	SEGR 4961 Introduction to Energy Systems	Overview of energy systems: energy types, generation, conversion, storage, transportation/transmission, and utilization. Principles, physical structure, processes, and utilization of fossil fuel, nuclear, and renewables for transportation, thermal, and electrical energy generation are discussed along with associated performance metrics. Introduction to environmental impacts of energy production, life-cycle analysis, energy efficiency concepts and metrics, transmission systems, grid reliability, and the impact of smart grid technologies. Presented in the context of industry standards as well as federal and state regulations.
Systems Engineering & Engineering Management	SEGR 4962 Energy Markets	Energy and power systems in regulated and competitive environments and implications on business decisions for firms in these industries. Topics include: mechanism of energy markets; comparative market systems; gas, oil, coal, and electricity market architecture; smart grid and renewable energy in electricity markets; risk and risk management in energy. Cross-listed as EMGT 5962 and MBAD 6962.
Systems Engineering & Engineering Management	SEGR 4963 Energy Systems Planning	Optimal planning of resources, logistics, distribution and storage in the end to end energy value chain. Topics include: Smart Grid Optimization; supplier and customer relationship management; Lean-Six Sigma energy system process design; power systems reliability and control, preventive maintenance, predictive maintenance, process and service quality control. Cross-listed as EMGT 5963.
Sociology	SOCY 1101. Introduction to Sociology	The scientific study of society and its structures, culture and its building blocks, and group interactions; the sociological perspective and process; fundamental concepts, principles, and procedures to understand society. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Sociology	SOCY 2090. Topics in Sociology: Sociology of Gender	Changing patterns of gender inequality; socialization and social structure as basis of gendered behavior, ideologies, and relationships. Alternative gender models and social movements as vehicles to diminishing gender inequality. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Sociology	SOCY 2163 Sociology of Gender	Changing patterns of gender inequality; socialization and social structure as basis of gendered behavior, ideologies, and relationships. Alternative gender models and social movements as vehicles to diminishing gender inequality. (Course modified by faculty in Sustainability in the Curriculum Workshop)

Sociology	SOCY 2169. Sociology of Health and Illness	The cultural and structural influences on the definition of health and illness; models of illness behaviors; health demography and epidemiology; social influences on the delivery of healthcare; ethical issues surrounding health and illness; and the development of relevant social policy.
Sociology	SOCY 3090. Topics in Sociology: The 1960s	Examine the important cultural, social, and political conflicts that emerged in the 1960's, especially those related to the black civil rights movement, feminism, the Vietnam War, environmentalism, social justice, the youth-base counterculture, and expanding one's consciousness' through drug use. These diverse conflicts ultimately brought significant change in American attitudes, values, institutions, and policies.
Sociology	SOCY 3090. Topics in Sociology: Examining Institutional Racism	Sociological examination of the historical and contemporary elements of structural racism. In addition to exploring the causes and consequences of these institutional arrangements, opportunities for change and the challenges to contemporary leadership will be considered.
Sociology	SOCY 3090. Topics in Sociology: Social Justice Movements in the African Diaspora	Study of social movements as collective human behavior that is sustained and intentional in efforts to affect social change, typically from outside of established institutional channels. Cover social movements among members of the African Diaspora, specifically those in North, South and Central America. These activities include, but are not limited to: enslaved people's rebellions, early 20th century radicalism, struggles against colonialism, the U.S. Civil Rights Movement, the Black Power Movement, and recent post-globalization movements.
Sociology	SOCY 3110. American Minority Groups	Relations between dominant and minority groups; the establishment, maintenance, and decline of dominance involving racial, ethnic, and religious minorities.
Sociology	SOCY 3143 Social Movements	Analysis of collective behavior, ideology, development, and organizations of movements seeking or resisting change.
Sociology	SOCY 3250. Political Sociology	Sociological analysis of the relationship between social, economic and political systems. Focuses on power relations in society and its effects on the distribution of scarce resources. Topics covered may include: theories of power and the nation state, political participation and voting, religion and politics, the comparative welfare state, media and ideology, the global economy, war and genocide, revolutions, and social movements.
Sociology	SOCY 4091. Topics in Sociology: Social Inequality	Examine the distribution of power, privilege, and prestige; correlates and consequences of inequality; national and international comparisons.
Sociology	SOCY 4111 Social Inequality	Distribution of power, privilege, and prestige; correlates and consequences of inequality; national and international comparisons.
