

| Acad Group | Subject | Catalog | Full Course Name   | Course Description   |
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| AR         | ARC     | 539     | Adaptation to Climate Change                               | Introduction to the phenomena and related discussion on the topic of climate change. Review of current scientific evidence, tactics for mitigation of emissions and other causal actions, followed by study of the adaptation required by changing conditions.   |
| AR         | ARC     | 579     | INTRO TO RES. BLDG & COMM DSGN                             | Focus on climate, control, natural energy use, ecosystems, energy flow, environmental intervention, and case studies of vernacular building techniques.  |
| AR         | ARC     | 230     | Building Technology I                                      | Materials and Methods. (Focuses on the integrated educational experience of building construction, materials, and methods of exploring architectural problems.)  |
| AR         | ARC     | 481     | Climate Resiliency   | This course trains undergraduates in collaborative approaches to climate adaptation using a problem-solving learning format that mirrors emerging interdisciplinary modalities. Students apply methods and lessons to weekly reflections and final capstone projects.  |
| AR         | ARC     | 223     | Architecture and the Environment                           | An introduction to basic architectural and environmental principles in design, promoting goals of environmental responsibility, social equity, and economic sustainability.  |
| AR         | ARC     | 558     | Theories of Landscape Architecture                         | Leading theories of landscape architecture which have influenced current considerations of nature, landscape and design, including concerns such as urban heat island effect, climate change resilience, and health impacts of landscape.  |
| AR         | ARC     | 639     | Adaptation to Climate Change                               | Introduction to the phenomena and related discussion on the topic of climate change. Review of current scientific evidence, tactics for mitigation of emissions and other causal actions, followed by study of the adaptation required by changing conditions. Class assignments include creative proposals for adaptation action.   |
| AR         | ARC     | 594/694 | Geographic Information Systems in Urban Design             | Exploration of Geographic Information Systems (GIS) in urban design. Principles of GIS and their application to spatial analysis, data management, and visualization with a focus on sustainable and resilient urban design and planning.  |
| AR         | ARC     | 581/681 | Special Problems   | Group or individual investigations of significant architectural issues, offered by special arrangement only.   |
| AR         | ARC     | 122     | Architecture and Behavior                                  | The course focuses on the study of human behavior and its relationship to the design process. Topics include: cultural diversity, social equity and the application of psychological factors in the design of buildings and their environment.   |
| AR         | ARC     | 679     | An Introduction to Resilient Building and Community Design | This course introduces students to the relationships between climate, resiliency, architecture and urbanism; building awareness of the growing challenges and opportunities ahead, and the intersections between these disciplines. What does resilience mean in this broader context, and how should escalating stressors and shocks be addressed? Students learn about climate sciences, then research, document, and analyze evolving resilient design strategies, at the scale of buildings, neighborhoods and cities, in the end, applying those lessons to a given case study site; developing a holistic set of resilient design recommendations. During the course, students interact with specialists in the fields of architecture and urban design, as well as related fields, such as engineering, social, marine and environmental sciences, and/or policymakers, to better comprehend first-hand the interwoven scientific, social, environmental, and governmental ramifications to resilient design. Lastly, students learn the mechanics of participatory design methods employed to engage communities in related efforts. |
| AR         | ARC     | 586     | Special Problems   | Group or individual investigations of significant architectural issues, offered by special arrangement only.   |
| AR         | ARC     | 362     | Environmental Building Systems I                           | Architectural response to natural environmental requirements. Focus on climate control, natural energy use, ecosystems, energy flow, environmental intervention, and case studies of vernacular building techniques.   |
| AR         | ARC     | 363     | Environmental Building Systems II                          | Directly building on Environmental Building Systems I, the course sets an agenda for the future architectural profession to formulate a more substantial and meaningful role for energy, both consumption and embodiment in the design of our constructed environment. Course content will address fundamental principles associated with natural and constructed lighting systems, passive, and active thermal systems, power generation and distribution, water management, and acoustics in architecture.   |
| MS         | ATM     | 653     | CLIMATE CHANGE   | Overview of the physical processes which regulate the earth's climate and response to forcing. Includes study of climate feedback mechanisms and anthropogenic impacts.  |
| AS         | APY     | 359     | The Archaeology of Plastics                                | Explores, through the lenses of archaeology, environmental sciences, health, and public policy, the defining material culture of our age: the Age of Plastics.   |
| AS         | APY     | 435     | ANTHRO NATUR & ENV   | This course is an introduction to the anthropological investigation of nature, biology, and environment. Taking examples from cultural anthropology and the subfields of environmental anthropology, political ecology, and the anthropology of science, the course builds an understanding of the various ways in which ideas about nature and human nature making practices shape our contemporary world: its places, space, life forms, and forms of life.  |
| AS         | BIL     | 320     | Evolutionary Biology                                       | History of the theory of evolution. Macroevolution, including the fossil record, the origin of life on Earth, phylogeny and biodiversity, human evolution, speciation and extinction. Microevolution and population genetics, including mutation and genetic variation, natural selection, genetic drift, gene flow, and nonrandom mating. Heritability and evolution of key traits. Evolutionary insights into behavior, including kin selection, sexual selection, co-evolution and co-speciation.   |
| AS         | BIL     | 330     | Ecology  | The interactions of living organisms with each other and with their abiotic environment.   |
| AS         | BIL     | 334     | BIOGEOGRAPHY & CONSERVATION                                | Processes and mechanisms of evolution. A scientific approach to the study of evolution by natural selection, concepts of fitness and adaptation, and genetic bases of change.  |
| AS         | BIL     | 331     | ECOLOGY LAB  | Lab and field exercises in ecology. Some Saturday field trips required.  |
| AS         | BIL     | 103     | Introduction to Ecology                                    | Overview of ecological and evolutionary principles; relationships of organisms to living and non-living aspects of the environment; human impact on ecosystems. Not for credit in the biology major or minor.  |
| AS         | BIL     | 105     | Biology of Plants  | Evolution and diversity of the plant kingdom; economic and cultural importance of plants to humans. Not for credit in the biology major or minor.  |
