

UC Berkeley Sustainability Courses (updated Spring 2014): IMPORTANT NOTE: This list includes courses from Fall 2011 through Spring 2014. Courses added in 2014 are highlighted in red. Many courses are offered repeatedly, but many also change over time. The semester that the courses are offered (F, SP, or F/SP) is also liable to change. This list is intended as a resource for students interested in taking courses that are related to or focused on sustainability, not as a planning tool. To check if a course is being offered, use the Schedule of Classes (<http://schedule.berkeley.edu/?PageID=index.html>), or ScheduleBuilder (<https://schedulebuilder.berkeley.edu/>). The courses are also categorized as "related" or "focused" -- related courses may only include a unit or section on a topic that relates to sustainability. The course description provided is often only an excerpt or shortened version of the full course description that can be found in the Course Catalog (links to department page provided for each course), and often highlights the reason that the course is on this list. Therefore, especially, for "related" courses, it is highly advisable to read the full course description.

Keywords have been added to make searching this long list easier. Using the find option on your computer (PC: Control + F; Mac: Command + F), may allow you to better browse topics that you are interested in.

Department	Course Number	Course Title	Offered	More Detail	Focused or Related	Keywords
A,RESEC	201	Production, Industrial Organization, and Regulation in Agriculture	F	Industrial organization including economics of information with applications to food retailing, cooperatives, fishing, and energy	Focused	Food, Agriculture
A,RESEC	213	Applied Econometrics	F	Standard and advanced econometric techniques are applied to topics in agriculture and resource economics	Focused	Agriculture, Economics
A,RESEC	232	Empirical International Trade and Investment	SP	Empirical aspects on international trade, foreign investment, and the environment	Related	Economics, Trade, International
A,RESEC	241	Economics and Policy of Production, Technology and Risk in Agricultural and Natural Resources	F	Agricultural and environmental policies and their impact on production and the environment, water resources, and more	Focused	Agriculture, Economics
A,RESEC	249	Agricultural, Food, and Resource Policy Workshop	F, SP	Presentation and criticism of ongoing research by faculty, staff and students	Related	Food, Agriculture
A,RESEC	C253	International Economic Development Policy	F	Development/application of policy to developing-world problems related to poverty, macroeconomics, and environmental sustainability	Related	Economics, International, Development, Sustainability
A,RESEC	261	Environmental Resource Economics	F	Theory of renewable and nonrenewable natural resource use, with applications to forests, fisheries, energy, and climate change.	Focused	Economics, Environment, Renewable
A,RESEC	263	Dynamic Models in Environmental and Resource Economics	F	Methods of analysis and optimal control of dynamic systems, emphasizing applications in environmental and natural resource economics	Focused	Economics, Modeling
A,RESEC	264	Empirical Energy and Environmental Economics	SP	In-depth understanding of empirical methods and research designs that are routinely used in field of energy and environmental economics	Focused	Economics, Energy, Environment
A,RESEC	269	Natural Resource Economics Workshop	F, SP	Current Research in the department	Related	Economics, Research
AMERST	10	Introduction to American Studies	F, SP	Draw on the arts, material culture, and various fields affecting cultural production and meaning. Areas include environmental studies	Related	Art, Culture, Environment
AMERST	10AC	Introduction to American Studies	F, SP	Draw on the arts, material culture, and various fields affecting cultural production and meaning. Areas include environmental studies	Related	Art, Culture, Environment
AMERST	C171	The American Designed Landscape Since 1850	F, SP	Cultural/social contexts that have shaped landscape architecture practice; includes environmental concerns and technological innovations	Related	Culture, Landscape, Environment
ANTHRO	C129D	Holocene Paleoecology: How Humans Changed the Earth	F, SP	Unravel the broad trends of human ecodynamics over the past 10,000 years using methods and data from a variety of fields	Focused	History, Change, Global
ANTHRO	135B	Environmental Archaeology	F, SP	Human-environment interaction, impact, and environmental degradation; with an emphasis on ecofactual analysis	Focused	History, Analysis
ANTHRO	137	Energy, Culture, and Social Organization	F, SP	Influence of culture and social organization on energy use, energy policy, and quality of life issues in domestic and international settings	Focused	Culture, Society, Energy
ANTHRO	140	The Anthropology of Food	F, SP	Identity, taste, taboos, ritual, traditions, nationalism, health, alcohol use, civilizing society, globalism, and the global politics of food	Related	Food, Culture, Global
ANTHRO	C254	Topics in Science and Technology Studies	F	Multidisciplinary field with capacity to rethink the relationship of science, technology, and political and social life; includes climate change	Related	Technology, Science, Politics, Society, Climate
ARCH	100B	Fundamentals of Architectural Design	F, SP	Stresses tectonics, materials, and energy considerations	Related	Architecture, Energy
ARCH	101	Case Studies in Architecture	F, SP	Strategies in analysis/design of buildings: internal spatial relationships, material, form, tectonics, social and environmental considerations	Related	Architecture, Design
ARCH	122/222	Principles of Computer Aided Architectural Design	F	Includes evaluation and prediction using examples from structures, energy, acoustics, and human factors	Related	Architecture, Energy, Modeling
ARCH	130	Introduction to Architectural Design Theory and Criticism	F, SP	Technology, environmental and ecological concerns, globalization of architectural production, and development of new materials	Related	Architecture, Technology, Environment
ARCH	140	Energy and Environment	SP	Fundamentals of building science including the evolving nature of building technologies, energy efficiency, ecology, and responsible design	Focused	Architecture, Energy, Environment
ARCH	142/242	Sustainability Colloquium	F	Presentations on a variety of topics related to sustainability	Focused	Sustainability
ARCH	149	Special Topics in Energy and Environment	F, SP	Special topics include climatic design, heating, ventilating, air-conditioning systems, lighting, and acoustics	Focused	Architecture, Energy, Environment
ARCH	175/275	Introduction to Architectural Theory 1945-Present	F, SP	Issues such as rapid urbanization, sustainability, the politics of cultural identity, and globalization	Related	Architecture, Environment, Global
ARCH	200A	Architectural Design Studio	F	Problems emphasize the major format, spatial, material, tectonic, social, technological, and environmental determinants of building form	Related	Architecture, Technology, Environment
ARCH	200B	Architectural Design Studio	F	Problems emphasize the major format, spatial, material, tectonic, social, technological, and environmental determinants of building form	Related	Architecture, Technology, Environment
ARCH	240	Advanced Concepts in Energy and Environment	F, SP	Quantitative and qualitative methods for assessing energy performance during design of both residential and commercial buildings	Focused	Architecture, Energy, Environment
ARCH	243	Natural Cooling: Sustainable Design for a Warming Planet	F, SP	Course focuses on zero- and no-energy climate responsive cooling strategies for both residential and commercial scale buildings	Focused	Architecture, Energy, Climate, Sustainability
ARCH	244	The Secret Life of Buildings	F, SP	Attention to energy use, occupant well-being, and architectural spacemaking	Related	Architecture, Energy
ARCH	253	Seismic Design and Construction	F	Contemporary design and construction techniques for improving the performance of new and existing buildings in earthquakes	Focused	Architecture, Earthquakes
BIOENG	25	Careers in Biotechnology	SP	Includes engineered solutions to environmental challenges	Related	Biotechnology, Environment
BIOENG	C181	The Berkeley Lectures on Energy: Energy from Biomass	F	After an introduction to the different aspects of our global energy consumption, the course will focus on the role of biomass	Focused	Energy, Global, Climate, Biofuel
IB	C82	Oceans	F	Importance oceans to the global carbon cycle, and principles of ecology with focus on important concept of energy flow through food webs	Related	Oceans, Global, Carbon, Ecology
IB	100B	Principles of Biodiversity	F	Maintenance of diversity: ecosystem function; global change; human uses/effects on biodiversity; conservation biology	Related	Biology, Global, Change, Biodiversity
IB	106A	Physical and Chemical Environment of the Ocean	SP	Air/sea interaction. Mixing. Formation of water masses. Modeling biological and geochemical processes. Ocean and climate change	Related	Biodiversity, Modeling, Oceans, Climate
IB	152	Environmental Toxicology	SP	The environmental fate and effect of toxic substances from human activities, with emphasis on aquatic systems	Focused	Toxic, Environment, Water
IB	154	Plant Ecology	F	Population ecology, life histories, community structure and dynamics, disturbance and succession, diversity and global change	Related	Ecology, Biodiversity, History, Global, Change
IB	C155	Holocene Paleoecology: How Humans Changed the Earth	F, SP	Unravel the broad trends of human ecodynamics over the past 10,000 years using methods and data from a variety of fields	Focused	History, Change, Global
IB	C156	Principles of Conservation Biology	SP	Factors that affect the creation, destruction, and distribution of biological diversity at the level of the gene, species, and ecosystem	Related	Conservation, Biodiversity, Ecosystem
IB	166	Evolutionary Biogeography	SP	Techniques used to study interactions between biogeographic ranges, evolutionary processes, extinction, and environmental change	Related	Research, Biology, Environmental, Change
IB	200B	Principles of Phylogenetics: Ecology and Evolution	SP	Covers applications of phylogenetics to biogeography, speciation, conservation, population genetics, ecology, behavior, development	Related	Biology, Ecology, Population, Conservation, Genetics
IB	C205	Quantitative Methods for Ecological and Environmental Modeling	F	Review of background mathematical and statistical tools necessary for pursuing ecological and environmental modeling	Related	Ecology, Environment, Modeling
IB	C216	Freshwater Ecology	SP	Topics including natural selection and adaptive evolution, and social-ecological resilience of freshwater ecosystems under global change	Related	Evolution, Ecology, Water, Ecosystems, Change, Global
IB	C226	Stable Isotope Ecology	SP	Includes isotope measurements in the context of terrestrial, aquatic, and marine ecological processes and problems	Related	Ecology, Water, Chemistry
IB	C229	Introduction to Climate Modeling	SP	Emphasizes fundamentals of climate system via hierarchy of climate models. Investigate climate feedbacks, sensitivity, and response times	Focused	Modeling, Climate
MCB	31	Genes, Cells, and Creatures	SP	Includes question: Can we determine the size of human population that the earth can sustain?	Related	Biology, Population, Sustainability
PMB	10	Plants, Agriculture, and Society	F	Interactions between plants and the environment, and effects of human industrial and agricultural activity on plant ecosystems	Focused	Agriculture, Society, Plants, Ecosystem
PMB	13	Genetic Revolutions	SP	Science, history, and philosophical implications behind past discoveries; contemplation of future genetic revolutions; includes topic of ag	Related	Genetics, Science, History, Agriculture
PMB	40	The (Secret) Life of Plants	SP	Basics of genetic engineering and biotechnology reveal how they are used to modify plants, and these socially relevant issues are assessed	Related	Biotechnology, Society, Plants
PMB	122/222	Bioenergy	SP	Global energy, chemistry of climate change, biofuels from biological perspective	Focused	Energy, Global, Climate, Biofuel
PMB	C124/C224	The Berkeley Lectures on Energy: Energy from Biomass	F	After an introduction to the different aspects of our global energy consumption, the course will focus on the role of biomass	Focused	Energy, Global, Climate, Biofuel
PMB	180	Environmental Plant Biology	SP	Physical parameters in global and micro-environment that affect plant function; plant response to suboptimal/adverse conditions	Related	Global, Environment, Plant
BUDDSTD	C126	Buddhism and the Environment	F, SP	Thematic course on Buddhist perspectives on nature and Buddhist responses to environmental issues	Focused	Buddhist, Environment
UGBA	107	The Social, Political, and Ethical Environment of Business	F, SP	Business in development of social values, goals, and national priorities. Expanding role of corporations in dealing with social problems	Related	Business, Society, Ethics
UGBA	170	Business Ethics for the 21st Century	F, SP	Enhance the ability of students to anticipate, critically analyze, and appropriately respond to the wide-range social and ethical issues	Related	Business, Society, Ethics
UGBA	178	Introduction to International Business	F, SP	A survey involving environmental, economic, political, and social constraints on doing business abroad	Related	Business, Global, Economics, Environment