Sociology	SOCY 4121. Globalization and Development	Introduces different views and arguments on the nature, impact, and trend of globalization in sociology and other related fields. Explores broad implications of globalization and how the globalization processes transform our world economically, politically, socially, and culturally.
Sociology	SOCY 4169. Health Disparities	Introduction to medical sociological concepts and frameworks necessary to understand health disparities. Examines race, class, and gender-based patterns of inequality. Explores mechanisms that help create and maintain inequality in health, with a focus on racial disparities in physical health.
Social Work	SOWK 2182 Human Behavior in the Social Environment I	Human development within the biological, psychological, and social structure as it occurs throughout the lifespan.
Social Work	SOWK 2183 Human Behavior in the Social Environment II	The foundational framework for understanding human interaction between individuals, families, communities, and larger social systems.
Social Work	SOWK 3120 Diversity and Populations-at-Risk	Analysis of issues of race, ethnicity, gender, sexual orientation, social class, age, and ability within social work practice.
Social Work	SOWK 3201 Foundations of Social Welfare	History of and current trends in social welfare, and values and conflicts that influence social welfare programming.
Social Work	SOWK 3202 Social Welfare Policy	Critical analysis of social welfare policy, including policy development and reform processes and outcomes.

Languages & Culture Studies	SPAN 3210. Spanish American Civilization and Culture	Introduction to the cultural heritage of Spanish America. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Middle, Secondary, & K-12 Education	TESL 4204. Inclusive Classrooms for Immigrant Students	An introduction to the general issues related to multicultural education and to the teaching of English Language Learners (ELLs) in diverse classroom and school contexts. Topics include: current demographics and immigration trends, legal issues, second language and identity development of immigrant students.
Theatre	THEA 1360. Applied Theatre in Communities and Schools	Students preparing to work in a wide range of community and/or school settings explore applied theatre, a broad term for drama/theatre serving people and purposes outside traditional theatre spaces. Sharpen collaborative skills and critical lenses to create culturally relevant theatre approaches that prioritize diversity, inclusivity, and the assets of the participants and their communities.
Interdisciplinary Studies	WGST 2050. Topics in Women's Studies: Social Activism	Focus on social justice, equity, and activism. Explore various areas of social change. Examining oppression from a historical and present-day lens, gain an understanding of the importance of intersectionality in social movements. Topics include: history of racism, classism, queer/trans history, understanding gender, understanding faith, abilities, and systems theory.
Interdisciplinary Studies	WGST 3050. Topics in Women's Studies: Race, Gender and Social Movements	Examine how notions of gender and race have been created and contested through social movements and theories from the late twentieth century to the present. Draw on Black Feminisms, Black Studies scholarship, and queer theory to help guide our curiosities' and discuss popular debates.
Interdisciplinary Studies	WGST 3160. Gender and Education	Explores the relationship between gender and education, primarily in the context of formalized schooling. Topics include: history of women's education; gender identity and socialization; gender discrimination and biases in curriculum and classroom teaching; gender gaps in academic performance; and the relationship between educational choices and gender.
Interdisciplinary Studies	WGST 4050. Topics in Women's Studies: Indigenous Feminism	Conceptions of being human developed in the work of decolonial theorist Sylvia Wynter. Beginning with her decolonial project, examine the relation between dominant conceptions of the political subject-human and structures of knowledge production, as well as the impact such conceptions have in the contemporary context.

Inclusive Graduate Courses

Department	Course Number, Title	Description
Anthropology	ANTH 5040. Topics in Biological Anthropology: Primates in Peril	Almost 40% of the Earth's species are facing extinction, mostly due to human activities. Explore the fundamental challenges hindering global success of the biodiversity conservation movement with particular attention on nonhuman primates. Students will be introduced to a variety of theoretical approaches from anthropology, ecology, risk management, social justice, and political ecology.
Anthropology	ANTH 5040. Topics in Biological Anthropology: Human-Animal Disease Transfer	Examine the processes that are involved in human-animal disease transfer with particular attention paid to the complex ways in which culture and health articulate to further the spread of these diseases both today and in our human past. We will also incorporate lessons learned from medical anthropology and applied anthropology to conceptualize realistic, structurally-informed solutions that can serve to lessen the spread of these diseases or help find ways to cope with the aftermath.
Architecture	ARCH 5202. Architectural History II: 1750-Present	Global survey of architecture and urbanism from 1750 to the present. Explores key architectural and urban ideas, designers, buildings, and urban projects as well as how they were shaped by their environmental, political, economic, technological, and cultural context.