| AS         | BIL     | 106     | Biology of Animals   | Evolution and diversity of the animal kingdom and the relationship between humans and other animals. Not for credit in the biology major or minor.   |
| AS         | BIL     | 107     | Introduction to Evolution                                  | Processes and mechanisms of evolution. A scientific approach to the study of evolution by natural selection, concepts of fitness and adaptation, genetic and developmental bases of evolutionary change, how new species arise, major trends in evolution, extinction and human evolution. Not for credit in the biology major or minor.   |
| AS         | BIL     | 222     | Plant Diversity  | The diversity and evolution of seed plants, the most important plants on land that shape our physical environment, affect climate, and provide humans with food, medicines, and materials important in all aspects of our lives. Survey of major lineages of Gymnosperms and Angiosperms, their evolutionary history, adaptations to life on land, reproductive biology, ecology, and economic benefits. Techniques for the collection of plant specimens from the field, and their preparation and identification for museum collections.   |
| AS         | BIL     | 223     | Plants and People  | A multi-disciplinary survey of ethnobotany and economic botany, emphasizing the ecosystem services that plants provide to humans.  |
| AS         | BIL     | 161     | EVOL BIODIVR LAB   | A laboratory approach to applying the scientific method. Experimental design and hypothesis testing at the organismal and ecological level.  |
| AS         | BIL     | 107     | Introduction to Evolution                                  | Processes and mechanisms of evolution. A scientific approach to the study of evolution by natural selection, concepts of fitness and adaptation, genetic and developmental bases of evolutionary change, how new species arise, major trends in evolution, extinction and human evolution. Not for credit in the biology major or minor.   |
| AS         | BIL     | 160     | Evolution and Biodiversity                                 | Evolution and ecology of life on Earth. Systematics, biodiversity, evolutionary theory and mechanisms, with emphasis on the morphological, ecological, and behavioral adaptations of the diversity of life.  |
| AS         | BIL     | 1       | Conservation Biology                                       | The challenges facing conservation practitioners and the toolkit that has been developed to face these threats. Examination of important conservation cases and how endangered species and ecosystems are distributed across the globe; common threats to biodiversity and methods that have been developed to face these threats at both species and landscape scales; government implementation of conservation strategies. Students will read papers from the primary literature on a weekly basis that provide examples of how conservation tools are developed and implemented. Biology 330 (Ecology) is recommended.   |
| AS         | BIL     | 430     | Tropical Ecology   | Tropical ecosystems including world distribution of tropical climate biogeographical regions, deserts and environmental factors, grassland and primary production, savannah population dynamics, energy flow, biogeochemical cycling, succession, and biodiversity of tropical ecosystems.   |
| AS         | BIL     | 431     | Landscape Ecology  | An in-depth exploration of landscape ecology, the interplay between spatial pattern and ecological process. How spatial patterns are characterized by scale, ecological communities, and elements of connectedness. Ecological classifications of landscapes, and how patterns develop on landscapes. How landscapes change through time, and how those changes can be detected, analyzed and simulated. Management of landscapes for conservation biology and ecosystem services. Taught in Ecuador as part of the UGalapagos program.  |
| AS         | BIL     | 433     | Conservation in Practice                                   | Intersection between economic development, science and conservation in one of the world's most pristine and fragile ecosystems, the Galapagos Islands. Exploration of how tourism offers an alternative to unsustainable fisheries that once drove the local economy, yet has created a new set of pressures on the people and the environment. Mitigation efforts, science, and international conservation mesh with an understanding of local politics, customs and cultures. Taught in the Galapagos as part of the UGalapagos semester.  |

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| BU | BSL | 690 | Responsible Business  | BSL 690 explores the law's role in regulating responsible business and the impact of law on managerial decision-making. Students will evaluate whether the law engineers responsible, sustainable business, focusing on tort, compliance, and criminal law as examples of the law as regulator. Critical to this analysis is the degree to which ethics and corporate social responsibility are vital gap fillers. Students will achieve a firm grasp on and will practice using ethical decision-making models. Other topics include, for example, contract law as a means to achieve mutually agreed-upon responsible conduct in business.   |
| BU | BUS | 204 | Intro to Corporate Sustainability                                     | This course introduces students to issues associated with business and sustainability, through the lens of corporate governance and corporate citizenship. Readings, class sessions, and assignments are designed to instill in students a practical understanding of key corporate sustainability frameworks, challenges and opportunities, institutions, and actors in the global corporate context. Students will learn to apply alternative decision making models to current business activities.   |
| EN | CAE | 202 | SUSTAINABLE MATERIALS   | This course review basic materials principles, with a specific focus on civil engineering materials and sustainability.  |
| EN | CAE | 430 | Water-Resources Engineering I   | Basic principles of open channel flow. Computation of water surface profiles. Design of hydraulic structures, design of lined and unlined open channels, and design of sanitary sewer systems. Introduction to hydrology and analysis of hydrologic data. Rainfall characteristics and peak runoff models.   |
| EN | CAE | 560 | Sustainable Construction  | Drivers and foundations of sustainable construction. Principles of sustainable construction: integrated planning and design, life-cycle view of projects, resource selection and optimization, protection of the natural environment, toxics and pollutants elimination, durability and quality. Green building assessment initiatives, green building policies, and code impacts. Evaluation of the environmental impacts of construction operations. Innovative design and construction practices. Economic viability. Subtropical and coastal issue and opportunities. Case studies.  |
| EN | CAE | 581 | Energy-Efficient Building Design                                      | Concepts and methods of energy-efficient building design and sustainable performance. Topics cover building envelope, mechanical, power and lighting, and service water heating systems. Computer-based energy simulation methods and building energy standards are emphasized.  |
| EN | CAE | 582 | BUILDING ENERGY MODELING  | Modeling and analysis of building energy performance using state-of-art whole building energy simulation programs. Topics include dynamic simulation of heating and cooling loads in buildings, modeling of building equipment and control system, and integrated simulation of equipment and building loads.  |
