

Department	Number	Course Name	Course Description	Sust Focus
AH	2071	Introduction to the Arts in America	A survey of American art from the period of colonial exploration and settlement to the postmodern present. Political and social meanings of painting, sculpture, architecture, prints, and photographs. The relationship of art to religion and nationalism; issues of class, race, and gender.	Related
AH	2145	History of Decorative Arts: European Heritage	Changing styles of European furniture, textiles, ceramics, and glass in the context of general trends in art history and changing patterns in economic, technological, social, and cultural history.	Related
AH	2154	American Architecture I	Stylistic properties, form and type characteristics, technological developments, and urbanistic patterns are introduced as a means of interpretation of historic meaning. Buildings are analyzed both as artifacts and as signifiers of social, cultural, and economic tendencies. 1600–1860.	Related
AH	2155	American Architecture II	Continuation of AH 2154. Stylistic properties, form and type characteristics, technological developments, and urbanistic patterns are introduced as a means of interpretation of historic meaning. Buildings are analyzed both as artifacts and as signifiers of social, cultural, and economic tendencies. 1860–present.	Related
AH	3101	Ancient Art of the Bronze Age and Greece	A survey of Greek art from the Minoans and Mycenaeans (c. 2000 B.C.) to the age of Alexander (c. 300 B.C.). Relationships among the arts of the different groups in the Aegean area and their impact on Western culture. The Theran volcanic eruption, the “Dorian Invasion,” the portrayal of women, “heroic nudity,” and the assumption of a stylistic chronology.	Related
AH	3106	Art and Archaeology of Israel and Neighboring Lands	The archaeology of Israel and adjacent areas (Syria, Jordan, Lebanon). Examination of many major sites and monuments. Significant problems and current debates.	Related
AH	3146	Modern Architecture in Europe and America	Major developments in architecture and urbanism from the Industrial Revolution to the end of the 20th century.	Related
AH	3151	American Art in the Age of Revolution	American art during the 18th-century “consumer revolution,” the American War for Independence, and the early republic. Emphasis on the socioeconomic and political purposes of art, with focus on Enlightenment symbolism and the visualization of national identity.	Related
AH	3152	American Art in the Era of National Expansion	American art from the opening of the Erie Canal in 1825 to the Spanish-American War in 1898. Emphasis on the role of art in the expansion of the United States, exploring issues of race, class, and gender; art, and religion.	Related
AH	3165	Later Twentieth-Century Art	Artists, art, and critical concepts from the later twentieth century, focusing on key movements and issues, including Abstract Expressionism, Minimalism, Conceptual Art, feminism, identity politics, and the rise of globalization.	Related
AH	3165	(W) Later Twentieth-Century Art	Artists, art, and critical concepts from the later twentieth century, focusing on key movements and issues, including Abstract Expressionism, Minimalism, Conceptual Art, feminism, identity politics, and the rise of globalization.	Related
AH	4181	Topics in Asian Art	Visual cultures of Asia, from India to China, and from a range of time periods. Examination of artworks in their historical, religious, and cultural contexts. Topics vary by semester. May be repeated for credit provided the topic differs. See department for more details. Restricted to art history majors or with the permission of the instructor.	Related
AH	6251	Proseminar in American Art in the Age of Revolution	American art during the 18th-century “consumer revolution,” the American War for Independence, and the early republic. Emphasis on the socioeconomic and political purposes of art, with focus on Enlightenment symbolism and the visualization of national identity.	Related
AH	6252	Proseminar in American Art in the Era of National Expansion	American art from the opening of the Erie Canal in 1825 to the Spanish-American War in 1898. Emphasis on the role of art in the expansion of the United States, exploring issues of race, class, and gender; art and religion.	Related
AH	6287	Preventive Conservation Techniques	Practical applications of preventive conservation of materials, monitoring environmental conditions, conducting risk assessments, evaluation of exhibit and storage areas; developing plans, policies, and procedures for collections care; grant proposal preparation for collections care initiatives.	Related
AMST	1160	Race, Gender and Law	Significant civil rights cases, critical race theory, feminist theory, and current public policy debates on domestic violence, mass imprisonment, sexual assault, and racial profiling.	Related
AMST	1200	The Sixties in America	A survey of American society, culture, and politics during the decade of the 1960s. Topics include the civil rights movement, the student movement, the Vietnam War, and the counterculture.	Related
AMST	2010	Early American Cultural History	How culture was important in the creation of the United States—in its origins as a colonial outpost and its expansion across the continent; in its hierarchies and expressions of power, especially as organized by race, class, ethnicity, or gender; in the creation of democracy and the valuing of free expression; and in the development of cities and the varied uses of the countryside	Related
AMST	2011	Modern American Cultural History	The effects of culture in the shaping of the United States since 1876. The role of the mass media; effects of cultural conceptions on the physical landscape; changing ideas of race, ethnicity, gender, and sexuality; and the political meanings of cultural conflict. Transnational influences on U.S. culture and effects of U.S. culture abroad	Related
AMST	2020	Washington, D.C.: History, Culture, and Politics	Introduction to interdisciplinary methods of studying the contemporary city. Major problems of metropolitan life, past and present, analyzed by faculty and community leaders. Emphasis on experiential team projects	Related
AMST	2071	Introduction to Arts in the America	A survey of American art from the period of colonial exploration and settlement to the postmodern present. Political and social meanings of painting, sculpture, architecture, prints, and photographs. The relationship of art to religion and nationalism; issues of class, race, and gender.	Related
AMST	2120	Freedom in American Thought and Popular Culture	America was founded on the premise of providing freedom to its people. But what, exactly, is freedom? The question has been debated in America since its founding and continues today; this course examines varied answers provided by American political thought and popular culture.	Related
AMST	2125	Varieties of Feminist Theory	Classical and contemporary texts on feminist explanations of women’s status. Relationships within the sex/gender system and arrangements based on class and race. Evaluation, through the lens of feminist theory, of several academic disciplines in the sciences, social sciences, and humanities	Related
AMST	2144	Explorations in Historical Geography	Examination of selected themes in the cultural geography of the United States over the course of its history, in relation to an overview of the historical geography of the country	Related
AMST	2210	The African American Experience	This course will provide a survey of the historical, political, and cultural dimensions of the African American experience in the U.S. The course will be organized chronologically and thematically and will cover topics such as American slavery, medical experimentation, Hurricane Katrina, aesthetics, hip-hop, and Afro-futurism.	Related

AMST	2320	U.S. Media and Cultural History	History and analysis of 20th-century U.S. media and culture, including the rise of consumer culture, film, and television. Racial, gendered, and national identities in the context of modernism, mass culture, and globalization.	Related
AMST	2350	U.S. Religion and Politics	How religion and politics have influenced each other in the United States and how Americans have understood those influences. Religious violence; conflicts between faith and science; religious factors in racial and gender politics; and the separation of church and state.	Related
AMST	2380	Sexuality in U.S. History	Examination of the changing social organization and meaning of sexual practices and desires in American culture, with particular attention to the relationship between sexuality and gendered racial and class identities and politics.	Related
AMST	2385	Sex and Citizenship	How gender and sexuality have shaped Americans' understanding of citizenship; the state regulation of marriage, reproduction, military service, immigration, and access to other government resources and benefits; the cultural representation of women, LGBTQ individuals, and other sexual and gender minorities as second-class citizens; and the efforts of women, LGBTQ groups, and others to claim full equality in American culture and politics.	Related
AMST	2410	20th-Century U.S. Immigration	Survey of immigration policy and immigrants' lives. How immigrants have changed the United States and how the United States has changed immigrants	Related
AMST	2440	The American City	An interdisciplinary introduction to the ethnic, cultural, political, and architectural landscape of the American city. Urban theory, race and ethnicity, urban history, planning and architecture, city politics, and cultural representations of the city.	Focused
AMST	2490	Themes in U.S. Cultural History	Topical examination of the ideas, values, and modes of expression that have made American life distinctive, as revealed through a cross-cultural or global perspective. Topic vary by semester.	Related
AMST	2520	American Architecture	Stylistic properties, form and type characteristics, technological developments, and urbanistic patterns are introduced as a means of interpretation of historic meaning. Buildings are analyzed both as artifacts and as signifiers of social, cultural, and economic tendencies. 1600–1860.	Related
AMST	2521	American Architecture II	Continuation of AMST 2520. Stylistic properties, form and type characteristics, technological developments, and urbanistic patterns are introduced as a means of interpretation of historic meaning. Buildings are analyzed both as artifacts and as signifiers of social, cultural, and economic tendencies. 1860–present.	Related
AMST	2533	Material Culture in America	Review and analysis of the cultural messages embedded in our material surroundings. Consideration of a range of humanly created artifacts, ranging from specific objects to vast landscapes.	Related
AMST	2610	Science, Technology, and Politics in Modern America	The history of science and technology and their role in political and social life from the late 19th century to the present.	Related
AMST	2710	The United States in Global Context, 1898–Present	How the 20th- and 21st-century U.S. has been engaged globally, both politically and culturally, with attention to global culture, transnational ideas and social movements, foreign policy, and economic transformations.	Related
AMST	2750	Latinos in the United States	Exploration of the term Latino and its impact on discussions of race, identity, and citizenship expectations throughout U.S. history. How geographic, linguistic, aesthetic, political, and economic factors construct Latino identity and influence policymaking and international relations.	Related
AMST	3324	U.S. Urban History	History of American urban life and culture from the colonial era to the present, focusing on transitions from pre-industrial to industrial and post-industrial forms. The social and spatial configuration of U.S. cities, and the urban politics of race, class, and gender.	Related
AMST	3351	U.S. Social History	Survey of American society and social change from the Civil War to the present. Gender, sexuality, race, ethnicity, and class perspectives.	Related
AMST	3353	U.S. Women's History II	Continuation of AMST 3352. History of women in the Americas and in the United States from trans-Atlantic encounters from 1877 to present.	Related
AMST	3361	African American History II	Continuation of AMST 3360. Survey of the African American experience, emphasizing the contributions of black Americans to and their impact upon American history.	Related
AMST	3362	African American Women's History	Addresses the history of African American women's labor, cultural expression, institution-building, activism and strategies to combat oppression from the antebellum period through the late 20th century. Investigates the intersection of race, gender, and class as it has shaped U.S. society, racism, the black freedom movement and African American women's experiences.	Related
AMST	3900	Critiquing Culture	Modes of analysis, including ethnography and other cultural studies methods, applied to examination of the interaction of cultural texts and practices with structures of power. Theories and themes central to American studies; scholarly debate about mass culture, ideology, visuality, discourse, and affect.	Related
AMST	3901	Examining America	Modes of power and forms of identification within and across U.S. national borders. Social constructions of the nation; forms of diversity and identity, such as race, gender, and sexuality; and the transnational flow of people, ideas, culture, and religion. Restricted to American Studies majors.	Related
AMST	4701	(W) Epidemics in American History	The history of epidemics in the United States from the late nineteenth to the early twentieth century. The development of medical and public health responses to epidemics, and their social, political, cultural, and economic impacts. Sources include primary documents, historical accounts, memoirs, fiction, and films.	Related
AMST	4702	(W) Race, Medicine, and Public Health	The experiences of African Americans as patients and health care providers; the history of the relationship between race, American medicine, and public health. Emphasis on the importance of understanding the historical roots of contemporary policy dilemmas such as racial and ethnic disparities in health and health care.	Focused
AMST	6110	Cultural Theory and American Studies	Major issues in critical and cultural theory as they relate to American culture. Various interpretive approaches including discourse analysis, cultural studies, new historicism, anthropological theory, etc	Related
AMST	6220	Theory and Emotions	Interdisciplinary exploration of politics of emotion, with an emphasis on the emotions that attach to race, gender, and sexuality.	Related
AMST	6230	The Politics of Freedom	This seminar examines critical interventions into the theories, rhetorics, and practices of freedom. It will focus on the politics of freedom in relation to an array of themes that may include liberalism, slavery, imperialism, political economy, individualism, and neoliberalism.	Related
AMST	6240	Borders and Boundaries	Exploration of borders (the literal edge or limit of a territory) and boundaries (intra-societal differences). Readings from cultural anthropology, political science, and social history examine classic tensions between state formation and nation building.	Related

AMST	6420	Religion and American Culture	Interdisciplinary analysis of religious beliefs, practices, and representations in the United States, as well as intersections of the religious and the secular. Relationships of religion to race, gender, capitalism, science, mass media, and material culture.	Related
AMST	6430	Gender, Sexuality, and American Culture	The changing social organization, cultural representation, and meaning of gender and sexuality in the United States, with emphasis on their relationship to race, class, region, nationality, empire, and globalization. Pre-colonial to 1877.	Related
AMST	6450	Race in America	Interdisciplinary analysis of the history of race and its changing political, social, and cultural meanings in the United States. Transnational racial formations, struggles for and against civil rights, multiracialism, and interracialism.	Related
AMST	6455	American Social Movements	Interdisciplinary analysis of the history of race and its changing political, social, and cultural meanings in the United States. Transnational racial formations, struggles for and against civil rights, multiracialism, and interracialism.	Related
AMST	6470	Cityscapes	Interdisciplinary examination of the American city, including urban theory, history, planning, architecture, urban politics, and cultural representations of the city.	Related
AMST	6475	U.S. Urban History	History of American urban life and culture from the Colonial era to the present, focusing on the transitions from pre-industrial to industrial and post-industrial forms, the social and spatial configuration of U.S. cities, and the urban politics of race, class, and gender.	Related
ANTH	1001	Biological Anthropology	Survey of human evolution, genetics and physical variation, and primatology. Regular laboratory exercises.	Related
ANTH	1002	Sociocultural Anthropology	Survey of the world's cultures, illustrating the principles of cultural behavior.	Related
ANTH	1004	Language in Culture and Society	Comparison and analysis of how cultures use language to communicate. The relationship of language to issues of human nature, gender, race, class, artistic expression, and power.	Related
ANTH	1005	The Biological Bases of Human Behavior	Human behavior from an evolutionary perspective, including issues such as communication, intelligence, reproductive behavior, parental behavior, aggression, and cooperation, and drawing on an understanding of the behavior and biology of the nonhuman primates.	Related
ANTH	2501	The Anthropology of Gender: Cross-Cultural Perspectives	Anthropological representations of gender relations in "other" cultures have provided important case material for feminist theorizing of sex differences and gender roles and statuses. How a cross-cultural approach can inform our understanding of gender.	Related
ANTH	2502	Anthropology of Science and Technology: 21st-Century Brave New Worlds	The relationship between science and society, with consideration of how scientific knowledge and emergent technologies affect our lives, identities, social relations, and material conditions. The sociopolitical context in which scientific knowledge is produced and the ethnographic study of biotechnology, especially genetics and its various applications.	Related
ANTH	2533	Material Culture in America	Review and analysis of the cultural messages embedded in our material surroundings. Consideration of a range of humanly created artifacts, ranging from specific objects to vast landscapes.	Related
ANTH	2750	(W) Latins in the United States	Exploration of the term Latino and its impact on discussions of race, identity, and citizenship expectations throughout U.S. history. How geographic, linguistic, aesthetic, political, and economic factors construct Latino identity and influence policymaking and international relations.	Related
ANTH	2750	Latins in the United States	Exploration of the term Latino and its impact on discussions of race, identity, and citizenship expectations throughout U.S. history. How geographic, linguistic, aesthetic, political, and economic factors construct Latino identity and influence policymaking and international relations.	Related
ANTH	3407	Conservation in a Changing World: Human and Animal Behavior	How humans and animals interact in a wide variety of settings, how human and animal welfare can be ensured, and how we can create a scientifically sound, yet socially and economically acceptable, conservation of the planet's biodiversity.	Related
ANTH	3502	Cultural Ecology	Basic principles of cultural ecology. Human interaction with the ecosystem both past and present; emphasis on the application of anthropological precepts to current environmental problems.	Related
ANTH	3503	Psychological Anthropology	The cross-cultural study of the relationship between culture and personality. Topics include emotion, conceptions of the self, mental health and illness, sexuality, marriage and parenting, and cognition. Psychobiological, cultural, ecological, and psychoanalytical theories are examined.	Related
ANTH	3504	Illness, Healing, and Culture	Introduction to medical anthropology. What the record of human evolution and prehistory tells about human health; the epidemiology of health and illness; how different cultures define disease; understanding illness and healing systems cross-culturally; and the role of medical anthropology in health care and international development.	Focused
ANTH	3506	Politics, Ethnicity, and Nationalism	Comparative analysis of political systems; political processes, such as factionalism, styles of leadership, political ritual.	Related
ANTH	3507	Kinship, Family, and Community	Cross-cultural analysis of how people form, maintain, and transform social groups and boundaries. Focus on how communities such as family, ethnic group, and nation are defined in moral terms.	Related
ANTH	3513	Anthropology of Human Rights	Issues of basic human rights and their violation by different cultures, states, and organizations. Genocide, ecocide, abuses on the basis of ethnicity, religion, or similar factors, and the treatment of those seeking asylum. Rights of informants and groups studied in anthropological research.	Focused
ANTH	3513	(W) Anthropology of Human Rights	Issues of basic human rights and their violation by different cultures, states, and organizations. Genocide, ecocide, abuses on the basis of ethnicity, religion, or similar factors, and the treatment of those seeking asylum. Rights of informants and groups studied in anthropological research.	Focused
ANTH	3531	Methods in Sociocultural Anthropology	Approaches to field research. Conceptual bases and biases in the delineation of problems and in the selection, analysis, and organization of data. Students design and carry out their own field projects in the Washington area.	Related
ANTH	3601	Language, Culture, and Cognition	The role of language and culture in the organization of human experience. Beginning with debates about linguistic relativity, the course explores the way language use shapes cognition and practice in a variety of cultures and social contexts.	Related
ANTH	3602	Ethnographic Analysis of Speech	Linguistic variation and change in discourse practices; social and political correlates of linguistic interaction; recording, transcription, and analysis of verbal interaction.	Related
ANTH	3602	(W) Ethnographic Analysis of Speech	Linguistic variation and change in discourse practices; social and political correlates of linguistic interaction; recording, transcription, and analysis of verbal interaction.	Related
ANTH	3701	Native Peoples - North America	Comparative study of Indian groups representative of the different culture areas of the United States and Canada. Contemporary issues involving indigenous groups, the wider society, and the state.	Related
ANTH	3702	Anthropology of Latin America	Culture history and ways of life in a selected region of Central or South America. Regional focus to be announced in the Schedule of Classes.	Related

ANTH	3704	Cultures of Southeast Asia	Anthropological introduction to the cultures of Southeast Asia; the role of biocultural evolution, political economy, gender, colonialism, nationalism, and globalization, particularly in Vietnam, Myanmar, Thailand, Malaysia, Indonesia, and the Philippines.	Related
ANTH	3707	Anthropology of the Middle East	Geographic environment, language, religion, and social structure of settled and nomadic peoples of the Middle East; emphasis on the Arab world.	Related
ANTH	3708	Anthropology of Africa	Comparative examination of the history, cultural development, and contemporary problems of sub-Saharan African cultures. New World African cultures are also considered.	Related
ANTH	3791	Topics in Regional Anthropology	Culture, history, and ways of life in a selected region of the world.	Related
ANTH	3801	African Roots from Australopithecus to Zimbabwe	The development and contributions of Africa from human beginnings through medieval states. Topics include human evolution, origins of art, technology, trade, and animal/plant domestication, rise of African states, early relations with Europe and Asia, antecedents of contemporary African diversity.	Related
ANTH	3801	(W) African Roots from Australopithecus to Zimbabwe	The development and contributions of Africa from human beginnings through medieval states. Topics include human evolution, origins of art, technology, trade, animal/plant domestication, rise of African states, early relations with Europe and Asia, antecedents of contemporary African diversity.	Related
ANTH	3802	Human Cultural Beginnings	Survey of prehistory in Europe, Africa, and Asia from the earliest hominid cultures to the beginnings of agriculture.	Related
ANTH	3802	(W) Human Cultural Beginnings	Survey of prehistory in Europe, Africa, and Asia from the earliest hominid cultures to the beginnings of agriculture.	Related
ANTH	3803	Old World Prehistory: First Farmers to First Cities	Archaeology of the Near East, Egypt, Europe, and other areas, from the beginnings of agriculture to the rise of Babylon.	Related
ANTH	3803	(W) Old World Prehistory: First Farmers to First Cities	Archaeology of the Near East, Egypt, Europe, and other areas, from the beginnings of agriculture to the rise of Babylon.	Related
ANTH	3804	Origins of the State and Urban Society	Emergence of urbanism and the state in the prehistory of various world regions. Regions covered might include India, China, Mexico, and the Pacific, among others.	Related
ANTH	3822	Archaeology in Film and Television	As visual media increase public awareness of archaeology, misrepresentations and distortions abound. This course examines the relationships among archaeology, the media, and popular culture. Issues considered include nationalism, descendant communities, gender, race, and colonialism.	Related
ANTH	4008	Seminar: Contemporary Anthropological Theory	The development of major trends in anthropological theory. How anthropologists from the four fields—sociocultural, linguistic, biological, and archaeology—have deployed and developed the ideas of theorists in their own empirical research and theorizing about specific processes.	Related
ANTH	4008	(W) Seminar: Contemporary Anthropological Theory	The development of major trends in anthropological theory. How anthropologists from the four fields—sociocultural, linguistic, biological, and archaeology—have deployed and developed the ideas of theorists in their own empirical research and theorizing about specific processes. Includes a significant engagement in writing as a form of critical inquiry and scholarly expression to satisfy the WID requirement.	Related
ANTH	6104	Proseminar in Linguistic Anthropology	Contemporary anthropological studies of language in biological, social, and historical perspectives.	Related
ANTH	6202	Museums and the Public: Exhibiting Culture	Study of the issues and problems involved in “exhibiting culture,” past and present, including issues of representation, message and interpretation, audience, ownership of objects and symbols, and ways of reconstructing the past. Critical examination of museum exhibits.	Related
ANTH	6203	Preventive Conservation Concepts	Historical development of preventive conservation in museums, conservation ethics, team approaches to conservation, interactions of various materials with agents of deterioration. Basics of materials testing, preparation of condition reports, choosing museum storage and exhibition materials, and risk assessment.	Related
ANTH	6204	Preventive Conservation Techniques	Practical applications of preventive conservation of materials, monitoring environmental conditions, conducting risk assessments, evaluation of exhibit and storage areas; developing plans, policies, and procedures for collections care; grant proposal preparation for collections care initiatives.	Related
ANTH	6205	Problems in Conservation	Individual conservation projects to determine composition, construction, decomposition of materials, and possible stabilization techniques. Conservation laboratory experience.	Related
ANTH	6301	The Anthropology of Development	Theoretical perspectives that distinguish the contribution of anthropology to understanding processes of change in the Third World. Focus on health, population, environment, gender, and tourism issues. The role of anthropology in planning and implementing projects and policy.	Focused
ANTH	6331	Research Methods in Development Anthropology	Anthropologists’ roles in research-related activities, such as feasibility studies, social soundness analysis, and evaluations. Innovative research techniques, such as interactive data gathering, team survey methods, and rapid rural appraisal.	Focused
ANTH	6391	Anthropology and Contemporary Problems	Exploration of anthropological perspectives on a current issue, such as refugees, ethnic violence, national mythologies, and women’s health in developing countries. Topic announced in the Schedule of Classes.	Focused
ANTH	6404	The Evolution of Primate Life Histories	Recent developments in the study of human and non-human life histories. Life history theory. Life history traits compared among primate groups in order to determine how selective pressures have shaped extant primate life history patterns.	Related
ANTH	6406	Human Genetic Variation	The genetic variation in human populations as a framework for measurement and analysis of genetic diversity and evolutionary process. Consideration of the possible roles of cultural change leading to adaptive/selective events.	Related
ANTH	6407	Anthropological Genetics	Molecular approaches to understanding human evolution and diversity; current research findings and new methodologies; social and ethical issues, including commercial DNA testing and ownership of biological samples.	Related
ANTH	6501	Gender and Sexuality	Study of new theoretical and methodological approaches developed in the anthropology of gender; postcolonialism, sexuality, and literary representations of gender.	Related
ANTH	6507	Nationalism and Ethnicity	Major theoretical and ethnographic issues in the study of nationalism worldwide. Explores how ethnic groups emerge in colonial and contemporary plural societies and how states attempt to integrate ethnic groups into nations.	Related
ANTH	6508	Ethics and Cultural Property	Survey of ethical issues in anthropology, focusing on cultural property and repatriation; the epistemological, ethical, and political dilemmas of excavating, collecting, and owning cultural artifacts.	Related
ANTH	6509	Anthropology of Art, Aesthetics, and Symbolism	Anthropological approaches to aesthetic problems and theories of symbolism in the context of ethnographic materials.	Related