Architecture	ARCH 5206. Professional Practice	Learning objectives include an understanding of the practice of architecture today, its responsibilities and procedures, and emerging alternative forms of practice and roles of the architect. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Architecture	ARCH 5305. Building Systems Integration	Introduces a set of advanced issues related to the comprehensive, systematic integration of building technology systems commonly used in large-scale buildings through case study, analytical, and simulation methods. Topics address the resolution of the building structure, materials, environmental systems, mechanical systems, electrical systems, life safety, building water supply and waste, and conveying systems in building design.
Architecture	ARCH 5605. Computational Practice	Capstone course for digital and computational studies in the 5th-Year program. The objectives of the course are to provide the use of advanced digital tools, digital fabrication, advanced visualization techniques, scripting, as well as parametric and building information modeling tools. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Architecture	ARCH 6050. Architectural Elective: Equity and Social Justice in Architecture	Architectural Electives are available in a wide variety of subjects. Topics include: Computation, Theory, Representation, Making, Urbanism, and Technology. (Only counted offerings that included sustainability Content -- see titles)
Architecture	ARCH 6050. Architectural Elective: Urban Form	Architectural Electives are available in a wide variety of subjects. Topics include: Computation, Theory, Representation, Making, Urbanism, and Technology. How local, state and national policies have combined to create Charlotte's urban form, and how race was a fundamental contributor especially in terms of redlining, urban renewal, revitalization, and gentrification. Topics include equitable solutions for housing, neighborhoods, cities and urban mobility.
Architecture	ARCH 6050. Architectural Elective: Dilemmas of Modern City Planning	Architectural Electives are available in a wide variety of subjects. Topics include: Computation, Theory, Representation, Making, Urbanism, and Technology. This offering focused on economics, social forces, attitudes about density, ideas about sustainability, and incentives to encourage good design as forces that affect contemporary urban form. The class studied how local, state and national policies combined to create Charlotte's urban form, and how race was a fundamental contributor.

Architecture	ARCH 6050. Architectural Elective: Community Planning Workshop	Architectural Electives are available in a wide variety of subjects. Topics include: Computation, Theory, Representation, Making, Urbanism, and Technology. . Contemporary theory and practice in planning and urban design; applying planning and urban design theory and methods to actual problems; compiling and analyzing community scale data, working with citizens, professional planners and designers, and elected officials, and examine what it means for the planner and urban designer to demonstrate ethical responsibility to the public interest, to clients and employers, and to colleagues and oneself. Integration of four themes: Nature, Infrastructure, Property, and People.
Architecture	ARCH 6101. Design Studio: Fundamentals	An introductory architectural design studio that focuses on fundamental concepts of architecture, as well as the acquisition and practice of a wide range of technical and graphic skills and media. Considers a comprehensive set of ideas and skills that seeks a better relationship between people, buildings, the city, and nature. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Architecture	ARCH 6103. Design Studio: Options: IMPAKT: An E-(CO)-MMUNITY model	This intensive studio-based course allows for a variety of topical studio learning options, including: summer study travel abroad, design building activities, and other design-related projects and activities. (Only counted offerings that included sustainability Content -- see titles)
Architecture	ARCH 6306. Technology Topic: Engaging Urban Futures	Focuses on the study of topical areas of technology in architecture. The course may be selected from a number of designated technology courses that examine specific issues contributing to architecture as a process of investigation, innovation, analysis and/or research. (Only counted offerings that included sustainability Content -- see titles)
Architecture	ARCH 6306. Technology Topic: Green Infrastructure	Focuses on the study of topical areas of technology in architecture. The course may be selected from a number of designated technology courses that examine specific issues contributing to architecture as a process of investigation, innovation, analysis and/or research. (Only counted offerings that included sustainability Content -- see titles)
Architecture	ARCH 7101. Design Studio Topical: IMPAKT: An E-(CO)-MMUNITY model	Focuses on issues relevant to current architectural practice and/or exploration of architectural theory. (Only counted offerings that included sustainability Content -- see titles)
Architecture	ARCH 7102. Design Studio Comprehensive	Focuses on a site-specific project emphasizing technological and systemic issues that lead toward a comprehensive building design. This section focused on the link between human comfort and mosquito protection as part of a singular design proposition, dispelling the notion that protective, low-energy and comfortable buildings must be sealed, airtight enclosures that isolate the occupant from the outdoors and much of the social life of the community that occurs there.