UGBA	192A	Leading Nonprofit and Social Enterprises	F, SP	Prepares students conceptually and practically to found, lead, and manage organizations in the nonprofit sector	Related	Business, NGO, Management
UGBA	192N	Topics in Non-Profit Management.	F, SP	Advanced study in the field of non-profit management that will address current and emerging issues	Related	Business, Non-profit, Management
UGBA	192P	Strategic Corporate Social Responsibility and Consulting Projects	F, SP	Course will examine best practices used by companies to engage in socially responsible business practices	Related	Business, Society, Ethics
UGBA	192T	Topics in Corporate Social Responsibility	F, SP	Advanced study in the field of corporate social responsibility that will address current and emerging issues	Related	Business, Society, Ethics
UGBA	195S	Entrepreneurship To Address Global Poverty	F, SP	Explores poverty and entrepreneurship before focusing on various markets like health, housing, education, energy, ag, and finance	Related	Business, Poverty, Energy, Health
MBA	207	Ethics and Responsible Business Leadership	F, SP	Anticipate, critically analyze, and respond to the social, ethical, and political challenges that face managers operating in a global economy	Related	Business, Society, Ethics
MBA	212	Energy and Environmental Markets	F, SP	Political economy of regulation/deregulation; climate change and environmental policies related to energy production and use; and more	Focused	Business, Environmental, Climate, Energy
MBA	292I	Social Investing--Recent Findings in Management and Finance	F, SP	Use of ESG (environmental, social, and governance) criteria and its increasing prevalence among high net worth individuals and institutions	Related	Business, Management, Environmental, Society
MBA	292T	Topics in Socially Responsible Business	F, SP	Advanced study in the field of Socially Responsible Business	Related	Business, Society, Ethics
CHEME	40	Introduction to Chemical Engineering Design	F	Design choices in light of process efficiency, product quality, economics, safety, and environmental issues	Related	Chemistry, Environmental
CHEME	90	Science and Engineering of Sustainable Energy	SP	Intro to the science and technologies of producing electricity and transportation fuels from renewable energy resources	Focused	Energy, Fuel, Science, Chemistry
CHEME	C195A/C295A	The Berkeley Lectures on Energy: Energy from Biomass	F	After an introduction to the different aspects of our global energy consumption, the course will focus on the role of biomass	Focused	Energy, Global, Climate, Biofuel
CHEME	C295Z	Energy Solutions: Carbon Capture and Sequestration	F	Course will survey the capture and sequestration of CO2 from anthropogenic sources	Focused	Carbon, Climate
CHEM	105	Instrumental Methods in Analytical Chemistry	F, SP	Includes real-world problem solving with emphasis on bioanalytical, environmental, and forensic applications	Related	Chemistry, Biology, Environmental
CHEM	C138/C238	The Berkeley Lectures on Energy: Energy from Biomass	F	After an introduction to the different aspects of our global energy consumption, the course will focus on the role of biomass	Focused	Energy, Global, Climate, Biofuel
CHEM	C234	Green Chemistry: An Interdisciplinary Approach to Sustainability	SP	Design and production of safer and more sustainable chemicals and products	Focused	Chemistry, Design, Sustainability
CHEM	C236	Energy Solutions: Carbon Capture and Sequestration	F	Course will survey the capture and sequestration of CO2 from anthropogenic sources	Focused	Carbon, Climate
CY PLAN	110	Introduction to City Planning	F, SP	Concepts and procedures in city planning to improve the urban environment in response to physical, social, and economic problems	Related	Planning, Adaption
CY PLAN	114	Introduction to Urban and Regional Transportation	SP	Intro to the characteristics of urban transportation systems, the methods through which they are planned and analyzed	Related	Planning, Transportation
CY PLAN	119	Planning for Sustainability	F	Sustainable development applied to cities and urban regions; variety of contemporary urban planning issues through the sustainability lens	Focused	Planning, Sustainability, Development
CY PLAN	C139	Urban and Sub-national Politics in Developing Countries	F, SP	Sanctions, transportation, pollution, energy services, and public safety managed locally due to resource constraints and political boundaries	Related	Development, Transportation, Pollution, Politics
CY PLAN	205	Introduction to Planning and Environmental Law.	SP	Planning regarding property rights, land use regulation, and access to housing	Related	Planning, Regulation, Law, Environmental, Land
CY PLAN	209	Methods for Collaborative Planning: Meeting Management, Negotiation, and Consensus Building	F	Role play simulations on environ management, community and ethnic conflict, transportation, housing development and environ justice	Related	Management, Environmental Justice, Environmental, Transportation, Development
CY PLAN	C213	Transportation and Land Use Planning	F	Includes models of transportation and urban structure and empirical evidence of transportation-land use impacts	Related	Planning, Modeling, Transportation, Land
CY PLAN	214	Infrastructure Planning and Policy	F	Transportation, water supply, wastewater, storm water, solid waste management, community energy facilities, and urban public facilities	Focused	Transportation, Water, Management, Energy, Waste
CY PLAN	C217	Transportation Policy and Planning	F	Transportation finance, pricing, and subsidy issues; energy and air quality in transportation innovations in transportation policy; and more	Related	Transportation, Energy, Transportation
CY PLAN	218	Transportation Planning Studio	F	Planning for mass transit and other alternatives to private automobile; emphasis on planning and designing for transit-based housing	Related	Planning, Transportation
CY PLAN	219	Comparative International Topics in Transportation	F	Builds policy lessons on planning for mobility, accessibility, and sustainability in different political and contextual settings	Focused	Planning, Sustainability, Global, Transportation
CY PLAN	C241	Research Methods in Environmental Design	F	Environmental problems, attitudes, and criteria. Methods of addressing environmental quality. Environmental simulation.	Focused	Environmental, Research
CY PLAN	248	Advanced Studio: Urban Design/Environmental Planning	SP	Advanced problems in urban design and land use, and in environmental planning	Focused	Planning, Environmental, Design, Land

CY PLAN	249	Urban Design in Planning	F	Environmental surveys, community involvement, problem identification, environmental evaluation and impact assessment	Related	Environmental, Impact Assessment
CY PLAN	C251	Environmental Planning and Regulation	F	Emerging trends in environmental planning and policy and basic regulatory framework for environmental planning encountered in the U.S.	Focused	Planning, Environmental, Policy
CY PLAN	252	Land Use Controls	F	Theory, practice and impacts of zoning, growth management, land banking, development systems, and other techniques of land use control	Related	Management, Land, Development
CY PLAN	254	Sustainable Communities	F	Explores concept of sustainable development at the community level	Focused	Sustainability, Development
CY PLAN	256	Healthy Cities	F	Inquiry to influences of urban population health; analysis of determinants; roles of city planning and public health agencies in research	Related	Health, Planning, Research
CY PLAN	C257	The Process of Environmental Planning	F	Techniques used in planning, and evaluation of alternate means of implementation in varying environmental and political circumstances	Focused	Planning, Environmental, Politics
CIV ENG	11	Engineered Systems and Sustainability	SP	An introduction to key engineered systems (e.g., energy, water supply, buildings, transportation) and their environmental impacts	Focused	Engineering, Environmental, Sustainability
CIV ENG	70	Engineering Geology	F	Influence of geological factors on engineering works and the environment	Related	Engineering, Environmental, Geology
CIV ENG	C106	Air Pollution	F	Introduction to air pollution and the chemistry of earth's atmosphere	Focused	Pollution, Atmospheric, Chemistry, Air
CIV ENG	107	Climate Change Mitigation	SP	Assessment of technological options for responding to the threat of climate change	Focused	Climate, Technology
CIV ENG	108	Air Pollutant Emissions and Control	SP	Analysis of air pollution sources and methods for controlling emissions, with a focus on transportation-related air pollution	Focused	Pollution, Transportation, Air
CIV ENG	111	Environmental Engineering	F	Methods for controlling emissions, with a focus on transportation-related air pollution	Focused	Pollution, Transportation, Air
CIV ENG	111L	Water and Air Quality Laboratory	F	Provides an opportunity to understand key concepts in water and air quality through hands-on experimentation	Focused	Water Quality, Air, Pollution
CIV ENG	112	Environmental Engineering Design	F	Engineering design and project management of environmental quality control systems	Focused	Management, Environment, Design
CIV ENG	113N	Ecological Engineering for Water Quality Improvement	SP	Ecological engineering for treating contaminated water using natural processes to improve water quality	Focused	Water Quality, Ecology
CIV ENG	114	Environmental Microbiology	F	Microbial processes with application to water, wastewater and the environmental fate of pollutants	Related	Pollution, Water Quality, Chemistry, Wastewater
CIV ENG	115	Water Chemistry	F	Chemistry applications in aquatic environment and in water and wastewater treatment processes	Focused	Chemistry, Environmental, Water Quality
CIV ENG	C116	Chemistry of Soils	SP	Chemical mechanisms of reactions controlling the fate and mobility of nutrients and pollutants in soils	Related	Pollution, Soil, Chemistry
CIV ENG	140	Failure Mechanisms in Civil Engineering Materials	SP	Failure mechanisms in civil engineering materials associated in part with environmental changes	Related	Materials, Environmental
CIV ENG	C154	Introduction to Urban and Regional Transportation Planning	SP	Intro to urban transportation systems - methods of analyzing and planning and dimensions policy issues	Related	Transportation, Planning, Policy
CIV ENG	155	Transportation Systems Engineering	SP	Transportation impact modeling; noise; air pollution. Multi-criteria evaluation and decision making. Financing and politics	Related	Transportation, Modeling, Air, Pollution
CIV ENG	156	Infrastructure Planning and Management	F	Infrastructure systems that support society: transportation, communications, power, water, and waste	Focused	Transportation, Energy, Water, Waste, Society
CIV ENG	173	Groundwater and Seepage	F	Intro to principles of groundwater flow, including groundwater geology, contaminant transport, and design of waste containment systems	Related	Groundwater, Pollution, Waste
CIV ENG	176	Environmental Geotechnics	SP	Principles of environmental geotechnics applied to waste encapsulation and remediation of contaminated sites	Focused	Environmental, Waste, Contamination
CIV ENG	180	Design, Construction, Maintenance of Civil and Environmental Engineered Systems	SP	Constraints and trade-offs in engineering, life-cycle engineering (design through decommissioning), development of factors of safety	Related	Engineering, Design
CIV ENG	186	Design of Cyber-Physical Systems	SP	Crowd-sourced applications for maps, traffic management, or persuasive technologies for sustainable behavior	Related	Transportation, Sustainability, Behavior
CIV ENG	191	Civil and Environmental Engineering Systems Analysis	F	Problems include design of a transportation system for an urban area and resource allocation for maintenance of a water supply system	Related	Transportation, Design, Water
CIV ENG	202A	Vadose Zone Hydrology	F	Theoretical framework for modeling, followed by applications in ecology, drainage and irrigation, and contaminant transport	Focused	Modeling, Ecology, Pollution, Water
CIV ENG	203N	Surface Water Hydrology	F	Includes snow and snowmelt processes, applications of remote sensing, and flood and drought modeling	Related	Water, Sensing, Modeling
CIV ENG	209	Design for Sustainable Communities	SP	Innovative products or processes for improving the sustainability of resource-constrained communities in poor, developing countries	Focused	Sustainability, Community, Poverty, Development
CIV ENG	210A	Control of Water-Related Pathogens	SP	Comprehensive strategies for the assessment and control of water-related human pathogens	Focused	Water, Health
CIV ENG	211A	Environmental Physical-Chemical Processes	F	Fundamental concepts of physical-chemical processes that affect water quality in natural and engineered environmental systems	Related	Water Quality, Chemistry, Environmental
CIV ENG	211B	Environmental Biological Processes	SP	Incorporates basics of microbiology in engineering context to describe, predict, and control behavior of environmental biological systems	Related	Biology, Engineering, Environmental
CIV ENG	212	Water Quality Engineering	SP	Principles and engineering applications of technical processes for water and wastewater treatment, and water reclamation	Related	Water Quality, Treatment, Reclamation
CIV ENG	213	Watersheds and Water Quality	SP	Application of ecosystem modification and pollutant trading to enhance water quality	Focused	Water Quality, Pollution, Ecosystem
CIV ENG	214	Environmental Analytical Chemistry	SP	Principles and practices used to quantify trace elements, organic pollutants, smog-forming gases, and nutrients in the environment	Focused	Atmospheric, Pollution, Environment, Chemistry