ANTH	6531	Methods in Sociocultural Anthropology	Epistemology; the definition of research problems; selection of research subjects and sites; techniques of data collection (e.g., surveys, interviews); data management and organization; ethical protocols; <u>issues of safety; grant writing and funding.</u>	Related
ANTH	6561	American Folklife	The materials of American folk culture, concentrating on folk architecture, crafts, and art. Major organizing themes are regionalism and the use of objects as indicators of cultural intention.	Related
ANTH	6801	Paleolithic Archaeology	Current problems relating to materials from the Old World.	Related
ANTH	6806	Technology	Cross-cultural examination of the form, function, meaning, and use of material culture (such as ceramics or stone tools) and the behavior patterns involved in its production.	Related
ANTH	8695	Linguistic Field Methods	The relationship between language and thought in dialogue with the study of a particular foreign language. Ethnographic study of language and cognition and the application of linguistic theory and method to anthropological research. Methods of elicitation and textual analysis, and technologies used for storing and analyzing linguistic data.	Related
ARAB	3001	Advanced Arabic	Emphasis on development of speaking, listening, reading, and writing skills at the advanced level of proficiency in culturally appropriate contexts. Discussion of cultural and social issues based on a selection of contemporary written and audiovisual materials from Arab literary and media sources.	Related
ARAB	3302	Media Arabic	Authentic scripted and audiovisual materials from various contemporary Arab media outlets including television and radio newscast and cultural programs, newspaper and magazine articles, and the Internet.	Related
ARAB	3501	Arabic and Arab Identity	History of the Arabic language from pre-Islamic times and its subsequent spread into contiguous regions. The role of the Arabic language in formulating the ideology of Arab nationalism and identity.	Related
ARAB	3502	Arab Film and Culture in English	Historical and thematic survey of Arab cinema and its expression of Arab culture. Course is conducted in English.	Related
ARTH	6206	Human Development and Art Therapy	Psychological and artistic development across the life span; theories of personality development; cultural and environmental influences; and human behavior, including developmental crises, disability, exceptional behavior, and addictive behavior.	Related
ARTH	6210	Counseling/Art Therapy Process	Theoretical and clinical dimensions of counseling and art therapy explored through study of current research concerning the diverse elements affecting the therapeutic process. The goals of each phase of treatment; development of the therapeutic alliance; assessment of client readiness; therapeutic techniques and interventions as practiced in short- and long-term treatment.	Related
ARTH	6211	Process of Counseling and Art Therapy	Major theories in counseling and art psychotherapy through the lens of the creative process and other aspects of clinical practice; the influence of multicultural issues, contemporary and evidence-based practices, and various settings on art-making and the therapeutic encounter. Restricted to students in the art therapy program.	Related
ARTH	6231	Child Art Therapy	Practical, theoretical, and ethical considerations involved in treating children in clinical, community, and educational settings; application of art therapy and counseling principles and practices for diverse child populations; development of interventions for varied DSM diagnoses.	Related
ARTH	6232	Art Therapy with Adolescents	Practical, theoretical, and ethical considerations in treating adolescents in clinical and educational settings. Assessment and treatment issues integrating the use of art techniques specifically designed for this population. Application of art therapy and counseling principles and practice for diverse adolescent populations. Development of interventions for varied DSM-V diagnoses.	Related
ARTH	6233	Martial and Family Art Therapy/ Counseling	Principles of working with families and couples, including an overview of systems theories and stages of family life cycle development; art techniques for evaluating of family dynamics; intervention strategies and cultural and ethical considerations.	Related
ARTH	6235	Social and Cultural Diversity	Exploration of the therapist's heritage, expectations, worldview and values; racial/cultural identity development; skills for multicultural counseling. Stereotypes and biases that interfere with effective treatment of culturally different clients. The role of the art therapist or counselor in conflict resolution, advocacy, and social justice. May be repeated for credit if taken through the study abroad course option.	Related
ARTH	6235	Social and Cultural Diversity	Exploration of the therapist's heritage, expectations, worldview and values; racial/cultural identity development; skills for multicultural counseling. Stereotypes and biases that interfere with effective treatment of culturally different clients. The role of the art therapist or counselor in conflict resolution, advocacy, and social justice. May be repeated for credit if taken through the study abroad course option. Restricted to art therapy students	Related
ARTH	6242	Psychopathology: Art and Diagnosis	Criteria of psychiatric diagnoses, such as the Diagnostic and Statistical Manual multi-axial system, theories of psychopathology, and relevant literature evaluation of potential indicators of functional and organic disorders in behavior and artwork of clients; ethical issues; cultural and environmental influences on diagnostic categorization; basic introduction to psychopharmacology.	Related
ARTH	6243	Substance Abuse and Addiction	Overview of substance abuse and addictions for art therapy and counseling, including theory and treatment applications; screening and assessment tools; treatment models specific to the field of addictions; art therapy techniques in the treatment of substance abuse for adolescents and adults in a variety of treatment settings. Restricted to students in the art therapy program.	Related
ARTH	6265	Advanced Issues in Psychotherapy and Art Therapy	Overview and application of one or more treatment models or theories to various mental and emotional disorders. Connections between the practice of art therapy and the techniques of other disciplines.	Related
ARTH	6271	Art Psychotherapy and Trauma I: Theory and Approaches to Treatment	Introduction and overview of theory, practice, and treatment related to complex, trauma-related problems; psychobiology of traumatic stress, impact of traumatic stress on individuals, and specific treatment modalities in clinical setting; somatic (body-based) and nonverbal (art and image-based) treatment modalities. Supervised treatment or observation of treatment of clients with trauma histories. Restricted to students in an art therapy program.	Related
ARTH	6272	Art Psychotherapy and Trauma II: Loss, Countertransference, and Resiliency	Multi-modal treatment of acute, serial, or complex trauma; theoretical, practical, moral, cross cultural, and personal aspects as seen through an art therapy and counseling lens. Supervised treatment or observation of treatment of clients with trauma histories. Restricted to graduate students in the art therapy program.	Related
BADM	1004	The Age of Globalization	A multidisciplinary foundation in the globalization of people, markets, and firms. Required for all School of Business students.	Related
BADM	2001	Markets and Politics	Economic and political resource allocation; social and political influences on business organizations; contemporary problems and issues.	Related

BADM	2001	(W) Markets and Politics	Economic and political resource allocation; social and political influences on business organizations; contemporary problems and issues.	Related
BADM	3102	Business and Government Relations	Economic and legal environment of business enterprise; social and political influences; contemporary problems and issues.	Related
BADM	3103	Human Capital in Organizations	An introduction and integration of concepts drawn from human resource management and organizational behavior. Application of these concepts to individual, group/team, and organizational scenarios through experiential exercises, cases, and projects. Development of skills in analyzing and evaluating human capital problems and determining appropriate solutions.	Related
BADM	4101	Business Law and Ethics	An introduction to practical reasoning at the intersection of business and society. Emphasis on application of ethics frameworks and core principles of business law to problems of individual, organizational, and social responsibility in business.	Related
BADM	4101	(W) Business Law and Ethics	An introduction to practical reasoning at the intersection of business and society. Emphasis on application of ethics frameworks and core principles of business law to problems of individual, organizational, and social responsibility in business.	Related
BISC	1005	The Biology of Nutrition and Health	A study of the human body and its disorders and diseases through examination of the essential molecules of life, nutrition, digestion, genetics, and reproduction.	Focused
BISC	1006	The Ecology and Evolution of Organisms	Introduction to ecology and evolution, including man's impact on other plants and animals, and an overview of Earth's biodiversity.	Related
BISC	1007	Food, Nutrition, and Service	A study of biology and nutrition that uses service learning to reinforce course concepts. Topics include the need for humans to consume other organisms, processing of consumed nutrients, unexpected effects of nutritional consumption, and measures to improve nutrition.	Focused
BISC	1008	Understanding Organisms through Service Learning	The evolution of life on earth; the value of other organisms, their role in our world, and how humans can cause harm to this infrastructure. Students work with a community partner to perform activities that assist the partner while reinforcing course concepts.	Related
BISC	2000	Sophomore Colloquium	Topics in biological diversity from the perspective of species and within the conceptual framework of evolutionary biology; the explanatory power, simplicity, and grandeur of evolution and its products; how questions and hypotheses are empirically addressed. Restricted to sophomores with permission of the department.	Related
BISC	2305	Plant Biology	Plant metabolism and molecular biology: photosynthesis, nitrogen metabolism, membrane transport, mechanisms of hormone action, protein targeting, biotechnology, and current research topics.	Related
BISC	2334	(W) Integrative Biology of Fishes	An introduction to concepts in anatomy, biomechanics, physiology, developmental biology, biomechanics and hydrodynamics, adaptive radiation, evolutionary biology, and ecology using fish as model organisms. Significant fish groups are covered, but emphasis is on exploring broader topics in which fish have figured prominently in research.	Focused
BISC	2450	Organic Evolution	Synthetic theory of organic evolution, including population biology, speciation, adaptation, macroevolution, systematics, biogeography, and the geologic record.	Focused
BISC	2454	General Ecology	The core concepts of the field of ecology across different hierarchical scales of ecological systems.	Focused
BISC	2456	General Ecology Laboratory	Practical exercises and field-trips are used to explore the core concepts of the field of ecology across different hierarchical scales of ecological systems.	Focused
BISC	2467	Marine Biology	Study of relationships between organisms and physical, chemical, and biological factors of the marine environment. Consideration of the open ocean and coastal ecosystems and human influences on them.	Focused
BISC	3454	Marine Ecology	Abiotic and biotic factors in marine environments in general and ecological theory behind how they shape communities, biomes, and patterns in marine biodiversity; major marine habitats and the important organisms, physical environment, and major interactions in each; threats to marine environments and effective conservation strategies.	Focused
BISC	3455	Marine Ecology Laboratory	Study of marine ecology through experiential learning and an introduction to ecological research in the marine environment and using large datasets collected by marine scientists. By visiting marine ecosystems, students will also learn about marine resource use and conservation strategies in the coastal zone.	Focused
BISC	3458	Plant Comparative Structure and Function	Fundamental principles of how organisms are built, investigating trade-offs and coordination in design, how variation in structure influences physiological function in different ecological settings, and how relations among plants shape structure and function and responses to ecological gradients.	Focused
BISC	3459	Field Biology	Overview of the approaches and techniques used by contemporary field biologists for cataloging, quantifying, and comparing patterns of biodiversity across plants, animals, and fungi at multiple spatial and temporal scales.	Focused
BISC	3460	Conservation Biology	Theory and practice of conserving biological diversity. Ecological patterns of biodiversity, biology of small populations, and conservation case studies. Use of ecological modeling software to explore various topics.	Focused
BISC	3461	Plant-Animal Interactions	Review of the major ecological and evolutionary interactions that occur between plants and animals in natural and managed ecosystems.	Focused
BISC	3462	Plant-Animal Interactions Lab	Field and laboratory study of temperate interactions between plants and animals. Group projects focus on original data collection, analysis, and interpretation.	Focused
BISC	3464	Ecology and Evolution of Societies	Study of broadly important ecological and evolutionary patterns and processes exemplified by organisms that have undergone the major evolutionary transition to living in societies.	Focused
BISC	6243	Seminar: Ecology	In-depth study of selected topics, including reports on original publications.	Focused
CAH	3090	History of Design	Since the mid-nineteenth century design has exercised an increasingly important role as a cultural force, from the chairs we sit in to the utensils with which we eat. This wide-ranging survey from 1850 to the present presents a history of designed objects, images, and spaces, including products, furniture, appliances, interiors, posters and other printed materials, and the latest digital media. Influences among the design disciplines, as well as developments in materials and technologies, are studied within their cultural, political, economic, and social contexts.	Related

CAH	6040	Contemporary Culture & Design	This course will examine how the field of design reflects the movements and attitudes of our contemporary culture and vice versa. Each year the course will explore different topics through a combination of seminar, special guest lectures, student presentations, and readings. Students will complete an extensive research project on a topic of their choice and present their findings at the end of the semester. The Spring semester will focus on the objects with which we surround ourselves—from the highly functional to the purely decorative and the imminently disposable to the cherished heirloom. We will explore the societal influences, the environmental impact, and the role and responsibility of designers in a culture of objects.	Related
CAH	6235	Surface, Space, Place	This course examines the thicket of practical and theoretical underpinnings of art and design in spatial contexts. Careful attention will be paid to urban planning and ideologies of power that impact decisions on what appears in the visual environment. How do planned landscapes, such as cemeteries and gardens, negotiate both physical and mental space? How do we imagine "formless" environments, such as outer space and the Internet, to have contours and divisions? This course makes extensive use of area resources, such as the National Mall, Dumbarton Oaks, Rock Creek Cemetery, and various museum collections and monuments, to register space and place in history and memory. Course open to graduate students, and to qualified undergraduates with permission of Academic Studies department chair.	Related
CE	1010	Introduction to Civil and Environmental Engineering	An introduction to the profession of civil and environmental engineering. Field visits and laboratory exercises complement classroom instruction.	Focused
CE	1020	Introduction to a Sustainable World	The science underlying the basic processes that gave rise to the world we live in and that maintain its viability for human life. Ecosystem-functioning environmental issues, such as greenhouse gas emission and ozone, with current efforts to resolve them. Technological innovations in the context of sustainability.	Focused
CE	2510	Environmental Sustainability	An introduction to environmental sustainability with focus on the nexus of water, energy, and climate; energy demands of water systems, water footprints of energy generation, and how the two valuable resources are limiting each other; technologies and research frontiers toward a sustainable water and energy supply.	Focused
CE	2710	Introduction to Transportation Engineering	Transportation system components; roadway traffic capacity and network performance measures; signalized and un-signalized intersections; monitoring techniques, instruments and data processing. Sustainability issues and environmental impact of transportation systems with focus on urban design, planning and regulation.	Focused
CE	3110	(W) Civil Engineering Materials	Mechanical properties and behavior of civil engineering materials such as metals, concrete, and fiber-reinforced polymer composites. Properties range from plastic deformations of metallic materials to crushing of confined and unconfined concrete. Basis of the strength of materials. Concepts of creep, fatigue, fracture, and crack propagation.	Focused
CE	3111	(W) Civil Engineering Materials Lab	Measurement of stress-strain characteristics and study of failure modes in ductile steel, brittle concrete, and anisotropic composite materials. Experiments include data collection, data analysis, and interpretation and presentation of results regarding tension, compression, bending, impact, and shear properties.	Focused
CE	3140	Sustainability in Engineering Materials	Sustainable engineering: overall materials energy needs/properties and impacts; load resistance and aging, thermodynamics, water conservation, heat transfer, use of energy-efficient materials in construction, life-cycle assessment.	Focused
CE	3310	Reinforced Concrete Structures	Properties of concrete and reinforcement; design of flexural reinforcement, shear reinforcement; development of reinforcement; design of columns, floor slabs; ethics and professionalism in design. A design project, including the use of computer software and a detailed report, is required.	Related
CE	3520	Environmental Engineering I: Water Resources and Water Quality	Physical and chemical analyses of water quality and characteristics. Microbiology of water and pathogens. Introduction to water treatment processes involving coagulation, flocculation, filtration, and disinfection.	Focused
CE	3521	Environmental Engineering Laboratory	Laboratory experiments for physical and chemical analyses of water and wastewater. Measurement of turbidity, alkalinity, dissolved oxygen, BOD, COD, suspended solids, and optimum coagulant dose using jar tests.	Focused
CE	3720	Highway Engineering and Design	Road vehicle performance. Principles of highway design: horizontal and vertical alignments, roadside design; drainage and drainage structures, earthwork, intersections, interchanges, parking facilities; basic traffic models; highway materials. Application of safety standards.	Related
CE	3730	Sustainable Urban Planning Dynamics	Human and physical processes shaping urban environments; human-environment interactions in the context of an urban region; urban design, materials, transport, planning, and regulation.	Focused
CE	4341	Senior Design Project I	First in a two-course sequence for the senior design project in civil and environmental engineering. Outcomes include team formation, project selection, task formulation and assignments, preliminary design validation and/or prototyping. Restricted to students in the civil engineering program with senior standing.	Focused
CE	4342	Senior Design Project II	Second in a two-course sequence for the senior design project in civil and environmental engineering. Application of civil and environmental engineering concepts in the design of a project that integrates the concepts and technical knowledge learned in two or more of the following disciplines: engineering mechanics, materials, environmental engineering, geotechnical engineering, structural engineering, transportation engineering, and water resources engineering. Restricted to students in the civil engineering program with senior standing. Prerequisite: CE4341. Recommended background: Knowledge of structural analysis of indeterminate structures, reinforced concrete and structural steel design, and soil mechanics.	Focused
CE	4410	Introduction to Geotechnical Engineering	Soils and rock formation, soil composition, permeability, seepage and flow net analysis, stresses in soil medium, consolidation and settlement, shear strength of soil, analysis of lateral earth pressures, soil compaction.	Focused
CE	4411	Geotechnical Engineering Laboratory	Laboratory experiments to evaluate liquid and plastic limits, grain-size distribution, shear strength, compressibility, permeability, and moisture-density relationship of soils.	Focused
CE	4450	Introduction to Geo-environmental Engineering	Characterization of soils and wastes, engineering properties of soils and geo-synthetics, fundamental concepts of fate and transport of contaminants, common practice in design and construction of waste containment systems, current methods for remediation of contaminated groundwater and soils.	Focused

CE	4530	Environmental Engineering II: Water Supply and Pollution Control	Introduction to wastewater treatment systems including clarification, suspended and attached growth processes. Use of dissolved oxygen models. Water supply and wastewater collection systems, applied hydraulics of pipelines and pumps. Planning to meet quality needs and regulatory requirements.	Focused
CE	4620	Hydrology and Hydraulic Design	Descriptive hydrology: hydrologic cycle, precipitation, stream flow, evaporation, and transpiration. Quantitative hydrology: hydrograph analysis, hydrographs of basin outflow, storage routing. Probability concepts in hydrology: flood frequency, rainfall frequency, stochastic hydrology. Culverts and stilling basins.	Related
CE	6102	Application of Probability Methods in Civil Engineering	Uncertainty in real-world information; basic probability concepts and models; random variables; useful probability distributions, statistical estimation of distribution parameters from observed data; empirical determination of distribution models; testing hypothesis; regression and correlation analyses; decision theory.	Related
CE	6201	Advanced Strength of Materials	Deflection of beams using singular functions, unsymmetrical bending of beams, beams on elastic foundation. Beam-column problems, shear center for thin-walled beam cross sections, curved beams. Applications of energy methods, torsion, basic equations for theory of elasticity, thin- and thick-walled cylinders, stress concentration, and failure criteria.	Related
CE	6342	Structural Design to Resist Natural Hazards	Prediction of forces due to earthquakes and strong winds; generalized codes; pseudostatic methods for preliminary design; codes based on spectra, energy absorption and ductility; influence of foundations; ground failures; static and aeroelastic effects of strong winds. Design project.	Focused
CE	6403	Geotechnical Engineering	Principles of soil mechanics applied to the analysis and design of mat foundations, pile foundations, retaining structures including sheeting and bracing systems, and waterfront structures. Foundations on difficult soils and reinforced earth structures.	Focused
CE	6404	Geotechnical Earthquake Engineering	Ground motion, wave propagation, foundation isolation, site response analysis, seismic stability of retaining structures, soil structure interaction.	Focused
CE	6501	Environmental Chemistry	Principles of chemistry of natural waters, water supplies, wastewaters, hazardous wastes. Stoichiometry, equilibrium, solubility, kinetics, organic chemistry, biochemistry, analytical techniques. Examples from water/wastewater practice to illustrate applications.	Focused
CE	6502	Advanced Sanitary Engineering Design	Elements of design including basic parameters and hydraulic requirements. Layout and design of water supply and wastewater systems, pumping stations, and treatment plants. Plant expansions and modifications.	Focused
CE	6503	Principles of Environmental Engineering	Basic concepts of water, air, and terrestrial environments and interrelationships among them. Principles of environmental chemistry and microbiology. Assessment of environmental quality and impacts. Environment and health. Water and wastewater systems. Legal and regulatory controls.	Focused
CE	6504	Water and Wastewater Treatment Processes	Theory and application of commonly used processes. Sedimentation, coagulation, filtration, disinfection, gas transfer, activated sludge, trickling filters, oxidation ponds, sorption, and sludge stabilization and disposal. Process combinations to produce treatment systems.	Focused
CE	6505	Environmental Impact Assessment	Public policy and legislation on environmental quality. Methods for assessing impacts of engineering projects. Technology for assessing impacts on air, water, and land environments, applied to transportation facilities, water and wastewater facilities, industrial and community development.	Focused
CE	6506	Microbiology for Environmental Engineers	Principles and applications of advanced treatment systems for water, wastewater, and hazardous wastes, including: biological nutrient removal, oxidation-reduction processes, stripping, sorption, membrane processes, chemical precipitation, others.	Focused
CE	6507	Advanced Treatment Processes	Principles and applications of advanced treatment systems for water, waste-water, and hazardous wastes, including: biological nutrient removal, oxidation-reduction processes, stripping, sorption, membrane processes, chemical precipitation, others.	Focused
CE	6508	Industrial Waste Treatment	Types of industries, waste sources. Characteristics, measurements, and evaluation. Minimization and reuse. Treatment process selection, development, and design. Regulations, permits, standards, monitoring, and pretreatment.	Focused
CE	6509	Introduction to Hazardous Wastes	Regulations, including RCRA and Superfund. Transport and fate of hazardous substances. Elements of environmental toxicology, risk assessment, and hazard ranking. Monitoring, data collection, and evaluation. Waste minimization. Case histories.	Focused
CE	6601	Open Channel Flow	Types and regimes of flow; energy and momentum principles, uniform flow, gradually varied flow, spatially and rapidly varied flow. Flow in nonprismatic channels. Unsteady flow; dam break problem, flood routing.	Related
CE	6602	Hydraulic Engineering	Hydraulic design of conveyance, regulating, and measurement structures. Design for spillways, energy dissipators, inlet and outlet works related to dams. Forces on hydraulic structure and stability analysis. Hydraulic turbines and pumps. Design considerations for flow through pipes. Transients and cavitation.	Related
CE	6603	Design of Dams	Project planning and investigations. Types of dams; design of earth-rock fill dams; stability analysis, foundation treatment, wind-wave protection. Construction methods for dams. Reservoir sedimentation. Safety inspection of dams.	Related
CE	6604	Advanced Hydrology	Precipitation, evaporation, and transpiration. Soil physics; stream flow, drainage basins, hydrograph analysis, and stream-flow routing. Design criteria, flood frequency statistics and analysis, flood forecasting and control, water supply forecasting.	Related
CE	6605	Ground Water and Seepage	Permeability theory of groundwater flow, flow nets, analogs, computer solutions; applications to engineering problems such as excavation dewatering, flow through dams, stabilization of earth slopes.	Focused
CE	6606	Mechanics of Water Waves	Irrotational theory for deep- and shallow-water waves, reflexion, refraction, diffraction, attenuation. Water waves of finite amplitude: shallow-water theory, tides, bores, long-waves theory, conoidal and solitary waves. Wave generation by wind. Wave breaking and reflexion.	Related
CE	6607	Water Resources Planning and Control	The parameters of water resources planning and control, economics of water resources and related natural resources, economics of water-quality control, physical parameters of water resource development, water resources law.	Focused
CE	6609	Numerical Methods in Environmental and Water Resources	Use of microcomputers in water resources. Elements of finite difference schemes, basic operations, convergence, stability, and consistency. Nonuniform flow and error analysis; unsteady laminar flow; diffusion problems; unsteady flow in open channels; water hammer, seepage flow, and diffusion-dispersion problems.	Focused