Architecture	ARCH 7104. Design Studio Diploma Project: Architecture and the Force of Nature	Capstone project experience for the professional degree. Students engage an instructor-led studio theme that involves design, research, and/or practical issues relevant to architecture and its discourse. This section investigated questions of utilizing built form and urban fabric for different purposes to benefit community.
Architecture	ARCH 7104. Design Studio Diploma Project: Critical Ecologies	Capstone project experience for the professional degree. Students engage an instructor-led studio theme that involves design, research, and/or practical issues relevant to architecture and its discourse. This section interrogated questions around the uneasy relationship between culture and environment, with comparisons between western and Japanese approaches and ecocriticism.
Biological Sciences	BIOL 5244. Conservation Biology	Conservation biology is an integrative field of research and management aimed at understanding and preserving biological diversity. This course will explore a suite of inter-related topics including conservation values, extinction rates, genetic diversity, demography, habitat fragmentation, reserve management, and ecological restoration.
Civil & Envir. Engineering	CEGR 5145 Groundwater Resource Engineering	Overview of hydrological cycle and principles of saturated and unsaturated subsurface flow. Aquifer types and well hydraulics. Field methods for evaluating hydraulic conductivity. Introduction to contaminant fate and transport. Applications of groundwater modeling.

Civil & Envir. Engineering	CEGR 5264. Landfill Design and Site Remediation	Principles and regulations pertaining to waste disposal and municipal solid waste landfill siting, design, construction, and operation. Specific focus on design and construction of composite liner, mass flux analysis, and design and operation of leachate and gas collection systems. Outcomes include: ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
Civil & Envir. Engineering	CEGR 6141. Water Quality Modeling	Mathematical modeling of water quality in receiving streams including: generation of point and nonpoint sources of pollution; formulation of transport equations for contaminants in stream and estuarine water; and prediction of the fate, persistence and transformation of chemical pollutants in aquatic ecosystems. Computer model simulation and case studies.
Civil & Envir. Engineering	CEGR 6173. Environmental Aquatic Chemistry	Concepts of chemical equilibrium applied to natural aquatic systems. Understanding of microbiological processes for environmental quality control. Topics include bioremediation.
Engineering Technology & Construction Management	CMET 5140. Building Energy Management	Integrated planning of energy efficient technologies for building environmental control systems. Introduction to the design, planning, and optimization of HVAC systems and technology needed to integrate the heating, cooling, natural ventilation, lighting, electricity, and building energy management systems into a building's structure and design.
Engineering Technology & Construction Management	CMET 6000. Special Topics in Construction & Facility Management: Hazard	Hazards and hazard risks associated with the environment we live and build in. An understanding of these events is necessary in preparing and building for a sustainable and resilient community. This course will cover different hazards from hurricanes to tornadoes to earthquakes to even human-induced hazards. The focus will be on those hazards that are likely to cause high impacts to our infrastructure and communities. Topics include mechanisms behind the formation of hazards, how hazards interact with infrastructure to result in damage, overall community resilience to hazards, effects of climate change, and spatial mapping of infrastructure assets and hazards.
Engineering Technology & Construction Management	CMET 6135. Advanced Construction Planning & Management	Advanced methods for planning and controlling construction projects. Topics include: resource allocation, leveling and management, critical path method and project evaluation and review techniques of scheduling, project controls through cost-schedule integration, and schedule compression. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Engineering Technology & Construction Management	CMET 6270. Operation of Constructed Facilities	Acquisition, operation, maintenance, and disposal of building systems, structures, permanent interiors, furniture, and equipment; grounds and other exterior elements. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Communication Studies	COMM 6000. Topics in Comm Studies: Gendered Bodies in Health Comm	Recognize the ways in which health and illness are gendered and socially constructed and study specific communication phenomena (e.g., public discourse, narrative, social support) in health contexts relevant to gendered bodies (e.g., prostate cancer, pregnancy/fertility, eating disorders). Topics include: social construction of gender and illness; intersections of biology, medical technology, and communication; gender identity, sexual orientation, sexual identity, cultural gender norms. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Counseling	CSLG 6145. Multicultural and Social Justice Counseling	Multicultural and social justice perspectives are crucial to effective and ethical practice in the counseling profession. In this course, students develop the knowledge, skills, and awareness for multicultural and advocacy competence to help them be more effective in assisting diverse clients and supporting communities (especially at-risk and vulnerable populations).