CIV ENG	217	Environmental Chemical Kinetics	SP	Estimation of environmental reaction rates. Development of models of pollutant behavior in complex natural systems	Focused	Chemistry, Pollution, Environment, Modeling
CIV ENG	218A	Air Quality Engineering	F	Quantitative overview of the characterization and control of air pollution problems	Focused	Air, Pollution
CIV ENG	218B	Air Pollutant Dynamics	SP	Study of the behavior of gaseous and particulate air pollutants, with application to understanding fate of pollutants and more	Related	Air, Pollution
CIV ENG	218C	Air Pollution Modeling	SP	Theory and practice of mathematical air quality modeling	Focused	Air, Pollution, Modeling
CIV ENG	226	Stochastic Structural Dynamics	F	Applications in earthquake, wind, and ocean engineering	Related	Earthquake, Wind, Ocean, Engineering
CIV ENG	227	Earthquake-Resistant Design	SP	Evaluation of earthquake vulnerability of existing structures and rehabilitation of seismic deficiencies	Related	Earthquake, Structures
CIV ENG	240	Civil Engineering Materials	F	Differences and similarities in response to loading and environmental effects on concrete, wood, and steel	Related	Structures, Materials
CIV ENG	C250N	Transportation Policy and Planning	SP	Transportation finance, pricing, and subsidy issues; energy and air quality in transportation innovations in transportation policy; and more	Related	Transportation, Planning, Policy, Energy, Air
CIV ENG	256	Transportation Sustainability	F, SP	Introduction to the fundamentals of sustainable transportation	Focused	Transportation, Sustainability
CIV ENG	264	Behavioral Modeling for Engineering, Planning, and Policy Analysis	SP	Focus on behavioral theories and use of quantitative methods to analyze human response - includes topic of sustainability	Related	Modeling, Behavior
CIV ENG	268E	Civil Systems and the Environment	SP	Life-cycle planning, design, environmental assessment, industrial ecology, design for environment, pollution prevention, external costs.	Focused	Planning, Design, Environmental, Ecology, Pollution
CIV ENG	275	Geotechnical Earthquake Engineering	F	Influence of soil conditions on site response, seismic site response analysis, analysis of seismic soil-structure interaction, and more	Related	Earthquakes, Analysis, Soil
CIV ENG	C276	Seismic Hazard Analysis and Design Ground Motions	SP	Deterministic and probabilistic approaches for seismic hazard analysis	Focused	Earthquakes, Hazard
CIV ENG	285C	Seismic Methods in Applied Geophysics	SP	Acquisition, processing, and interpretation of seismic data with application to environmental site characterization, groundwater, and more	Focused	Data, Geophysics, Environmental, Water, Earthquakes
CIV ENG	290J	Advanced Topics in Geotechnical Engineering	F, SP	Includes new developments in geotechnical earthquake engineering, soil improvement, geosynthetics and earth structures, and more	Related	Geophysics, Earthquake, Soil
CIV ENG	C290U	Transportation and Land Use Planning	F	Includes models of transportation and urban structure and empirical evidence of transportation-land use impacts	Related	Modeling, Transportation, Land
CIV ENG	292A	Technologies for Sustainable Societies	F	Technologies that serve major societal needs, such as shelter, water, food, energy, and transportation, and waste management	Focused	Technology, Water, Food, Energy, Transportation, Waste
COLWRIT	50AC	Researching Water in the West: Its Presence, Its Absence, and Its Consequences for the Peoples of California	F, SP	Cosiders a variety of players in the story of water rights in California, including federal and state representatives, conservationists	Related	California, Water, Writing
COLWRIT	150AC	Researching Water in the West: Its Presence, Its Absence, and Its Consequences for the Peoples of California	F, SP	Cosiders a variety of players in the story of water rights in California, including federal and state representatives, conservationists	Related	California, Water, Writing
COLWRIT	192AC	Advanced Composition: Community-Based Ethics	F, SP	Focuses on ethical decisions as they apply to diversity, sustainable practices, economic impacts	Related	Ethics, Diversity, Sustainability, Economics, Writing
DEMOG	110	Introduction to Population Analysis	F	Life tables, fertility and nuptiality measures, age pyramids, population projection, measures of fertility control	Related	Fertility, Analysis, Population
DEMOG	C126	Social Consequences of Population Dynamics	F	Includes, resource issues, economic development, the environment, population control, family planning, birth control, aging	Related	Resources, Development, Environment, Population
DEMOG	160	Special Topics in Demography	F, SP	Topics may include the demography of specific world regions, race and ethnicity, population and policy, and population and environment	Related	Population, Policy, Environment, Global
DEMOG	C175	Economic Demography	SP	What are the economic and environmental consequences of rapid population growth?	Related	Economics, Environment, Population
EPS	3	The Water Planet	F, SP	Patterns of water use, threats to water quality, effects of global climate change on future water supplies. Water issues facing California.	Focused	Water, Water quality, Climate, California, Global
EPS	8	Geologic Record of Climate Change	F, SP	Geologic record of climate change emphasizing how knowledge can constrain present day thinking about future climate change.	Focused	Climate, Future, Global
EPS	C12	The Planets	F, SP	Understanding other worlds will help us save our own planet and help us understand our place in the universe	Related	Planets, Global
EPS	20	Earthquakes in Your Backyard	F, SP	Includes earthquake hazard and risk, with particular emphasis on the situation in California	Related	Earthquakes, California, Hazard, Risk, California
EPS	80	Environmental Earth Sciences	F, SP	Describes geologic processes active on and in the earth and man's interactions with them	Related	Geologic, Interactions, Global
EPS	C82	Oceans	F	Importance oceans to the global carbon cycle, and principles of ecology with focus on important concept of energy flow through food webs	Related	Oceans, Carbon, Ecology, Energy
EPS	102	History and Evolution of Planet Earth	F	Includes formation oceans, and atmosphere; stratigraphic record of environment, and evolution; climate history and climate change	Related	Oceans, Atmospheric, Record, Evolution, Climate
EPS	103/203	Introduction to Aquatic and Marine Geochemistry	SP	Includes reactions in marine environment; carbon system equilibrium chemistry and biogeochemistry of fresh/salt water	Related	Oceans, Environment, Carbon, Chemistry, Water
EPS	111	Petroleum Geology	F	Origin of petroleum: quality, quantity, thermal maturation of organic matter in source rock	Related	Carbon, Petroleum
EPS	115	Stratigraphy and Earth History	F	Earth history; neocatastrophism; applications of stratigraphy to climate change, petroleum geology, and archaeology	Related	History, Climate, Petroleum, Global
EPS	117	Geomorphology	F	Examination of runoff generation, weathering, soil erosion by water and wind, mass wasting, glacial and periglacial processes	Related	Soil, Erosion, Water, Glaciers
EPS	124/224	Isotopic Geochemistry	F	An overview of the use of natural isotopic variations to study earth, planetary, and environmental problems	Related	Global, Environment, Problems, Isotopes, Chemistry
EPS	C129	Biometeorology	F	How the physical environment of plants and soil affects the physiological status of plants and how plants affect their physical environment	Related	Plants, Soil, Environment
EPS	131	Geochemistry	F	Chemistry of the solid earth, oceans, and atmosphere	Related	Chemistry, Oceans, Atmospheric
EPS	C146	Geological Oceanography	F	Sources/composition of marine sediments, sea-level change, imprint of climatic zonation on marine sediments, ocean floor resources	Related	Oceans, Climate, Resources, History
EPS	150	Case Studies in Earth Systems	F	Discussion of three research problems on the interactions of solid earth, hydrologic, chemical, and atmospheric processes	Related	Research, Global, Chemistry, Atmospheric, Water
EPS	170AC	Crossroads of Earth Resources and Society	SP	Evolution and diversity of attitudes about resource development, environmental management, and conservation	Focused	Resources, Development, Management, Conservation, Environmental
EPS	C180	Air Pollution	F	An introduction to air pollution and the chemistry of earth's atmosphere	Focused	Air, Pollution, Chemistry, Atmospheric
EPS	C181	Atmospheric Physics and Dynamics	F	Processes that determine the structure/circulation of the Earth's atmosphere including the role of water in the energy/radiation balance	Related	Atmospheric, Water, Energy, Global
EPS	C183	Carbon Cycle Dynamics	SP	The focus is the (unsolved) puzzle of the contemporary carbon cycle.	Focused	Carbon, Global
EPS	200	Problems in Hydrogeology	F	Includes faulting and earthquakes, hydrocarbon migration and trapping, flow-associated mineralization, and contaminant problems	Related	Earthquakes, Carbon, Pollution
EPS	209	Matlab Applications in Earth Science	SP	Includes riverbed characterization, landslide risk analysis, and geospatial and seismic data analysis	Related	River, Water, Earthquake, Data, Analysis
EPS	210	Exploration, Ore Petrology, and Geochemistry	SP	Chemistry of ores related to climate change, hydrological evolution, and tectonics. Materials for conventional/sustainable technologies	Focused	Chemistry, Climate, Tectonics, Materials, Technology
EPS	C229	Introduction to Climate Modeling	SP	Emphasizes fundamentals of climate system via hierarchy of climate models. Investigate climate feedbacks, sensitivity, and response times	Focused	Modeling, Climate
EPS	C241	Stable Isotope Ecology	SP	Includes isotope measurements in the context of terrestrial, aquatic, and marine ecological processes and problems	Related	Isotope, Chemistry, Water, Ecology, Problems
EPS	C242	Glaciology	F	Use mechanics of glacial systems to examine glaciers as geomorphologic agents and as participants in climate change	Focused	Glaciers, Climate
EPS	250	Advanced Topics in Earth and Environmental Sciences	F	Review of recent literature and discussion of ongoing research at the interface between earth science and environmental science	Focused	Environmental, Research, Global
EPS	251	Carbon Cycle Dynamics	F	The focus is the (unsolved) puzzle of the contemporary carbon cycle.	Focused	Carbon, Global
EPS	271	Field Geology and Digital Mapping	SP	Geological mapping, field observation, and problem solving in the Berkeley hills leading to interpretation of geo processes and history	Related	Mapping, Problems, History
EPS	C276	Seismic Hazard Analysis and Design Ground Motions	SP	Deterministic and probabilistic approaches for seismic hazard analysis	Focused	Earthquakes, Hazard
EPS	C295Z	Energy Solutions: Carbon Capture and Sequestration	F	Course will survey the capture and sequestration of CO2 from anthropogenic sources	Focused	Carbon, Climate
EALANG	C126	Buddhism and the Environment	F, SP	Buddhist perspectives on nature and Buddhist responses to environmental issues	Focused	Buddhist, Environment
ECON	C3	Introduction to Environmental Economics and Policy	F, SP	Introduction to microeconomics with emphasis on resource, agricultural, and environmental issues	Focused	Economics, Environment, Agriculture, Resources
ECON	84	Buddhist Economics Sophomore Seminar	SP	Undergraduate seminar comparing neoclassical economics model to an ideal economy that promotes individual freedoms and capabilities	Related	Economics, Social, Global
ECON	C102	Natural Resource Economics	F	Application to energy, forests, fisheries, water, and climate change. Resources, growth, and sustainability	Focused	Economics, Energy, Climate, Water, Forests, Resources, Sustainability

ECON	C125	Environmental Economics	SP	Theories of externalities and public goods applied to pollution and environmental policy. Trade-off between production and environment.	Focused	Economics, Environment, Pollution
ECON	131	Public Economics	F, SP	Course covers tax policy, social insurance programs, public goods, environmental protection, interaction between levels of government	Related	Economics, Environment, Policy
ECON	C175	Economic Demography	SP	What are the economic and environmental consequences of rapid population growth?	Related	Economics, Environment, Population
ECON	274	Global Poverty and Impact Evaluation	SP	Explore the variety of tools available for rigorously measuring the impact of development programs	Related	Economics, Development, Impact
EDUC	C193A	Environmental Education		Theory and practice of translating ecological knowledge, environmental issues, and values into educational forms	Focused	Environment, Education
EDUC	C193B	Environmental Education		Theory and practice of translating ecological knowledge, environmental issues, and values into educational forms	Focused	Environment, Education
EDUC	283D	Popular Education		Cooperative study and action directed toward achieving more just and peaceful societies within a life-sustaining global environment	Related	Environment, Education, Global, Sustainability
EECS	134	Fundamentals of Photovoltaic Devices	F, SP	How solar cells work and the concepts and models of solar cell device physics. Light management and economics also covered	Related	Energy, Solar, Technology, Economics
EECS	137B	Introduction to Electric Power Systems	SP	Focus on new and emerging technologies for power conversion and delivery. Includes solar and wind generation	Related	Energy, Technology, Solar, Wind