CE	6610	Pollution Transportation Systems	Distribution of pollutants in natural waters and atmosphere, diffusive and advective transport, mathematics for stream pollutant deoxygenation rates, groundwater pollution transport, sediment transport, thermal transport, numerical simulation of pollutant transports in streams and estuaries.	Focused
CE	6702	Vehicle Dynamics	Engineering principles and analytical methods explaining the performance of an automotive vehicle. Basic mechanics governing vehicle dynamic performance in longitudinal, ride, and handling modes. Engineering analysis techniques applied to basic systems and subsystems to derive the governing equations.	Related
CE	6703	Sustainable Urban Planning	Human and physical processes shaping urban ecologies and environments; human-environment interactions in the context of an urban region; urban land use, transport and planning. Restricted to students with departmental approval.	Focused
CE	6706	Pavement & Runway Design	Pavement types, wheel-load characteristics; stresses in pavements and subgrades; empirical methods of design of flexible and rigid highway and airfield pavements; general principles of runway design.	Related
CE	6707	Systems Dynamics Modeling and Control	Introduction of concepts in control theory and applications to solve problems in civil and transportation engineering dealing with single-input/single-output and multi-input/multi-output systems. Review of classical control theory in the frequency and time domain, state-space analysis, system optimization, and non-linear control.	Related
CE	6721	Traffic Engineering and Highway Safety	Roadway traffic capacity and network performance measures; steady and unsteady traffic flow phenomena; traffic control signalization theory and practical implementation; monitoring techniques, instruments, and data processing for highway safety. Traffic related highway safety design concepts.	Related
CE	6722	Intelligent Transportation Systems	Commands, controls, and communications in modern multimodal transportation; infrastructure/highway and vehicle automation, advanced traffic management, vehicle control and safety systems; information, data, and sensory requirements; practical applications and projects.	Focused
CE	8370	Intelligent Systems Theory and Applications	Overview of artificial intelligence, neural networks, genetic algorithms, fuzzy systems, and hybrid intelligent systems and their integration with other information processing methods. Intelligent systems applications; examples are drawn from ITS and traffic engineering, vehicle safety, remote sensing, and structural design optimization.	Related
CE	8380	Advanced Biomechanics	Historical overview of biomechanics and biomaterials. Fundamental concepts in mechanics as applied to the treatment of biological systems. Approaches to the mechanical analysis of the human structure under physiological and non-physiological loading conditions. Constitutive laws for biological materials. Finite element applications.	Related
CED	3030	Sociology of Family	The study of family dynamics in today's society begins with understanding of basic necessary functions such as domestic living, working, earning, educating the young, and sustaining the well-being of all. In addition, we consider the influence of family patterns and values on the lives of all its members, both within the family unit and beyond. This course surveys traditional and evolving forms of the "nuclear" family, multi-generational interactions, the extended and the informal family (among other types), especially in their impact on young people raised in a wide variety of family environments. Assignments include analysis of typical family behaviors and educational programming designed for family groups, especially in the visual arts and related subjects.	Related
CED	4010	Contemporary Issues: Education Policy and Visual Art	This is an interdisciplinary investigation of current affairs concerning the interaction of cultural politics, governmental trends, and broad developments in educational philosophy in the public arena. Topics change in response to emerging issues of public concern, often including the interaction of local, regional, and national attitudes to art, the impact of educational reform efforts, the role of art education as social acculturation, and appropriate funding levels for both art and education.	Related
CED	4050	Art Science: Developing Creativity	One of two courses available to advanced students that reinforce their general knowledge of fundamental principles and processes of math and science. This provides a basis for integration of art education with core academics in schools and for thematic development of educational activities that bridge traditional divisions between alternative modes of thought and intellectual experience. The semester includes a multidisciplinary consideration of intellectual creativity as it is understood and practiced in the arenas of art and science. Specific topics vary with the interests of faculty and students. Students prepare original art education activities for both formal and informal educational settings, incorporating concepts from the course.	Related
CED	5630	Special Topics: Art, Cultural and Character Education	At the graduate level, the MAT Art Education program offers a rotating series of advanced seminars in education, designed to apply theory and practice to the most timely issues emerging in the field as they relate changing trends in art pedagogy in particular. This special topics course will bring together two areas of recent curricular expansion in order to focus specifically on the potential for the visual arts to provide a framework for important areas of attitudinal education: 1) cultural understanding among diverse local communities and across the globe, and 2) personal development in terms of ethics, decision-making, and participation in civil society. This course will be divided between a systematic review of strong examples of materials available to educators, their similarities and differences, and weekly sessions devoted to the creation on cutting-edge lesson units by student teams.	Related
CHEM	2000	Sustainable Chemical Economy	Sophomore colloquia are small, seminar-type classes that deeply engage CCAS second-year students in a discipline, focus on a narrow issue of high interest and impact, and require independent research projects. May be repeated provided topic differs. Consult the Schedule of Classes for more details	Related
CHEM	2085	Environmental Chemistry	Chemistry and physics of the environment, with emphasis on water and air pollution; environmental analysis and modeling and their limitations.	Focused
CHEM	3140	Geochemistry	Chemical systems and processes on the planet Earth; origins and interactions among and within the Earth's lithosphere, oceans, and atmosphere; origin, distribution, and behavior of the elements; radioactive and stable isotope systems. Aqueous geochemistry; geochemical cycles.	Focused
CHEM	6222	Biomedical Mass Spectrometry	Principles, instrumentation, methods, and applications of mass spectrometry; selected state-of-the-art methods demonstrate basic principles to show how new methods of analysis are developed; typical applications highlight solutions of biomedical problems, including proteomics and metabolomics.	Related

CHEM	6280	Energy and Environment	Fundamentals of energy conversion in thermomechanical, thermochemical, electrochemical, and photoelectric processes in existing and future power and transportation systems, with emphasis on <u>efficiency, environmental impact, and performance.</u>	Focused
CHEM	6281	Environmental Chemistry: Air, Water, and Soil	Survey of the behavior, movement and impact of natural and man-made chemicals in all layers of the environment in the context of the atmosphere, hydrosphere, and lithosphere; the effects of acid rain, sewage treatment, ozone destruction, anthropogenic climate change, air pollution, and eutrophication.	Focused
CHEM	6282	Green Industrial Chemistry	Introduction to the basic design principles for greener chemical technologies; widely used practices, including catalysis, use of renewable starting materials, minimization of energy inputs, and use of <u>greener solvents.</u>	Focused
CHEM	6283	Chemical Toxicology and Rational Design of Safer Chemicals	Introduction to the basic tools and paradigms of toxicology in the context of chemical design for minimizing potential toxicity of commercial chemicals; computational methods for prediction of bioavailability, reactivity, bioaccumulation and different types of toxicity; application of <u>in silico methods to the rational re-design of functional and safer chemicals.</u>	Focused
CHEM	6284	Environmental Analytical Chemistry	Advanced analytical methodology for environmental assessment; analytical instrumentation, techniques for remote measurements, determination of trace atmospheric constituents of anthropogenic and natural origin, measurement uncertainty analysis, detection and identification of organic and inorganic pollutants in air, water, soil and biota, and the determination of heavy metals <u>and radionuclides in the environment.</u>	Focused
CHEM	6289	Capstone Seminar in Environmental and Green Chemistry	Group projects carried out with an external partner or client—such as a government agency, nonprofit group, or chemistry laboratory research project—that identify and solve real world scientific problems <u>related to environmental and green chemistry.</u>	Focused
CHIN	3136	Chinese Women in Myth, Literature, and Film (Writing Intensive)	Women's position in Chinese cultural and political life from prehistoric myth to the present time. Includes a significant engagement in writing as a form of critical inquiry and scholarly expression to <u>satisfy the WID requirement. Conducted in English.</u>	Related
CHIN	3162	Chinese Culture Through Film	Survey of the Chinese cultural heritage presented through films. Topics include literature, philosophy, art, religion, and social history from prehistorical times to the modern era. Course conducted in <u>English.</u>	Related
CHIN	3163	Taiwanese Literature and Film	A introductory survey of modern and contemporary Taiwanese literary and cinematic works. Readings include poetry, folk lyrics, dramas, novels, and memoirs that bear distinctive marks of Taiwan's diverse literary trends. Films include those by internationally renowned directors such as Hou Hsiao-hsien, <u>Ang Lee, Edward Yang, and Tsai Ming-liang.</u>	Related
CHIN	3173	Chinese Drama and Theatre	Chinese drama and theatrical genres. Topics include the relation between theatrical performance and ritual practice, gender identities, and cross-cultural exchange. Course conducted in <u>English.</u>	Related
CHIN	3841	Religion in Modern China	The changes, destructions, and reconstructions of Chinese religions from the late nineteenth century to the present day. The relationship between the (re)making of Chinese religions and the making of a <u>modern Chinese nation-state.</u>	Related
CHIN	4107	Readings in Modern Chinese I	Readings in newspapers, social science materials, and documentary materials.	Related
CHIN	4121	Advanced Conversation and Composition I	Productive skills at the advanced discourse level, topic-specific practice of commonly used speech patterns and writing formats.	Related
CHIN	6841	Religion in Modern China	The changes, destructions, and reconstructions of Chinese religions from the late 19th century to the present day. The relationship between the (re)making of Chinese religions and the making of a modern <u>Chinese nation-state.</u>	Related
CID	1200	Stand on the Right, Walk on the Left: Human Response to the Urban Environment	This course explores the dynamics of people and space, how they interact with each other, and how this informs the way we design. Students will be immersed in a collaborative, interactive studio experience which will involve: instructor-led or self-guided expeditions in and around the city during class time; observation, data-collection, and thoughtful documentation of findings; conceptual sketching; and model making. An increased curiosity and awareness of our surroundings and the way we interact with our environment will lead to an introductory exploration of human factors including: scale, anthropometrics, ergonomics, universal design, and cultural contexts. Students will also engage in the study of texts and films which explore the basic frameworks of design at its core, and will be asked to react to the readings/viewings. Students will use photography and social media tools such as Pinterest and Instagram to explore and document observations in their own environment using the rich, dynamic setting of Washington DC. The final product of this studio will be a photo-documentary, inspired by Jane Fulton Suri's "Thoughtless Acts," which probes ideas and asks questions similar to <u>"How do we design for the way we live?"</u>	Related
CML	2143	Current Issues/Hlth Sci Mgt	Evaluation of major problem areas in the management of health sciences organizations. Discussions include legal, technological, managerial, organizational, and leadership issues in the changing <u>health care environment.</u>	Focused
CML	6203	Health Information Quality and Outcomes	Approaches to medical informatics to support managerial decision making, patient care, and quality improvement in clinical practices. Ethical, legal, and social dimensions of health care information <u>technology.</u>	Focused
CML	6204	Marketing Clinical Services	The marketing process from the viewpoint of clinical practice managers. Needs assessment, <u>environmental analysis, planning, distribution, pricing, promotion.</u>	Related
CML	6274	Health Economics and Finance	Issues of health care economics, financial management, and budgeting that relate to managerial decision-making. Applied financial management, management control systems, budgeting, staffing, <u>and cost accounting.</u>	Focused
CNSL	6163	Social/Cultural Dimensions-Cns	Basic sociocultural concepts in counseling theory and how they apply to the practice of the counseling profession.	Related
CNSL	6164	Values, Spiritual, and Religious Issues in Counseling	The theoretical and practical intersection of counseling, psychotherapy, and mental health considerations with religion and spirituality. The clinically effective and ethically responsible <u>integration of religion and spirituality into counseling.</u>	Related
CNSL	8254	Advanced Multicultural Counseling	Recent research addressing key aspects of multicultural counseling. Practical knowledge about effective skills practice in the provision of services to clients from different cultural backgrounds, with emphasis on experiential and cognitive/behavioral approaches. Restricted to Admission by permission <u>of instructor.</u>	Related
COMM	2162	Sociology of the Family	Examination of the stages of family life: birth, childhood, premarital relationships, marriage and sex roles in marriage, retirement, and old age. Special emphasis on development and maintenance of <u>interpersonal relations.</u>	Related

COMM	3174	Intercultural Communication	Exploration of the process, trends, rewards, and difficulties of human communication in intercultural contexts, with an eye toward establishing guidelines for mitigating miscommunication across cultures. <u>May involve fieldwork.</u>	Related
COMM	3177	Corporate Ethical Communication	How businesses analyze their communication methods in the context of internal ethical standards. General codes of ethics, marketing ethics, corporate social responsibility, consumer protection, environmental protection, and ethical issues that corporate decision makers face in developing policies <u>that affect employees, customers, and society as a whole.</u>	Related
COMM	3179	Sexual Communication	Exploration of sexual communication addressing behaviors, attitudes, and knowledge; the formation of sexual norms, negotiating sexual intimacy and safer-sex, gender roles in sexual relationships, sexual health communication campaigns, and parent-child sexual communication.	Related
COMM	4150	Persuasion	In-depth study of the principles and techniques of persuasion from both production and consumption perspectives, in both personal and mediated contexts. Emphasis on the common-premise model, with consideration of such topic areas as pathos/ethos/logos, attitude and behavior change, effectiveness, <u>ethics, and subconscious influence.</u>	Related
COMM	6150	Persuasion	In-depth advanced study of principles, techniques, and ethics of persuasion from both sender and receiver perspectives, and across both personal and mediated contexts. Emphasis is on the common-premise model with special consideration of such topics as audience analysis; systems of ethics; persuasive claims; pathos/ethos/logos; attitude and behavior change; sender, message, channel, and receiver characteristics; <u>and subconscious influence. Restricted to Graduate students.</u>	Related
COMM	6174	Intercultural Communication	A multidisciplinary examination of the conceptual foundations of culture, the effects of culture on communication in comparative and multicultural contexts, and the suggested guidelines for communication competence in intercultural communication settings. Restricted to Graduate Students.	Related
COMM	6179	Sexual Communication	How public and private communication about sex reflects and affects sexual attitudes, behaviors, and knowledge; health communication, interpersonal communication, and mass communication theories, with consideration of topics such as sexual norms, negotiating sexual intimacy and safer sex, gender roles, <u>and parent-child sexual communication.</u>	Related
COMM	6189	Intercultural Negotiation	Introduction to negotiation and dispute resolution in intercultural contexts. Students hone their negotiation and conflict management skills through a series of simulation exercises. Theoretical and methodological issues related to the study of negotiation in intercultural contexts. Restricted to <u>Graduate students; open to undergraduate students with permission of the instructor.</u>	Related
COMM	6190	Leadership Communication	Leadership as a function of human communication; theories of leadership and communication strategies employed by leaders in a variety of contexts; leadership as a form of social action; effectiveness and social implications of the strategies employed in leadership communication.	Related
CPH	2090	Photography/Photojournalism Studio I	Students explore personal sources of image making, strategies for editing, and different ways of seeing while refining their technical abilities. Assignments provide a structure for individual expression and interpretation while developing an awareness of photographic traditions, including photojournalism and documentary modes, and of the current state of contemporary practices. Students develop confidence and rigor in their approaches within an atmosphere of exploration and risk-taking. Fine-art photography and photojournalism students meet together and participate in frequent group and individual critiques, which promote intensive dialogue and proficiency in critical thinking.	Related
CPH	2100	Media Lab I	Required of Fine Art Photography and Photojournalism majors and elective for other BFA and BA students. This course extends the traditional use and control of photographic materials into the digital realm, exploring the scanning of negatives, the use of the digital darkroom for editing and tonal control, and the comparison of different output devices and materials available to the photographer. Discussions also include the integration of digital tools with traditional approaches to photography as well as non-traditional approaches, such as multimedia and animation. Issues dealing with presentation and the choice of archival inks and papers are covered. The goal is to familiarize students with the digital tools and materials, so as to allow freedom of personal expression and an awareness of the <u>integration of technique, medium, and content.</u>	Related
CPH	3050	Media Lab II	This course introduces students already familiar with still photography to time-based media, including video and audio. Over the course of the semester students will script, shoot/record, edit, and present projects including a silent video, a sound piece or audio package, and a video with audio. The history of time-based media will be examined and its influence traced through pop culture, art history, and conceptual and technical analyses. Basic techniques in Final Cut Pro and audio software will be covered. This course fulfills a PH and PJ major requirement, is open to all BFA majors and other degree students by permission of the instructor, and is a prerequisite for more advanced video classes.	Related
CPJ	2091	Photojournalism Studio II	This course continues the progression of CPH 2090 Photojournalism Studio I but focuses entirely on the techniques, practices, and ethics of photojournalism itself. Assignments, classroom visitors, field trips, and readings will deepen students' understanding of the field and increase their skills for <u>researching, photographing and editing stories.</u>	Related
CPJ	3090	Photojournalism Studio III	or Photojournalism majors only. Classes in this third-year course for photojournalism majors examine the similarities and differences in photojournalism in newspapers, magazines, television, the Internet, and other media. In addition to short-term, deadline-driven assignments, students undertake long-term projects. Topics include still and moving images, writing and editing needs in a variety of assignments, <u>journalistic ethics, and communication laws.</u>	Related
CPJ	3091	Photojournalism Studio IV	For Photojournalism students only. In this continuation of CPJ 3090 students research, report and photograph a longterm narrative project. Through guest speakers, readings and assignments students consider different modes of practice, journalistic ethics, and communication laws. Multimedia <u>approaches are explored as part of the course.</u>	Related
CPJ	4090	Photojournalism Thesis I	In the final year of the Photojournalism curriculum, the emphasis is on developing individual strengths and style in the context of a sophisticated understanding of how photographic media shape and reflect public opinion. Students define, propose, research and initiate a longterm project that will culminate in the Spring semester Senior Thesis exhibit. Intensive one-on-one and group critiques are integrated into the course as the students explore various approaches to their chosen subject matter.	Related

CPJ	4091	Photojournalism Thesis II	This course continues the objectives of CPJ 4090 and focuses on the completion of the students' thesis work, which results in an exhibition at the Corcoran Gallery. Portfolio development and critique prepares students for the onset of their careers.	Related
CPJ	4170	Professional Practices for Photojournalism	For Photojournalism students only. This classroom complement to students' internship experiences examines the professional contexts in which today's photojournalism takes place and incorporates business practices, ethics, and economic realities. Practical approaches for working across multiple platforms are explored. Students will meet with working professionals and experts during the semester and will develop their portfolios, resumes and web identities for presentation in meeting the professional demands of the field.	Related
CPJ	6025	PJ Sem II: Theories of Change/ New Forms of Radical Photography	In questioning how photographers collaborate with NGO's, policy makers, community activists and many others, this course will examine if and how creative work can radicalize civic institutions like the press, citizenship and even government toward greater justice and equity. With a focus on three arenas examined through visual arts: violence, the environment and global equity; the class will present students with a comprehensive window into the discourse and practice(s) of socially engaged art, film, and photography. Through critical discussions, field trips, and visiting artists, the class will create a blueprint and staging ground for students to activate these ideas within their own areas of interest.	Related
CRA	2104	Business of Clinical Research	Fiscal and managerial components of clinical research, including the budgeting processes, fiscal management, software applications, legal and contractual issues, and recruitment of personnel and subjects. Examination of all entities involved in clinical research, including drug, device, biological, and diagnostics sponsors; academic medical centers; and contract research organizations, site management companies, physician-run organizations, and health delivery organizations.	Related
CRA	6203	Partnerships with Human Subjects	Regulatory, policy, ethical, and practical considerations associated with the engagement, recruitment, retention, and interaction with human research subjects.	Related
CRA	6204	The Clinical Research Industry	Integration of project management principles, decision making models, cross-cultural competency, and interdisciplinary team dynamics to facilitate effective and efficient conduct of clinical trials.	Related
CRA	6208	International Clinical Research	Analysis of the strategies and methods of clinical research in international settings; explore cultural and ethical consideration in global clinical research projects.	Related
CSCI	2501	Ethical Issues in Computing	Introduction and analysis of the ethical issues of the technological age; ethical principles and skills and social analysis skills needed to evaluate future consequences of the design and implementation of complex computer systems; application of professional ethics codes in decision-making in professional practice.	Related
CSCI	4532	Information Policy	Roles, issues, and impacts of computer-based information systems in national and international arenas, focusing on privacy, equity, freedom of speech, intellectual property, and access to personal and governmental information. Professional responsibilities, ethics, and common and best practices in information use.	Related
CSCI	6532	Information Policy		
DNCS	6401	Sustainable Supply Chains	Introduction to integrating environmental management and sustainability concepts into the operations and supply chain management fields.	Focused
EALL/REL	3881	Women, Gender, And Religion in China	Historical introduction to women and men as gendered subjects and the construction of gender and power in Chinese religions. May be taken for graduate credit with extra work assigned.	Related
EALL/REL	6881	Women, Gender, And Religion in China	A historical introduction to the concepts of body, gender, and womanhood in Confucian, Daoist, Buddhist, and popular Chinese religious traditions. Women's roles in religious ritual and practices; the influence of Christianity and modernity.	Related
ECE	4610	Electrical Energy Conversion	Three-phase and single-phase AC rotating machines and transformers, DC machines, rotating machines as circuit elements, power semiconductor converters. Renewable generation, utility grid integration, smart grid applications.	Focused
ECE	6060	Electric Power Generation	Three-phase and single-phase AC rotating machines and transformers, DC machines, rotating machines as circuit elements, power semiconductor converters. Renewable generation, utility grid integration, smart grid applications.	Focused
ECE	6610	Electrical Energy Conversion	Three-phase and single-phase AC rotating machines and transformers, DC machines, rotating machines as circuit elements, power semiconductor converters. Renewable generation, utility grid integration, smart grid applications. May be taken for graduate credit by students in fields other than electrical engineering.	Related
ECE	6620	Electrical Power Systems	AC power grids, transmission line parameters, load flow, economic dispatch voltage, frequency, and power flow control. Voltage, current, and power limitations. Fault analysis and stability considerations. Effect of independent power producers and variable energy sources and energy storage.	Focused
ECE	6666	Power System Transmission, Control, and Security	Analysis of AC networks, load flow, transient stability, economic dispatch, reactive compensation, FACTS, effects of alternative generation, voltage and frequency control, N-1 contingency, restoration techniques.	Focused
ECE	6667	Nuclear Power Generation	Review of nuclear reactor engineering, traditional and developing reactor design, issues regarding the safe operation of nuclear plant, and control and regulatory aspects of nuclear power generation.	Focused
ECE	6668	Power Distribution Grids	Equipment for power distribution for industrial, commercial, and residential applications; switching and safety at the distribution voltage level; bulk insulation level and insulation coordination principles; smart grid innovations; remote metering.	Focused
ECE	6669	Smart Power Grids	Probability theory; basic power market reliability modeling and evaluation; generation supply reliability techniques, modeling and evaluation; reliability of transmission system and delivery of supply; loss of load probability evaluation; forced and maintenance outages and impact on system reliability; load forecasting and probability of interconnected systems; risk evaluation in power system operation; operating reserve techniques and indices; distribution system reliability including substations; composite system reliability modeling; reliability worth and value.	Focused
ECE	6690	Power Systems Economics	Overview of electrical power market economics and market participants; production pricing and market clearing pricing; market ancillary service pricing. Location marginal pricing and zonal pricing schemes; new electrical generation entrant impact; investing in generation and in transmission; independent power producers and independent transmission owners.	Related