Electrical & Computer Engineering	ECGR 5171 Introduction to Energy Systems	Overview of energy systems: energy types, generation, conversion, storage, transportation/transmission, and utilization. Principles, physical structure, processes, and utilization of fossil fuel, nuclear, and renewables for transportation, thermal, and electrical energy generation are discussed along with associated performance metrics. Topics include: environmental impacts of energy production, life-cycle analysis, energy efficiency, smart grid technologies, and federal and state regulations.

Electrical & Computer Engineering	ECGR 5172. Energy Markets	Energy and power systems in regulated and competitive environments and implications on business decisions for firms in these industries. Topics include: mechanism of energy markets; comparative market systems; gas, oil, coal, and electricity market architecture; smart grid and renewable energy in electricity markets; risk and risk management in energy. Cross-listed as SEGR 4962 and MBAD 6962.
Electrical & Computer Engineering	ECGR 5172. Energy Markets	Energy and power systems in regulated and competitive environments and implications on business decisions for firms in these industries. Topics include: mechanism of energy markets; comparative market systems; gas, oil, coal, and electricity market architecture; smart grid and renewable energy in electricity markets; risk and risk management in energy. Cross-listed as EMGT 5962 and MBAD 6962.
Electrical & Computer Engineering	ECGR 6190/8190. Smart Grid Characterization, Design & Analysis	The fundamental principles of the Smart Grid with emphasis on Grid modernization Analysis and design. Examines the design and integration of renewable energy resources to power grid, the impact of power system analysis in the context of smart grid, smart grid observability and controllability, Wide Area Monitoring and Control, Self-Healing network.
Middle, Secondary, & K-12 Education	EDCI 6201. Perspectives in Immigration and Urban Education	Examines theories, issues, policies and historical trends in the education of immigrant students in urban public schools. Topics include: theories of immigrant adaptation in relation to race, gender, social class, language learning, and immigration status, demographic trends and their influence on urban schools and on teacher preparation, broader political influences on immigrant education, and the role of family and community in shaping immigrant students' educational trajectories.
Middle, Secondary, & K-12 Education	EDCI 8180. Critical Issues and Perspectives in Urban Education	Introduction to some of the current critical issues in urban education. Topics include: structural inequality, immigration, poverty, (re)segregation, the impact of race, class, ethnicity, gender and language, as well as No Child Left Behind. Requires participation in school and/or community activities to better understand the urban environment.
Middle, Secondary, & K-12 Education	EDCI 8186. Globalization, Urbanization, and Urban Schools	Explores globalization locally and internationally, with special emphasis on how global development processes are affecting urban communities and urban schools. Explores issues of global governance, global inequality, low-wage economics, and the transnationalization of the globe. It investigates conceptual and theoretical issues underlying globalization, and their impacts on the production of knowledge, educational policy, and school curricula. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Middle, Secondary, & K-12 Education	EDCI 8314. Urban Educational Reform	Explores the educational reform movements since 1954, the landmark Brown v. Board of Education Supreme Court case; focus is on the current federal legislation, No Child Left Behind, as well as state and local reform as they impact urban schooling. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Middle, Secondary, & K-12 Education	EDCI 8660. Readings in Urban Education Research	Study of methodology and findings of historical and current research about needs and characteristics of urban schools, diverse populations in urban regional environments, legal and ethical issues, policy-making, and promising solutions to educational challenges of poverty, social justice, language differences, and conflicting values. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Reading & Elementary Education	ELED 6260. History and Psychology of Racism	The history and psychology of race and racism is examined, and an analysis of how racism manifests and is sustained by individuals living within systems of power and privilege (micro and macro levels) is explored. An in-depth examination of unconscious racial bias, awareness of privilege, and the impact of ideologies that sustain racism, including colorblind ideology and meritocracy is conducted. Notion of Whiteness as normative in the United States is investigated. How those notions of race and racist beliefs and practices exist in the U.S. (e.g., politics, education, psychological perspectives) are included. Students consider various approaches to race/racism that ground race in biology, heredity, genetics, culture, or social identity.

Reading & Elementary Education	ELED 6261. Racial Identity	This course is for Master of Education in Urban Education and Graduate Certificate in Anti-Racism in Urban Education Distance Education students. Examination of (a) how individuals construct and maintain their sense of themselves as raced beings within historical and ideological constructions of race, and (b) personal- and societal-level consequences of such identities. A review is included of essential theories pertaining to racial and ethnic identity in the U.S. and practical applications related to understanding how racial and ethnic identities play a meaningful role in the human experience and in schools and classrooms.