ENE,RES	C100/C200	Energy and Society	F, SP	Energy sources, uses, and impacts: introduction to the technology, politics, economics, and environmental effects of energy in society	Focused	Energy, Society, Impacts, Technology, Economics, Politics
ENE,RES	101	Ecology and Society	F	Topics include ecological limits to growth, threats to biodiversity, value of ecosystem goods and services, and more	Focused	Ecology, Biodiversity, Ecosystem, Society
ENE,RES	102	Quantitative Aspects of Global Environmental Problems	SP	Human disruption of biogeochemical and hydrological cycles; climate change; pollutants; loss of species; radioactivity; epidemics	Focused	Impact, Climate, Pollution, Problems, Environment
ENE,RES	170/270	Environmental Classics	F	How have certain "environmental classics" shaped the way in which we think about nature, society, and development?	Focused	Environment, Nature, Society, Development
ENE,RES	175/275	Water and Development	F	This course introduces students to water policy in developing countries	Focused	Water, Policy, Development, Global
ENE,RES	C180	Ecological Economics in Historical Context	SP	Multiple perspectives on ecological economics in order to move toward sustainable, fulfilling, just economies	Focused	Economics, Ecology, Sustainability
ENE,RES	190/290	Seminar in Energy, Environment, Development and Security Issues	F, SP	Critical, cross disciplinary analysis of specific issues or general problems of how people interact with environmental and resource systems	Focused	Environment, Resources, Problems
ENE,RES	201	Interdisciplinary Analysis in Energy and Resources	F	Important perspectives on energy and resource issues, introduced through a particularly influential book or set of papers	Focused	Energy, Resources
ENE,RES	C202	Modeling Ecological and Meteorological Phenomena		Modeling methods in ecology and meteorology; stability analysis; effects of anthropogenic stress on natural systems	Focused	Modeling, Ecology, Meteorology
ENE,RES	C205	Quantitative Methods for Ecological and Environmental Modeling	F	Review of background mathematical and statistical tools necessary for pursuing ecological and environmental modeling	Related	Modeling, Ecology, Environment, Statistics
ENE,RES	220	Modeling Energy, Environmental, and Resource Systems		A first course in modeling with an emphasis on optimization and on applications in energy, environment, and resource management	Focused	Modeling, Energy, Environment, Resources, Management
ENE,RES	C226	Photovoltaic Materials; Modern Technologies in the Context of a Growing Renewable Energy Market	F	Focus on fundamentals of photovoltaic energy conversion with respect to operation/design of efficient semiconductor solar cell devices	Related	Energy, Solar, Materials
ENE,RES	254	Electric Power Systems	SP	Includes organizational design, regulations, environment, end-use efficiency, and new technologies	Related	Energy, Power, Environment, Technology, Efficiency
ENE,RES	280	Energy Economics	SP	Includes patterns of energy use, trade-offs in energy conservation, effect of energy policy; projecting energy and resources supply and use	Related	Energy, Conservation, Policy, Resources
ENE,RES	291	Special Topics in Energy and Resources	F, SP	Study and critical analysis of advanced topics in energy and resources using interdisciplinary approaches	Related	Energy, Resources, Analysis
ENE,RES	292A	Tools of the Trade	F	Quantitative methods for energy and resource analysis	Related	Energy, Resources, Analysis
ENGIN	93	Energy Engineering Seminar	F	Weekly seminar with different speakers on energy-related topics. The goal is to expose students to a broad range of energy issues.	Related	Energy
ENG	C77	Introduction to Environmental Studies		How scientific method, and imaginative thinking can clarify what is at stake in environmental issues and ecological citizenship	Focused	Environment, Issues, Writing, Values
ENVDES	1	People and Environmental Design	F, SP	Survey of relationships between people and environments, designed and non-designed; intro to the literature and professional practices	Related	Environment, Design
ENVDES	R3B	Reading and Composition in Energy, Society, and Environmental Design	F, SP	Key literature that examines, primarily, the relationship between sustainability and environmental design disciplines	Focused	Environment, Design, Sustainability
ENVDES	4C	Future Ecologies: Urban Design, Climate Adaptation, and Thermodynamics	F, SP	Intro to methods for investigating relationships in the built environment; Questions about human habitat that could shape the future	Focused	Environment, Society, Design
ENVDES	105	Deep Green Design	F, SP	Relationships among ecosystem, energy, resource flows, human social and cultural values, and tech to produce the built environment	Focused	Ecosystem, Energy, Society, Culture, Values, Technology, Design
EEP	C1	Introduction to Environmental Economics and Policy	F, SP	Introduction to microeconomics with emphasis on resource, agricultural, and environmental issues	Focused	Economics, Environment, Agriculture, Resources
EEP	100	Microeconomic Theory with Application to Natural Resources	F, SP	Basic microeconomic tools for further study of natural resource problems	Focused	Economics, Resources, Problems
EEP	C101	Environmental Economics	SP	Theories of externalities and public goods applied to pollution and environmental policy. Trade-off between production and environment.	Focused	Economics, Environment, Policy, Pollution
EEP	C102	Natural Resource Economics	F	Application to energy, forests, fisheries, water, and climate change. Resources, growth, and sustainability	Focused	Economics, Energy, Climate, Water, Forests, Resoures, Sustainability
EEP	C115	Modeling and Management of Biological Resources	F	Various models for topics such as population interactions, competition, fisheries, pest management, and genetics	Related	Economics, Modeling, Resources, Population, Fish, Management
EEP	C118	Introductory Applied Econometrics	F	Techniques of statistical and econometric analysis with applications in environmental, resource, and international development economics	Related	Economics, Statistics, Environment, Resources, Global
EEP	131	Globalization and the Natural Environment	F	How has increased international trade, integration of factor markets, and international agreement affected the environment?	Related	Environment, Economics, Global
EEP	140AC	Economics of Race, Agriculture, and the Environment	F	Examines whether and how economic processes explain differential experiences among racial groups in U.S. ag and environmental systems	Related	Economics, Environment, Race, Agriculture
EEP	141	Agricultural and Environmental Policy	F	Considers the formation, implementation, and impact of public policies affecting agriculture and the environment	Related	Environment, Economics, Policy, Agriculture
EEP	143	Economics of Innovation and Intellectual Property	F	Topics include innovation examples from agriculture, energy, pharmaceuticals, software, and electronics	Related	Economics, Agriculture, Energy, Technology
EEP	145	Health and Environmental Economic Policy	F	Focus on frameworks for analyzing market failure in provision of health and environmental goods and policy findings relevant to the field	Related	Economics, Environment, Health, Market Failure
EEP	147	Regulation of Energy and the Environment	SP	Emphasis on policies that seek to mitigate the impact of energy production and consumption on the environment	Focused	Policy, Energy, Environment, Mitigation
EEP	153	Population, Environment, and Development	SP	Interdisciplinary approach to interactions between population, environmental change, and economic development	Focused	Population, Environment, Change, Economics, Development
EEP	154	Economics of Poverty and Technology	SP	Focuses on technologies related to agricultural production, processing, market access, value chains, and climate change	Related	Technology, Agriculture, Climate, Economics
EEP	161	Advanced Topics in Environmental and Resource Economics	F	Optimal use of renewable/nonrenewable resources. Balancing environmental and extractive values. Resources, growth, and sustainability	Focused	Renewable, Resources, Environment, Sustainability
EEP	162	Economics of Water Resources	SP	Urban demand for water; water supply and economic growth; water utility economics; irrigation demand; large water projects; and more	Focused	Water, Economics
EEP	C175	The Economics of Climate Change	F, SP	Economic models will be developed to analyze the impacts of climate change and provide and critique existing and proposed policy tools	Focused	Modeling, Economics, Climate, Policy
EEP	C180	Ecological Economics in Historical Context	SP	Multiple perspectives on ecological economics in order to move toward sustainable, fulfilling, just economies	Focused	Economics, Ecology, Sustainability
EEP	C183	Forest Ecosystem Management	SP	Introduces students to concepts and quantitative tools needed for the sustainable management of multi-use forest ecosystems	Focused	Sustainability, Management, Forests, Ecosystems
ESPM	2	The Biosphere	F	Includes human dependence on the biosphere as well as the magnitude and consequences of human interventions in the biosphere	Related	Global, Resources
ESPM	6	Environmental Biology	F	Discussion of basic ecological processes as a basis for understanding environmental problems and formulating strategies for their solution	Focused	Environment, Biology, Ecology, Problems
ESPM	9	Environmental Science Case Study Seminar	SP	Introduction for lower division students to the process of addressing real environmental problems through a progression of case studies	Focused	Environment, Problems
ESPM	C10	Environmental Issues		Issues of economic development, population, energy, resources, technology, and alternative systems	Focused	Economics, Development, Population, Energy, Resrouces, Technology
ESPM	C11	Americans and the Global Forest	F	Challenges students to think about how individual and American consumer decisions affect forest ecosystems around the world	Focused	Economics, Development, Forests, Ecosystems, Global
ESPM	C12	Introduction to Environmental Studies		How scientific method, and imaginative thinking can clarify what is at stake in environmental issues and ecological citizenship	Focused	Environment, Issues, Writing, Values
ESPM	15	Introduction to Environmental Sciences	F, SP	Water/air quality, global change, energy, ecosystem services, introduced and endangered species, water supply, waste, human population	Focused	Environment, Water, Air Quality, Energy, Ecosystems, Population
ESPM	24	Issues in Natural Resource Conservation	F, SP	Designed to provide new students with the opportunity to explore an intellectual topic with a faculty member in a small-seminar setting	Focused	Conservation, Natural Resources
ESPM	44	Biological Control	F	Regulation of populations of organisms, especially insects, through interactions with parasites, predators, pathogens, competitors	Related	Population, Insects, Pathogens, Regulation
ESPM	50AC	Introduction to Culture and Natural Resource Management	F, SP	Intro to culture's affects on fire management, wildland and urban forests, rangelands, parks and preserves, and croplands in America	Related	Culture, Fire, Management, Forests, Parks
ESPM	60	Environmental Policy, Administration, and Law	F, SP	Emphasis is on use of science in decision making, choices between regulations and incentives, and role of bureaucracy in resource policy	Related	Regulation, Policy, Resources
ESPM	78A	Teaching and Learning Environmental Science	F, SP	Students create lesson plans integrating core concepts and their knowledge of local environmental issues	Related	Environment, Education, Issues
ESPM	90	Introduction to Conservation and Resource Studies Major	F, SP	Overview of ecological problems and contrasting approaches to solutions through institutional and community-based efforts	Related	Ecology, Solutions, Community
ESPM	100	Environmental Problem Solving	F	Analysis of contrasting approaches to understanding and solving environmental and resource management problems	Focused	Environment, Problems, Solutions, Resources, Management
ESPM	100ES	Introduction to the Methods of Environmental Science	SP	Includes development of research questions, sampling methods, experimental design, statistical analysis, scientific writing and graphics	Related	Research, Sampling, Statistics, Writing
ESPM	102A	Terrestrial Resource Ecology	F	Organized around environmental biophysics, ecosystem carbon balance, ecophysiology, population ecology, community ecology	Related	Environment, Ecosystem, Carbon, Population, Community
ESPM	102B	Natural Resource Sampling	F	Introduces students to important sampling and measurement concepts in grassland, forest, wildlife, insect, soil, and water resources	Related	Sampling, Forests, Insects, Soil, Water, Resources
ESPM	102BL	Laboratory in Natural Resource Sampling	F	Field data is collected with various important sampling designs and analyzed	Related	Data, Sampling, Analysis, Resources
ESPM	102C	Resource Management	SP	A range of contemporary air, soil, wetland, rangeland, forest, social, economic, and ecosystem management problems is addressed	Focused	Resources, Management, Air, Soil, Forests, Economics, Ecosystems, Problems
ESPM	102D	Resource and Environmental Policy	SP	Develops capacities to analyze the cause, dynamics, and consequences of resources and environmental policy formation/execution	Focused	Resources, Analysis, Environment, Policy