ECE	6691	Power Systems Reliability	Probability theory; basic power market reliability modeling and evaluation; generation supply reliability techniques, modeling and evaluation; reliability of transmission system and delivery of supply; loss of load probability evaluation; forced and maintenance outages and impact on system reliability; load forecasting and probability of interconnected systems; risk evaluation in power system operation; operating reserve techniques and indices; distribution system reliability including substations; composite system reliability modeling; reliability worth and value	Related
ECON	2136	Environmental and Natural Resource Economics	Analysis of a variety of environmental and natural resource problems. The economic causes of these problems, their consequences, and the relative merits of alternative policies for dealing with them.	Focused
ECON	2148	Survey of Health Economics	Economic analysis of the determinants of demand, supply, output, and distribution in the health care sector, with special emphasis on current policy issues of access, quality, and cost.	Focused
ECON	2151	Economic Development	Theories and empirical studies of the economic problems of developing countries.	Focused
ECON	2151	(W) Economic Development	Theories and empirical studies of the economic problems of developing countries.	Focused
ECON	2157	Urban and Regional Economics	Analysis of the determinants of urban growth and development; firm location; the functioning of urban land and housing markets.	Related
ECON	2158	Industrial Organization	Analysis of market structure, conduct, and performance of firms in a market economy, with emphasis on case studies of U.S. industries.	Related
ECON	2159	Government Regulation of the Economy	Economic analysis of antitrust and regulation in the American economy.	Related
ECON	3148	Health Economics	Analysis of economic theories and applications to the demand for and supply of healthcare. Examination of the role of government in health care, public health, and unhealthy behavior (e.g., smoking).	Focused
ECON	3161	Public Finance: Expenditure Programs	Economic analysis of government spending and social regulation programs. Topics include public goods, externalities, income transfer and social insurance programs, and benefit–cost analysis of government programs.	Related
ECON	3165	Economics of Human Resources	Economic analysis of education and training, labor market discrimination, marriage and the family, and social security.	Focused
ECON	6237	Economics of the Environment and Natural Resources	Analysis of public policy problems relating to the environment and natural resources development and management.	Focused
ECON	6248	Health Economics	Demand for medical care; organization of the health care delivery industry; policy issues on regulation, efficiency, and allocation of health care services.	Focused
ECON	6250	Survey of Economic Development	An introduction to economic problems faced by less developed countries. Emphasis on applications to policymaking and evaluation.	Focused
ECON	6255	Economics of Technological Change	Economics of research and development; innovation and growth; the role of government in the development and use of new technology.	Focused
ECON	6285	Economic Development in Latin America	Diversity of structures of Latin American economies; import substituting industrialization; inflation; problems of underemployment and income distribution.	Related
ECON	6286	Economic Development in Latin America	Continuation of ECON 6285. Structure of trade; protection, exports, and economic development; regional and global economic integration; foreign investment, multinational enterprise, and technology transfer.	Related
ECON	6294	Topics in Economic Development	Topics on economic development issues and policy vary depending on faculty availability and interest. Primarily for master's students in programs other than economics.	Related
ECON	6295	Energy Economics	Special topics course, depending on current issues of interest and faculty availability.	Related
ECON	6316	Applied Development Economics	The complex causes of underdevelopment and contemporary ideas about how to make development succeed; theory underlying development economics, as well as the analytical tools used in development research. Students are expected to have a working understanding of the concepts of calculus.	Related
ECON	6318	Applied Health Policy Analysis	Analysis of the U.S. health care system; how the health care market differs from the market for other goods and appropriate regulatory response. Students are expected to have taken a course in intermediate microeconomics and at least one semester of calculus at the undergraduate level.	Related
ECON	8351	Development Economics I	Major analytic concepts, measures, theoretical models, and empirical methods of development economics.	Related
ECON	8352	Development Economics II	Continuation of ECON 8351. In-depth examination of special research topics with emphasis on methods in applied microeconomics.	Related
ECON	8357	Regional Economics	Study of regional planning and growth models, including input–output, programming, and econometric models used by planning agencies; analysis of interregional production, trade, migration, firm location, and pricing models.	Related
ECON	8358	Urban Economics	Analysis of spatial relationships among economic activities within an urban area including the urban land, labor, and housing markets; urban transportation models; fiscal relationships among jurisdictions.	Related
EDUC	6530	Intercultural Campus Ldrshp	This course is designed to explore intercultural leadership skills through the lens of understanding group identity differences, multicultural competence, and the foundations of effective advocacy for social justice. Lectures, readings, class discussions, written assignments, and experiential activities are used to promote an understanding of intercultural leadership skills to help create inclusive learning environments. The course will explore how oppression and privilege relate to differences based on gender, race and ethnicity, sexual orientation, and (dis)ability. Students will also study how these identities intersect with each other	Related
EDUC	6579	Managing Multicultural Environments	Application of multicultural research in identifying key elements for managing diverse environments, communicating with families, planning professional development activities, and increasing student learning.	Related
EDUC	6602	Regional Studies in International Education	In-depth study of education in a selected region of the world. Structures and issues facing education systems in social, political, economic, cultural, and historical context. Prospects of education for human national development. May be repeated for credit provided the region differs.	Focused
EDUC	6650	Education and National Development	The role education plays in the process of national development in advanced industrial societies and societies moving to industrialism.	Focused
EDUC	8140	Ethnographic Research Methods	Techniques used to examine systematically the contemporary daily life of a given group in its natural setting, focusing on culture—the recurring patterns of thought and social relations.	Related

EDUC	8321	Economics of Education	Application of economic theory and analysis to education problems and policies. Contemporary education reforms that are adopted to improve educational outcomes are analyzed with emphasis on <u>their complexities.</u>	Related
EDUC	8322	Education Policy Implementation	The evolution and implementation of education policies. Analysis of policy implementation at varying governance levels and types of educational systems. Policy is analyzed as a process and as it interacts with <u>organizational, social, economic, and political factors.</u>	Related
EHS	2109	Infectious Diseases and Bioterrorism	Examination of the basic principles of epidemiology, the growing problem of emerging infectious diseases, the threat of biological warfare, and emergency preparedness planning and response for large-scale biological events. Restricted to students in the health sciences program or with the instructor's <u>permission.</u>	Related
EHS	2160	Disaster Response Planning and Management	Planning for and management of mass-casualty incidents in the pre-hospital and hospital environments for all risks (attack, man-made, and natural), including development of response plans, triage, medical evacuation procedures, communications, roles of government and the private sector, terrorism, <u>pandemics and epidemics, and medical care for mass gatherings.</u>	Focused
EHS	2161	Principles of Hazardous Materials and CBRNE Incident Management	Examination of hazardous materials and their risks, including chemical, biological, radiological, nuclear, and explosives (CBRNE). Identification of hazardous materials and related problems, precautions in approaching the contaminated patient, protective clothing, decontamination, and <u>management of selected hazards, and countermeasures.</u>	Related
EHS	2175	Community Risk Management and Safety in EHS	This course introduces the EHS professional to the benefits of community information and community relations. Students analyze strategies for introducing risk reduction programs and apply these concepts in <u>the development of such programs.</u>	Related
EHS	2211	Intro to Telemedicine	An introduction to the ethical, legal, and technical aspects of telemedicine, including, but not limited to, emerging technologies, planning and operational considerations. Students will complete a number of practical exercises requiring direct application and utilization of Internet, video, audio, and other <u>technologies.</u>	Related
EHS	3105	Integrated Response to High Impact Violent Incidents	Examination of resources and response strategies needed to mitigate high impact, violent incidents involving an ongoing threat; evaluation of multiagency and multidiscipline integrated operations, mass <u>casualty events, and terrorism.</u>	Related
EHS	4101	Humanitarian Relief Ops.	An integrative approach to humanitarian relief operations, including factors that can influence relief delivery, field planning considerations, and the roles and limitations of non-governmental organizations, international organizations, local government, and various federal and civilian and military agencies. Emphasis on medical aspects of working with particular populations such as women, <u>children, the elderly, and culturally underrepresented or persecuted population subsets.</u>	Focused
EHS	6203	Legal&RegltryOblig/Emer Svcs	Laws, regulations, and standards pertaining to emergency services. Implications for organizational <u>policy and response requirements for executives, managers, and supervisors.</u>	Related
EHS	6211	Innovations in Telemedicine	Consideration of telemedicine in a multidisciplinary format toward innovation and entrepreneurship in <u>the fields of medicine, public health, engineering, and business.</u>	Focused
EHS	6274	Health Economics and Finance	Issues of health care economics, financial management, and budgeting that relate to managerial decision making. Applied financial management, management control systems, budgeting, staffing, and <u>cost accounting.</u>	Focused
EMSE	3740	(W) Systems Thinking and Policy Making	Introduction to systems thinking and system dynamics approach to policy analysis; applications to business management and public policy; key principles of systems; causal-loop and stock and flow <u>models of business growth, technology adoption, and marketing.</u>	Related
EMSE	3855	(W) Critical Infrastructure Systems	Topics in engineered infrastructure systems; asset management, environmental impact analysis, input-output life cycle analysis and inoperability modeling, infrastructure risk and reliability analysis, resilience and resistance to natural hazards or service disruptions, and development of infrastructure <u>sustainability metrics.</u>	Related
EMSE	4190	Senior Project in Systems Engineering I	First phase of a two-semester senior project to identify real world problems and assess applicable systems engineering methodologies. Project focus varies, but may include Washington, D.C. area problems in public infrastructure or the private sector, including transportation, energy, environment, <u>healthcare, telecommunications.</u>	Focused
EMSE	4191	Senior Project in Systems Engineering II	Second phase of a two-semester senior project. Field experience and systems engineering project completion in a team context. Each small group confronts an actual problem, conducts an analysis and formulates a solution using systems engineering methods and models. Oral and written reports demonstrate project management, effective teamwork, and the mastering of applied systems <u>engineering concepts.</u>	Focused
EMSE	4410	Engineering Economic Analysis	How the concept of time value of money is used to make optimal engineering project investment choices in the face of competing alternatives; life-cycle financial analysis of engineering projects. Provides foundation knowledge for the National Council of Examiners for Engineering and Surveying <u>Fundamentals of Engineering examination.</u>	Related
EMSE	6045	International Technology Commercialization	The process of moving ideas to commercial reality in an international setting. Interdisciplinary approach that weaves together study of international and organizational cultures and dynamics, with the disciplines of analytics, engineering management, entrepreneurship, marketing, and technology <u>forecasting, to commercialize innovations in technology.</u>	Related
EMSE	6200	Policy Factors in Environmental and Energy Management	Exploration of the policy development process from several different but integrated perspectives. Focus on areas of environmental and energy management and use of current case studies to develop a framework of understanding to support decisions in a broad variety of management settings.	Focused
EMSE	6220	Environmental Management	Technical, economic, political, administrative, and social forces influencing the quality of the environment and the use of resources. Government and industrial programs to combat pollution of the air, soil, and water; existing and pending pertinent legislation; theoretical aspects of specific <u>management problems.</u>	Focused
EMSE	6225	Air Quality Management	The nature of critical local, regional, continental, and global problems associated with air pollution and the historical evolution of such problems. The complex regulatory and institutional framework controlling air quality management in the U.S. Current air quality management concepts and <u>processes.</u>	Focused

EMSE	6230	Hazardous Waste Management and Cleanup	Hazardous waste management and cleanup processes used in the U.S. and around the world. The roles of the relevant federal, state, and local government agencies; major hazardous waste laws and regulations. Planning, assessment, investigation, design, and construction phases of hazardous waste remediation projects.	Focused
EMSE	6235	Water Quality Management	The nature of point and non-point sources of surface and ground water pollution and the statutory, regulatory, and institutional framework controlling water quality management activities in the U.S. Current approaches to water quality protection and enhancement. The role of engineered treatment processes in water quality management.	Focused
EMSE	6240	Environmental Hazard Management	Causes and effects of extreme natural and technological hazards. Organizational responsibilities, management approaches, directed technologies, and social factors related to environmental hazard assessment. Cultural, institutional, and technical capacities bearing on environmental disaster management, national and international risk reduction, and mitigation measures.	Focused
EMSE	6245	Analytical Tools for Environmental Management	A survey course in environmental management, focusing on tools to assess the environment: quantitative risk assessment, environmental valuation methodologies, Congressional activities, and environmental laws. The regulatory process as it relates to environmental management. Risk assessment and modeling approaches to solving environmental problems.	Focused
EMSE	6260	Energy Management	Examination of the range of available energy resources, trends in their use, the programs and organizations that have developed and evolved to address problems associated with energy resource use.	Focused
EMSE	6285	Analytical Tools for Energy Management	Analytical tools needed to manage energy resources at the facility level. Energy technologies: instrumentation, measurement, and control. Energy auditing; conservation techniques, financial and economic analysis, and maintenance of energy budgets. Functions of an energy management office of a large organization.	Focused
EMSE	6290	Climate Change: Policy, Impacts, and Response	The known and unknown in climate change science; strategies and technologies for mitigation of and adaptation to the impact of climate change; international issues related to avoidance, challenges posed by as yet undefined effects, and responsibilities mandated by existing and proposed laws, executive orders, regulations, and court rulings.	Focused
EMSE	6291	Greenhouse Gas Measurement and Reporting	Study of existing methodologies and standards for measuring and reporting greenhouse gas (GHG) emissions with particular emphasis on accepted environmental accounting frameworks for the business sector and regulatory schemes.	Focused
EMSE	6292	Greenhouse Gas Mitigation	Conducting mitigation analyses, identifying, and analyzing projects to reduce greenhouse gas emissions with a focus on energy efficiency and renewable energy; monitoring and reporting emission reductions using accepted methodologies; use of carbon markets as a tool for cost-effective mitigation.	Focused
EMSE	6293	Greenhouse Gas Management Assurance and Information Systems Design	Design of information systems for management of greenhouse gas emissions. Assurance of greenhouse gas emissions assertions.	Focused
EMSE	6295	Environmental Security	Overview of potential terrorist attack vectors on government-owned and private sector assets most directly tied to environmental health and safety. Homeland security requirements for environmental infrastructure, water supplies, energy sources, nuclear waste, and other programs vulnerable to targeting. Courses of action designed to prevent attacks.	Focused
EMSE	6325	Medical and Public Health Emergency Management	Medical and public health management issues encountered in crises, emergencies, and disasters for non-medical emergency managers. The spectrum of medical, public health, psychological and behavioral problems; incident management organization and processes that address these concerns and integrate medical and public health assets into the response.	Focused
EMSE	6715	Theory of Games	Mathematical models of conflict and cooperation with applications in economics, business, defense, transportation, and societal issues (voting schemes, fair division, auctions). Concept and computation of equilibrium in n-person games.	Related
ENGL	1365	Literature and the Environment	The depiction of the nonhuman world in literature and film; how natural and built environments are translated into narrative; the relationship between literary production and environmental action.	Focused
ENGL	2800	Introduction to Critical Theory	Topics and techniques of literary and cultural analysis. Introduction to major schools of critical theory, including psychoanalysis, Marxism, feminism, queer theory, and disability studies.	Related
ENGL	2800	(W) Introduction to Critical Theory	Topics and techniques of literary and cultural analysis. Introduction to major schools of critical theory, including psychoanalysis, Marxism, feminism, queer theory, and disability studies.	Related
ENGL	3730	Topics in Global Postcolonial Literature and Film	Representations of empire and culture in modern Anglophone literature and cinema from around the world; cross-cultural encounter, migration, identity, orientalism, gender, environment, conflict, and globalization.	Related
ENGL	3730	(W) Topics in Global Postcolonial Literature and Film	Representations of empire and culture in modern Anglophone literature and cinema from around the world; cross-cultural encounter, migration, identity, orientalism, gender, environment, conflict, and globalization. Includes a significant engagement in writing as a form of critical inquiry and scholarly expression to satisfy the WID requirement.	Related
ENRP	6085	Topics in Environmental Resource Policy	Topics announced in the Schedule of Classes. May be repeated for credit provided the topic differs.	Focused
ENRP	6097	Practicum in Environmental Resource Policy	International students engage in an unpaid internship. Restricted to students enrolled in the MA in environmental resource policy program.	Focused
ENRP	6101	Environmental Sciences I: Physical Sciences	Basic physical sciences crucial to environmental issues, including chemistry, geology, hydrology, climate science, and cross-media interactions; land, air, and water pollution, climate change, production and consumption of energy, sea level rise, and anthropogenic changes in the cryosphere.	Focused
ENRP	6102	Environmental Sciences II: Life Sciences	Basic life sciences crucial to environmental issues, including biology, ecology, environmental health and toxicology, epidemiology, and agriculture; biodiversity, ecosystem services, habitat preservation, deforestation, conservation biology, nutrient cycling, and the impacts of climate change on living systems.	Focused
ENRP	6140	Introduction to Environmental Law	Federal environmental statutes, implementing regulations, state regulatory programs, international environmental agreements; environmental governance tools; strengths, weaknesses of legal, administrative, private approaches to environmental threats; the role of federal courts, administrative law in environmental protection.	Focused

ENRP	6145	Global Environmental Justice and Policy	Environmental justice, considered as both a movement and a public policy. Examination of environmental injustices—both perceived and actual—affecting individuals, communities, and populations. Adherence to, and enforcement of, environmental laws and regulations that affect the allocation of environmental benefits and the distribution of sources of toxic pollution and other hazards.	Focused
ENRP	6295	Research Topics in Environmental Resource Policy	May be repeated for credit to a maximum of 6 credits.	Focused
ENRP	6298	Seminar in Environmental Resource Policy	The capstone seminar involves team development of a project sponsored by an external entity, such as a government agency or non-governmental organization, or participation in an aspect of a research project directed by a faculty member. The student team functions as an external consultant tasked with analysis of the chosen issue.	Focused
EXNS	1103	Professional Foundations in Exercise Science	Introduction to the science and practice of exercise and human movement as they relate to public health. Emphasis on the various sub-disciplines of exercise science, research related to the field, and professional and career development.	Focused
EXNS	1114	Community Nutrition	Introduction to community nutrition and public health programs offered on the local, state, national, and international levels, targeting both individuals and groups. Topics include health policies, nutrition programs, nutrition assessment, and principles of nutrition education.	Focused
EXNS	2120	Assessment of Nutritional Status	Methods of assessing dietary intakes, physical activity, anthropometry, body composition, and micronutrient status of individuals; factors affecting selection, reliability, and interpretation of various assessment methods in public health settings.	Focused
EXNS	2122	Food Systems in Public Health	This course will explore systems thinking as it pertains to agriculture and food, attempt to define sustainability within the context of the global food system, examine the current state of the global food system from farm to fork, and analyze its impacts on health. The course will also examine several policies, programs, and proposals aimed at creating a healthier, more sustainable global food system.	Focused
EXNS	6209	Advanced Concepts in Nutrition Science	Topics in nutrition and public health. Emerging issues, challenges, and controversies in nutrition science; the role of diet composition and physical activity in the maintenance of health and the development of chronic disease; and effectively communicating scientific findings and identifying key knowledge gaps in nutrition science literature.	Focused
FA	3911	Collaborative Practices: Social Practices of Art	The effects of artists using their work to participate in political, social and/or cultural change. Ethical, cultural, and political implications of using art in the public sphere. Philosophical, theoretical, and historical background of these practices.	Related
GEOG	1001	Introduction to Human Geography	A systematic survey of human geography; spatial perspectives on demographic, social, cultural, economic, and political changes around the world.	Focused
GEOG	1002	Introduction to Physical Geography	A systematic survey of environmental geography; perspectives on environments and human ecology, including ecosystems and their use, and resource geography.	Focused
GEOG	1003	Society and Environment	An introduction to the dynamic relationship between society and the physical environment, with focus on population, natural resources, environmental degradation, pollution, and conservation.	Focused
GEOG	2104	Introduction to Cartography and GIS	Fundamentals of cartography; geographic data structure and information systems.	Focused
GEOG	2107	Introduction to Remote Sensing	Remote-sensing techniques using digital satellite imagery and aerial photography. Application to rural and urban settings, vegetation, and environmental monitoring.	Focused
GEOG	2108	Weather and Climate	The elements and controls of weather and climate. Topics include energy and water balances, atmospheric general circulation, and severe weather events.	Focused
GEOG	2110	Climate and Human Ecology	Interrelationships between human activities and the climatic environment. Emphasis on global climatic change.	Focused
GEOG	2120	World Regional Geography	Practical approach to the themes, concepts, and tools appropriate for in-depth examination of the geography of the world's. Historical and physical regional geographies; contemporary regional issues; and intra- and interregional issues.	Focused
GEOG	2124	Urban Transportation	The relationship between freight and passenger transportation systems and urban land use patterns and structure.	Focused
GEOG	2125	Transportation Systems and Networks	The structure and evolution of transportation networks and their impact on regional development.	Focused
GEOG	2127	Population Geography	Patterns of world population; factors contributing to population pressures, growth, and migrations.	Focused
GEOG	2128	Geomorphology	Understanding the nature, origin, and development of landforms in the field and through the use of maps and aerial photos.	Focused
GEOG	2129	Biogeography	The types of comparative data used to elucidate patterns of distribution, diversity, and dynamics in species, communities, and ecosystems.	Focused
GEOG	2133	People, Land, and Food	The relationship between humans and their food sources through exploration of nutritional dynamics, food sourcing, agricultural land use, and food markets.	Focused
GEOG	2134	(W) Energy Resources	Analysis of regional patterns and trends in consumption and production of energy resources. Examination of international energy linkages and energy policies of selected nations.	Focused
GEOG	2134	Energy Resources	Analysis of regional patterns and trends in consumption and production of energy resources. Examination of international energy linkages and energy policies of selected nations.	Focused
GEOG	2136	Water Resources	Analysis of the global spatial patterns, development, use, and quality of water resources.	Focused
GEOG	2137	Environmental Hazards	Examination of environmental hazards with an emphasis on physical geography, economics, and the basics of geographic information systems (GIS).	Focused
GEOG	2140	(W) Urban Geography	The design and function of cities in the United States; contemporary, economic, political, and social change.	Focused
GEOG	2140	Cities and Societies	The design and function of cities in the United States; contemporary, economic, political, and social change.	Focused
GEOG	2141	Cities in the Developing World	Urbanization processes, problems, and management in the developing world. Focus on urban location, politics, housing, services, employment, and environmental issues.	Focused
GEOG	2146	Political Geography	Interrelationships among the human and physical environment and political systems; the organization of political territories.	Related
GEOG	2147	Military Geography	An examination of environmental and locational factors and their impact on military planning and operations.	Related
GEOG	2148	Economic Geography	Locational influences on and spatial variation of the development of manufacturing, services, trade, and finance.	Related
GEOG	3132	Environmental Quality and Management	The evolution of environmental management philosophies and tools. The global distribution, utilization, and degradation of natural resources.	Focused