Reading & Elementary Education	ELED 6263. Anti-Racist Activism in Education	Examination of the long and inspiring history of anti-racist movements and resistance to racist practices and policies among both people of color and white people throughout American history. The characterizations and impetus for contemporary anti-racist movements, particularly the role of social media as a vehicle for organizing momentum and disseminating information are explored. Analyzes how systems, including education, can organize for lasting social change in effort to create a more equitable and just society.
Systems Engineering & Engineering Management	EMGT 5961. Introduction to Energy Systems	Overview of energy systems: energy types, generation, conversion, storage, transportation/transmission, and utilization. Principles, physical structure, processes, and utilization of fossil fuel, nuclear, and renewables for transportation, thermal, and electrical energy generation are discussed along with associated performance metrics. Introduction to environmental impacts of energy production, life-cycle analysis, energy efficiency concepts and metrics, transmission systems, grid reliability, and the impact of smart grid technologies. Presented in the context of industry standards as well as federal and state regulations.
Systems Engineering & Engineering Management	EMGT 5962. Energy Markets	Energy and power systems in regulated and competitive environments and implications on business decisions for firms in these industries. Topics include: mechanism of energy markets; comparative market systems; gas, oil, coal, and electricity market architecture; smart grid and renewable energy in electricity markets; risk and risk management in energy. Cross-listed as SEGR 4962 and MBAD 6962.
Systems Engineering & Engineering Management	EMGT 5963. Energy Systems Planning	Optimal planning of resources, logistics, distribution and storage in the end to end energy value chain. Topics include: Smart Grid Optimization; supplier and customer relationship management; Lean-Six Sigma energy system process design; power systems reliability and control, preventive maintenance, predictive maintenance, process and service quality control. Cross-listed as SEGR 4963.
Systems Engineering & Engineering Management	EMGT 6926. Lean Supply Networks	Builds fundamental lean systems skills to effectively design, plan, and execute lean supply networks that deliver value to customers. With the ongoing global pressure of cost cutting and quality focus, many companies have been implementing "lean manufacturing" concepts to survive in this competitive marketplace. Students are exposed to industry cases from major companies that illustrate the challenges of managing lean supply networks.
Engineering Technology & Construction Management	ENER 5290. Advanced Instrumentation	Methodologies for measurement, analysis, and control of physical components of conventional and renewable energy conversion and storage systems.
Engineering Technology & Construction Management	ENER 6120. Energy Generation & Conversion	Overview of energy use. Fossil fuel resources and energy conversion. Solar energy principles, solar collector, photovoltaic cells and applications. Wind energy and wind turbines. Nuclear energy principles, nuclear reactors and power generation. Geothermal and Hydraulic energy conversion. Hydrogen energy, storage, and transportation. Overview of fuel cell, fuel cell types, and application. Topics include: energy, environment, and renewable energy; energy storage systems; distributed generation, microgrids and interconnection of alternative energy sources.

English	ENGL 6680 Seminar in British Literature: Romanticism and Ecology	The Romantic period is generally known for its writers' focus on the natural world as a source for imaginative creation. Yet these writers took up their pens at the beginning of what we now call the Anthropocene, the first geological age defined by human activity. The Romantic turn to the natural world at this historical moment provides critical insights into developments of the period as well as into our own age of ecological crises. Through close readings of the texts of various Romantic authors, such as Mary Wollstonecraft, William Wordsworth, John Clare, and Mary Shelley, as well as contemporary ecocritical scholarship, we will generate questions about how Romantics conceived of the natural world and the impact of these conceptions on our own moment. (Course modified by faculty in Sustainability in the Curriculum Workshop)
English	ENGL 6687 Seminar in Global Literature: Contemporary Global Fiction	identify aesthetic, political, and historical factors that are determinant for certain narratives to become global. Develop a comparative framework that interrogates the capacity of those narratives to intervene, among others, in discourses of nationalism, migration, and transnationalism, the global reach of environmental disasters, gender, imperialism, and terrorism.