ESPM	C103	Principles of Conservation Biology	SP	Factors that affect the creation, destruction, and distribution of biological diversity at the gene, species, and ecosystem levels are examined	Focused	Conservation, Biodiversity, Ecosystem
ESPM	C104	Modeling and Management of Biological Resources	F	Various models for topics such as population interactions, competition, fisheries, pest management, and genetics	Related	Economics, Modeling, Resources, Population, Fish, Management
ESPM	106	American Wildlife: Identification and Conservation	F	Identification and life histories of wildlife in North America. The conservation of rare and endangered species is highlighted.	Focused	History, Conservation, Endangered
ESPM	108A	Trees: Taxonomy, Growth, and Structures	F	Modes of stem structure and growth will be considered in relation to habitat and life cycles, and to suitability for timber value	Related	Trees, Habitat, Timber
ESPM	108B	Forest Genetics	F	Theoretical aspects of genetics used to understand patterns of genetic variation in natural forest trees; applications to conservation biology	Related	Forests, Genetics, Trees, Conservation
ESPM	111	Ecosystem Ecology	SP	Considers how these principles ecosystem ecology apply to ecosystem recovery and to regional and global fluxes of carbon and nutrients	Focused	Ecosystems, Ecology, Global, Carbon
ESPM	114	Wildlife Ecology	F	Introduction to wildlife ecology and its relationship to management programs	Related	Ecology, Management
ESPM	115B	Biology of Aquatic Insects	F	Identification and ecology of aquatic insects, including their role as indicators of environmental quality	Related	Ecology, Insects, Water Quality
ESPM	115C	Fish Ecology	F	Diversity of fishes in CA, emphasizing physical, biotic, and human-related factors that affect distribution, diversity, and abundance of them	Related	Fish, Diversity, Ecology
ESPM	C115C	Fish Ecology	F	Diversity of fishes in CA, emphasizing physical, biotic, and human-related factors that affect distribution, diversity, and abundance of them	Related	Fish, Diversity, Ecology
ESPM	116C	Range Ecology, Improvements, and Management	SP	Ecological basis for range management activities, considered in the context of western range ecosystem types	Focused	Ecology, Management, Range
ESPM	116C	Tropical Forest Ecology	SP	Basic ecology integrated with discussion of human disturbances, restoration, and global importance of tropical forests	Focused	Ecology, Restoration, Global, Forests
ESPM	117	Urban Garden Ecosystems	F	An ecosystem approach to the study of urban gardens with an organic perspective	Related	Ecosystems, Urban, Garden, Organic
ESPM	118	Agricultural Ecology	F	Examines fundamental biological, technical, socio-economic, and political processes that govern agroecosystem productivity and stability	Focused	Agriculture, Sociology, Economics, Politics
ESPM	120	Soil Characteristics	F	Soil management for agriculture, forestry, and urban uses will also be discussed	Related	Soil, Management, Agriculture, Forests
ESPM	121	Development and Classification of Soils	SP	Soils as functioning parts of ecosystems; use of soils in archeological and paleoclimatic studies; anthropogenic effects on soil ecosystems	Related	Soils, Ecosystems, Archeology
ESPM	122	Field Study of Soil Development	SP	Methods of soil morphological descriptions; study of factors controlling soil development; relationship of soil morphology to land use	Related	Soil, Sampling, Land
ESPM	C128	Chemistry of Soils	SP	Chemical mechanisms of reactions controlling the fate and mobility of nutrients and pollutants in soils	Related	Soil, Chemistry, Pollution, Nutrients
ESPM	C129	Biometeorology	SP	How the physical environment of plants and soil affects the physiological status of plants and how plants affect their physical environment	Related	Plants, Soil, Environment
ESPM	131	Soil Microbial Ecology	SP	Includes global environmental change and bioremediation and microbe influences on soil productivity and environmental quality	Related	Environment, Change, Global, Microbial, Soil, Ecology
ESPM	134	Fire, Insects, and Diseases in Forest Ecosystems	F	Includes the evolution of interactions due to modern human policies of preservation, management and exploitation	Focused	Fire, Insects, Forests, Ecosystems, Management, Preservation
ESPM	C148	Pesticide Chemistry and Toxicology	SP	Chemical composition of pesticides, their mode of action, resistance mechanisms, and methods of evaluating their safety and activity	Related	Chemistry, Pesticides, Resistance, Safety
ESPM	150	Special Topics in Environmental Science, Policy, and Management	F, SP	Special topics in Environmental Science, Policy, and Management	Related	Environmental, Science, Policy, Management
ESPM	151	Society, Environment, and Culture	SP	Issues, concepts, and processes pertaining to understanding the relationship between human society, culture, and the environment.	Focused	Issues, Sociology, Culture, Environment
ESPM	152	Global Change Biology	SP	The course will focus on understanding how anthropogenic changes to the global environment impact organisms	Focused	Global, Change, Environment

ESPM	155	Sociology of Natural Resources	F	Social definition of natural resources, identification of publics, social organization of resource use, and social impact analysis	Focused	Resources, Use, Sociology, Analysis
ESPM	C159	Human Diet	SP	Includes domestication of staple crops, modern diets and their problems, food taboos, human attitudes toward foods, and dietary politics	Related	Agriculture, Food, Diet, Politics, Problems
ESPM	160AC	American Environmental and Cultural History	F	Natural resource use of different cultures includes gathering-hunting-fishing; farming, mining, ranching, forestry, and urbanization	Related	Resources, Culture, Fish, Forests
ESPM	161	Environmental Philosophy and Ethics	F	Human environments as physical, social-economic, and technological ecosystems; emphasis on ideologies, beliefs, attitudes, and behavior	Related	Environment, Ecosystems, Behavior, Ethics
ESPM	163AC	Environmental Justice: Race, Class, Equity, and the Environment	SP	Environmental justice, analyzing the implications of race, class, labor, and equity on environmental degradation and regulation	Focused	Environmental Justice, Regulation
ESPM	165	International Rural Development Policy	SP	Function of agricultural and mineral development, with particular consideration of rural hunger, resource availability, technology	Related	Agriculture, Development, Resources, Technology, Global, Policy
ESPM	166	Natural Resource Policy and Indigenous Peoples	SP	The origins and specific patterns of socio-economic problems; existing and alternative future development policies and their effects	Related	Sociology, Economics, Problems, Development, Policy
ESPM	C167	Environmental Health and Development	F	Topics include water management; population change; toxics; energy development; air pollution; climate change; chemical use, etc	Focused	Health, Management, Water, Population, Energy, Pollution, Climate
ESPM	168	Political Ecology	SP	Environmental problems in international context with focus on politics/economics, resource access, and representations of nature	Related	Politics, Ecology, Economics, resources, Global, Problems
ESPM	169	International Environmental Politics	F	Main debates in the field, including trade-environmental conflicts, security, and environmental justice issues	Related	Environmental Justice, Global, Safety
ESPM	C170	Carbon Cycle Dynamics	SP	The focus is the (unsolved) puzzle of the contemporary carbon cycle.	Focused	Carbon
ESPM	172	Photogrammetry and Remote Sensing	SP	Tools for natural resources management in ecology, geography, geology, civil engineering, and environmental design	Related	Resources, Management, Ecology, Design
ESPM	173	Introduction to Ecological Data Analysis	SP	Introduces concepts and methods for practical analysis of data from ecology and related disciplines	Related	Data, Analysis, Ecology
ESPM	174	Design and Analysis of Ecological Research	F	Surveys major designs and analyses for biological field and laboratory studies	Related	Research, Analysis, Ecology
ESPM	175A	Senior Research Seminar in Environmental Sciences	F	Lectures and assignments emphasize research design, data analysis, scientific writing, and scientific communication	Related	Research, Data, Analysis, Writing
ESPM	175B	Senior Research Seminar in Environmental Sciences	SP	Lectures and assignments emphasize research design, data analysis, scientific writing, and scientific communication	Related	Research, Data, Analysis, Writing
ESPM	175L	Senior Research Laboratory in Environmental Sciences	F, SP	Independent laboratory or field research in support of the required senior seminar project	Related	Research
ESPM	178B	Environmental Science Education Practicum	F, SP	Framed around sustainability; apply knowledge to build curriculum pieces for presentation in high school classrooms	Focused	Education, Sustainability, Environment
ESPM	C180	Air Pollution	F, SP	An introduction to air pollution and the chemistry of earth's atmosphere	Focused	Air, Pollution, Chemistry, Atmospheric
ESPM	181A	Wildland Fire Science	SP	Fire behavior modeling, fire management, fire in the urban-wildland intermix, wildland fire, and ecosystem sustainability	Related	Modeling, Fire, Ecosystem, Sustainability
ESPM	182	Forest Operations Management	F	Planning, design, and implementation of activities such as road building, forest harvesting, erosion control, and fire suppression	Focused	Forests, Fire, Planning, Management
ESPM	183	Forest Planning and Management	SP	Planning and management of forestlands to meet multiple objectives of land owners and the society	Focused	Forests, Fire, Planning, Management
ESPM	C183	Forest Ecosystem Management	SP	Introduces students to concepts and quantitative tools needed for the sustainable management of multi-use forest ecosystems	Focused	Forests, Management, Sustainability
ESPM	184	Agroforestry Systems	SP	Economic, biologic, social, and political conditions for successful agroforestry systems are analyzed	Focused	Forests, Economics, Sociology, Politics
ESPM	185	Applied Forest Ecology	F	Silviculture as a tool to meet multiple resource and ecosystem management objectives	Focused	Silviculture, Ecosystem, Management, Forests
ESPM	186	Management and Conservation of Rangeland Ecosystems	F	Woodlands, grasslands, and shrublands provide biodiversity, wildlife habitat, watershed, recreation, open space, and forage	Focused	Management, Conservation, Ranges, Biodiversity
ESPM	187	Restoration Ecology	SP	Ecological theories for ecological restoration; focus on Bay Area restoration and linkages with social, political, and economic factors	Focused	Ecology, Restoration, Politics
ESPM	190	Seminar in Environmental Issues	F, SP	Interdisciplinary study of issues for advanced students. Designed to develop skills in critical analysis of specific issues	Related	Environment, Analysis, Issues
ESPM	192	Molecular Approaches to Environmental Problem Solving	F	How biotechnology can be used to solve problems in conservation, habitat preservation, agriculture and environmental pollution	Focused	Biotechnology, Conservation, Preservation, Agriculture, Pollution
ESPM	C193A	Environmental Education	F	Theory and practice of translating ecological knowledge, environmental issues, and values into educational forms	Focused	Education, Ecology, Environment
ESPM	C193B	Environmental Education	F	Theory and practice of translating ecological knowledge, environmental issues, and values into educational forms	Focused	Education, Ecology, Environment
ESPM	194	Senior Seminar in Conservation and Resource Studies	F, SP	Seminar in which students synthesize their knowledge, skills, and interests into a holistic perspective	Focused	Conservation, Resources
ESPM	194A	Senior Seminar in Conservation and Resource Studies	F, SP	Seminar in which students synthesize their knowledge, skills, and interests into a holistic perspective	Focused	Conservation, Resources
ESPM	194B	Capstone Course in Society and Environment	F, SP	Senior capstone project in student's primary area of concentration and presentation to ESPM Society and Environment faculty and majors	Focused	Society, Environment
ESPM	195	Senior Thesis	F, SP	Subject must be approved by faculty sponsor during final semester of junior year and course initiated in first semester of the senior year	Related	Research, Environment
ESPM	H196	Honors Research	F, SP	Supervised independent honors research in environmental science, policy, and management, followed by written report to department	Related	Research, Environment
ESPM	197	Field Study in Environmental Science, Policy, and Management	F, SP	Supervised experience in off-campus organizations relevant to specific aspects of environmental science, policy, and management	Related	Research, Environment
ESPM	201A	Research Approaches in Environmental Science, Policy, and Management	F	Intro to the diverse ways environmental problems are researched; comparing approaches and methods of various disciplines	Focused	Environment, Problems, Research, Methods
ESPM	201C	Environmental Forum	F, SP	Presentation and analysis of current topics in environmental science, policy, and management	Related	Environment, Analysis
ESPM	201S	Environmental Science Policy and Management Colloquium	F, SP	Seminars for the presentation and discussion of original work by faculty, visiting scholars, and graduate students	Related	Environment, Colloquium
ESPM	C205	Quantitative Methods for Ecological and Environmental Modeling	F	Review of background mathematical and statistical tools necessary for pursuing ecological and environmental modeling	Related	Modeling, Ecology, Environment, Statistics