| EN | CAE | 665 | Facilities Operation and Management                                   | Facilities management topics based on core concepts of International Facility Management Association (IFMA) involving management of corporate needs, health, safety, security, operation and maintenance of physical facilities. This course will focus on development and understanding of sustainable facilities management responsibilities involving the building envelope, preventative maintenance, system operational efficiencies, data analytics and intelligent building systems, building security, maintenance staffing, infrastructure utility requirements as well as holistically integrated assets, people, corporate strategic planning and technology. Additionally development of skills to engage in facilities management functions which include EPA environmental / waste disposal, fleet management and statutory regulations as well as emergency management planning will be emphasized. |
| EN | CAE | 660 | Sustainable Construction  | Drivers and foundations of sustainable construction. Principles of sustainable construction: integrated planning and design, life-cycle view of projects, resource selection and optimization, protection of the natural environment, toxics and pollutants elimination, durability and quality. Green building assessment initiatives, green building policies, and code impacts. Evaluation of the environmental impacts of construction operations. Innovative design and construction practices. Economic viability. Subtropical and coastal issue and opportunities. Case studies.  |
| EN | CAE | 681 | Energy-Efficient Building Design                                      | Concepts and methods of energy-efficient and environmentally-friendly building design. Topics include energy and sustainable design strategies, climate, passive and active solar design, passive cooling systems, day lighting, and computer simulation of energy flows in buildings. A quantitative understanding of energy fundamentals, examples from practice, and design exercises using computer simulation programs are emphasized.  |
| EN | CET | 340 | Introduction to Environmental Engineering                             | Environmental mass and energy balances, introduction to environmental chemistry, air pollution, water pollution, sustainable solid waste management, risk assessment, and global atmospheric change are discussed.   |
| AS | CHM | 401 | Environmental Chemistry   | Major environmental features of the earth; Role of natural and synthetic chemicals in the environment; Atmospheric and aquatic pollution; Application of acid-base theory and oxidation reduction to environmental problems.   |
| AS | ECS | 111 | Introduction to the Earth's Ecosystem                                 | Earth's ecosystems and the interactions of humans with them. Concepts in ecology, environmental science and policy.  |
| AS | ECS | 112 | Field Problems in Ecosystem Science and Policy                        | Problem solving in ecology and environmental management. Class projects and case studies providing experience in identifying problems, quantifying scientific issues and considering management options and outcomes. Extensive field experience.  |
| AS | ECS | 113 | Introduction to Environmental Policy                                  | Theories and case studies from various fields, including anthropology, economics, ethics, geography, political science and psychology, will be used to explore the multiple perspectives that influence group and individual perceptions of environmental issues.  |
| AS | ECS | 201 | CNTMP ENVRN ISS I   | This course provides an overview of the principles of environmental quality and the engineering and policy controls used to manage water, air, and soil pollution.   |
| AS | ECS | 215 | GREEN SPACES INTRO  | Faculty supervised research & application projects in indoor, urban, and suburban green spaces. Topics of focus include green walls, roof gardening, edible gardening, permaculture, sustainable gardening, composting & vermiculture, gardening for wildlife, and backyard ecology. No previous ecology or gardening experience required.   |
| AS | ECS | 202 | Seminar Series in Contemporary Environmental Issues II                | Current environmental topics involving interaction of science and policy.  |
| AS | ECS | 232 | Ecological Principles and Environmental Applications                  | Overview of the science of ecology and its basic principles. Covers aspects of organismal ecology (including population genetics, structure, growth and regulation; adaptations and responses to the physical environment and biological communities); community ecology; and ecosystems (including energy flow, biogeochemical cycles, and biomes). Students will learn to apply ecological principles to understand and solve environmental problems.  |
| AS | ECS | 301 | Tools for Environmental Decision-Making: The Quantitative Perspective | Quantitative decision-making techniques and methodologies.   |
| AS | ECS | 302 | Perspectives on Environmental Decision Making                         | Techniques for assessing human impacts on the environment. Covers approaches from law, ethics, anthropology and includes cases involving local, regional and global environmental management issues.   |
| AS | ECS | 342 | Decision-Making and the Environment                                   | Provides a comprehensive overview of the art and science of decision modeling in natural resources policy management. Students learn to understand and develop basic decision models, interpret the results and communicate them to non-analytical decision makers.  |
| AS | ECS | 345 | Economics of Natural Resources and the Environment                    | A comprehensive overview of the economics of national, international, and global environmental problems. A unifying theme throughout is sustainable development defined as "maximizing the net benefits of economic development while maintaining the services and quality of natural resources over time". We will use economic reasoning to examine causes and consequences of environmental and resource problems, and measures for dealing with them.  |
| AS | ECS | 371 | READINGS IN ECOSYSTEM SCIENCE AND POLICY                              | Supervised readings on special topics. Offered by special arrangement with a faculty member. May be repeated for credit.   |
| AS | ECS | 372 | SPEC TOPICS IN ECS  | Content varies by semester and is indicated in parentheses following course number and title in class schedule.  |
| AS | ECS | 375 | TOPICA IN ENV & HU  | Content varies by semester and is indicated in parentheses following course number and title in class schedule.  |
| AS | ECS | 377 | TOPIC ENV ECO & DE  | Content varies by semester and is indicated in parentheses following course number and title in class schedule.  |
| AS | ECS | 379 | SPEC TOP ECOSYS SCI & POLICY  | Content varies by semester and is indicated in parentheses following course number and title in class schedule.  |
| AS | ECS | 380 | FIELD STUDIES IN ECS  | Field course to various U.S. and international regions, focusing on current and historic interactions of humans with the local environment. Includes water, land, and mineral resources as well as impacts on local ecosystems. Emphasis on current management efforts and potential impacts of climate change.  |
| AS | ECS | 401 | INTERNSHIP  | Students selecting the internship will be required to spend a minimum of 120 contact hours working in an outside firm or agency whose mission is to address environmental issues where science and policy intersect.   |
| AS | ECS | 403 | INTRDIS APPROACHES  | Students with diverse disciplinary backgrounds will design an interdisciplinary study focused on an environmental problem with a major science component and significant societal implications. Students will apply quantitative methods, formulate usable policy, and communicate their results.  |
| AS | ECS | 405 | APPL RSCH IN ECOSYSTEM SCI  | Faculty-mentored applied research in environmental topics. Projects in natural ecosystems, sustainable design and business, and communication of environmental issues.   |
| AS | ECS | 415 | GREEN SPACES RESEARCH   | Faculty supervised research & application projects in indoor, urban, and suburban green spaces. Topics of focus include green walls, roof gardening, edible gardening, permaculture, sustainable gardening, composting & vermiculture, gardening for wildlife, and backyard ecology.   |