GEOG	3143	(W) Urban Sustainability	Relationship between urban spaces and the environment through the lens of sustainability.	Focused
GEOG	3143	Urban Sustainability	Relationship between urban spaces and the environment through the lens of sustainability.	Focused
GEOG	3154	Geography of the Middle East and North Africa	Cultural and physical regional patterns of the Middle East and North Africa.	Related
GEOG	3161	Geography of Latin America	Examination of spatial characteristics of physical and cultural phenomena in Latin America.	Related
GEOG	3164	The Geography of Africa	Human and environmental geography of Africa south of the Sahara desert, including study of patterns and processes, culture and environment, and development issues.	Related
GEOG	3165	Geography of South Asia	An examination of the complex interplay of environmental, economic, sociocultural, and political factors in South Asia and their effects at the local and regional levels.	Related
GEOG	3193	Environmental Law and Policy	An introduction to selected pieces of major environmental legislation. The role of the courts and bureaucracy in implementing and interpreting legislation and their impacts on decision making.	Related
GEOG	3194	Special Topics in Physical Geography	Topics covering physical principles of the Earth's physical geography and natural environment including the hydrosphere, atmosphere, biosphere, and lithosphere.	Related
GEOG	3195	Special Topics in Human Geography	Topics in human geography including population, urban, cultural, political and economic issues amongst others.	Related
GEOG	3218	Arctic Systems	Arctic regions examined from an interdisciplinary perspective, linking different elements of physical and human geography; Arctic climate, oceans, landscapes, and ecosystems; key issues involving interaction between humans and the environment; climate change and its effects in the Arctic.	Related
GEOG	3810	Planning Cities	An examination of historical and contemporary trends and dynamics in urban planning in the United States and abroad.	Focused
GEOG	4308	Programming for Geospatial Applications	Fundamental concepts for creating Python scripts in ArcGIS; guidelines for proper Python syntax, troubleshooting common errors, and using loops to test for conditions and execute different code based on the results.	Related
GEOG	4309	GIS for Emergency Management	Introduction to the theoretical principles of geographic information systems and examination of its history, current uses, and potential for emergency management through case studies, guest lectures, and hands-on training on various GIS products.	Focused
GEOG	4311	Open Source Solutions for Geospatial Project Management	Geospatial project management, from design through implementation. Students work exclusively with open source technology for data capture, management, analysis, and communication; open source solutions and the effectiveness and sustainability of project management.	Related
GEOG	6207	Urban Planning and Development	Selected problems in urban and regional planning: applications of zoning, environmental controls, and other techniques for achieving sustainable urban development.	Focused
GEOG	6208	Land Use and Urban Transportation Planning	Relationships between land use and the movement of goods and people. Examination of land use and transportation planning principles, issues, and techniques. Roles of public and private interests in land use and transportation planning and management.	Focused
GEOG	6218	Arctic Systems	Aspects of Arctic regions from an interdisciplinary perspective that links elements of physical and human geography; Arctic climate, oceans, landscapes, and ecosystems; interaction between humans and environment; climate change.	Related
GEOG	6219	Seminar: Climatology	Inadvertent climate modification due to urbanization and impacts on environmental and human health.	Focused
GEOG	6220	Seminar: Climatic Change	Examination of natural and human-induced climatic change, at global, regional, and local scales.	Focused
GEOG	6222	Seminar: Resources and the Environment	Topics related to the spatial variations and interrelationships of resources and the environment; applications of geographic information systems and remote sensing.	Focused
GEOG	6223	Seminar: Population and Health	Interrelationships between population characteristics and dynamics and impacts on human health.	Focused
GEOG	6224	Seminar: Political Geography	Examination of political factors in location theory and analysis of the nature of political territories and conflict.	Related
GEOG	6225	Seminar: Transportation and Development	Transportation and communication in the organization of space.	Focused
GEOG	6230	Seminar: Environmental Issues in Development	A consideration of the geographical dimensions of the links between development and the environment.	Focused
GEOG	6232	Migration and Development	Analysis of migration's impact on development at various scales for both the sending and receiving localities.	Related
GEOG	6243	Seminar: Urban Geography	Topics concerning social, political, economic, and environmental issues in U.S. cities.	Related
GEOG	6244	Urban Sustainability	Urban sustainability and environmental issues in developed and developing cities.	Focused
GEOG	6245	Water Resources Policy and Management	In this course, we will examine the history and practice of water resources policy and management in the context of integrated water resource management. Thus, we will address management issues and policy responses to such topics as the impacts of urban and agricultural runoff on water quality; provision of wastewater and water quality services; water supply, water allocation and scarcity; and modification of waterbodies for the purposes of flood control, hydropower, navigation, and recreation. In addition, non-human water requirements: e.g. for fish and wildlife, as well as the need to preserve the natural ecosystems that provide and sustain water resources will be central to each discussion. We will examine management and policy issues in the United States and worldwide at a range of scales: local, state, federal and international. In the course of these examinations, students will gain an understanding of how current issues such as growing populations, increasing affluence, and climate change may impact water resource policy and management.	Focused
GEOG	6250	Geographic Perspectives on Development	Theory and debates surrounding economic development in a globalizing world, with case studies.	Related
GEOG	6261	Geographical Perspectives on Latin America	Natural resources, the environment, and population dynamics through time.	Related
GEOG	6262	Geographical Perspectives on the Middle East	Examination of selected topics related to political, economic, social, cultural, and geographic patterns and processes in the region.	Related
GEOG	6265	Geography of Russia and Its Neighbors	A deeper understanding of Post-Soviet geography with a focus on the physical and environmental characteristics of the region, geography of natural and human resources, ethnic, cultural and religious diversity, characteristics of economic and political regions, and recent geopolitical developments.	Related
GEOG	6290	Principles of Demography	Introduction to basic demographic perspectives and data; methods for analysis of population size, distribution, and composition; determinants and consequences of population trends. Departmental prerequisite waived.	Focused

GEOG	6291	Methods of Demographic Analysis	Basic methods for analysis of mortality, natality, and migration; population estimates and projections; estimation of demographic measures from incomplete data. Departmental prerequisite waived.	Focused
GEOG	6292	Qualitative Methods in Geography	Qualitative research methods, including questionnaires, focus groups, in-depth interviews, repeat photography, observation, reflective mapping, coding, and map interpretation that help appreciate the human experience and build upon ways to produce knowledge.	Issues
GEOG	6293	Special Topics	Consideration of geographic aspects of topical social or environmental problems.	Focused
GEOG	6303	Introduction to Remote Sensing	Theoretical, technical, and applied aspects of remote sensing as a tool for monitoring and managing Earth's resources.	Focused
GEOG	6304	Geographical Information Systems	Fundamentals of cartography; geographic data structure and geographic information systems.	Focused
GEOG	6305	Geospatial Statistics	Nature of geographical inquiry and the analytical and statistical methods used in the study of spatial processes and patterns.	Focused
GEOG	6306	Geographical Information Systems II	Advanced principles of geographic information systems and their use in spatial analysis and information management.	Focused
GEOG	6307	Digital Image Processing	This course introduces students to the theoretical, technical and applied aspects of remote sensing as a tool for monitoring and managing earth resources. This course will provide students with the knowledge for analyzing and applying remotely sensed data for problem solving as it applies to land cover.	Related
GEOG	6308	Programming for Geospatial Applications	Fundamental concepts for creating Python scripts in ArcGIS; guidelines for proper Python syntax, techniques to troubleshoot common errors, and using loops to test for conditions and execute code based on results.	Related
GEOG	6309	GIS for Emergency Management	This course will introduce students to the theoretical principles of geographic information systems and will examine its history, current uses and potential for emergency management through case studies, guest lectures and hands-on training on various GIS products.	Focused
GEOG	6311	Open Source Solutions for Geospatial Project Management	Geospatial project management, from design through implementation. Students work exclusively with open source technology for data capture, management, analysis, and communication; open source solutions and the effectiveness and sustainability of project management.	Related
GEOL	1001	Physical Geology	Lecture, laboratory. An introduction to the principal features of the composition and structure of the earth. Topics include the nature of minerals and rocks, surface and deep earth processes, mineral and energy resources, and plate tectonics.	Focused
GEOL	1005	Environmental Geology	Lecture, laboratory. An introduction to the impact of geology on the environment, with emphasis on the relation of people and society to natural environments; population evolution, natural hazards, and mineral resources. Laboratory fee.	Focused
GEOL	1006	Science & the Environment	The large-scale processes operating within the atmosphere, oceans, and solid Earth.	Focused
GEOL	2106	Oceanography	The ocean with its many environments represents the last largely unexplored frontier on earth. Origin of the ocean systems and plate tectonics, ocean habitats and their biota, marine hydrology and ocean currents; air-sea interaction and climate control; ocean mapping techniques; environmental regulations covering marine resources.	Focused
GEOL	2122	Structural Geology	Lecture and laboratory. Study of natural and experimental rock deformation and the relationships between stress and strain as recorded by geologic structures.	Issues
GEOL	2151	History of Life	A review of the origin of life, the geologic record, and the evolutionary history of the major groups of organisms, including the origin of life and evolution of invertebrates, vertebrates, and plants.	Related
GEOL	2159	Geobotanical Ecology of the Central Appalachians	A multidisciplinary approach to Appalachian ecology involving application of scientific principles from both geology and botany, stressing interrelationships between geological, geochemical, and biological processes.	Focused
GEOL	3118	Volcanology	Fundamental principles and geologic processes associated with volcanism. Eruptive styles, processes leading to magma production and transport, triggering mechanisms, plate tectonic settings, volcanic hazards, and disaster mitigation. Case histories of selected volcanic eruptions examined in detail.	Related
GEOL	3119	Field Experience in Volcanology	Week-long field exercise at a major volcanic center in the western United States. Field-based interpretation and analysis of volcanic and related rocks. The geology of each site and the processes responsible for volcanism discussed in detail.	Related
GEOL	3131	Global Climate Change	Fundamental causes and patterns of climate change. Methods of reconstruction of past climates; modeling and predicting climate change.	Focused
GEOL	3138	Hydrogeology	Principles and theory of basic and applied hydrology: surface water hydrology, geology of groundwater systems, groundwater flow, surface water-groundwater interactions, contamination and remediation technologies, conservation, management, and regulations.	Related
GEOL	3140	Geochemistry	Chemical systems and processes on the planet Earth; origins and interactions among and within the Earth's lithosphere, oceans, and atmosphere; origin, distribution, and behavior of the elements; radioactive and stable isotope systems. Aqueous geochemistry; geochemical cycles.	Focused
GEOL	3189	Geophysics	Principles of magnetic, gravity, seismic and electrical methods applied to geological problem-solving.	Focused
GEOL	3191	Geology of Energy Resources	Principles of geology applied in energy exploration, exploitation, and production; the geology of energy resources in ocean basins; borehole and surface geophysical applications and reconnaissance mapping techniques; management and regulation of energy resources; sustainability, efficiency, and conservation issues.	Focused
GEOL	4195	Geological Field Methods	Weekend field trips. Methods of outcrop analysis, geologic mapping, and data interpretation. The geological evolution of the central Appalachian mountains and the plate tectonic processes responsible for their formation emphasized.	Related
HCQ	6200	Introduction to Health Care Quality	An overview of the US health care system and the influence of health policy development and implementation on health care quality. Introduction to fundamental concepts of health care quality, patient safety, leadership, and change management.	Related
HCQ	6201	Building a Quality Culture	Application of leadership and organizational change theories and principles to the implementation of quality and patient safety initiatives. Focus on strategies for developing the culture and infrastructure needed to support patient safety and continuous quality improvement.	Related
HCQ	6202	Health Care Quality Landscape	Analysis of quality and patient safety challenges in US health care with a focus on political and environmental influences.	Related

HCQ	6275	Leadership and Change	A capstone course focusing on the concept of leading change within the contexts of health professionals, health systems, and health policy. Organizational, management, and change theories as well as characteristics of personal and professional change leadership are explored in relation to expectations for successful executive leadership and performance in today's dynamic health care environments.	Related
HDEV	6108	Life Span Human Development	Continuity and change in developmental attributes. The developing person in relation to social norms, roles, and stage-graded expectations from birth to death. Interaction between biogenetics and environment.	Focused
HDEV	6129	Cultural Effects on Human Development	Effects of culture on the experience and expression of self, others, space, time, faith systems, norms, and other attributes. Egocentric and sociocentric effects, primitive and technological effects. Group immersion as the basis for prejudice. Developmental consequences as a consequence of cultural context.	Focused
HIST	3324	US Urban History	History of American urban life and culture from the colonial era to the present, focusing on transitions from pre-industrial to industrial and post-industrial forms. The social and spatial configuration of U.S. cities, and the urban politics of race, class, and gender.	Related
HIST	6475	US Urban History	History of American urban life and culture from the Colonial era to the present, focusing on the transitions from pre-industrial to industrial and post-industrial forms, the social and spatial configuration of U.S. cities, and the urban politics of race, class, and gender.	Related
HIST	2011	Modern American Cultural History	The effects of culture in the shaping of the United States since 1876. The role of the mass media; effects of cultural conceptions on the physical landscape; changing ideas of race, ethnicity, gender, and sexuality; and the political meanings of cultural conflict. Transnational influences on U.S. culture and effects of U.S. culture abroad.	Related
HIST	2320	U.S. Media and Cultural History	History and analysis of 20th-century U.S. media and culture, including the rise of consumer culture, film, and television. Racial, gendered, and national identities in the context of modernism, mass culture, and globalization.	Related
HIST	2350	U.S. Religion and Politics	How religion and politics have influenced each other in the United States and how Americans have understood those influences. Religious violence; conflicts between faith and science; religious factors in racial and gender politics; and the separation of church and state.	Related
HIST	2380	Sexuality in U.S. History	Examination of the changing social organization and meaning of sexual practices and desires in American culture, with particular attention to the relationship between sexuality and gendered racial and class identities and politics.	Related
HIST	2440	The American City	An interdisciplinary introduction to the ethnic, cultural, political, and architectural landscape of the American city. Urban theory, race and ethnicity, urban history, planning and architecture, city politics, and cultural representations of the city.	Focused
HIST	2610	Science, Technology, and Politics in Modern America	The history of science and technology and their role in political and social life from the late 19th century to the present.	Related
HIST	2710	The United States in Global Context	U.S. political and cultural global engagement in the twentieth- and twenty-first-centuries; global culture, transnational ideas and social movements, foreign policy, and economic transformations.	Related
HIST	3351	U.S. Social History	Survey of American society and social change from the Civil War to the present. Gender, sexuality, race, ethnicity, and class perspectives.	Related
HIST	3363	Race, Medicine & Public Health	Issues of race, medicine, and public health.	Focused
HIST	6050	Modernization, Imperialism, Globalization	Readings seminar in classic and recent theories of modernization, imperialism, and globalization.	Related
HIST	6431	Gender, Sexuality, and American Culture II	Continuation of HIST 6430. The changing social organization, cultural representation, and meaning of gender and sexuality in the United States, with emphasis on their relationship to race, class, region, nationality, empire, and globalization. 1877 to present.	Related
HIST	6455	American Social Movements	The history of social movements in the United States, with emphasis on civil rights, feminism, conservatism, and labor in local, national, and transnational contexts; the historical rise and fall of these movements and their larger impact on American life.	Related
HIST	6470	Cityscapes	Interdisciplinary examination of the American city, including urban theory, history, planning, architecture, urban politics, and cultural representations of the city. Same as AMST 6470.	Focused
HLWL	1104	Outdoor and Environmental Education	A conceptual and experiential introduction to outdoor education, environmental education, wilderness travel, and outdoor leadership.	Focused
HLWL	1114	Personal Health and Wellness	Survey of the various components involved in personal health and wellness, such as personal fitness, sexuality, mental health, and environmental health; application of knowledge through the use of decision making and behavior modification skills.	Focused
HLWL	1116	Lifestyle Nutrition	Introduction to nutrition that enables the student to make healthful food choices to enhance quality of life and prevention of chronic disease. Topics may include label reading, vegetarian diets, eating for exercise, and interpreting nutrient recommendations.	Focused
HLWL	1117	Lifetime Fitness	Core elements of personal fitness as applied to daily life. Emphasis on the development of functional fitness skills that can be practiced both in and out of the classroom.	Related
HOL	6706	Current Issues in Organizational Leadership	Current issues and future trends in organizational leadership. Students gather data and analyze key topics associated with areas such as talent management, leading through demographic shifts, leadership in a globalized world, leading global change, and developing new forms of leadership, ethics, and sustainability.	Related
HOL	6708	Global Leadership	The changes taking place in organizations due to the process of globalization and the requirements for leadership. The changing global environment, how those changes influence operational and strategic issues within global organizations, and how a leader can better understand the global environment to help organizations meet these new challenges.	Related
HOL	6710	Globalization, Change, and Learning	With learning as the coping strategy, focus on how policymakers and global leaders can be helped to take advantage of the opportunities and address the challenges that globalization presents.	Related
HOL	8703	Human Systems Change	The classical and contemporary ideas related to social systems change; the relation of these ideas to current issues in organizations.	Related
HOL	8705	Organizational Culture	Theory and research on organizational culture, from the multidisciplinary seminal works in anthropology, psychology, sociology, and management to current day theorizing and empirical research on culture. The rituals, values, and behaviors that differentiate cultural groups and the way cultural identities manifest themselves in organizational practices; and how organizational culture evolves and its relationship to other organizational phenomena such as innovation, strategy, sensemaking, and performance. Current trends in organizational culture theorizing.	Related

HONR	1033	Honors Proseminar: Scientific Reasoning and Discovery	Using an inquiry-based approach, students learn to identify hidden regularities and patterns in nature that may indicate fundamental unifying principles and laws. The scientific method; evaluation of scientific information; limitations of the scientific process; development of a scientific hypothesis. Tools and methodologies of geology, chemistry, physics, biology, anthropology, and other disciplines.	Related
HONR	1034	Honors Proseminar: Scientific Reasoning and Discovery	Continuation of HONR 1033. Using an inquiry-based approach, students learn to identify hidden regularities and patterns in nature that may indicate fundamental unifying principles and laws. The scientific method; evaluation of scientific information; limitations of the scientific process; development of a scientific hypothesis. Tools and methodologies of geology, chemistry, physics, biology, anthropology, and other disciplines.	Related
HSCI	2103	Health Policy and the Health Care System	Incorporates economic theory and policy analysis methodology to analyze the impact of changes in the health care system on the practice of health sciences professionals and the quality and process of health care. Development of critical thinking skills through review of current medical literature.	Related
HSCI	2104	Management of Health Science Services	Application of management and organizational principles to the delivery of services provided by health sciences disciplines. Issues addressed include information systems, leadership, team building, fiscal management, human resources management, quality improvement, and management of conflict and change.	Related
HSCI	2105	Current Issues in Bioethics	Basic issues, approaches, and requirements of ethically acceptable decision making with patients, including patient confidentiality, conflicts of interest, allocation of scarce resources, occupational risks in health care, and professional responsibility for overall quality of care.	Related
HSCI	2108	Quality Improvement/ Health Care	Analysis of the structures in place to enhance the quality of health care delivery and political and economic influences that affect quality improvement programs. Assessment of specific interventions to enhance health care from the perspectives of providers and patients.	Related
HSCI	2109	Trends&Innovation/ HealthCare	Examination of new technologies, health care delivery models, and the phenomenon of sophisticated consumers. Assessment of the impact of science, technology, ethics, and government on the provision of health care.	Related
HSCI	2110	Disease Prev/ Health Promotion	An overview of basic public health concepts for health sciences students, including epidemiology, health promotion, and disease prevention. Review of current issues in health promotion. Completion of a public health project in a clinical site.	Related
HSCI	2111	Dev/Health Care Professions	Students will analyze the history and evolution of health care professions, and compare them to general changes in science and culture. Students will compare and contrast how the evolution of health care professions has changed practice and informed how we may view clinical practice in the future.	Related
HSCI	2114	Healthcare/ Developing Nations	An introduction to health concerns in the developing world. Students will explore interventional approaches for such issues as malaria, HIV/AIDS, clean water, maternal and women's health, and childhood mortality.	Focused
HSCI	2115	Intro Biostatistics- Health Sci	Basic concepts of biostatistics with application to the health sciences professions. Research design, frequency distributions, descriptive measures, probability, sampling, regression and correlation, analysis of variance, hypothesis development/testing and data organization/analysis options are covered.	Related
HSCI	2117	Introduction to Statistics for Health Sciences	Foundational concepts in descriptive and inferential statistics, including probability, sampling distribution, estimation, correlation, t-Test, simple linear regression, and chi-square. Application of statistical concepts and methods within the health sciences.	Related
HSCI	4102	HumanPhysiology/ExtremeEnviro	The course examines human physiology and the pathophysiology of acute illnesses and injuries, and evaluates appropriate mitigation strategies associated with living and working in extreme environments.	Focused
HSCI	4106	Intro to Epidemiology for HS	An introduction to epidemiological methods and their applications in the prevention and control of illness, community and clinical interventions, and health services.	Related
HSCI	6240	Issues & Trends in Health Syst.	Analysis of key contemporary issues in U.S. health and social policy that affect the design and structure of the health care system. The health policy process and initiatives that shape care delivery.	Related
HSCI	6241	The Health Care Enterprise	An overview of global business principles related to health care systems: the management of patient-centered care delivery, marketing, finance and fiscal management principles, information technology, and quality improvement.	Related
HSCI	6261	Fdtn in Clinical/Trans.Rsrch	Overview and analysis of the translational research principles and practice through the application of basic, clinical, community health and health services research concepts.	Related
HSCI	6264	Epidemiology Translational Res.	Basic concepts and methods of epidemiology and their application in measuring, studying and improving the health of populations applied to applications for translational research.	Related
HSML	6206	QuanMethds&Epid/HealthServices	Application of epidemiology and analytical methods to improve population health, enhance decision-making, and introduce operations management. The concepts and procedures complement HSML courses for information management and finance. Prerequisites: 2 or 3 semester hours in introductory statistics.	Related
HSML	6210	Hlth Serv FinancI Applications	Application of health finance theory to health services organizations and systems. Budgeting process, understanding profit and loss, managing resources including accounts receivable, labor and supplies. The budget as a tool for analyzing operational changes.	Related
HSSJ	1100	Introduction to Human Services and Social Justice	Human services and social justice theory, research, and practice; historical and intellectual development, community-based scholarship, and the context of Washington, D.C.	Focused
HSSJ	1177	Organizing for Social Justice in Human Services	Theory in community organizing and social justice is connected with an opportunity to explore how it is applied directly in the field. Methods used by non-profit organizations and campaigns to address issues in human services.	Focused
HSSJ	2160	Role of NGOs in International Humanitarian Assistance	The increasing role of nongovernmental organizations (NGOs) as providers of service and care for vulnerable individuals and communities in need; development of NGOs, the place they hold in international interventions, and the types of services they provide.	Related
HSSJ	3152	Fact/Field/Fiction: Intersections in HSSJ	Integration of theoretical, empirical, and practical knowledge with real-world issues in human services through socially just practices. Students conduct community-based research and complete a significant service-learning experience at an approved not-for-profit organization (approximately 16 hours per week).	Related
IAD	3350	Basic Sustainability Design Strategies	Introduction to sustainable design and to the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) Rating Systems for Interior Design and Construction.	Focused