ESPM	210	Spatial Data Analysis for Natural Resources	SP	An introduction to natural resource spatial data analysis	Related	Resources, Data, Analysis
ESPM	C211	Modeling Ecological and Meteorological Phenomena	F	Modeling methods in ecology and meteorology; stability analysis; effects of anthropogenic stress on natural systems	Focused	Modeling, Ecology, Meteorology
ESPM	215	Hierarchical Statistical Modeling in Environmental Science	SP	Hierarchical statistical models include generalized linear mixed models, generalized additive mixed models and more	Related	Modeling, Statistics
ESPM	C216	Freshwater Ecology	SP	Topics including natural selection and adaptive evolution, and social-ecological resilience of freshwater ecosystems under global change	Related	Evolution, Ecology, Water, Ecosystems, Change, Global
ESPM	C220	Stable Isotope Ecology	SP	Includes isotope measurements in the context of terrestrial, aquatic, and marine ecological processes and problems	Related	Ecology, Water, Chemistry
ESPM	222	Surface and Colloid Chemistry of Natural Particles	SP	Structure and coordination chemistry of natural adsorbent particles in aqueous systems; applications to contaminant hydrology	Related	Chemistry, Water, Hydrology
ESPM	C225	Isotopes	F	Includes isotope measurements in the context of terrestrial, aquatic, and marine ecological processes and problems	Related	Chemistry, Land, Water, Ecology, Problems
ESPM	226	Interdisciplinary Food and Agriculture Studies	SP	How farm management, government policies, supply chains, and science influence risks like climate change, agrobiodiversity, and more	Focused	Farms, Management, Policy, Climate, Risk, Biodiversity
ESPM	228	Advanced Topics in Biometeorology and Micrometeorology	SP	Biophysical models for interpreting flux measurements; models that couple energy, water, and carbon to predict trace gas fluxes	Related	Modeling, Energy, Water, Carbon
ESPM	233	Geographic Information Systems for Environmental Science and Management	F	Review the GIS basics with special reference to data used in managing California environments and apply this to a project	Related	GIS, Data, Environment, California
ESPM	C234	Green Chemistry: An Interdisciplinary Approach to Sustainability	SP	Design and production of safer and more sustainable chemicals and products	Focused	Chemistry, Design, Sustainability
ESPM	250	Environmental History	F	Includes theories of environmental history, and relationships between environmental history, philosophy, ethics, ecology, and policy	Related	Environment, History, Ethics, Ecology, Policy
ESPM	251	International Conservation and Development Policy	SP	Changes in Third World rural economy, ecology, and environment and ways in which these are affected by development policies	Focused	Ecology, Economics, Environment, Development, Policy
ESPM	C252	Topics in Science and Technology Studies	F	Multidisciplinary field with capacity to rethink the relationship of science, technology, and political and social life; includes climate change	Related	Technology, Politics, Climate
ESPM	253	Advanced Readings in Political Ecology	SP	Sociological analysis of environmental change focusing on environmental conflict	Related	Sociology, Politics, Ecology, Change
ESPM	C255	Seminar in Sociology of Forest and Wildland Resources	F	Individual projects and group discussions concerning social constraints to, and effects of, natural resource planning and management	Focused	Sociology, Resources, Planning, Management
ESPM	256	Science, Technology, and the Politics of Nature	SP	Tension between technocracy and democracy in science policy, and on role of biotechnology in reshaping the natural and political order	Related	Policy, Biotechnology
ESPM	258	Race, Science, and Resource Policy	F	Natural resource policy with emphasis on whether, why, and how 'race' distributes access to/control of environmental resources and more	Focused	Policy, Resources, Race, Environment
ESPM	259	Transnational Environmental Politics and Movements	F	Contemporary issues in international environmental politics; impacts of globalization; comparative transnational environmental movements	Focused	Environment, Politics, Global
ESPM	260	Governance of Global Production	F	Current trends in the restructuring of industrial production; distributions of environmental, labor, and social impacts from this production	Related	Global, Production, Environment, Sociology, Impacts
ESPM	261	Sustainability and Society	SP	Science-based technologies that are central to the search for sustainability in contemporary societies and their environmental impacts	Focused	Technology, Sociology, Environment, Sustainability
ESPM	262	Race, Identity, and the Environment	SP	Foundations of environmental ideas and attitudes and their connections to contemporary environmental practices	Related	Race, Environment
ESPM	264	Silviculture Seminar	F	A seminar covering various aspects of silviculture and related issues	Related	Silviculture
ESPM	265	Seminar on Fire as an Ecological Factor	F	Effect of fire on ecology of forest and rangeland	Related	Fire, Ecology, Ranges, Forests
ESPM	271	Advanced Remote Sensing of Natural Resources	F	A look into linking remote sensing with GIS and integrated analysis of multisource spatial data	Related	GIS, Data
ESPM	276	Advanced Silviculture	SP	Advanced topics related to the dynamics and management of forest stands	Related	Silviculture, Forests, Management
ESPM	277	Advanced Topics in Conservation Biology	SP	A graduate level seminar covering advanced topics in conservation of biodiversity, focused on designing protected area networks	Focused	Conservation, Biodiversity
ESPM	279	Seminar on Pastoralism	SP	A survey of pastoral animal management and production systems, as they influence and are influenced by the rangeland environment	Related	Management, Ranges, Animals
ESPM	280	Seminar in Range Ecosystem Planning and Policy	F	A seminar course dealing with selected current topics in range ecosystem planning and policy	Related	Ranges, Ecosystems, Planning, Policy
ESPM	281	Seminar in Wildlife Biology and Management	F	Reports and discussion of recent studies in wildlife biology and management	Related	Biology, Management
ESPM	284	Demographic Methods for Population Viability Analysis	F	Conservation problems faced by small populations of threatened or exploited species will be emphasized	Focused	Conservation, Population, Analysis
ESPM	290	Special Topics in Environmental Science, Policy, and Management	F, SP	Study and critical analysis of topics, research, and texts pertinent to environmental science, policy, and management	Related	Research, Analysis, Environment
ENVSCI	10	Introduction to Environmental Sciences	F	Environmental problems: geologic hazards, water and air quality, water supply, solid waste, introduced and endangered species,	Focused	Environment, Problems, Water, Air, Waste
ENVSCI	10L	Field Study in Environmental Sciences	F	Field/lab studies of Strawberry Creek to exemplify integration of physical, biological, and social components of environmental management	Focused	Environment, Management, Research
ENVSCI	C12	Environmental Science for Sustainable Development	F	The scientific basis of sustainability, explored through study of energy, water, food, natural resources, and built environment	Focused	Sustainability, Energy, Water, Food, Resources
ENVSCI	24	Freshman Seminar	F	Provide new students with the opportunity to explore environmental science with a faculty member in a small-seminar setting	Related	Environment
ENVSCI	84	Sophomore Seminar	F, SP	Seminar offers opportunity for intellectual contact between environmental science faculty members and students in their second year	Related	Environment
ENVSCI	100	Introduction to the Methods of Environmental Science	SP	Introduction to basic methods used in environmental research by biological, physical, and social scientists	Related	Research, Environment
ENVSCI	125	Environments of the San Francisco Bay Area	SP	Emphasis on the interaction of physical elements, their modification by humans, and problems deriving from human use	Focused	Change, Problems, Local
GWS	141	Interrogating Global Economic "Development"	F, SP	"Development" practices about labor, population, resources, environment, literacy, tech, media; and women's resistance and alternatives	Related	Development, Population, Resources, Technology, Gender
GEO	1	Global Environmental Change	F, SP	Importance of natural and human-induced change, global warming, forest clearance, soil erosion, climate change and its consequences	Focused	Climate, Forests, Soil, Change, Global
GEO	4	World Peoples and Cultural Environments	F, SP	Then development and spread of cultural adaptations, human use of resources, transformation and creation of human environments	Focused	Culture, Resources, Environment
GEO	10	World Regions, Peoples, and States	F	The most important interrelations between environment, economy, ethnicity, and national identity and viability of states will be explored	Related	Environment, Economics, Ethnicity, Global
GEO	20	Globalization	F	How and why are geographical patterns of employment, production, and consumption unstable in the contemporary world?	Related	Production, Consumption, Global
GEO	30	The Ocean World	F, SP	History and geography of ocean peoples, cultures, and resource use with associated problems. New approaches to saving the oceans	Focused	Oceans, Culture, Resources, Problems
GEO	31	Justice, Nature, and the Geographies of Identity	F	Understanding traditional ideas of environmental justice as well as to examine less traditional sites of environmental justice	Focused	Environmental Justice
GEO	35	Global Ecology and Development	F, SP	Course explores how growth and stagnation are linked to problems of environmental sustainability	Focused	Development, Problems, Sustainability, Global
GEO	40	Introduction to Earth System Science	F, SP	Climate change, ozone depletion, and biodiversity loss, air and water pollution, fisheries depletion, and science in public policy	Focused	Climate, Ozone, Biodiversity, Air, Water, Pollution, Fish, Policy
GEO	50AC	California	F, SP	Classic themes in geography, such as regional difference, the transformation of nature, the space of cities, and the changing landscape	Related	California, Change
GEO	51	Political Economy of Development in East Asia	SP	New generations of women workers in the global economy, the politics of deforestation, and Asian financial crises and recovery	Related	Economics, Politics, Forests, Global
GEO	C82	Oceans	F	Alien world of sea life, importance of the ocean to the global carbon cycle, and principles of ecology	Related	Oceans, Carbon, Ecology, Energy
GEO	C110	Economic Geography of the Industrial World	F	Geographic dynamics of technical change, employment, business organization, resource use, and divisions of labor	Related	Change, Business, Resources, Labor
GEO	130	Food and the Environment	F, SP	Role of agriculture in the world economy, national development, and environmental degradation in the Global North and the Global South	Related	Agriculture, Economics, Development, Environment, Global
GEO	137	Top Ten Global Environmental Problems	F	Examines scientific basis underlying the largest environmental threats, and reframe issues to explore the societal basis of those problems	Focused	Environment, Problems, Sociology, Global

GEO	138	Global Environmental Politics	F, SP	Includes environmental degradations, agricultural production, political power, access to resources, global environmental policies/treaties	Focused	Environment, Agriculture, Politics, Policy, Global
GEO	C139	Atmospheric Physics and Dynamics		Processes that determine the structure/circulation of the Earth's atmosphere including the role of water in the energy/radiation balance	Related	Atmospheric, Water, Energy, Global
GEO	140A	Physical Landscapes: Process and Form		How physical landscapes change and are susceptible to human modifications, which are often unintentional	Related	Land, Change
GEO	142	Climate Dynamics		Includes observations of climate system; earth's energy balance; atmospheric radiative transfer; surface energy balance; hydrologic cycle	Related	Climate, Energy, Atmospheric, Water, Global
GEO	143	Global Change Biogeochemistry		Explores the imprint of the biota (including humans) on the chemistry of the ocean, land, and atmosphere	Focused	Chemistry, Oceans, Land, Atmospheric
GEO	C145	Geological Oceanography		Sources/composition of marine sediments, sea-level change, imprint of climatic zonation on marine sediments, ocean floor resources	Related	Oceans, Change, Climate, Resources
GEO	167	Africa: Ecology and Development		Includes rural development, ecological change, demography, migration, urban growth, agricultural development, and peasant economy	Related	Development, Ecology, Agriculture, Africa
GEO	171	Ecosystem Responses to Global Climate Change	SP	This course is designed to provide a vehicle for instructors to address a topic in physical geography	Related	Geography, Ecosystems, Climate Change
GEO	203	Nature and Culture: Social Theory, Social Practice, and the Environment		Explores classics in environmental thought as well as recent contributions that put the field on the forefront of social knowledge today	Focused	Environment, Sociology
GEO	215	Seminar in Comparative and International Development		Research in comparative development, organization of work, and access to resources in different regions of the world economy	Related	Research, Resources, Economics, Global
GEO	C241	Glaciology		Use mechanics of glacial systems to examine glaciers as geomorphologic agents and as participants in climate change	Focused	Glaciers, Climate