| AS | ECS | 515 | GREEN SPACE MANAGEMENT  | Students plan and manage ongoing and proposed green space projects. Student managers work with supervising faculty; also organize and educate student volunteers and students concurrently enrolled in ECS 215 and 415.  |

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| AS | ECS | 605 | INTERDISC ENV LAW & POLICY   | Faculty-mentored applied research in environmental topics. Projects in natural ecosystems, sustainable design and business, and communication of environmental issues.  |
| AS | ECS | 672 | SPEC TOPICS IN ECS   | Content varies by semester and is indicated in parentheses following course number and title in class schedule.   |
| AS | ECS | 310 | Sustainable Living   | Sustainable Living explores the systems that support life on the planet, how those systems are unsustainable, and the kinds of policies that will allow human development without further damage to earth, ocean, and atmosphere. Topics covered include renewable energy, land-use practices, water issues, green building, transportation, and healthy living/eating. Students advocate for sustainable practices of their choice in writing and in oral/visual presentations   |
| AS | ENG | 249 | Literature and the Environment   | This class will explore a wide range of literary responses to the natural world, from the late eighteenth century to the present moment, from Britain, the United States, the Caribbean, West Africa, and other global environments. We will read poetry, fiction, and creative nonfiction to analyze the diverse ways in which writers have represented the natural world and people's place within it—and against it. Can environmental storytelling provide useful solutions to environmental crisis? What is "cli-fi"? How have queer, Indigenous, and Black writers revised the canon of "nature writing" that tended to emphasize the figure of the white man alone in the woods, seeking inspiration from nature.  |
|    | EPH | 639 | VECT-BORNE DISEASE   | The course will provide students with an overview of the epidemiology of major vector-borne diseases in the U.S. (e.g., Lyme Disease, West Nile Virus) and globally (e.g., malaria, dengue, filariasis, leishmaniasis, and other arboviruses), field and lab-based methodologies for vector studies to incriminate vector species and assess transmission dynamics, vector and disease surveillance, and "cutting-edge" vector control technology. A major focus will be on the ecology of vectors in their local environments and how transmission dynamics are affected by changes in land use, urbanization, and climate. Students will learn about new WHO-approved strategies for integrated Vector Management (IVM) and how they are applicable for the prevention and control of all vector-borne diseases.  |
|    | EPH | 643 | INTRO TO OCCUPATIONAL HEALTH   | This course offers a general introduction to major concepts and issues in occupational health and safety from local to global, addressing fundamental topics and current controversies. The course covers core topics that prepare students to more fully understand and address occupational health issues: toxicology, exposure assessment, occupational epidemiology, risk assessment/risk management, prevention of workplace injury and disease, health promotion of adults and protection of worker populations from environmental hazards.   |
| MS | EVR | 605 | Interdisciplinary Environmental Law and Policy                                       | This course introduces main concepts of environmental protection, along with administrative law and judicial review in the environmental arena. After considering the major constitutional hurdles in regulation of environmental law (with a focus on justiciability doctrines), we will examine major federal environmental statutes including the National Environmental Policy Act, Clean Water Act, Clean Air Act, and others. We will investigate both the emergence of environmental regulation in these areas and the newly evolving remedies for the control of pollution and prevention of environmental degradation. We close the semester with an examination of pesticides, GMOs, and Climate Change.  |
| MS | EVR | 629 | Biology, Ecology, and Management of Mangrove Ecosystems                              | This course is intended to introduce students to mangrove ecosystems, one of the most productive, and biologically diverse, ecosystems in the world, and one of South Florida's key coastal ecosystems. The principal objective is to explain how our scientific understanding of mangrove ecosystems has been unfolding and how today they are considered paramount not only for their organic carbon contributions to coastal areas, but as protectors of the coast, mitigators of global climate change, reservoirs of biodiversity, and supporters of the livelihoods of millions of inhabitants throughout the world. The course will consist of lectures, class discussions, and presentations of student assignments. The lectures will follow an open seminar format in which all students are expected to actively participate in the discussion of the presented material. Two lectures will take place during field trips to local mangrove areas.   |
| MS | EVR | 636 | Topics in Ocean Economics and Policy   | The objective of the class is to discuss the main economic and political concepts associated with environmental policy in the US and elsewhere. In particular, the class focuses on how economic thinking, methods, and data relate to conservation, environmental, and natural resource policy and management problems. The class will draw on marine, terrestrial, climate, weather, and other inter-dependent domains to illustrate similarities and differences from an economic and political perspective. Students interested in enrolling in this class should have a basic background in economics.   |
| MS | EVR | 671 | MARINE CONSERVATION BIOLOGY  | This course introduces students to critical concepts in Marine Conservation, exploring aspects of the biology and ecology of marine organisms and ecosystems and how they impact human management of marine resources. Through a combination of lectures, primary literature discussions, case studies, and debates, students will learn how science informs conservation and management and understand the strategies and tools available to managers. By the end of the course, students should have a good understanding of the following: ecological principles, basics of marine species, threats to biodiversity, fisheries effects on species, habitats, and ecosystems, place-based management (MPAs, marine reserves, etc.), and human dimensions (culture, economics, and competing interests).   |
| AS | HIS | 368 | NAT & ENVRN AM HIS   | Shifting attitudes toward nature and the environment in American history; the rise of environmentalism and changes in public policy related to environmental conservation and preservation.   |
| AS | GEG | 105 | WLD REGIONAL GEG   | An introduction to geography's basic concepts within the framework of a comprehensive survey of the world's major regions.  |
| AS | GEG | 110 | INTRO HUMAN GEG  | An introduction to the sub-fields of human geography by an examination of patterns and process in the international system.   |
| AS | GEG | 120 | PHYSICAL GEOGRAPHY   | The Earth system (atmosphere; hydrosphere; biosphere; lithosphere) emphasizing the interrelationships among its constituent subsystems; human-environmental interactions and geographic dimensions of these four subsystems.  |
| AS | GEG | 235 | WINE, ENVIRONMENT & SOCIETY  | Explores regional differences in wine production, consumption, economics, culture, politics, and globalization, while cultivating basic wine literacy.  |
| AS | GEG | 241 | HEALTH & MEDICAL GEOGRAPHY   | Integrates public health and medicine with human and environmental geography using three approaches: ecological (the interaction of disease and our natural/built environments), social (the behavioral effects of culture, poverty, and politics), and spatial (using geospatial technology to better understand and improve health services and outcomes).  |