IAD	6350	Sustainability and the Built Environment	The application of sustainable design; introduction to the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system, the Living Building Challenge, and the WELL Building Standard.	Focused
IAFF	2090	Latin America: Problems and Promise	An interdisciplinary course in Latin American studies designed to introduce undergraduates to the diverse, rich, and complex history, politics, economy, culture, and society of Latin America.	Related
IAFF	2092	Russia and Eastern Europe: An Introduction	A multidisciplinary introduction to the lands and cultures of the former Soviet Union and Central and Eastern Europe. The main emphasis is on history and politics, with attention also given to economics, trade, geography, military matters, literature, and the media.	Related
IAFF	2093	Africa: Problems and Prospects	Aspects of the environment, culture, and politics as they affect the present and anticipated future of Africa.	Focused
IAFF	2094	Europe: International and Domestic Interactions	A multidisciplinary view of contemporary Europe, including the E.U. states, other states of Eastern Europe, and Turkey. The widening processes of political, judicial, economic, cultural, and security integration.	Related
IAFF	6102	Global Gender Policy	An interdisciplinary and comparative approach to examination of policies targeted at achieving gender equality and of the costs of policies that are not gender-specific. Topics include poverty reduction, environmental sustainability, social justice, global and personal security, and prevention of and responses to extreme calamities and crises. How global gender policies are rationalized, adopted, implemented, and assessed. Focus on "what works" and why it works; gaps that remain in achieving global gender equality.	Related
IAFF	6136	Gender and Development	Theoretical approaches to gender and development and debates over how to promote gender equity and rights across the gender spectrum. Key issues in gender and development and the range of actors who are involved in promoting gender equality. General patterns, lessons with broader applications, and challenges and differences within and between societies.	Related
IAFF	6142	Technology Creation/Diffusion	Examination of the relationship between invention (inception), innovation (first application), and dissemination (diffusion) of technological knowledge; focus on the technological environment prevailing in the major developed market economies.	Related
IAFF	6151	Environmental Policy	Examination of public policies designed to protect the human and physical environment; focus on the ways science and technology can simultaneously create new environmental problems and contribute to their mitigation and prevention.	Focused
IAFF	6158	Energy Policy	This course focuses on the patterns of international energy policy-making and implementation, energy geopolitics, and the emergence of environmental and institutional challenges that will fundamentally reshape the way global society extracts and consumes energy. It is organized around historical patterns, current issues, and future prospects. An integrating theme is the role played by science and technology.	Related
IAFF	6153	Science, Technology, and National Security	The contributions of science and technology to U.S. security in military, intelligence, and homeland security activities.	Related
IAFF	6173	Security and Development	Consideration of the relationship between security and development reflecting the growing interest from the security field in issues that have traditionally been the purview of development, and vice versa.	Related
IAFF	6186	Energy Security	Special topics course, depending on current issues of interest and faculty availability.	Related
IAFF	6186	Environmental Security	Special topics course, depending on current issues of interest and faculty availability.	Related
IBUS	4403	Oil: Industry, Economy, and Society	Multidisciplinary approach, related primarily to political economy and management, to oil and its effects on business, nation-states, and the world economy.	Focused
IBUS	4404	Global Energy	Fundamental economics and politics of the energy business; effects on business decisions and strategies; conventional energy generation technologies and alternative technologies. Course equivalent or permission of the instructor may be substituted for the prerequisite. Restricted to juniors and seniors.	Focused
IBUS	6400	Oil: Industry, Economy, and Society	Multidisciplinary approach to the study of oil and its effects on business, nation-states, and the world economy, based primarily on political economy and management perspectives. Topics include the oil industry, the global oil environment, and the potential effects of oil on a society.	Focused
INFR	4105	Consumer Health Informatics	Consumer health informatics as a field of research and development in the context of medical informatics, including patient and provider perspectives and technology innovations utilized by patients and healthcare systems.	Related
INFR	4106	Population Health for Medical Informatics	Population health informatics, and informatics techniques used on population-level data to improve health.	Related
ISTM	4130	(W) Writing On The Ethics of Technology	Complex ethical dilemmas inherent in the introduction of new technologies and the influence human behavior asserts on these problems. Students write stories to explore and evaluate specific ethical problems relative to technology from various perspectives.	Related
ISTM	4233	Emerging Technologies	New developments in scientific and technological innovation, including automation, energy, medicine, bioengineering, social science, information technology, and space; forecasting technological advances and assessing their economic and social effects. Students enrolled at the graduate level are expected to do additional work.	Related
ISTM	6201	Information Systems Development and Applications	The information systems life cycle evaluated in terms of technologies, impact, and management. Structured and object-oriented analysis, prototyping, software reuse, testing, life-cycle costs, software development environments, and organizational and behavioral aspects of development projects.	Related
ISTM	6233	Emerging Technologies	Exploration of new developments in scientific and technological innovation, including automation, energy, medicine, bioengineering, social science, information technology, and space. Emphasis on forecasting these technological advances and assessing their economic and social effects. The role of advancing technology in driving social change.	Related
ISTM	6239	Sem:Competitiveness/Technology	Capstone course integrating the field of management of science, technology, and innovation. Commercialization of technology in the private sector and the impact on competitiveness. Implementation of technology in the public sector. Technology development, from new product concept to utilization.	Related
ISTM	6297	International Technology and Innovation	Growth and future potential and impact of the technology expansion within international arenas and the global economy. Social, economic, innovative start-ups, multinational firms.	Related
LAW	6332	Land Use Law	Problems, solutions, emerging concepts, and constitutionality of land use regulations, including zoning, subdivisions, historic preservation, exactions, vested rights, transfer of development rights, growth management, and urban and regional planning.	Focused

LAW	6406	Regulated Industries	2-3 credit class offered on topic of regulated industries.	Related
LAW	6408	Food and Drug Law	Regulation of foods, drugs, and medical devices under the federal Food, Drug, and Cosmetic Act. Historical development of the law and how it is interpreted and enforced by the Food and Drug Administration and the courts. Statutory interpretation, administrative law, judicial enforcement, and the underlying roles of politics and science.	Focused
LAW	6430	Environmental Law	Philosophical foundations, common law roots, and constitutional framework of U.S. environmental law. Major statutes dealing with endangered species, clean air, clean water, environmental impact assessment, and hazardous waste cleanup. Statutory objectives and regulatory strategies of these efforts and their relative effectiveness. Decision making in the face of scientific uncertainty, the role of cost-benefit analysis, and the relative distribution of environmental burdens and pursuit of environmental justice. Alternatives to conventional regulatory approaches.	Focused
LAW	6431	Wildlife and Ecosystems Law	In-depth study of the complex body of laws that protect or regulate wildlife, including laws that protect ecosystems and the habitats in which wild animals live. The course addresses more than two dozen wildlife-specific federal laws and their accompanying regulations, similarly intricate state law schemes, federal and state civil and criminal enforcement, constitutional and tribal issues that arise in wildlife cases, and a vivid common law history that stretches across several centuries.	Focused
LAW	6432	Air Pollution Control	An in-depth analysis of the Clean Air Act. Topics include the history of air pollution control, air quality planning, standard setting, technology-based controls, incineration, indoor air pollution, permitting, and control of electrical utilities.	Focused
LAW	6434	Water Pollution Control	Introduction to water pollution control and the Clean Water Act, with emphasis on water quality requirements and policies affecting industrial, municipal, and agricultural/ development interests. Related federal laws and policies involving wetlands, watersheds, coastal pollution, oil spills, groundwater, and safe drinking water.	Focused
LAW	6435	Trade&SustainableDevelpmnt Law	Overview of the major environmental treaties and other legal and institutional frameworks at the intersection of international trade issues and sustainable development efforts. Examination of the frequently conflicting views of judicial and quasi-judicial bodies, policymakers, and issue advocates. Emphasis on developing the theoretical bases and practical skills to address issues of trade and sustainable development that arise in governmental, private sector, and NGO practice, and effective legal strategies for addressing those issues on behalf of a wide range of clients.	Focused
LAW	6437	Coastal, Navigatn, Wetlands Resr	Federal statutory and constitutional law governing the development, regulation, and protection of the waters of the United States, including wetlands. Focus on federal and state regulation and protection of wetlands and other aquatic resources, with special emphasis on Clean Water Act Section 404. Other topics include the evolution of federal authority over the navigable waters of the United States; legal issues involved in the planning, construction, and operation of federal water resource development projects by federal and state agencies (i.e., for navigation, flood control, hydropower, water supply, etc.); the federal navigation servitude; the Coastal Zone Management Act; the Marine Protection, Research, and Sanctuaries Act (i.e., the "Ocean Dumping Act"); the London Dumping Convention; and Fifth Amendment "regulatory takings."	Focused
LAW	6438	Energy Law and Regulation	Survey of the law and regulation of energy production, distribution, and use. Topics include fuel production, electricity and natural gas utility regulation, nuclear and hydroelectric facility regulation, renewable energy, energy efficiency, and energy tax policy and financial incentives. Legislation and regulations developed in response to climate change concerns.	Focused
LAW	6440	Natural Resources Law	Introduction to federal public lands (BLM lands, national forests, national parks, and national wildlife refuges) and the legal issues related to their multiple resource uses— forestry, mining, water, recreation, wildlife, endangered species, and wilderness. Principles of federal and state authority over these lands. Administrative law and practice governing land-management agency decision making and litigation challenging such decisions. Focus on topical case studies, statutory materials, and case law.	Focused
LAW	6441	Energy Law Seminar	Selected topics in energy law to be announced at the time of registration. May be repeated for credit provided the topic differs. Enrollment is limited.	Focused
LAW	6442	Control-Solid/Hazardous Waste	Principal federal statutes governing the management and cleanup of hazardous substances and waste. Site and remedy selection processes, liability regime, and government and private enforcement rights under the Superfund statute. Rules for identifying industrial and commercial waste as hazardous; treatment, storage, and disposal standards; regulation of recycling; and operation of underground storage tanks.	Focused
LAW	6443	Oil and Gas Law	(blank)	Focused
LAW	6444	Regulatn/ToxicSubstancesRisk	Government regulation of the production and use of toxic substances and the management of hazardous waste. The basic analytical processes of risk assessment and risk management; common law approaches to reducing risks from management of toxic substances; and precautionary legislation. Emphasis on federal legislation, including the Toxic Substances Control Act; the Federal Insecticide, Fungicide, and Rodenticide Act; the Safe Drinking Water Act; provisions of the Federal Food, Drug, and Cosmetic Act; the Resource Conservation and Recovery Act; and selected aspects of the Comprehensive Environmental Response, Compensation, and Liability Act.	Focused
LAW	6449	Environmental & Toxic Torts	The use of common law and statutory remedies to compensate those experiencing personal injuries or economic harm caused by exposure to toxic products or toxins in the environment. Topics covered include novel and emerging theories of recovery (e.g., medical monitoring), class actions/mass torts, preemption, and methods of proving scientific causation.	Focused
LAW	6450	Federal Facilities Environ Law	Analysis of the legal framework governing environmental law compliance at federal facilities. Review of a wide range of environmental, fiscal, and other laws that uniquely regulate federal installations and operations. Topics include the National Environmental Policy Act, statutes governing management and conservation of federal property, expenditure of federal funds, public involvement in federal environmental decision making, federal-state sovereignty issues, federal agency litigation, and professional responsibility issues.	Focused
LAW	6452	Environmental Issues-Bus Trans	Focus on applied environmental law. Emphasis on environmental compliance counseling, identifying environmental issues in business and real estate transactions, and drafting techniques to avoid environmental problems. Topics include environmental audits, securities disclosure issues, green advertising, criminal liability for officers, environmental liability for purchase of stock and corporate assets, lender liability, and partnership liability.	Focused

LAW	6454	International Environmentl Law	The treaty negotiation process, role of international institutions in developing and implementing environmental agreements, relationship between environmental law and international issues, developing countries' perspectives on environmental issues, and social and cultural changes that affect the implementation of environmental law. Issues covered include climate change, export of hazardous waste, deforestation and biodiversity, Antarctica, and environmental concerns in war, human rights, and development financing.	Focused
LAW	6455	Int'l Climate Change Law	Analysis of the legal regimes created by the United Nations Framework Convention on Climate Change (UNFCCC) and by the Kyoto Protocol. Carbon finance and trading mechanisms created by Kyoto and national and regional schemes to assist parties to the treaty in meeting their obligations. Forest carbon sequestration schemes, structure and legal aspects of carbon finance transactions, and the drafting of carbon agreements. Proposals for federal legislation and emerging state and voluntary carbon credit schemes in the United States.	Focused
LAW	6457	Sustainable Communities Law and Policy Seminar	Focus on the emerging field of smart growth—regional development that takes into account economic, environmental, and social considerations. Factors influencing sprawl; urban trends in the U.S. and abroad; and new legal and interdisciplinary approaches to promote comprehensive planning, urban redevelopment, and regional competitiveness.	Focused
LAW	6458	Enviro Negot & Dispute Resol	Negotiation and alternative dispute resolution theories and processes, focusing on complex environmental disputes and transactions involving multiple parties and scientific or technical issues. Students participate in negotiation and mediation exercises both in and outside of class, using diagnostic and other tools useful for pre-negotiation preparation, mid-negotiation analysis, and post-negotiation evaluation of proposed agreements or deadlock.	Focused
LAW	6459	Atomic Energy Law	The evolution of the Atomic Energy Act, the regulatory structure for non-military nuclear materials, federal and state law related to nuclear waste; waste transportation; the contrasting stories of two deep geologic permanent waste repositories (Waste Isolation Pilot Plant [WIPP] and Yucca Mountain); the dilemma posed by nuclear wastes having no disposal pathway; the law and policies to avert nuclear terrorism; and compensation when the unexpected happens.	Related
LAW	6460	Envir&Energy Policy Practicum	Students conduct in-depth law and policy development work on behalf of environmental or energy nonprofit organizations or government agencies, working closely with the client organization or agency to research one, or perhaps two substantial policy issues during the semester. The research is expected to lead to rule comments, a white paper, policy recommendations, draft legislation, revised organization procedures, or other similar policy outcomes. Students regularly meet with faculty supervisors to discuss project developments.	Focused
LAW	6464	Environmental Crimes	Focus on crimes under various federal environmental statutes, including the interplay of statutory and regulatory provisions that define such crimes, development of investigations and prosecutions, the rationale for criminal sanctions for certain environmental violations, and salient policies and issues associated with environmental crimes. Prior experience with environmental law from either an academic or practical perspective is recommended.	Focused
LAW	6466	Environmental Law Seminar	Selected topics in environmental law to be announced at the time of registration.	Focused
LAW	6468	Graduate Enviromental Placemnt	The student works on a project in the environmental law field under the supervision of both the faculty director of the program and a lawyer practicing environmental law. The project may involve working with a government agency, a congressional committee, a private practitioner, or a nonprofit public-interest environmental organization. Admission to the course is limited to LL.M. students with permission of the environmental law program director. Students may earn no more than a total of 4 credit hours for this course. This course is graded on a CR/NC basis. Five hours of work per week are required for each credit.	Focused
LAW	6469	Environmental Lawyering	The role of the lawyer in representing government agencies and nonprofit organizations in the fields of environmental and energy law, with specific emphasis on public policy formation and interactions with regulated entities and the public. Environmental regulation, advanced environmental legal research, ethical concerns related to the practice of public interest law, client counseling and negotiations skills, the art of commenting on regulations and legislative drafting, the role of state and local governments in environmental protection, and the basics of environmental transactions.	Focused
LAW	6546	International Law of Human Rights	An overview of international and regional human rights instruments and institutions, focusing on the manner in which the United Nations, Inter-American, European, and African human rights systems seek to protect individual and group rights. Examination of the problems these systems have encountered in discharging their mandate and exploration of ways to strengthen international and regional governmental and nongovernmental efforts in the human rights field.	Related
LAW	6547	Regional Protection of Human Rights	Advantages and disadvantages of addressing human rights issues regionally rather than at the national or global levels. The jurisprudence and procedures of the European, Inter- American, and African human rights systems. The potential for developing a regional system in parts of Asia.	Related
LAW	6550	Law of the Sea	International law related to the use of ocean space. Development of international law concerning internal waters, territorial sea, contiguous zone, high seas, continental shelf, fisheries, exclusive economic zone, maritime boundaries, marine environment, marine scientific research, deep seabed, and settlement of disputes. Current legal and policy issues associated with these areas.	Focused
LAW	6568	Human Rights Lawyering	Human rights lawyering from the perspective of victims' advocates and governmental and inter-governmental officials. Overview of international human rights law and key domestic legal principles. Methods of investigation and fact-finding, interpretation and application of law, and choice of remedies. Role playing and other class exercises using the United Nations and Inter-American systems as models.	Focused
LAW	6570	Int'l Human Rights of Women	Theoretical and practical challenges to reinforcing international human rights of women. Major international and regional treaties and instruments; standards to determine sex discrimination as developed by international tribunals and domestic courts; interaction of international and domestic law in the context of women's rights; and feminist/ activist theories and critiques on topics such as state responsibility for violence against women and conflicts between women's rights and religious or cultural rights.	Focused

LAW	6571	Human Rights&Enviro Protection	The intersection of national and international law on human rights and environmental protection, with focus on rights-based approaches to environmental protection and how environmental deterioration may limit or infringe the enjoyment of guaranteed rights. The current state of the law concerning a claimed right to a safe and healthy environment, corporate social responsibility, land and resource rights of indigenous peoples, the role of international financial institutions, and human rights litigation linked to environmental harm	Focused
LAW	6627	Environmental Law Clinic	Second-, third-, and fourth-year students participate in the J.B. and Maurice C. Shapiro Environmental Law Clinic, representing clients in environmental litigation in both the federal and state systems. Students work under faculty supervision in administrative, trial, or appellate actions, particularly citizen suit actions. This work includes actions under the Clean Air Act, the Clean Water Act, the Comprehensive Environmental Response, Compensation and Liability Act, the Endangered Species Act, the Resource Recovery and Conservation Act, and the Federal Facilities Compliance Act. Permission of the instructor is required prior to registration	Focused
LAW	6633	Human Rights Clinic	Under faculty supervision, students work in a clinical setting in partnership with experienced attorneys and specialized institutions engaged in human rights activism on case projects drawn primarily from one of two main areas: (1) litigation and advocacy before international human rights tribunals and treaty bodies, primarily in the Inter-American and United Nations human rights systems; or (2) human rights litigation and advocacy in the United States, especially in relation to the Alien Tort Claims Act and the Torture Victims Protection Act	Related
LAW	6664	JournalEnergy/EnvironmentalLaw	Limited to third-year members of the student staff of the Journal of Energy and Environmental Law. A maximum of 2 credit hours may be earned in this course. Second-year students must enroll in LAW 6657 to reflect journal participation. This course is graded on a CR/NC basis.	Focused
LAW	6824	International Human Rights and Refugee Law	2 credit course.	Related
LAW	6825	Econ/Soc/CultrlRghtsLaw & Prac	Legal and practical challenges that arise from a state's obligation to protect economic, social, and cultural rights (ESCR), and the conceptual framework for those rights. Mechanisms and tools for implementation of ESCR, including the right to housing, health, food, water, education, and work. Obligations of states for human rights beyond their borders.	Focused
LAW	6826	Human Rights in theMarketplace	The impact of international human rights standards on global trade, corporate governance and competition, international finance, and economic development. Basic principles and institutions; market-based initiatives toward corporate responsibility (i.e., efforts by companies to attract consumers and investors by voluntarily adopting human rights codes of conduct or social accountability standards); domestic regulation (directives and legislation in various countries that, through human rights conditionality, attempt to recruit the transnational corporation as an instrument of foreign policy); civil liability (the enforcement of standards against corporations through private lawsuits in domestic courts); and international regulation (under which intergovernmental organizations attempt to channel corporate conduct in ways that are thought to be socially responsible)	Related
LAW	6830	Hmn Rts Advocacy & Disseminatn	This course offers students the opportunity to develop skills in human rights advocacy and dissemination. Through the use of simulation exercises, such as the preparation of petitions to regional and international human rights bodies, country condition reports in support of litigation in national courts, and applications for refugee status, students engage in critical analysis of the methods and strategies for human rights advocacy at the local, national, regional, and international levels. Emphasis is also placed on the training of officials in human rights standards and the dissemination of such information to the general public	Related
LSPA	1011	Hiking	Introduction to hiking as an element of outdoor education, environmental education, and basic wilderness travel, incorporating elements of outdoor leadership. For those with less experience with general outdoor recreation as well as more experienced hikers. Visits to D.C. metropolitan area parks and surrounding regions.	Focused
MAE	4149	Thermal Systems Design	Completion of a thermal systems design project that requires integration of engineering science, economics, reliability, safety, ethics, professional responsibility, and social considerations. Development and use of design methodology, optimization, feasibility considerations, detailed system descriptions, and presentation of results.	Focused
MAE	6261	Air Pollution	Introductory course on the generation, monitoring, and control of air pollution. Atmospheric pollutants; current levels and health problems. Combustion chemistry and mixing. Photochemical processes: smog and measurements. Atmospheric dispersion: inversion and acid rain.	Focused
MAE	6262	Energy Systems Analysis	Analysis of energy resources and conversion devices. Statistical data analysis, forecasting, I/O, and net energy analyses, mathematical modeling.	Focused
MAE	6263	Advances in Energy Engineering	Review of thermodynamics, heat transfer, fluid dynamics, and materials technology used in the energy industries. New energy-efficient technologies in transportation and buildings; renewable energy (wind, solar, and biomass). Climate change and sustainability issues, such as carbon capture, cap and trade, carbon sequestration.	Focused
MBAD	6245	Global Perspectives	How decisions and processes are modified for the complex global arena. Differences between the domestic and international environments and the implications for management; variations in the organization of institutions of capitalism across countries. Challenges of operating in different cultures, effects of national differences in institutional environments, and design of organizational structures for coordination and control in multinational operations.	Related
MBAD	6246	Global Economy	Linkages within the global economy. International macro and micro economic and financial developments and trends in developed, emerging, and developing economies. Focus on understanding macroeconomic data, sources of long-term growth, critical global issues that impact long-term development, mega trends, globalization and technological advances, and cyber security issues.	Related
MBAD	6253	Mgmt of Tech & Innovation	Business, technological, economic, and political factors that influence the development and adoption of new technology. Management concepts and practices useful in enhancing corporate innovation. Corporate venture divisions and organizational alternatives.	Related
MBAD	6262	Managing Human Capital	Issues of corporate culture, strategy implementation, growth management, employee recruitment and retention, organizational behavior, diversity, ethics, and legal aspects of business. How human resource policies and practices can become a source of competitive advantage.	Related

MBAD	6281	Business Ethics	Businesses are experiencing increasing challenges and opportunities to ensure that they demonstrate integrity in all of their activities, both internal and external to their operations. Perspectives, information, and skill development in advancing the value of integrity in business organizations.	Related
MBAD	6289	Business Ethics & Public Policy	Businesses are experiencing increasing challenges and opportunities to ensure that they demonstrate integrity in all of their activities, both internal and external to their operations. Perspectives, information, and skill development in advancing the value of integrity in business organizations.	Related
MBAD	6297	Business and Innovation	Innovation as a core business process involving technological, market, and organizational change. Strategic decisions, capabilities, and moves made or developed in established firms to create, deliver, and capture value.	Focused
MGT	3305	Human Capital Sustainability	Managerial challenges associated with employment, economic efficiency, employee equity, and employee voice. How market forces, public policy, negotiations, and globalization affect sustainable employment relationships.	Focused
MGT	6285	Social Entrepreneurship	Theory and practice of social entrepreneurship. The power and limits of social entrepreneurship as a tool for creating sustainable and scalable social impact.	Related
MSTD	6102	NonProfit Fiscal Management	Basic concepts of general accounting; fund accounting for nonprofit organizations; budgets and budget systems; use of the budget as a management tool; long-range planning; income sources; other financial management concepts.	Related
MSTD	6306	Race, Gender, Sexuality, and the Museum	Exploration of the role that museums play in the construction, reification, and representation of ideas about race and gender.	Related
ORSC	2046	Global Organizations	The globalization of organizations as the engine for the global movement of talented and skilled professionals; the increasing focus of organizations on attracting, utilizing, and developing such individuals. Issues related to the formulation of global strategy and the leadership of global talent.	Issues
ORSC	2116	Leading Change	An in-depth introduction to and analysis of concepts and techniques of leadership, including motivation, goal alignment, incentives, teamwork, and communication. Conceptual and empirical background of the management of change.	Related
ORSC	2123	Negotiation and Conflict Resolution	Theories in psychology, management, and communication as applied to individual-, group-, and organizational-level contexts of negotiation and conflict resolution.	Related
ORSC	6241	Strategic Management and Policy Formation	Processes and theories of strategic management in the profit and not-for-profit sectors. Analysis of behavioral, sociopolitical, and economic forces underlying strategy formulation. Issues of strategic competitive advantage; corporate diversification; multinational corporations; evaluation and choice; and implementation of functional and corporate strategies.	Related
ORSC	6246	Comparative Management	International dimensions of management over a broad spectrum of topics, including cross-national transfer and management practices in a global economy; cross-cultural interaction; business-government relations; expatriation and repatriation processes; international strategic management; technology transfer; globalization of human resources management.	Related
OT	8274	Program Theory and Health Innovations	Program theory as the basis for designing health and educational innovations that can be tested using scientific methods, replicated in practice, and inform policy.	Related
PA	6118	Health, Justice, and Society I	Presentation and discussion of issues including social determinants of health, cultural competency, ethical principles, epidemiology, and patient safety. A related community service component is included in PA 6119.	Focused
PA	6119	Health, Justice, and Society II	Continuation of PA 6118. Students interact with community clinicians and/or members of communities with vulnerable populations, developing communication and team practice skills through participation in team projects.	Focused
PHAR	6116	Pharmacogenomics and Personalized Medicine	Relationships between human genetic variability and drug responsiveness, susceptibility to disease, and disease severity. Scientific, clinical, legal, and ethical challenges in applying pharmacogenomics to drug discovery and clinical development. Professionals from such disciplines as human genetics, pharmacology, pharmaceutical sciences, genomic medicine, clinical and translational sciences, law, and regulatory affairs provide an integrative view of the application of pharmacogenomics to personalized medicine.	Related
PHIL	2124	Philosophies of Disability	Disability presents an intense and interesting challenge to traditional philosophical presuppositions and principles. This course examines various philosophical approaches to disability—historical, individual, and medical paradigms as well as those that rely on frameworks of social or human rights.	Related
PHIL	2124	(W) Philosophies of Disability	Disability presents an intense and interesting challenge to traditional philosophical presuppositions and principles. This course examines various philosophical approaches to disability—historical, individual, and medical paradigms as well as those that rely on frameworks of social or human rights.	Related
PHIL	2125	Philosophy of Race and Gender	A theoretical examination of the bodily, social, discursive, and political effects of patriarchy, racism, and classism.	Related
PHIL	2125	(W) Philosophy of Race and Gender	A theoretical examination of the bodily, social, discursive, and political effects of patriarchy, racism, and classism.	Related
PHIL	2132	Social and Political Philosophy	Philosophical theories about how economic, political, legal, and cultural institutions should be arranged. Topics include the meaning and significance of liberty, the legitimate functions of government, the nature of rights, the moral significance of social inequality, and the meaning of democracy.	Related
PHIL	2132	(W) Social and Political Philosophy	Philosophical theories about how economic, political, legal, and cultural institutions should be arranged. Topics include the meaning and significance of liberty, the legitimate functions of government, the nature of rights, the moral significance of social inequality, and the meaning of democracy.	Related
PHIL	2133	Philosophy and Nonviolence	Violence and nonviolence in the personal and social struggle for meaningful, just, and peaceful existence; philosophical foundations of pacifism and nonviolent resistance in the thought of Tolstoy, Gandhi, King, and others; philosophical inquiry into war, terrorism, genocide, and ethnic conflict, as well as human rights, humanitarian intervention, and just war theory.	Related
PHIL	2134	Philosophy of Human Rights	Conceptual, ethical, and theoretical analyses of human rights with emphasis on the justification of human rights, the debate over cultural relativism, and the application of human rights norms in domestic and global contexts.	Focused
PHIL	2135	Ethics in Business and the Professions	Ethical theories and basic concepts for analysis of moral issues arising in business and in professional practice.	Related