GEO	244	Complex Environmental Systems	F, SP	Includes climate change, human-environmental systems, vegetation community change, river networks, fires, earthquakes, and peatlands	Focused	Environment, Climate, Change, Fire, Earthquakes
GEO	249	Spatiotemporal Data Analysis in the Climate Sciences	F	The context will be climate data analysis, but the technique is readily translatable to other fields	Related	Climate, Data, Analysis
GEO	C250	Seminar in Sociology of Forest and Wildland Resources	F	Individual projects and group discussions concerning social constraints to, and effects of, natural resource planning and management	Focused	Sociology, Resources, Planning, Management
GEO	257	Topics in Climatology		Research seminar on selected topics in climatology	Related	Research, Climatology
GEO	282	Geographic Information Systems: Applications in Geographical Research	SP	Application of GIS methods to a variety of problems in physical and human geography, using topographic data, census data, and more	Related	GIS, Problems, Data
GER	160C	A Divided Nation. Politics and Culture in Germany 1945-1990	F, SP	Major national debates such as the student movement, opposition and conformity under Socialism, and the rise of environmentalism	Related	Germany, Politics, Environment
HIST	120	American Environmental and Cultural History	F	History of the American environment and ways in which different cultural groups have perceived, used, managed, and conserved it	Related	History, Culture, Environment, Management, Conservation
ISF	60	Technology and Values in the Global Arena		Includes effect of mass media on cultural integrity, politics of environmental regulation, and ethical implications of genetic engineering	Related	Technology, Media, Values, Culture, Politics, Regulation
ISF	100H	Introduction to Media and International Relations	F, SP	Media use to construct public opinion about, terrorism, international trade and finance, and global warming and resource depletion	Related	Media, Global, Climate, Resources
ISF	C101	Economic Geography of the Industrial World		Geographic dynamics of technical change, employment, business organization, resource use, and divisions of labor	Related	Economics, Business, Resources, Labor, Global, Change
IAS	C118	Introductory Applied Econometrics	F	Techniques of statistical and econometric analysis with applications in environmental, resource, and international development economics	Related	Economics, Analysis, Statistics, Environment, Resources, Development
IAS	157AC	Engineering, the Environment, and Society	F, SP	Engages students at the intersection of environmentaljustice, social justice, and engineering	Related	Envrionmental Justice, Social Justice, Environment, Society
IAS	C175	The Economics of Climate Change	F, SP	Economic models will be developed to analyze the impacts of climate change and provide and critique existing and proposed policy tools	Focused	Modeling, Economics, Climate, Policy
IAS	C229	Mediterranean-Climate Landscapes	F, SP	Comparative study of environmental conditions and human responses thereto in California and other Mediterranean-climate regions	Focused	Environment, California, Climate, Mediterranean
JOURN	C101	Edible Education: The Rise and Future of the Food Movement	F, SP	Organic ag, school lunch reform, food safety, animal welfare, food security, farm bill, urban ag, food sovereignty, local food economies	Focused	Food, Agriculture, Sustainability, Local
JOURN	C103	Edible Education: Telling Stories About Food and Agriculture	F, SP	Explores what can be done to make the food system healthier, more equitable, more sustainable, and the role of storytelling	Focused	Food, Health, Sustainability
JOURN	226	Science Reporting	F, SP	Advanced study of methods of reporting developments in such fields as science, education, health, or the environment	Related	Media, Science, Education, Health, Environment
LDARCH	12	Environmental Science for Sustainable Development	F, SP	The scientific basis of sustainability, explored through study of energy, water, food, natural resources, and built environment	Focused	Sustainability, Energy, Water, Food, Resources
LDARCH	101	Fundamentals of Landscape Design	F	Pedestrian/vehicular circulation, conservation and addition of plant materials, movement of water, recreation use, and creation of views	Related	Conservation, Water, Use, Landscape
LDARCH	103	Energy, Fantasy, and Form	F	Undergraduate studio with a central focus on climate modification for energy conservation	Focused	Energy, Conservation, Climate
LDARCH	110	Ecological Analysis	F	Analysis of environmental factors, ecosystem functions, and ecosystem dynamics, as related to decision-making for landscape planning	Focused	Environment, Ecosystems, Planning
LDARCH	110L	Ecological Analysis Laboratory	F	Field techniques for assessment of landscape factors. Includes topography, geology, climate, soil, hydrology, flora, vegetation, and wildlife	Focused	Landscape, Climate, Soil, Analysis
LDARCH	120	Topographic Form and Design Technology	F, SP	Technical, graphic and computational exercises, and studio problems in topographic site design and shaping of the site for surface drainage	Related	Technology, Water, Planning
LDARCH	121	Design in Detail: Introduction to Landscape Materials and Construction	SP	Production and availability of materials, with evaluations on their sustainability, and their potential impact on the immediate environment	Focused	Materials, Sustainability, Environment
LDARCH	122	Environmental Science for Sustainable Development	F	The scientific basis of sustainability, explored through study of energy, water, food, natural resources, and built environment	Focused	Sustainability, Energy, Water, Food, Resources
LDARCH	130	Sustainable Landscapes and Cities	F, SP	Introduction to the foundations of sustainability most related to the restoration, design, and creation of landscapes and cities	Focused	Sustainability, Restoration, Design, Landscape
LDARCH	138	Analysis of Metropolitan Form	F, SP	How the SF region can accommodate CA's growing pop while addressing human-induced consequences - visions for a sustainable region	Focused	California, Population, Sustainability
LDARCH	138AC	The Metropolitan Landscape	F, SP	How the SF region can accommodate CA's growing pop while addressing human-induced consequences - visions for a sustainable region	Focused	California, Population, Sustainability
LDARCH	170	History and Literature of Landscape Architecture	F, SP	Cultural/social contexts that have shaped landscape architecture practice; includes environmental concerns and technological innovations	Related	Culture, Landscape, Environment, Technology
LDARCH	C171	The American Designed Landscape Since 1850	F, SP	Cultural/social contexts that have shaped landscape architecture practice; includes environmental concerns and technological innovations	Related	Culture, Landscape, Environment, Technology
LDARCH	200A	Fundamentals of Landscape Design	F	Topics include pedestrian and vehicular circulation, conservation, movement of water, recreation use, and creation of views	Related	Transportation, Conservation, Water, Use
LDARCH	201	Ecological Factors in Urban Landscape Design	F	Particularly emphasizes innovative and forward thinking solutions to the ecological problems of the human environment	Focused	Ecology, Problems, Solutions, Design
LDARCH	204	Advanced Project Design	F, SP	Topics may include community design, educative environments, landscape as art, park design, or energy-conserving design	Related	Design, Landscape, Conservation
LDARCH	205	Environmental Planning Studio	SP	Identify needed data, assess environmental developmental problems, weigh competing uses, prepare an environmental management plan	Related	Environment, Development, Planning, Management, Data
LDARCH	221	Quantitative Methods in Environmental Planning	F, SP	Application of quantitative methods to environmental assessment, analysis, and evaluation in environmental planning	Related	Environment, Analysis, Planning
LDARCH	222	Hydrology for Planners	SP	Ccourse presents an overview of relevant hydrologic, hydraulic, and geomorphic processes	Related	Hydrology, Planning
LDARCH	225	Urban Forest Planning and Management	SP	Emphasis on planning and management of the urban forest, restoration of old parks, street trees, and community participation	Focused	Planning, Management, Forests, Trees, Community
LDARCH	226	Landscape Design Construction	SP	Durability of materials, efficient use of materials, and ability to evaluate how material selection and detailing can impact the environment	Focused	Materials, Environment
LDARCH	227	Restoration of Rivers and Streams	F	Goals and assumptions of river/stream restoration projects; techniques and strategies for evaluation of project success	Focused	Rivers, Restoration, Analysis
LDARCH	228	Research in Environmental River Planning, Management, and Restoration	F, SP	Review recent issues of specific journals for all papers relevant to environmental river planning, management and restoration	Related	Rivers, Planning, Restoration, Management
LDARCH	C229	Mediterranean-Climate Landscapes	F, SP	Comparative study of environmental conditions and human responses thereto in California and other Mediterranean-climate regions	Focused	Environment, California, Climate, Mediterranean
LDARCH	C231	Environmental Planning and Regulation	F	Emerging trends in environmental planning and policy and basic regulatory framework for environmental planning encountered in the U.S	Focused	Environment, Planning, Policy, Regulation
LDARCH	232	The Landscape As a Sacred Place	SP	Visual/cultural analysis of landscapes and problems related to sustainable design development, with emphasis on highly valued places	Related	Culture, Development, Sustainability, Analysis, Landscape
LDARCH	C237	The Process of Environmental Planning		Techniques used in planning, and evaluation of alternate means of implementation in varying environmental and political circumstances	Focused	Planning, Environment, Politics
LDARCH	C241	Research Methods in Environmental Design		Environmental problems, attitudes, and criteria. Methods of addressing environmental quality. Environmental simulation.	Focused	Research, Environment, Problems, Analysis
LDARCH	251	Theories of Landscape Architecture and Environmental Planning	SP	Covers the breadth of thinking in the field, including both environmental planning and landscape design as well as other sub disciplines	Related	Planning, Design, Environment
LDARCH	253	Landscape Architecture and Environmental Planning Colloquium	F, SP	Invited lectures on current research, planning practice, and design projects	Related	Research, Planning, Design
LDARCH	254	Topics in Landscape Architecture and Environmental Planning	F, SP	Examination of topical issues in landscape architecture and environmental planning	Related	Environment, Planning, Issues
LDARCH	255	Doctoral Seminar in Environmental Planning	F, SP	Discussions with faculty researchers and environmental planning practitioners, and examination of topical issues in environmental planning	Related	Environment, Planning, Issues, Research
LDARCH	258	California Water: An Interdisciplinary Seminar	F, SP	Increase understanding and appreciation of water resources and contribute to informed decision-making about water in California	Focused	Water, California, Resources, Planning
LEGALST	176	Twentieth-Century American Legal and Constitutional History	F, SP	Includes New Deal legal innovations, tort liability, environmental regulation, judicial reform, and federalism	Related	Law, Environment, Regulation
LNS	C30U	Americans and the Global Forest	F	Challenges students to think about how individual and American consumer decisions affect forest ecosystems around the world	Focused	Consumption, Forests, Ecosystems, Global
LNS	C30V	Environmental Issues		Issues of economic development, population, energy, resources, technology, and alternative systems	Focused	Economics, Development, Population, Energy, Resources, Technology
LNS	C70T	The Planets	F, SP	Understanding other worlds will help us save our own planet and help us understand our place in the universe	Related	Planets, Global
LNS	C70Y	Earthquakes in Your Backyard	F	Includes earthquake hazard and risk, with particular emphasis on the situation in California	Related	Earthquakes, California, Hazard, Risk, California
LNS	C101	Edible Education: The Rise and Future of the Food Movement	F, SP	Organic ag, school lunch reform, food safety, animal welfare, food security, farm bill, urban ag, food sovereignty, local food economies	Focused	Food, Agriculture, Sustainability, Local
LNS	C103	Edible Education: Telling Stories About Food and Agriculture	F, SP	Explores what can be done to make the food system healthier, more equitable, more sustainable, and the role of storytelling	Focused	Food, Health, Sustainability
LNS	170AC	Crossroads of Earth Resources and Society		Evolution and diversity of attitudes about resource development, environmental management, and conservation	Focused	Resources, Development, Environment, Management, Conservation
MATSCI	113	Mechanical Behavior of Engineering Materials	F	Prediction and prevention of failure by yielding, fracture, fatigue, wear and environmental factors are addressed	Related	Materials, Environment, Analysis
MATSCI	136	Materials in Energy Technologies	F	Course examines potentially sustainable technologies, and the materials properties that enable them	Focused	Materials, Sustainability, Technology, Energy
MATSCI	213	Environmental Effects on Materials Properties and Behavior	F	Fracture mechanics approach to corrosion; hydrogen embrittlement; liquid metal embrittlement; corrosion fatigue; testing methods	Related	Materials, Methods, Environment