Geography & Earth Sciences	ESCI 6000. Topics in Earth Sciences: Hydrogeochemical Tracers in Surface and Ground Water	Examine applied environmental tracers in surface, subsurface, and contaminant hydrology (streams, lakes, and groundwater). Tracer techniques include geochemical element fingerprinting of environmental processes and applications of isotopes. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Geography & Earth Sciences	GEOG 5132. Spatial Modeling for Social and Economical Applications	Theories and practices of spatial modeling with social and economical applications. Topics include: overview of modeling in human geography, socioeconomic data sources, and building and evaluating spatial models. Examples of models covered in class include: spatial accessibility, interaction, diffusion, tipping points, and segregation.
Geography & Earth Sciences	GEOG 5160. Geography of Transportation Systems	Geographical and human factors that affect the movement of goods and people from place to place. Emphasis on transportation routes and networks, commodity flow patterns, and the locational implications of freight rates.
Geography & Earth Sciences	GEOG 8408. Spatial Optimization	Spatial Optimization is articulated around the explicit use of GIS tools and techniques to solve coverage, distance-decay problems as well as routing problems integrating geographic information. Case studies in various domains such as urban retailing or transportation. Problem formulation and solution techniques to optimally preserve existing natural reserves, such as reservoir resources or locating natural corridors between biologically rich areas to protect diversity.
Public Health Sciences	HLTH 6220. Applied Health Behavior Change	Concepts and theories from the social and behavioral sciences that guide health promotion interventions targeted to changing health behaviors. Major public health problems such as health disparities, environmental risk factors, lifestyles choices that affect physical, mental, and social well-being, and problems with the organization and delivery of health services have both their origins and solutions in human behavior. Synthesize the evidence-based health promotion literature, choose appropriate theoretical and behavioral measures to determine intervention success, and apply theory to intervention activities and programs. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Public Health Sciences	HLTH 6227. Community Health Planning and Evaluation	Processes, techniques, and skills necessary to plan, to implement, and to evaluate programs related to public health. Understanding of these principles and their ability to apply them in practice through the development and presentation of a comprehensive community needs assessment, a program proposal, and an evaluation plan. Emphasis is placed upon a social-ecological analysis of factors contributing to the understanding of, and response to, community health issues.
Public Health Sciences	HLTH 6228. Social Determinants of Health	Exposure to broad social factors influencing population health: poverty, gender, economy, housing, immigration, urbanization, incarceration, technology, and others. These determinants differentially affect population subgroups influencing health status, health behavior, and healthcare utilization.

Public Health Sciences	HLTH 6273. Infectious Disease Epidemiology	Concepts and basic research methods in infectious disease epidemiology. Learn about causative agents, different routes of transmission (e.g., host-host, environmental transmission, vector-borne, etc.), outbreak investigation, and control/prevention strategies for a wide array of emerging and re-emerging infectious diseases, including HIV, Tuberculosis, malaria, etc.
Civil & Envir. Engineering	INES 8101. Environmental Systems	Hydrosphere, lithosphere and the Earth's biogeochemical systems and how these impact human activities and infrastructure. Emerging environmental issues and technologies in the areas of environmental impact due to human activities and natural disasters, and environmental sustainability including industrial ecology, waste minimization and recycling.
Civil & Envir. Engineering	INES 8104. Advanced Infrastructure Systems	Inter-relationship between urban infrastructure systems and the natural environment. Concepts pertaining to sustainability, resilience, climate change and adaptation, environmental quality, smart technology, asset management, decision support, economics and policy are reviewed and tailored to research on contemporary issues and emerging technologies.
Computer Science	ITCS 5156. Advanced Machine Learning	Explores the components of machine learning prediction functions for classification and regression with an emphasis on practical applications. Topics include: fundamental concepts, such as training, validation, overfitting, and error rates. Also introduces commonly-used machine learning algorithms, such as decision trees, naive Bayes, neural networks and random forests. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Management	MBAD 6101. Ethical Leadership	Examination of the roles of organizational values, culture, leadership, and governance in the avoidance of misconduct and in the development and maintenance of ethical organizations. Emphasis is placed on individual ethical decision-making challenges in organizations and on the development of ethical leadership skills.
Management	MBAD 6141. Operations Management	Design, operation, and control of service and manufacturing systems. Emphasis on using analytical tools for problem solving in process analysis and reengineering, work-force management, material and inventory management, aggregate planning, total quality management, and others. Includes case study readings on sustainability.
Management	MBAD 6962. Energy Markets	Energy and power systems in regulated and competitive environments and implications on business decisions for firms in these industries. Topics include: mechanism of energy markets; comparative market systems; gas, oil, coal, and electricity market architecture; smart grid and renewable energy in electricity markets; risk and risk management in energy. Cross-listed as SEGR 4962 and EMGT 5962.