PHIL	2136	Contemporary Issues in Ethics	Introduction to a range of debates in applied ethics, including both classic debates concerning topics such as the permissibility of abortion, animal treatment, and suicide as well as more current debates concerning our interactions with the environment and our obligations to the poor in a global context.	Related
PHIL	2281	Philosophy of the Environment	Three models of environmental sustainability: the current paradigm in economic and cultural thinking (neoclassical economics); redistribution of resources toward greater global equity (a macroeconomic perspective); and de-growth in the developed economies (ecological economics). The models offer different perspectives on what environmental sustainability means and how it can impact the cultural, religious, moral, metaphysical, and existential situation.	Focused
PHIL	6225	Queer(ing) Philosophy	Examination of how queer theory, which emerged as a field in its own right in the early 1990s, has posed significant challenges to traditional, taken-for-granted understandings of time, space, the body, race, sexuality, normality, culture, violence, and disability. Restricted to For graduate students only.	Related
PHIL	6230	Ethical Issues in Policy Arguments	Critical analysis of ethical foundations of public policy arguments, e.g., about protection of the environment or health and safety, equality of opportunity. Case studies of appeals to “welfare improvements,” to norms of duty, to “the social contract,” and to rights–claims. Attention to historical contexts and biases.	Focused
PHIL	6231	Seminar: Economic Justice	Ethical and economic analysis of equity and efficiency of current U.S. income distribution patterns. Theories of justice; economic theories of distribution; assessment of redistribution policies.	Related
PHIL	6237	Animal Ethics	The moral status of animals and the ethics of human use of animals. Major topics include models of moral status, animals' mental life, and specific ethical issues associated with the eating of animal products, the use of animals in research, and the keeping of animals in homes and zoos. Restricted to For graduate students only.	Focused
PHIL	6238	Feminist Ethics and Policy Implications	Feminist critiques of traditional ethical reasoning; alternative feminist ethical frameworks examined and applied to contemporary social problems, such as respecting cultural differences, dependency, disability.	Related
PHIL	6242	Philosophy, Law, and Social Policy	Consideration of the relationship between legal interpretation and policy goals. Theories concerning the role of the judiciary in a constitutional democracy and methods of constitutional and statutory interpretation. Representative policy topics include capital punishment, pornography, affirmative action, welfare, property rights, racial gerrymandering, gun control.	Related
PHIL	6250	Topics in Health Policy	Topics in health policy from the perspective of philosophical ethics, including human and animal research, the enhancement of human traits, justice and health care allocation.	Related
PHIL	6253	Cognitive Science and Public Policy	The cognitive sciences are providing new insights into the nature of human decision making at an accelerating pace. Cognitive psychology, cognitive neuroscience, neuroeconomics, evolutionary psychology, and developmental and comparative psychology are rewriting theories about human nature with significant implications for public policy. The course examines recent work in the cognitive sciences with the intent of drawing out its public policy implications.	Related
PHIL	6262	Normative Issues in Foreign Policy	Selected issues on foreign policy from a normative perspective; emphasis on human rights, economic globalization, global poverty, sustainable development, and the ethics of military intervention.	Related
PHIL	6281	Environmental Philosophy and Policy	Examination of philosophical frameworks for assessing policy approaches to environmental problems. Representative topics include duties to future generations, environmental justice, legal rights for natural objects, critiques of cost–benefit analysis, sustainability, risk measurement, the intrinsic value of nature.	Focused
PHIL	6293	Contemporary Continental Philosophy	Focus on several powerful philosophical concepts introduced by late 20th/early 21st-century continental scholars. Through a close reading of selected works, the influence these scholars have had upon one another is traced. Critical examination of the theoretical resources the works provide in articulating some of the most urgent ethical, social, and political demands of contemporary human existence. Restricted to For graduate students only.	Related
PHRG	4151	Introduction to the Pharmacy Profession	The evolving role of the pharmacist in the healthcare system. Attributes, attitudes, and ethical standards expected of the profession. Concepts of patient-centered care, collaborative care, and the pharmacist as an advocate, educator and health promoter. Pharmacy career paths.	Related
PHYS	1003	Physics for Future Presidents	A serious but accessible presentation of topics important for leaders to know—energy, global climate, high-tech devices, space travel, nuclear weapons, etc. Students possessing any level of scientific background are equipped with the concepts and analytical tools needed to make informed decisions and to argue their view persuasively.	Related
PMGT	6428	Cultural Aspects of Global Engagement	Understanding multicultural communities and diverse institutions, customs, and practices; effective and ethical public engagement on behalf of global organizations; communicating issues and commitments to diverse audiences and the general market; engagement strategies and techniques.	Related
PPPA	2701	Sustainability and Environmental Policy	A survey of the intersection of the principles of sustainability and the set of public policies that affect environmental management in the United States. Consideration of the idea that environmental policy is inevitably implemented in a complex interaction of both natural and human systems. Topics applicable to most environmental policy debates, such as the the balance between costs and benefits of environmental protection. Introduction to a “toolkit” of environmental policy instruments ranging from highly prescriptive command-and-control regulations to flexible market-based policies.	Focused
PPPA	6043	Land Use Planning and Community Development	Theory and practice of land use planning. Issues of competing land uses in an era of increased sprawl, population pressure, and environmental threat. Growth management techniques and practices in states and localities; the use of various regulatory controls and economic incentives to achieve desired outcomes. The idea of “sustainable community.”	Focused
PPPA	6049	Urban and Regional Policy Analysis	Examination of selected national policies and their effects on urban areas and governments. Emphasis on policy dimensions of urban systems and their relationship to the social, political, and economic context. Against the background of urban politics and administration, areas of health, education, welfare, manpower, transportation, and housing are addressed.	Focused

PPPA	6057	International Development Administration	This course provides an institutional, policy and operational context to prepare students for work in developing or transitioning countries. It includes a brief overview of international development theories, their translation into mainstream development policies and priorities (such as the Millennium Development Goals, structural adjustment and economic policy reform, and poverty reduction); ethical arguments for development aid, financial flows and issues related to aid effectiveness. The course introduces the major actors in the international development industry (multi-laterals, bi-laterals, NGOs, etc.) with special attention to U.S. bilateral players, policies and institutions. It relates selected sectoral policy areas (e.g., health and population, gender, agriculture) to broader current global issues such as global economic integration and climate change, and introduces students to regional and comparative perspectives, and selected policy implementation issues.	Related
PPPA	6058	International Development NGO Management	The course provides an overview of nongovernmental organization (NGO) management, highlighting those features of NGO management that are particular to NGOs active in international development. NGO roles as project implementers, technical assistance providers, intermediaries, partners, and policy advocates are analyzed. Particular attention is given to NGO- government, NGO-donor, and North-South relations.	Related
PPPA	6059	International Development Management	This course is designed to socialize students into the development management profession, and transfer and apply skills specifically developed for international development. In so doing, it will address key theories, perspectives, and approaches of community development, as well as provide training in specific development management tools and processes. Students work in teams with locally-based international development organizations to apply selected tools and processes.	Related
PPPA	6062	Community Development Policy and Management	This course examines the policy and practice of community development, including how private sector developers and lenders work with nonprofits, foundations, and the public sector to promote sustainable affordable housing, economic development, and other community-based projects that meet both financial as well as social impact criteria. This category of finance and development is intended to help people and communities just outside the margins of conventional, mainstream finance join the economic mainstream – and to help the economic mainstream enter emerging opportunity markets. The course explores different types of community development opportunities, including affordable housing, charter school, community facility, small business lending, and nonprofit real estate projects. The course also addresses emerging trends that are likely to affect community development policymakers and practitioners, including transportation oriented development, “green” development, use of technology, comprehensive community initiatives, and new ways of raising capital for community development projects.	Focused
PPPA	6063	Policy Issues in Corporate Social Responsibility (CSR) and Impact Investing	This course examines the role of the public and nonprofit sectors in supporting corporate and investor activities that are intended to have social and environmental, in addition to financial, benefits. These activities – often referred to as “corporate Social Responsibility” (CSR) and “impact investing” – have been described as having significant potential to create social benefits in addition to being in the financial best interests of the corporation or investor. At the same time, some critics of these activities have said that they are less about producing social benefits and more about marketing private sector activities that are primarily designed to produce corporate financial gains. The course explores what is meant by these two terms, what steps the public and nonprofit sectors have taken to support the wide range of activities that these terms encompass, and what have been the results of this work both in the United States and in other countries. The course also addresses emerging trends that are likely to affect the public and nonprofit role in CSR and impact investing in the future.	Related
PPPA	6063	Policy Issues in Corporate Social Responsibility and Impact Investing	This course examines the role of the public and nonprofit sectors in supporting corporate and investor activities that are intended to have social and environmental in addition to financial benefits.	Related
PPPA	6066	Environmental Policy	Current issues in environmental policy: biodiversity, land use including wilderness protection, climate change, environmental justice, economic growth, and ecological sustainability.	Focused
PPPA	6067	Environment, Energy, Technology, and Society	The identification, examination, and evaluation of how environment, energy, and technology are interrelated and how these interactions influence policy formulation and implementation at the international, national, regional, industrial, and organizational levels.	Focused
PPPA	6081	Poverty and Social Policy	Introduction to analytical and political issues surrounding the ongoing American and British debates on poverty and social policy; evaluating social assistance programs; the complementary roles of policy analysis and public management.	Focused
PSAD	6274	International Public Relations and Global Advocacy	How global public relations strategies are developed and implemented to support advocacy efforts. Case studies of successes and failures. Consideration of communications theories that enable insight into challenges arising from differences in language, culture, politics, and economics worldwide. Students develop, implement, and assess a comprehensive global public relations strategy that includes social media technologies.	Related
PSC	2212	State and Urban Policy Problems	Selected issues in state and urban policymaking, with emphasis on urban and metropolitan settings.	Related
PSC	2220	Public Opinion	How public opinion is measured, how it is shaped, and its consequences for policymaking.	Related
PSC	2222	Science, Technology, and Politics	Multiple impacts of scientific and technological developments on the political systems. Discussion of public policies for support, use, and control of science and technology.	Related
PSC	2224	Issues in Domestic Public Policy	Examination of the decision-making process and the substance of various issues in domestic public policy in such areas as crime, economics, education, energy, the environment, poverty, and health.	Related
PSC	2225	Women and Politics	An examination of the role and impact of women in politics, including women’s interests and access to the political system; specific public policy issues with a particular focus on the role of women.	Related
PSC	2240	Poverty, Welfare, and Work	The elements and politics of America’s welfare state. Social welfare policies and how they relate to work and poverty.	Related
PSC	2336	State–Society Relations in the Developing World	Historically informed exploration of enduring issues of concern in state–society relations, with an empirical focus on selected countries and regions of the developing world.	Focused
PSC	2337	Development Politics	An examination of how and why political systems develop the way they do. Why do some countries develop into democracies, while others become authoritarian? How do class conflict, the nature of the elite, and the political culture affect the development of political institutions?	Focused
PSC	2367	Human Rights	Human rights theory, the various movements for human, religious, civil, political, and other rights.	Focused
PSC	2367	(W) Human Rights	Human rights theory, the various movements for human, religious, civil, political, and other rights.	Focused

PSC	2439	International Political Economy	Analysis of the political aspects of global economic relationships, focusing on such issues as economic hegemony, interdependence, trade relations, development assistance, multinational corporations, and the role of international organizations.	Related
PSC	2442	International Organizations	Development and operations of international organizations working in the areas of collective security, peacekeeping, trade, finance, environment, human rights.	Related
PSC	2442	(W) International Organizations	Development and operations of international organizations working in the areas of collective security, peacekeeping, trade, finance, environment, human rights.	Related
PSC	6336	Political Economy of Developing Areas	Comparative analysis of how development problems have been defined from both political and economic perspectives and the solutions proposed by outsiders and insiders. Emphasis on the rise, demise, and recovery of development orthodoxies.	Focused
PSC	6439	International Political Economy	Research seminar exploring alternative theoretical approaches to the study of international political economy and their application to the explanation and interpretation of historical and contemporary events in world political and economic affairs.	Related
PSC	6457	Arms Control & Disarmament	Major issues and trends in the postwar development of U.S. arms control and disarmament policy.	Related
PSCS	3103	Ethics, Law, and Policy	Overview of ethical, legal and policy issues related to the impact of modern technology on society; ethical theories and decision making, professional responsibility and codes of ethics, copyright and intellectual property, information accountability, freedom of information and privacy, the Internet and considerations associated with information sharing and social networking.	Focused
PSHS	6242	Security and Civil Liberties	Examination of U.S. government activities designed to protect the security of American citizens while balancing those interests against citizens' civil liberties; limitations placed on government activities by the First and Fourth Amendments of the Constitution; complexities associated with the characterization of criminals and terrorists. Restricted to students in the MPS in homeland security program.	Focused
PSLD	6260	Introduction to Sustainable Design	(blank)	Focused
PSLD	6261	Ecology of the Built Environment	(blank)	Focused
PSLD	6262	Tools for Sustainable Design	(blank)	Focused
PSLD	6264	Native Plants I	Identification and use of native plant species that are sustainable due to their evolution as part of its local ecosystem.	Focused
PSLD	6265	Native Plants II	Continuation of PSLD 6264. Identification and use of native plant species that are sustainable due to their evolution as part of its local ecosystem.	Focused
PSLD	6266	Ecological Restoration	(blank)	Focused
PSLD	6268	Sustainable Design Methods	(blank)	Focused
PSLD	6269	Sustenance and the Landscape	(blank)	Focused
PSLD	6270	Sustainable Design Charrette	(blank)	Focused
PSLM	6206	Strategic Leadership for Sustainability and Change	Integration of the content of PSLM 6204 and PSLM 6205 through a focus on strategic leadership.	Focused
PSMB	6262	Bionanotechnology	Application of ideas from nanotechnology to solving biological and chemical problems and refining new methods and tools for health and medicine; overlapping, multidisciplinary activities at the intersection of photonics, chemistry, biology, biophysics, nano-medicine, and engineering. Laboratory experiments apply the fundamentals of nanotechnology to DNA and protein sensing.	Related
PSMB	6263	Management of Biotechnology Innovation	New scientific and technical products, processes, and services related to biotechnology; scientific discovery, emerging technologies, and birth of the biotechnology industry; management concepts and practices to enhance corporate innovation; corporate venture divisions and new management approaches.	Focused
PSMB	6264	Entrepreneurship and Technology Venture Creation	The process of innovation-entrepreneurship used to launch and build new ventures, with emphasis on technology ventures; organizing for innovation, raising venture capital, wealth creation, managing the small technology-based venture, marketing information technology products and services.	Related
PSPR	6230	Crisis and Issues Management	The intersection of communications and policy disciplines, including environmental scanning, public policy analysis, public policy advocacy, strategic communications, media relations, grassroots mobilization, coalition management and corporate reputation management. How these issues work together to further the broad strategic goals of organizations.	Related
PSTD	1010	Introduction to Peace Studies and Conflict Resolution	Major thinkers and themes in the field of peace studies and conflict resolution. Focus on philosophical and religious foundations of peace and justice movements in the 20th century. Examination of peace and conflict through an interdisciplinary lens and on personal, local, and international levels.	Focused
PSUS	6201	Principles of Sustainable Urban and Regional Planning	The environmental, social, and economic elements of sustainability. Present and future challenges, including environmental management, energy policy, financial crises, global warming, inequality, public education, third and first world slums, the success and failure of nations, urban agriculture, urban economics, and more. The implications of sustainable development and conducting research based on evidenced-based policy. Students focus on the work of researchers outside of the planning field as they write a series of research essays containing reviews of relevant scientific literature.	Focused
PSUS	6202	Urban and Environmental Economics	The application of neoclassical economics to problems faced by practitioners of the field of sustainable urban and regional planning. Key economic concepts including supply and demand, consumption and production, markets and market failure, and measurement of environmental and other non-market commodities. An economist's perspective on the principals and methods for understanding urban and environmental challenges and solutions, urban growth, environmental quality, public policy, and other issues fundamental to contemporary development.	Focused
PSUS	6203	Research Methods I: Geospatial and Econometric Analysis	Focus on developing proficiency in geographic information systems (GIS) and econometric analysis, a method of statistical analysis for measuring the relationships at work in socioeconomic phenomena. Building and analyzing spatial datasets, specifically using ArcGIS and Stata statistical software.	Focused
PSUS	6204	Land Use Law	(blank)	Focused
PSUS	6210	Transportation Planning in City Systems	Transportation planning with long-run goals in mind, including reducing greenhouse gas emissions. The role of planning at local and regional scales within the broader framework of transportation engineering.	Focused
PSUS	6211	Regional Development and Agricultural Economics	The economics of land use patterns and development processes in the United States and elsewhere in the world. Introduction to the field of agricultural economics and examination of food deserts and other food-related problems relevant to the field of sustainable urban planning.	Focused

PSUS	6212	Sustainable Communities I: Housing and Design	Community development with a focus on policy and the various sectors of interest that affect contemporary urbanization. How policies, planning techniques, and implementation strategies form the core work of planning practitioners. Topics include water supply, food deserts, public health, and urban resilience. Pathways to more sustainable communities are explored through the policy arenas in which key decisions are made; key sectors that make up the fabric of communities; and special topics that have emerged as critical challenges for sustainable community development	Focused
PSUS	6213	Research Methods II: Advanced Geospatial and Econometric Analysis	Builds upon the skills learned in PSUS 6203. Application of econometric and geospatial analysis in the field of sustainable urban and regional planning. Emphasis on objectivity and use of the scientific method to form defensible, evidence-based policy.	Focused
PSUS	6214	Food and Cities	(Blank)	Related
PSUS	6215	Urban Health and Impact Assessment	(blank)	Related
PSUS	6222	Climate Change Economics	Energy use in built environments with an emphasis on fundamental drivers of energy demand, strategies to promote energy efficiency, and essential features of energy supply; the relationship between energy demand and supply in development.; how advances in construction technology can help counter greenhouse gas emissions.	Focused
PSUS	6223	Sustainable Communities II: Tools for Assessment and Transformation	Builds on PSUS 6212 by further detailing the theory and tools relevant to the assessment and transformation of neighborhood and communities. Geospatial analysis explore the fundamental drivers of urban form, advanced transportation systems, theories of change, and various impact assessment tools used to inform policy implementation.	Focused
PSUS	6224	Sustainable Energy for Cities and the Environment	Resource management and renewable energy technologies. Vulnerabilities of existing urban structures, particularly the energy grid. Implications of and solutions to energy-related problems likely to arise in present and future cities.	Focused
PSUS	6231	Practicum:ClimateChangeMgt&Pol	(blank)	Focused
PSUS	6235	Adv Topics in Urban Sust	(blank)	Focused
PSUS	6236	International Studio	(blank)	
PSUS	6265	Native Plants II	(blank)	Focused
PSUS	6218	Real Estate Economics: Urban Growth and Affordability	(blank)	Related
PSYD	8246	Community Intervention	Consultation theory and practice related to social service, health, educational, and other not-for-profit organizations. Managing change and action plans.	Related
PUBH	1101	Introduction to Public Health & Health Svcs	Introduction to aspects of public health and health services, including health services administration and policy, maternal and child health, environmental health, and health promotion.	Focused
PUBH	2110	Public Health Biology	Basic scientific mechanisms, concepts, and principles in health and the pathogenesis of diseases; a foundation for applications to public health.	Focused
PUBH	2112	Principles of Health Education and Health Promotion	Social and behavioral theories underlying health promotion program development and evaluation. Practical applications in a variety of domestic and global public health settings. PUBH 1101 may be taken as a corequisite.	Related
PUBH	2114	Environment, Health, and Development	Survey of the relationship between health and development and environmental trends. Topics include deforestation, urban contamination, and desertification.	Focused
PUBH	2115	Health, Human Rights, and Displaced Persons	Concepts of health as a human right, ethics, and the participation of the international community in moving toward health for all. Civil and international conflict in the generation of displaced populations.	Focused
PUBH	2117	Service Learning in Public Health	A service-learning course that combines classroom instruction with practical learning. Students are responsible for securing an approved service site before the beginning of the semester; the instructor is available to assist with this placement.	Related
PUBH	3132	Health and Environment	Introduction to environmental and occupational health and implications for individual and population health. Issues of clean water, environmental toxins, air pollution, and the environmental impact on infectious diseases.	Focused
PUBH	3133	Global Health and Development	Basic concepts of political, social, and economic determinants of health and how health status is measured; burden of diseases that impact development and their basic epidemiological characteristics including who they affect, when they occur, and where risk is greatest; relationships between socioeconomic development and global health can be observed, measured, and used for the management of health programs. Material are global in coverage, but with a strong emphasis on low-income countries.	Focused
PUBH	3135	(W) Health Policy	An introduction to the fundamentals of the health care system in the United States and strategies available to policymakers when addressing problems relating to access, financing, and delivery of health care.	Focused
PUBH	3136	Health Law	Legal concepts related to individual health care and public health systems in the United States. Health care law, public health law, and bioethics.	Focused
PUBH	3137	Global Public Health Nutrition	Consideration of hunger and other nutrition issues globally, including food insecurity, under/over nutrition, and micronutrient deficiencies. Application of UNICEF malnutrition framework to describe vulnerable groups, critique program strategies, and identify multisectorial strategies to reduce hunger and malnutrition.	Focused
PUBH	3150	Sustainable Energy & Env Hlth	Sustainability issues from the perspective of environmental health. Technical, social, and health implications of specific energy sources. Energy conservation and efficiency in the context of population growth, food and water resources, and maintenance of a healthy environment for future generations.	Focused
PUBH	3151	Current Issues in Bioethics	Recent advances in science and technology make biomedical ethics a continuing matter of concern for students, health professionals and laypersons alike. This course offers an opportunity to investigate both general and specific ethical questions and ethical decision making from both a personal and organizational perspective, including topics such as the right to health care, research with human subjects, reproductive issues, genetics, professional and student roles and responsibilities, and end-of-life issues. Such investigation requires exposure to the issues and to various attempts to address and resolve them	Focused
PUBH	6001	Biological Concepts in Public Health	An overview of current knowledge about biological mechanisms of major diseases causing death and disability in the United States and globally; understanding and interpreting the reciprocal relationships of genetic, environmental, and behavioral determinants of health and disease in an ecologic context; analyzing, discussing, and communicating biologic principles of disease from a public health perspective.	Focused