| AS | GEG | 375 | Waste Sustainability   | This course explores how society can reduce harmful waste products and become more sustainable. Students will assess contemporary global approaches to waste reduction and the role of technology and policy in achieving circular economies by tracing major industrial and consumer waste streams (e.g., paper, plastic, glass, metal, e-waste) using an interdisciplinary lens.  |
| AS | GEG | 331 | Sustainable Development  | The concepts of sustainable development, its origins, and the global conventions associated with it. We use indicators of human well-being, governance, environmental conservation, social inclusion, and economic prosperity to evaluate how countries are making their development trajectories more sustainable. Although most of our discussion adopts a global perspective, the research conducted by students is focused on the challenges for implementing sustainable development policies in tropical and sub-tropical countries.  |
| AS | GEG | 334 | BIOGEOGRAPHY & CONSERVATION  | Explores the modern science of biogeography and its implications for the design of spatial strategies to conserve biodiversity and ecosystem services. Examines the history of biogeography and its geographical and ecological foundations. Discusses the fundamental biogeographical processes and uses them to investigate the evolution of biotas and explain the current biogeographic patterns. Explores the emerging field of conservation biogeography and its applications.  |
| AS | GEG | 337 | Climate Change, Sea Level Rise and Society   | This course provides an understanding of the scientific evidence for the reality and imminent seriousness of climate change, an assessment of the societal and environmental repercussions, and preparation to communicate, prepare for, and begin trying to solve this most serious problem of our century.  |
| AS | GEG | 338 | Landscape Character, Dynamics, Evolution; Influence on Societal Habitation and Risks | A thorough look at the nature of how Earth's landscape character, dynamics, and evolution defines the nature of human societies and their habitation potential and risks, both now and with increased population growth and global warming.   |
| AS | GEG | 346 | Immigrant and Refugee Health   | A theoretical background essential for understanding the complex interaction of migration and health. Students will gain a basic understanding of the theories surrounding the movement of people within and across political boundaries. Emphasis will be placed on the health issues experienced by displaced populations including refugees, migrants, and internally displaced persons. We will explore some of the difficulties that receiving communities face in addressing the health needs of migrants, the roles of actors involved in working with displaced populations and how emigration of a large segment of the population, either abruptly or over time, affects sending communities as well. Much of the class will consist of guest speakers and case studies presented by different healthcare professionals working with migrant communities, with examples of the problems faced and solutions achieved in addressing issues of immigrant and refugee health drawn for both national and international experience. |
| AS | GEG | 348 | Climate Change and Public Health   | The mechanisms by which climate change adversely affects human health, and the policy options for mitigating our exposure.  |
| AS | GEG | 366 | CITIES IN TIME & SPACE   | Interdisciplinary perspectives on the city, urbanity, and urbanization through a series of wide-ranging historical-geographical contexts. Field excursions are incorporated into the course.  |
| AS | GEG | 562 | SEMINAR URBAN MANAGEMENT   | Select topics in urban management. Contents varies by semester and is indicated in parenthesis following course number and title in Class Schedule.   |
| AS | GEG | 563 | SEMINAR URBAN GEOGRAPHY  | Topics in the study of urban geography. Content and prerequisites vary.   |
| AS | GEG | 648 | CLIMATE CHANGE & PUBLIC HEALTH   | The mechanisms by which climate change adversely affects human health and the policy options for mitigating our exposure.   |

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| AS | GEG | 345 | Global Water Security & Sustainability                          | Explores the physical, social, economic, and political dimensions of global water insecurity, particularly the management of global drinking water supplies, through an interdisciplinary social science lens that recognizes water's importance to social equity and environmental sustainability.  |
| AS | GEG | 203 | Global Challenges   | Analyzes 21st-century global challenges related to population growth, climate change, and sustainable development. Applies innovative solutions to contemporary challenges such as the sustainability of food, water, energy, healthcare, and security systems (among others) in a world of 10 billion people.   |
| AS | GEG | 335 | Sustainable Food Systems  | A sustainable food system sustains environmental health and local economies, and is socially just. We will explore the intricacies of global geographies of major food systems and how these systems have come to be. We will identify where major food types are produced, why and where the major demand centers are. Further, we will seek answers to fundamental food-related questions, including: in an age of plenty, why do people still starve, and what can be done about it? How do we explain malnutrition in some parts of the world and obesity in others? Can there really be such a thing as a "sustainable global food systems?" Finally, we will examine what the future implication for food is through exploration and evaluation of a range of visions for a safe, sustainable food system.   |
| AS | GEG | 357 | Economics of Sustainable Development                            | Economics of sustainable development studies the economic aspects of how society sustainably manages natural resources and the environment while improving human well-being. The first half of the class will begin with sustainable development principles and practices in various settings, focusing on institutions, governance, and economic policies. Critical issues cover sustainable development of land and water, risk and economic security, and disaster management. The second half of the class will discuss the evolution of smart growth in urban planning globally over the past three decades, mapping the trajectory from its original principles to its position as an important paradigm in sustainable urban planning today. Specifically, we will learn about the economic aspects of smart growth, how these aspects have been embedded in government policies for sustainable development, and to what extent these policies have achieved their goals. Throughout the course, we will work on various case studies focusing on recent topics worldwide.   |
| AS | GEG | 359 | Resilience Economics  | Resilience economics studies the economic aspects of how society adapts to climate change and natural disasters. The first half of the course will explore the economic tools and methods we use to analyze climate adaptation. Essential elements we will cover include discounting, risk and uncertainty, distributional impacts, monetary and non-monetary evaluations, and the cost-benefit analysis. The second half of the course will explore how the interactions between humans and the environment determine the causes, consequences, and distribution of climate change and natural disasters. Particularly, we will discuss the difficulties society faces relating to adaptive strategies from the economic perspective. Critical issues we will cover include agriculture, energy, health, and extreme events. Throughout the course, we will work on various case studies based on recent events worldwide.  |