Middle, Secondary, & K-12 Education	MDSK 5204. Equity and Education	Examination of issues of power, race, class, language, and privilege that affect the educational success of diverse student populations in today's public schools. Particular consideration is given to building mutually respectful relationships with diverse students, engaging parents/guardians/families from different cultural backgrounds, and creating and sustaining safe, caring, and inclusive classrooms using restorative practices that engender a positive learning environment.
Middle, Secondary, & K-12 Education	MDSK 6260. Teacher Leadership	An examination of the current research on adult learning and development, expert knowledge, and the professionalization of the field of teaching. Students develop skills to direct other educational professionals. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Political Science & Public Administration	MPAD 6292. Disaster Management	Emergency managers must be prepared to face a wide variety of natural, technological and public health disasters in their communities. Having a good understanding of a potential disaster's unique characteristics and dynamics can help an emergency manager better prepare for the worst-case scenario. Focuses on a series of natural and weather-related disasters, technological or man-made disasters and public health disasters.

Political Science & Public Administration	MPAD 6328. Urban and Community Development	Examines the policies and programs designed to reduce social and economic distress in U.S. communities and focuses on local and neighborhood-based efforts to address problems of inadequate housing, unemployment, lack of community services and facilities, crime etc. Considers the various roles that government, private sector, and nonprofit organizations play in community revitalization.
Finance	MSRE 6130. Site Planning, Building Design and Construction Fundamentals	Introduces essential principles of site planning, design and construction. Special emphasis is placed on programming and sustainability issues for different project types. The nature and characteristics of construction materials, equipment, and systems used in modern buildings will be presented and how they affect function and feasibility. Topics include LEED for Neighborhood Development.
Architecture	MUDD 5601. Community Planning Workshop	Contemporary theory and practice in planning and urban design; applying planning and urban design theory and methods to actual problems; compiling and analyzing community scale data, working with citizens, professional planners and designers, and elected officials, and examine what it means for the planner and urban designer to demonstrate ethical responsibility to the public interest, to clients and employers, and to colleagues and oneself. Integration of four themes: Nature, Infrastructure, Property, and People.
Architecture	MUDD 6050. Urban Design Elective: Dilemmas of Modern City Planning - Designing for Equity	Study of topical areas of urbanism and urban design. This offering focused on economics, social forces, attitudes about density, ideas about sustainability, and incentives to encourage good design as forces that affect contemporary urban form. The class studied how local, state and national policies combined to create Charlotte's urban form, and how race was a fundamental contributor.
Architecture	MUDD 6606. GIS and Urban Mapping	This applied research course is focused on the broader technical issues of what a contemporary geographic information system (GIS) is and how the system can help us model and better understand the dynamic complexities of a city. Introduces students to a mix of geographic information system theory and applications to urban design and planning problems. Topics include: geographic projection and coordinate systems, data management, models of spatial data, spatial analysis techniques, and GIS implementation issues.
Psychological Science	PSYC 8243. Diversity in Health Psychology	This course covers the central ideas and theories related to the role of culture, gender, and socioeconomic status in influencing behavior, cognitions, and emotions as they relate to physical and mental health outcomes. The materials reviewed examine the importance of considering the role of these factors in research, prevention intervention efforts, treatment, and the delivery of health services.
Social Work	SOWK 6151. Social Work, Social Justice, and Diversity	Examines individual, systemic, and ideological factors related to diversity and social justice. Theories and perspectives that contribute to understanding oppression and privilege are emphasized. Implications for social work practice, research, and policy are examined. Strategies to counter discrimination and oppression are identified.
Social Work	SOWK 7222. Advanced Social Work Practice with Organizations and Communities	Builds on the foundational theories and skills introduced in Social Work Practice with specific attention to communities and organizations as primary client systems. Introduces theories that inform and guide practice in communities and organizations. Builds advanced skills in engaging and assessing communities and organizations. (Course modified by faculty in Sustainability in the Curriculum Workshop)
Social Work	SOWK 7223. Advanced Social Work Practice with Organizations and Communities II	Builds advanced practice skills in the design, development, implementation, and evaluation of interventions at the community and organizational levels. Also builds skills in leadership and ethical decision-making. Emphasizes the use of critical thinking and self-awareness concerning leadership and ethical challenges in community and organizational contexts. (Course modified by faculty in Sustainability in the Curriculum Workshop)