PUBH	6004	Environmental and Occupational Health in a Sustainable World	Examination of the connection between population health and exposures to chemical, physical, and biological agents in the environment. Problem-solving frameworks familiarize students with data sources, methodologies, and policy approaches being used to address the public health impacts of environmental and occupational health hazards, including the consequences of climate change, natural resource degradation, and industrial chemicals. Integration of key concepts of environmental health with principles of sustainability illustrate how public policies and practices on the local, national, and global level affect population health.	Focused
PUBH	6121	Environmental and Occupational Epidemiology	Demonstration and application of epidemiologic methods for the study of environmental and occupational health problems; epidemiologic exposure assessment methods and methods relevant to cohort, case-control, cross-sectional, and case cross-over studies; survey design and sources and evaluation of biases and confounding; emphasis on written and oral communication skills.	Focused
PUBH	6125	Intro-Children's Health & Env	Describes the impact of environmental toxicants on children's health and reviews some of the major policy issues in the field of children's environmental health.	Focused
PUBH	6126	Assessment&Control/Env Hazards	Introduces the anticipation, recognition, assessment, and control of hazards in the workplace and the ambient environment. It emphasizes an understanding of the characteristic features of specific hazards, which may be chemical, biological, or physical/ergonomic.	Focused
PUBH	6127	Germs: An Introduction to Environmental Health Microbiology	Basics of public health microbiology as it relates to the environment, food, water, and bioterrorism. Examines from an environmental health perspective how the principles of microbiology are applied to current and emerging public health issues, whether from intentional or unintentional contamination of the environment. Specific topics will include: industrial animal production and increasing prevalence of antibiotic resistance; effectiveness of various point of use technologies for water purification; recent advances in quantitative microbial risk assessment; one medicine (where public and veterinary health meet); detection strategies for microorganisms (including bioterrorism agents); and current approaches in food defense and agroterrorism.	Focused
PUBH	6128	Global Environmental and Occupational Health	Examination of the global environmental and occupational health factors that contribute significantly to the global burden of disease, focusing primarily on low- and middle-income countries; principles from behavioral sciences, development economics, risk assessment, and epidemiology are included; potential solutions to environmental health problems, metrics used to measure impacts, and areas for future research.	Focused
PUBH	6130	Sustainable Energy and the Environment	The sustainability of various energy strategies, including energy conservation, green building principles, renewable energy, and mitigation and adaption policies for climate change. Emphasis on the life cycle framework. Topics include natural resource depletion, water and energy consumption, and air, water, and solid waste pollutant emissions.	Focused
PUBH	6131	Applied Data Analysis in Environmental and Occupational Health	Application of biostatistical and epidemiologic concepts and methods to analysis of environmental and occupational health (EOH) data. Students manage datasets, conduct data analyses, present data graphically, and interpret data for relevance to EOH research, policy, and practice. Development and practice of skills needed for analyzing complex exposures and communicating environmental and occupational research findings.	Focused
PUBH	6132	Water, Sanitation, and Hygiene (WASH) in Low-Income Countries	Introduction to working in both disaster and development settings in countries where contaminated water, inadequate sanitation, and poor hygiene (WASH) cause serious health problems. Students gain practical experience applying WASH methods in the field.	Focused
PUBH	6133	Social Dimensions in Climate Change and Health	The drivers of climate change and outcomes with particular focus on health dimensions; obstacles, vulnerabilities, inequality, and adaptation as well as technical and social solutions.	Focused
PUBH	6135	Researching Climate Change and Public Health	Study of the effects of climate change on human health using evidence compiled by the National Climate Assessment (NCA); widespread impacts, ecological context, oceans of change, infrastructure, water resources, energy, land use, heat, and air quality.	Focused
PUBH	6136	Introduction to Environmental and Occupational Epidemiology	Epidemiologic research designs; methods for the study of environmental and occupational health problems; exposure assessment methods; design aspects of cross-sectional, case-control, cohort, and case cross-over studies; sources and evaluation of biases and confounding; survey and questionnaire design.	Focused
PUBH	6137	Environmental and Occupational Health Culminating Experience I	The first in a two-course sequence. The final, integrative learning experience for the MPH in environmental health science and policy or global environmental health. Students apply the skills and knowledge, theories, and principles learned in the MPH program to practical public health problems. Restricted to MPH students in the Department of Environmental and Occupational Health who have completed all core courses and at least 9 credits in program-specific courses.	Focused
PUBH	6138	Environmental and Occupational Health Culminating Experience II	The second in a two-course sequence. The final, integrative learning experience for the MPH in environmental health science and policy or global environmental health. Students apply the skills and knowledge, theories, and principles learned in the MPH program to practical public health problems. Restricted to MPH students in the Department of Environmental and Occupational Health.	Focused
PUBH	6235	Epidemiology of Obesity	Introduction to the epidemiology of obesity; descriptive epidemiology, measurement, consequences, and determinants of obesity; adiposity and body composition; obesity interventions and policy.	Related
PUBH	6239	Epidemiology of Foodborne and Waterborne Diseases	Foodborne and waterborne toxicants; diseases linked to eating and drinking and their prevention. Topics include transmission of disease and disease processes; microbial toxins, mycotoxins, chemical toxins, bacterial infections (e.g., salmonellosis, shigellosis, vibrio, listeria), virus and parasitic infections; issues in food and water safety.	Related
PUBH	6241	Nutritional Epidemiology	Methodological issues related to dietary assessment, nutrition surveillance, and the epidemiology of obesity. Current trends, including the health impacts of vitamin D and sodium. Interpretation of the scientific literature in the field. Examples drawn from the National Health and Nutrition Examination Survey.	Related
PUBH	6262	Intro-Geog Information Systems	Geographic information systems (GIS) for mapping and display of health data. The course makes use of ArcGIS 8.3. The use of spatial statistics for the detection of clusters and patterns in the spread of diseases. Working with geodatabases, shape files, layers, query information from attribute tables, geocode addresses and customizing GIS applications.	Focused

PUBH	6263	Advanced GIS	Provides mid to advanced level training in GIS for display and analysis of health data. Use software ArcGIS 9.3 and additional extensions such as Spatial Analyst and Geostatistical Analyst. Also uses GeoDa software. Emphasizes benefits of using GIS to do more than simply manage and map data. GIS supports a range of spatial analysis functions that enable researchers to extract additional meaning from manipulating geographic data. Learn to work with raster datasets and geodatabases to build spatial models for analyzing health data and evaluating spatial patterns of health events based on notion of distance.	Focused
PUBH	6316	Introduction to Environmental and Occupational Epidemiology	(blank)	Focused
PUBH	6330	Health Services and Law	Examination of the ways in which the law and legal system in the United States influence and are influenced by the health care system. How judicial, statutory, regulatory, and constitutional sources of law embody health policy and affect access to and quality and financing of health care, as well as the regulation of patient rights.	Focused
PUBH	6335	Public Health and Law	How the law can both promote public health and conflict with the rights of individuals protected under the U.S. Constitution; legal concepts that underlie the public health system and inform public health policymaking; major areas of public health activity; the future of public health.	Focused
PUBH	6400	Global Health Frameworks	Overview of current issues in global public health with particular emphasis on low and middle-income countries. Serves as both an introductory course for students entering the field of global health, as well as an update on current technical and policy issues for advanced students who may have considerable experience.	Related
PUBH	6410	Global Health Study Design	A foundation in the tools necessary for planning and designing research related to identifying and solving problems in global health: choosing an appropriate research topic and research question, understanding the relationships between hypotheses and study objectives, conducting a literature review, choosing a research design to achieve the project purpose, writing a research proposal including planning for the challenges of global health research, and achieving productive dissemination of findings.	Related
PUBH	6416	Ethical and Cultural Issues in Global Health Research and Programs	Examine procedures and concerns for protecting communities and human subjects involved in public health programs and research. Consider cultural considerations integral to ethical conduct of public health research and programming in the global context. Discuss history behind rules and regulations that govern ethical principles around conduct of research involving human subjects. Consider contribution that awareness of cultural contexts where we work makes to ethical nature of our work as global health professionals.	Focused
PUBH	6417	Cross-Cultural Approaches for Global Health Practice	How to communicate, negotiate, and be more effective across cultures; social aspects that affect communication within cultures and how to navigate communication in practical situations including in the work place and in risk and crisis situations.	Focused
PUBH	6440	Global Health Economics and Finance	Examination of economics and finance principles as they apply to global health. Organization, delivery, and financing of health care in developing countries. Tools for analyzing issues related to global health economics and finance and application of those tools to a variety of a global health issues, including demand for health care, health care financing, social insurance, pharmaceuticals, and HIV/AIDS.	Focused
PUBH	6480	International Food and Nutrition Policy	Major global food and nutrition issues, their determinants, and the strategies that in place to address them. Students identify major nutrition and food challenges in a country or region as well as the policies and programs that have proven successful in addressing those challenges.	Focused
PUBH	6480	Public Health in Humanitarian Settings	Technical aspects of high-priority public health interventions; consideration of how and why sound public health interventions should be implemented in both emergency and chronic humanitarian settings; the roles of diverse humanitarian actors.	Focused
PUBH	6487	Emerging Zoonotic Diseases & Global Food Production	Analysis of trends in emerging zoonotic diseases and their links to global food production. Case studies on the use of surveillance systems and outbreak detection techniques to monitor emerging zoonotic diseases. Development of skills to analyze surveillance systems, policy reports, and literature related to emerging zoonotic diseases and food-borne outbreaks within a global context.	Focused
PUBH	6489	Evaluation of Food and Nutrition Programs and Policies	Application of evaluation approaches to existing or proposed nutrition and food programs and policies; competencies in the use of program impact theory as the foundation for evaluating such programs. Students should have a basic knowledge of the biological determinants of various nutritional statuses and some familiarity with program evaluation fundamentals.	Focused
PUBH	6493	Fundamentals of Supply Chain Management in Developing Countries	Practical approaches used by government policymakers, essential drugs program managers, NGOs, donors, and others to ensure that high-quality essential drugs are available, affordable and used rationally; existing and potential challenges and workable solutions related to managing the drug supply in developing countries. Restricted to graduate students.	Related
PUBH	6494	Population and Sustainable Development	The reciprocal connections between the dynamics of population growth, distribution, and age structure to health, well-being, and socioeconomic development.	Focused
PUBH	6513	Community Health Management	Management and development of community health services. Builds upon principles for management and community-oriented primary care.	Focused
PUBH	6514	Preventing Health Disparities	Provides students with an understanding of how social, political, and economic factors contribute to disparities (e.g. racial, ethnic, gender, and geographical) in health and health care and how to use evidence-based approaches to prevent or address health disparities.	Focused
PUBH	6562	Physical Activity and Obesity Interventions: From the Individual to the Environment	This course will broadly examine the public health issues related to physical activity and obesity, particularly as they relate to solutions for addressing individual factors and the obesogenic environment. Students will gain a further understanding of the social, physiological, behavioral, and environmental factors related to both obesity and physical activity. The course will focus on examining multiple levels of solutions, specifically: 1) individual and behavioral interventions; 2) school-based and community-level interventions; 3) environmental interventions; 4) policy-level interventions. Students will be expected to critically evaluate the necessary components of interventions, and apply that knowledge to future programmatic efforts.	Focused
PUBH	6563	Global Child Health	Science, policy, challenges, and successes of global child health; focus on low and middle income countries and children under five years of age. Communicable diseases of childhood and relevant chronic disease pandemics such as HIV and over-nutrition. The burden of disease and associated risk factors; cost-effective interventions and tools. Restricted to graduate students.	Focused

PUBH	6612	Food Systems in Public Health	A systems approach to understanding food systems and associated public health issues. How the current food system evolved, and how issues such as climate change and population growth may affect food systems in the future. The role of public health practitioners in meeting the population's need for safe, sufficient, and nutritious food. Policies, programs, and proposals aimed at creating healthier, <u>more sustainable food systems.</u>	Focused
PUBH	6613	US Food Policy and Politics	The programs, regulations and legislation that pertain to food production, food safety, nutrition assistance and dietary guidance in the United States at the federal, state and local levels.	Focused
PUBH	6619	Fundamentals of Nutrition Science	The fundamental scientific principles of human nutrition; improving diet and nutritional status in the broader context of public health; nutrition assessment, study designs in nutrition science research, the role of nutrition in chronic disease, and current topics in nutrition science.	Focused
PUBH	6699	Topics in Nutrition Sciences	Examination of a particular facet of nutrition sciences. Topics vary by semester. May be repeated for credit provided topic differs. See the Schedule of Classes for more details.	Focused
PUBH	8401	Foundations in Public Health Leadership & Practice	Interactive seminar course provides students in the doctor of public health (DrPH) program with a fundamental understanding of the history of and current issues associated with the four principal DrPH program areas: health policy, health behavior, global health and environmental and occupational health.	Focused
PUBH	8403	Leadership in Public Health Policy and Practice	Students work in teams on projects for clients from public health-related agencies or organizations in the Washington, D.C., area that address issues in environmental and occupational health, global health, health behavior, and health policy.	Focused
PUBH	8411	Advanced Topics - Principles of Human Health Risk Science	This course provides the doctoral student with a comprehensive orientation to the frameworks, principles and issues involved in assessing, managing and communicating environmental health risks. This fundamental, interdisciplinary course is designed to foster dialogue and insights about contemporary risk science and management issues, including ethical concerns and technical issues that influence policy making. Restricted to EOH DrPH program students only; other students by permission of instructor.	Focused
PUBH	8412	Advanced Topics - Environmental and Occupational Health Research and Practice	This course exposes students to the theory and reality of both research and practice in environmental and occupational health. There is an emphasis on the use of public health science in policy and regulatory decisions.	Focused
PUBH	8414	Policy and Management Leadership	Students develop and enhance their management, leadership, and policymaking skills for problem solving in real-world settings; public health departments, community health centers, legislative settings, and public or teaching hospitals.	Related
SEAS	6100	Innovation and Technology	Introduction to design and management of technology; Law of Diffusion of Innovation; identification of fundamental engineering design limits; sustained vs. disruptive engineering and technology, best practices from innovators and visionaries; engineering solutions at the prototype state; benefits of intellectual property protections; transformative technology and assessment from a holistic and global view point; application of the lean start-up approach to real-world challenges including sustainability.	Related
SMPA	3468	Communication and Global Social Change	The study and practice of communication, development, and social change; theories and arguments informing debates and communication programs, merits and impact of various approaches, and design and implementation of communication programs.	Related
SMPA	3471	Media in the Developing World	Contemporary views of media roles in developing nations. The role of the press and electronic media in economic, social, and national development, including media as agents of modernization, development journalism, and post-colonial responses to Western "cultural imperialism." Media and Islam: role of the Internet: and theories of media and globalization.	Related
SMPA	3476	Media, Technology, and Culture	Concepts, principles, and socio-political implications of new and changing media and related technologies. Focus on intersection of new technologies and the anthropology of everyday life, in particular self-governance, policy development, cultural rupture and cohesion, the tension between national security and individual privacy rights, and First Amendment issues.	Related
SMPP	6207	Environment, Energy, Technology, and Society	The identification, examination, and evaluation of how environment, energy, and technology are interrelated and how these interactions influence policy formulation and implementation at the international, national, regional, industrial, and organizational levels.	Focused
SMPP	6210	Strategic Environmental Management	Examination and analysis of the orientation and actions of private, public, and nonprofit sectors in relation to their natural environments. Emphasis on organizational interaction and effectiveness, particularly regarding business firms and industry, on issues of environmental quality and sustainability.	Focused
SMPP	6211	Corp. Environmental Management in Developing Countries	3 credit course.	Related
SMPP	6213	Management of Strategic Issues	The body of management theory and practice that has evolved to identify, analyze, and resolve strategic organizational issues. Methodology of the field; applications to critical issues in labor relations, energy and pollution, marketing and consumerism, business-government relations, and the global economy.	Focused
SMPP	6215	Corporate Governance and Ethics	The theory, practice, and public policy environment of corporate governance. Purpose, functioning, and responsibilities of boards of directors. Power, control, and compensation of corporate management. Shareholders and stakeholders. Corporate governance in comparative national settings.	Focused
SMPP	6216	Public Policy, Governance, and the Global Market	The socioeconomic foundations of government regulation and public policy cooperation for the governance of firms, markets and globalization. The evolution of national, transatlantic and multilateral frameworks for market and civil society governance, international competition policy cooperation, regulatory harmonization and industry standards.	Focused
SMPP	6241	GlobalCorporateResponsibility	(blank)	Focused
SMPP	6271	Corporate Envir Mgmt & Policy	(blank)	Focused
SMPP	6291	Ethics and Business	An in-depth, comprehensive exploration, analysis, and evaluation of specific for profit and non-profit organization values, approaches, and outcomes related to multiple ethical ideals, systems, and practices.	Focused
SOC	2170	(W) Class/Inequality-Amer Society	Analysis of distribution of resources and opportunities for participation, education, and social mobility. International comparisons; analysis of public policies that affect these distributions.	Related
SOC	2172	Institutional Racism: Policies and Prescriptions	Institutional policies and practices in the United States that yield racially disparate outcomes. The origins of such policies and practices, potential changes, and how such changes can be achieved.	Related

SOC	2173	Social Movements	General survey of the various forms of collective behavior (fads, panics, riots, social movements, etc.), and a more detailed study of the genesis, development, and decay of social movements and social revolutions.	Related
SOC	6248	Race and Urban Redevelopment	An examination of sociological forces shaping the development of metropolitan areas, racial inequality, and the intersections of urban development and race relations. Major theories of urban and metropolitan development and causes of racial inequality; major past and current public policies.	Focused
SOC	6250	Urban Sociology	Systematic analysis of urbanization and life within urban areas, primarily in the United States. Topics include theoretical perspectives on urban growth and neighborhood change, housing, the community question, neighborhood effects on individuals within the metropolis, and selected policy issues.	Related
SOC	6265	Women, Welfare, and Poverty	How the causes and consequences of poverty differ for women and men; how race, class, and gender shape policy responses to poverty. The history of family assistance policy in the United States and the impact of various welfare reform efforts.	Related
SOC	6290	Principles of Demography	Introduction to basic demographic perspectives and data; methods for analysis of population size, distribution, and composition; determinants and consequences of population trends.	Related
SPAN	2006	Advanced Spanish II	Continuation of SPAN 2005. Development of advanced Spanish proficiency, with a focus on argumentative speaking and writing. Development of cross-cultural competence and analysis of historical, social, and cultural practices and perspectives of Spanish-speaking societies.	Related
SPAN	3022	Advanced Oral Proficiency: Environmental and Social Sustainability in Latin America	Development of advanced Spanish oral proficiency, critical content knowledge, terminology and concepts through content-based course work in the areas of environmental and social sustainability in Latin America. Critical evaluation of key environmental and social aspects of sustainability as related to Spanish-speaking countries. Focus on understanding and interpretation of language- and discipline-specific written and oral materials such as film and documentary, news, academic, literary and public media texts.	Focused
STAT	6290	Principles of Demography	Introduction to basic demographic perspectives and data; methods for analysis of population size, distribution, and composition; determinants and consequences of population trends.	Related
STAT	6291	Methods of Demographic Analysis	Basic methods for analysis of mortality, natality, and migration; population estimates and projections; estimation of demographic measures from incomplete data.	Related
SUST	1001	Introduction to Sustainability	The concept of sustainability is both broad and specific as it is applied to areas ranging from social systems to law, engineering, public health, and natural systems. The course considers goals, principles, and practical applications, with a multidisciplinary perspective on major environmental and social issues growing out of these concerns.	Focused
SUST	2002	The Sustainable City	This course will explore the connection between cities and sustainability. We consider sustainability from a variety of theoretical and practical perspectives and examine some of the most pressing and critical issues that must be addressed in order to create a sustainable city.	Focused
SUST	3002	Climate Change and Policy	Climate change from an interdisciplinary perspective. Mitigation, adaptation, and intervention from the perspectives of public policy, economics, psychology, and public health. Climate modeling, green infrastructure, carbon capture and storage, climate justice, and international and multilateral environmental agreements.	Focused
SUST	3003	The Sustainable Plate	How dietary choices affect not just health, but the environment and those involved in the production of food as well; interdisciplinary perspective on the impact of food on the future of the environment, the economy, and society.	Focused
SUST	3096	Research in Sustainability	Directed research with a GW faculty member. The faculty member directing the research will assign work, such as papers and assigned reading, as appropriate.	Focused
SUST	3097	Culminating Experience in Sustainability	A paid or unpaid internship, fieldwork, directed research, or community service with an organization engaged in two or more of the three major goals of sustainability: economic development, social equality, or environmental protection. Students complete a series of reflection essays, career preparations, and other assignments throughout the semester.	Focused
TRDA	2195	Global Dance History	The role of dance globally in relation to socio-cultural and artistic histories. Importance of certain artists and dance forms contextualized by major world events as seen through the geography of immigration. Perspectives from the Americas, Africa, the Middle East, and Asia.	Related
TRDA	6204	Personal Aesthetics II: The Environment	(blank)	Related
TSTD	6249	Sustainable Destination Development	Relationship of tourism and sustainable development; specific emphasis on cultural, environmental, and economic impacts and trends.	Focused
TSTD	6261	Tourism Policy and Planning	This course focuses on the fundamentals for creating an enabling environment for sustainable tourism.	Related
TSTD	6282	International Consulting Experience	This short-term study abroad experience provides students with an opportunity to tackle a real life consulting assignment that focuses on inclusive and sustainable tourism development. It offered in a different tourism destination every year.	Related
UW	2031	Equality & the Law	Introduction to how lawyers and legal scholars research and write about specific disputes that arise in the context of complex social issues. The institutional assumptions about the content and style of legal writings. Briefs, legal memoranda, law review articles, resolutions, and many other specialized legal writing forms.	Related
UW	2031	(W) Equality & the Law	(blank)	Related
WGSS	3820	Global Women's Domestic Labor	Consideration of women's paid and unpaid domestic labor, including care work, in the context of global and globalizing political and cultural economies	Related
WGSS	3845	Global Women's Prison	Examination of women's confinement and incarceration in the context of global and globalizing political and cultural economies.	Related
WGSS	6240	Gender and Public Policy	Analysis of gender-related policy issues in the United States, such as domestic violence, military service, abortion rights, equal employment opportunity, child and dependent care, welfare, social security, and international development assistance.	Related
WGSS	6431	Gender, Sexuality, and American Culture II	Continuation of WGSS 6430. The changing social organization, cultural representation, and meaning of gender and sexuality in the United States, with emphasis on their relationship to race, class, region, nationality, empire, and globalization. 1877 to present.	Related