| AS | GEG | 520 | Sustainable Cities  | The emerging field of urban sustainability from an interdisciplinary perspective, by providing major theories and methodologies in sustainable urbanism, especially in terms of urban resilience, economic inequality, urban ecology, and environmental justice.   |
| AS | GEG | 375 | Waste Sustainability  | This course explores how society can reduce harmful waste products and become more sustainable. Students will assess contemporary global approaches to waste reduction and the role of technology and policy in achieving circular economies by tracing major industrial and consumer waste streams (e.g., paper, plastic, glass, metal, e-waste) using an interdisciplinary lens.   |
| AS | IGS | 644 | Energy Security and Environmental Sustainability                | The concepts of environmental sustainability and energy security will be explored. The importance of energy and the mitigation of climate change in formulation of country strategies, advancement of national interests and shaping of the international system will be stressed.   |
| AS | INS | 321 | INTERNATIONAL DEVELOPMENT                                       | A synthesis of major theories of international development, institutional architecture, and practice of international development. Focuses on key international development policies such as trade, macroeconomic finance, and equity. Considers narrow conceptions of modernity, growth, progress, wellbeing, and culture toward broader conceptions of freedom and/or sustainable development in both the Global North and Global South.   |
| AS | INS | 358 | FOOD POLICY: HANDS-ON APPROACH                                  | In this course, students will begin to immediately plant in the early spring, while harvesting the earlier fall semester's produce. The course will introduce students to planting and maintaining edible perennials in the South Florida environment. Students will study the role of urban farming as a potential contribution to the local food supply, changing urban landscapes into garden cities, and enhancing the role of tropical agricultural in reversing global warming.  |
| AS | INS | 421 | Poverty and the Environment: A Hands-On Approach                | The processes by which a growing economy creates wealth in the form of goods and services while simultaneously increasing poverty and pollution.   |
|    | KIN | 610 | Event Management  | This course is designed to introduce students to principles and practices of planning, funding and managing facilities associated with sports participation including professional sport venues, college sports, parks, recreational sport and health/fitness clubs. Students will gain an understanding of promoting, marketing, and maintaining sport facilities.  |
| LW | LAW | 267 | TOXIC TORTS & TOXIC REGULATION                                  | In this course, we will study the legal bases for toxic tort liability – an area that has its roots in familiar areas of the law but has applications unique to the area of toxic tort litigation. Our topics will include: the theories of liabilities that are most often used in toxic torts; the evidentiary rules governing the admissibility of scientific evidence; the procedural mechanisms, such as class actions, used to adjudicate issues affecting large numbers of people; and whether certain remedies, such as the creation of a medical monitoring fund or compensation for the risk of future disease, are appropriate.   |
| LW | LAW | 213 | Environmental Law   | This introductory course introduces main concepts of environmental protection, along with administrative law and judicial review in the environmental arena.   |
| LW | LAW | 318 | Law of the Sea  | This course examines the history and content of the law of the sea, one of the original and most important branches of international law.  |
| LW | LAW | 330 | CLIMATE FINANCE   | Finance and financial markets are a significant focus of actions and policies to address climate change.   |
| LW | LAW | 334 | International Environmental Law                                 | This course is designed to introduce students to the basic issues and concepts particular to international and global environmental law. The course will focus on a few case studies to explore the role law and policy can play in addressing different types of global environmental problems.   |
| LW | LAW | 350 | Marine Ecology and Law  | This two credit course is intended to introduce students to the legal concepts of marine environmental law and protection and how it relates to the field of maritime law in this rapidly evolving area. The course will be taught by a practicing maritime attorney and will employ a case study approach. The course will examine current U.S., Florida and, to a lesser degree, international marine environmental law and address such practical concerns as prosecuting and defending pollution or accident claims and liability for environmental damage, pollution and clean-up costs. Concepts in diverse bodies of law: maritime, tort, criminal, insurance, international and administrative, will be presented and discussed when relevant to particular marine environmental issues.   |
| LW | LAW | 517 | Regulatory Compliance, Corporate Governance, and Sustainability | Students will explore the critical role of compliance, corporate governance, and corporate social responsibility through the lens of in-house counsel, the compliance officer, the board of directors, institutional investors, regulators, and community stakeholders.  |
| LW | LAW | 550 | Urbanization, Capitalism, and Development                       | The course examines the origins, types and characteristics of cities as they evolve in history, from antiquity to modern times. The role of the medieval city as loci and vehicle for the emergence of modern capitalism is emphasized. The historical review follows the successive cycles of capitalism accumulation-from the fifteenth to the twentieth centuries-and the evolving character of cities during each. The focus then shifts to the morphology and class structure of industrial and post-industrial cities in the advanced world and the counterpart characteristics and roles of cities in the less developed world, with particular emphasis on Latin America, sub-Saharan Africa, and the Middle East. Two special topics will receive attention: a) The character and significance of the urban informal economy in advanced and less developed nations. b) The emergence and role of new global cities, with a focus on Miami, Dubai and Singapore. Students in this course will learn to go beyond surface appearances in order to identify key features of cities, including the distribution of the population in urban space and the role of cities as centers for capital accumulation and simultaneously, as sites for human living. |
| LW | LAW | 555 | Climate Change Law and Policy                                   | This two-credit course examines regulation of climate change from an international, national, and local perspective.   |
| LW | LAW | 572 | Everglades Law & Policy   | This compressed course will provide an overview of the law and policy of Everglades restoration through a blend of field visits and classroom learning.  |
| LW | LAW | 601 | ENVIR PLNG & IMPACT STATEMENT                                   | This course will take a broad view of environmental planning and analysis while focusing specifically on the requirements for and preparation of Environmental Impact Statements (EIS) and Environmental Assessments (EA). We will look in detail at the statutory requirements and procedures at the federal level, as well as the latest regulations promulgated by the Council on Environmental Quality (CEQ). Our approach will rely heavily on federal judicial opinions that provide compelling examples of environmental disputes and controversies.  |
| LW | LAW | 617 | Rights of Nature  | Offered by Announcement Only.  |
| LW | LAW | 629 | CONSERVATION, TOURISM & DEVEL                                   | Conservation, Tourism, and Development Seminar (Coastal Management). 3 Credit Hours.   |

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| LW | LAW | 734 | Environmental Appellate Advocacy                                     | The focus of this 2026 course will be Panama. We will explore its physical geography, culture, legal framework and institutions, and tourism-development-conservation conflicts. The field trip will be divided into two locations: Panama City and Chagres National Park. Panama City is a vibrant, cosmopolitan coastal city that is an international commercial and financial center, major international port and entrance to the Panama Canal, as well as a UNESCO World Heritage Site. Its coastline is undergoing major development that is altering its natural ecosystems. Chagres National Park (PNCh) is located an hour from Panama City and protects the watershed of Lake Alajuela, the major source of freshwater for the Panama Canal and for drinking water for a million residents of Panama City and Colón. The Spanish colonial road (Camino Real) passes through the PNCh. We will stay for 3 days in the community of Quebrada Ancha on the shores of Lake Alajuela at the site of a community-based tourism (CBT) project and examine in detail the organization and operation of the CBT project. Additionally, we will visit another CBT project at the Emberá community (Emberá Purú). |
| LW | LAW | 739 | UN Climate Negotiations  | Climate change is arguably the most pressing and complex environmental problem facing our planet. This class delves into the issues of law and policy involved in the international regulation of climate change mitigation and adaptation. The travel course centers around attending one week of the annual climate change treaty negotiations and writing short policy briefs on international climate change issues.   |
| LW | LAW | 842 | Disaster Law   | This course examines the law and policy of disasters (natural and technological) from hazard-mitigation planning, to emergency response, to cost sharing and compensation after an event, to long-term recovery. Climate change is increasing both the frequency and severity of natural disasters.  |
| LW | LAW | 739 | UN Climate Negotiations  | Climate change is arguably the most pressing and complex environmental problem facing our planet. This class delves into the issues of law and policy involved in the international regulation of climate change mitigation and adaptation. The travel course centers around attending one week of the annual climate change treaty negotiations and writing short policy briefs on international climate change issues.   |
| LW | LAW | 851 | Florida Topics in Environmental Law & Policy                         | This course will provide an overview of environmental policy at the state and local level in Florida. The course will include an analysis of relevant law, policy, and emerging issues for Florida-specific environments, focusing on environmental themes that are of particular importance to marine professionals, such as: Everglades restoration, coral reef protection, fish and wildlife management, watershed and land management, invasive and listed species, waste management, energy, and climate change policies.   |
| LW | LAW | 854 | Environmental Justice Clinic   | The clinic provides rights education, interdisciplinary research, public policy resources, and advocacy and transactional assistance to low- and moderate-income communities discriminated against by public and private actors in the fields of civil rights (e.g., housing and transportation), environmental protection (e.g., climate change, food access, land use, and pollution), and poverty law (e.g., economic development and municipal equity).  |
| LW | LAW | 856 | ENVIRONMENTAL JUSTICE CLINIC II                                      | The clinic provides rights education, interdisciplinary research, public policy resources, and advocacy and transactional assistance to low- and moderate-income communities discriminated against by public and private actors in the fields of civil rights (e.g., housing and transportation), environmental protection (e.g., climate change, food access, land use, and pollution), and poverty law (e.g., economic development and municipal equity).  |
| LW | LAW | 899 | Energy Regulation in an Age of Transition                            | The energy system is in the midst of profound transformation, driven by concerns about climate change and efforts to decarbonize energy supply; technological innovations that have made renewable energy, energy storage, and electric vehicles economically competitive; a constantly shifting regulatory landscape; and global conflicts that have revived calls for the United States to become both energy independent and to ramp up its exports of fossil fuels.  |
| LW | LAW | 923 | PROTECTION OF LIVING MARINE RESOURCES                                | This course is a primer into the legal foundations of illegal, unreported, unregulated fisheries (IUU) and fisheries governance and its impact on national security. The course will explore the current international and domestic legal framework of fisheries regulations and enforcement.  |
| MS | MBE | 615 | TROP MAR ECOLOGY   | Marine ecology with emphasis on tropical ecosystems and local habitats. Physical environmental and biotic adaptations, population, and community ecology are discussed. Field exercises in mangrove, sea grass, and coral reef ecosystems are also included.   |
| MS | MBE | 715 | Advanced Topics in the Ecology of Coastal Tropical Marine Ecosystems | This advanced class in tropical marine ecology is targeted at students in the MS and PhD programs as well as students in the MPS program with a strong background in marine ecology. The class describes the status, trends, and disturbance ecology of tropical coastal ecosystems and organisms, with a focus on coastal ecosystems of South Florida. In addition to reinforcing and expanding knowledge of basic ecological principles through lecture materials, students will be required to complete extensive readings on current topics relating to these ecosystems from the primary scientific literature. Students will participate in several paper discussions based on these readings. Additionally, students will complete two data analysis activities and write brief reports based on these analyses. Some prior knowledge of statistics is expected to complete these assignments.  |
| MS | MBE | 612 | AQUACULTURE I LAB  | This course examines the various strategies of resource exploitation and utilization related to aquaculture development. It focuses on environmental, technological, management, social and economic aspects of sustainable aquaculture. Advanced, emerging technologies and management strategies are examined, both at the hatchery and growout levels. The course also covers systems and all stages of planning and development, from site and species selection to feasibility studies, evaluation and sustainable use of natural resources, advanced hatchery and growout technologies. Emphasis is given on environmental sustainability as well as technical and economic feasibility of aquaculture projects.   |
| MS | MBE | 613 | AQUACULTURE II LAB   | This course covers basic science and advanced aquaculture technologies, with emphasis on production. It encompasses reproduction, spawning, larval husbandry, nursery and growout techniques of commercially important species of fish, crustaceans, mollusks, algae, non-traditional species and the production of live feeds such as microalgae, rotifers, Artemia spp. and other zooplanktonic organisms. The course also covers ontogeny, nutrition, physiology, bioenergetics and growth, environmental monitoring, disease prevention and control (prophylaxis, probiotics and vaccines), water quality management and growout technologies such as recirculating aquaculture systems (RAS), bioflocs and offshore surface and submerged cages. The course addresses advanced technology and proper management practices for sustainable aquaculture development. Aquaculture II is primarily a lab course, with a great deal of hands-on experience at the experimental hatchery and are required to conduct experimental trials and assist with ongoing projects. Course requires a background in either aquaculture and biological sciences or business.  |
| MS | MBE | 628 | Seafood Market & Marketing   | This course aims at educating the next generation of professionals in the seafood business and present future managers of an aquaculture business with the necessary knowledge in the packaging, pricing, placement, promotion and distribution of their finished product to give them the best return on their investment. The course covers basic theories but it is primarily a practical approach to the production, marketing and distribution of seafood products in the U.S. and the world market.  |
| MS | MBE | 617 | Aquaculture Business, Regulatory, and Environmental Considerations   | This course examines the substantive business, regulatory, and environmental issues concerning Aquaculture from offshore and coastal projects to land-based systems. Legal and regulatory considerations related to Aquaculture project development and operation will be covered. Aspects of business planning for different species and production systems will be examined. The interdisciplinary approach to Aquaculture will combine business and legal considerations with biological and environmental limitations.   |
| MS | MBE | 644 | Tropical Coastal Restoration   | This course provides an overview of the history of tropical coastal restoration, current restoration approaches, innovative techniques to enhance restoration in a changing environment, and the various metrics and monitoring methods to evaluate restoration success. Restoration fields covered include coral reef, artificial & hybrid reef, seagrass, sponge, mangrove, dune, historical, and biocultural restoration, along with marine debris removal. Students will have the opportunity to gain hands-on experience within these restoration fields through regular field trips. The ability to participate in strenuous fieldwork is required for enrollment.   |
| MS | MBE | 328 | Introduction to Aquaculture  | This course will provide an introduction to the field of aquaculture, which represents one of the fastest growing industries in food production in the worlds and is a field that offers exciting job opportunities in science, business, marketing, resource management, and socioeconomics. This course will provide students with a sound background in aquaculture prior to engaging in higher-level courses in this field.  |
| MS | MPO | 653 | CLIMATE CHANGE   | Overview of the physical processes which regulate the earth's climate and response to forcing.   |
| MS | MSC | 220 | Climate and Global Change  | The Earth's climate system and the role of natural and anthropogenic processes in shaping climate change.  |
| MS | MSC | 250 | Sustainable Economics Goes to the Movies                             | MSC 250 is an interdisciplinary lower-division general education course that uses the motion picture as a cultural context for illustrating sustainability and economics concepts. Stories, particularly those of human interest and emotion, can enrich discussions of economics and sustainability. Many films portray economics and sustainability as a set of problems to be inherited by future generations. Learners are more likely to recall course content when presented as a narrative than when couched in abstract models.  |
| MS | MSC | 342 | Decision Making and the Environment                                  | A basic, critical appreciation of interdisciplinary decision theory as applied to natural resources management. Specific goals include comprehension of: decision making under uncertainty, evolutionary social science, managing common pool resources, and behavioral economics.   |

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| MS | MSC | 345              | Economics of Natural Resources and the Environment   | A comprehensive overview of the economics of national, international, and global environmental problems. A unifying theme throughout is sustainable development defined as "maximizing the net benefits of economic development while maintaining the services and quality of natural resources over time". We will use economic reasoning to examine causes and consequences of environmental and resource problems                           |
| MS | MSC | 346              | Climate Science and Policy                           | The scientific evidence for, and the projected consequences of, climate change. The political and geo-engineering responses to the problem.  |
| AS | PHI | 238              | Environmental Ethics                                 | Theoretical and practical issues in the field of environmental ethics.   |
| AS | PHI | 337              | Environmental Ethics                                 | Theoretical and practical issues in the field of environmental ethics.   |
| MS | RSM | 520              | Climate and Society                                  | This course is designed to provide students from different disciplinary backgrounds with an overview of physical processes, general concepts and policy debates surrounding climate issues.  |
| BU | FIN | 654              | IMPACT INVESTING                                     | Provides an introduction to the emerging field of impact investing, where traditional investment objectives are modified to include social and environmental considerations. Students learn to evaluate the impact of social factors on portfolio decisions, financial risk, and asset prices.   |
| BU | FIN | 672              | SUSTAINABLE FINANCE                                  | Couples established and emerging theory on how finance can be used to address sustainability challenges. It covers diverse aspects of sustainable finance, including ESG (Environmental, Social, and Governance) measurement, socially responsible, and impact investing.  |
| BU | MKT | 653              | SUSTAINABLE MARKETING                                | Focuses on how marketing interfaces with all functional areas of business to create sustainable value for customers and ensure companies are profitable while considering ethical implications and the uncontrollable environment.   |
| MS | RSM | 616              | FL TOPICS ENVIR LAW & POLICY                         | Provides an overview of environmental policy at the state and local level in Florida. Includes analysis of law, policy, and emerging issues for Florida-specific environments, such as Everglades restoration and coral reef protection.   |
| MS | RSM | 620              | CLIMATE & SOCIETY                                    | Designed to provide students from different disciplinary backgrounds with an overview of physical processes, general concepts, and policy debates surrounding climate issues and their societal impacts.   |
| AS | WRS | 106 (S7, T4, U2) | First Year Writing II: Writing in Climates of Change | Advanced approaches to multidisciplinary written and multimodal communication using secondary sources. Emphasizes transferable skills in academic analysis, argument, and research. Not for major or minor. Cannot be taken on credit-only option.   |
| AS | WRS | 107              | Writing for the Sciences and Technology              | Advanced approaches to multidisciplinary written and multimodal communication using secondary sources. Emphasizes transferable skills in academic analysis, argument, and research for STEM disciplines. Not for major or minor. Cannot be taken on credit-only option.  |
| AR | ARC | 608              | Integrated Architecture Design Studio                | Advanced Design Studio focusing on skills associated with making integrated architectural design decisions across multiple systems. Design decisions within a complex architectural project will focus on the consideration and broad integration of environmental stewardship, technical documentation, accessibility, site conditions, life safety, environmental systems, structural systems, and building envelope systems and assemblies. |