MATSCI	C226	Photovoltaic Materials; Modern Technologies in the Context of a Growing Renewable Energy Market	F	Focus on fundamentals of photovoltaic energy conversion with respect to operation/design of efficient semiconductor solar cell devices	Related	Energy, Solar, Materials
MEC ENG	127	Composite Materials--Analysis, Design, Manufacture	F, SP	Properties and microstructure of high-strength fiber materials and matrix material. Includes sustainability and recycling	Related	Materials, Sustainability, Recycling
MEC ENG	140	Combustion Processes	F	Includes fundamentals of pollutant formation. Application to engines, energy production and fire safety	Related	Pollution, Energy, Safety
MEC ENG	146	Energy Conversion Principles	F, SP	Applications include conventional combustion, solar, wind, wave, thermolectric, and geothermal energy systems	Related	Energy, Solar, Wind, Wave, Geothermal
MEC ENG	165	Ocean-Environment Mechanics	F, SP	Physical properties of oceans. Global conservation laws. Surface-waves generation. Gravity-wave mechanics, kinematics, and dynamics.	Related	Oceans, Conservation, Wave
MEC ENG	290H	Green Product Development: Design for Sustainability	F, SP	Management of innovation processes for sustainable products, from product definition to sustainable manufacturing and financial models	Focused	Sustainability, Management, Manufacturing
MEC ENG	290I	Sustainable Manufacturing	F, SP	Practice and measure improvement using sustainability thinking, techniques, and tools for product and manufacturing process design	Focused	Sustainability, Manufacturing
NUSCTX	10	Introduction to Human Nutrition	F, SP	Emphasis of the course is on issues of current interest and on worldwide problems of food and nutrition	Related	Food, Nutrition, Global
NUSCTX	11	Introduction to Toxicology	SP	Evaluation of toxic hazard of natural and man-made substances present in the environment, the workplace, food, drink, and drugs	Focused	Hazard, Environment, Food, Toxicology
NUSCTX	104	Human Food Practices	SP	Community food and nutrition problems and programs. Food safety and consumer protection	Focused	Food, Community, Nutrition, Problems
NUSCTX	110	Toxicology	F	Modern toxicology and its applications in evaluating the safety of foods, additives and environmental contaminants	Related	Toxicology, Safety, Food, Environment
NUSCTX	C114	Pesticide Chemistry and Toxicology	SP	Chemical composition of pesticides, their mode of action, resistance mechanisms, and methods of evaluating their safety and activity	Related	Chemistry, Toxicology, Safety, Pesticides
NUSCTX	C119/C219	Advanced Toxicology	SP	Interpret data and apply knowledge to evaluate risk from exposure to toxic chemicals, including drugs and environmental contaminants	Related	Toxicology, Risk, Chemistry, Drugs, Environment
NUSCTX	135	Food Systems Organization and Management	SP	Production and delivery systems, management of resources, quality assurance, equipment, layout, marketing, personnel management	Related	Food, Management, Resources
NUSCTX	C159	Human Diet	SP	Includes domestication of staple crops, modern diets and their problems, food taboos, human attitudes toward food, and dietary politics	Related	Agriculture, Food, Diet, Politics, Problems
NUSCTX	166	Nutrition in the Community	F	Specific needs of population groups (infants, children, women, the elderly) are considered and questions of food security are investigated	Related	Nutrition, Food, Population
NAT RES	24	Freshman Seminars	F, SP	Provide new students with the opportunity to explore natural resources with a faculty member in a small-seminar setting	Related	Resources
NAT RES	39	Freshman/Sophomore Seminar	F, SP	Provide lower division students with the opportunity to explore natural resources with a faculty member in a small-seminar setting	Related	Resources
NAT RES	84	Sophomore Seminar	F, SP	Seminar offers opportunity for intellectual contact between natural resources faculty members and students in their second year	Related	Resources
NUC ENG	92	Issues in Nuclear Science and Technology	F	Includes reactor safety, nuclear waste, other applications of radiation, nuclear nonproliferation and arms control and engineering ethics	Related	Nuclear, Waste, Safety, Ethics
NUC ENG	104	Radiation Detection and Nuclear Instrumentation Laboratory	SP	Lab allows for practical measurements of interest for nuclear power, nuclear and non-nuclear science, and environmental applications	Related	Nuclear, Energy, Environment
NUC ENG	124	Radioactive Waste Management	F, SP	Characteristics, sources, compositions, heat generation; waste treatment technologies; waste disposal technologies; safety assessment	Focused	Nuclear, Waste, Safety, Analysis
NUC ENG	161	Nuclear Power Engineering	F	Includes thermal-hydraulic analysis of accidents in nuclear power plants and safety evaluation and engineered safety systems	Related	Nuclear, Energy, Safety

NUC ENG	162	Radiation Biophysics and Dosimetry	SP	Includes radiation exposure regulations; sources of radiation and radioactivity; basic shielding concepts; radiation protection and control	Related	Nuclear, Radiation, Regulation, Safety
NUC ENG	167/267	Nuclear Reactor Safety	F	Principles and methods used in the safety evaluation of nuclear power plants. Safety philosophies, design criteria and regulations.	Focused	Nuclear, Safety, Analysis, Energy, Design, Regulation
NUC ENG	170A	Nuclear Design: Design in Nuclear Power Technology and Instrumentation	SP	In addition to technology, the design should address issues relating to economics, the environment, and risk assessment	Focused	Nuclear, Design, Economics, Environment, Risk
NUC ENG	175	Methods of Risk Analysis	F	Tech risk and risk based decision making. Probabilistic safety assessment, human health risks, environmental and ecological risk analysis	Focused	Nuclear, Risk, Analysis, Health, Environment
NUC ENG	221	Corrosion in Nuclear Power Systems	SP	Structural metals; aqueous corrosion of reactor components; structural integrity of reactor components, chemical environment	Focused	Nuclear, Energy, Materials
NUC ENG	224	Safety Assessment for Geological Disposal of Radioactive Wastes	SP	Effect of engineered barrier alteration; overall performance assessment, uncertainty associated with assessment, regulation and standards	Focused	Nuclear, Radiation, Waste, Analysis, Regulation
NUC ENG	225	The Nuclear Fuel Cycle	SP	The emphasis is on the relationship between nuclear-power utilization and its environmental impacts	Focused	Nuclear, Energy, Environment
NUC ENG	265	Design Analysis of Nuclear Reactors	F	Includes control and transient problems; reactor safety and licensing; release of radioactivity from reactors and fuel processing plants	Related	Nuclear, Problems, Safety, Design, Analysis
NUC ENG	275	Principles and Methods of Risk Analysis	F	Principles and methodological approaches for the quantification of technological risk and risk-based decision making	Focused	Nuclear, Risk, Methods, Analysis
NUC ENG	290G	Scientific and Regulatory Basis for Environmental Protection in Nuclear Fuel Cycle	F	Standards and regulations; assessing environmental impacts; interpretation of environmental impact assessment results	Focused	Nuclear, Regulation, Environment, Analysis
PACS	10	Introduction to Peace and Conflict Studies	F, SP	War system/war prevention, conflict resolution/nonviolence, human rights/social justice, development/environmental sustainability	Related	Conflict, Rights, Justice, Development, Environment
PACS	164B	Nonviolence Today	F, SP	Social justice struggles, nonviolent intervention across borders and protection of the environment in the world of global corporatism	Related	Justice, Environment, Global
PHILOS	108	Contemporary Ethical Issues	F, SP	Discussion of problems in moral philosophy raised by real-life questions of individual conduct and social policy; includes climate change	Related	Ethics, Policy, Climate
POLSCI	124C	Ethics and Justice in International Affairs	F, SP	Moral questions including "Who should pay for global environmental damage?" analyzed through the individual's sense of obligation	Related	Ethics, Justice, Environment, Global
POLSCI	C139	Urban and Sub-national Politics in Developing Countries	F, SP	Sanctions, transportation, pollution, energy services, and public safety managed locally due to resource constraints and political boundaries	Related	Development, Transportation, Pollution, Politics
POLSCI	139D	Urban and Sub-national Politics in Developing Countries	F, SP	Sanctions, transportation, pollution, energy services, and public safety managed locally due to resource constraints and political boundaries	Related	Development, Transportation, Pollution, Politics
POLSCI	186	Public Problems	F, SP	Public admin, public policy, democratic theory to better understand some major social, political, environmental, and economic problems	Related	Policy, Politics, Environment, Economics, Problems
POLSCI	226A	International Political Economy	F	Creation, maintenance, and decay of arrangements that manage trade, money, resource use, technology, and physical environment	Related	Politics, Economics, Technology, Resources, Environment, Global
PB HLTH	14	Healthy People: Introduction to Health Promotion	F	Intro to personal and community health. Specific areas include stress, nutrition, exercise, the environment, communication, and sexuality	Related	Health, Community, Nutrition, Environment
PB HLTH	112	Global Health: A Multidisciplinary Examination	SP	Legal, social, political, and physical environments; economic forces; access to food, safe water, medical care; nutrition; cultural beliefs	Related	Health, Law, Politics, Economics, Food, Water, Nutrition, Culture, Global
PB HLTH	114	Issues in Personal and Community Health Promotion	SP	Selected topics (i.e., stress, sexuality, fitness, alcohol and drugs, environmental health), with the social/political factors	Related	Health, Sociology, Politics
PB HLTH	150B	Introduction to Environmental Health Sciences	F	Major human and natural activities that lead to release of hazardous materials into the environment and the links to human health	Focused	Health, Environment, Hazards
PB HLTH	C160	Environmental Health and Development	F	Topics include water management; population change; toxics; energy development; air pollution; climate change; chemical use, etc	Focused	Health, Management, Water, Population, Energy, Pollution, Climate
PB HLTH	C170B/C270B	Advanced Toxicology	SP	Interpret toxicological data and evaluate risk presented by exposures to toxic chemicals, including drugs and environmental contaminants	Related	Toxicology, Risk, Chemistry, Drugs, Environment
PB HLTH	196/290	Drinking Water and Health	SP	Special topics in various fields of Public Health	Related	Health, Water
PB HLTH	200C	Public Health Core Breadth Seminar	F	Intro to public health and a basic understanding of contributions of environmental, behavioral, and management and policy sciences to it	Related	Health, Environment, Management, Policy
PB HLTH	200C2	Environmental Health Sciences Breadth Course	F	Major human and natural activities that release hazardous materials into the environment	Related	Hazards, Environment, Health
PB HLTH	W200F	Environmental Health Sciences Breadth Course	F	Covers the breadth of hazards from chemical, biological, and physical agents of concern to environmental health professionals	Related	Hazards, Environment, Health
PB HLTH	206B	Food and Nutrition Policies and Programs	SP	Origins of food/nutrition improvement programs in the US; goals, design, and effectiveness of National School Lunch Program and others	Related	Food, Nutrition, Policy
PB HLTH	206D	Food and Nutrition Programs and Policies in Developing Countries	SP	Developing countries design/implementation of policies/programs that affect access to safe, affordable, and nutritionally adequate diets	Focused	Food, Nutrition, Policy, Development, Global
PB HLTH	213A	Family Planning, Population Change, and Health	F	Relationship between family planning and health; role of family size in economic development and environmental problems	Related	Health, Planning, Development, Environment
PB HLTH	220C	Health Risk Assessment, Regulation, and Policy	F	Intro to basic scientific components of environmental and occupational health risk assessment	Related	Health, Environment, Risk, Analysis
PB HLTH	220G	Politics, Policy, and Democracy in Environmental Health	F	Intro to environmental health policy in the US; respective roles of science, policy, and politics in shaping environmental health protection	Related	Health, Environment, Policy, Politics
PB HLTH	224C	Advanced Health Care Organizations and Environments	F	Theories include bureaucracy, contingency theory, culture and climate, resource dependence, and theories of change and innovation	Related	Health, Environment, Culture, Climate, Resources, Change
PB HLTH	C234	Green Chemistry: An Interdisciplinary Approach to Sustainability	SP	Design and production of safer and more sustainable chemicals and products	Focused	Chemistry, Design, Sustainability
PB HLTH	C253	Foundations of Public Health	SP	Includes respiratory disease and air pollution; tobacco control; environmental control and prevention of schistosomiasis; behavior change	Related	Health, Pollution, Environment, Behavior
PB HLTH	257B	Public Health Preparedness & Emergency Response	F	Includes natural disasters, detecting and monitoring public health threats, post-disaster sampling, surveys, rapid needs assessments	Related	Health, Monitoring, Sampling, Analysis
PB HLTH	266A	Foodborne diseases	F	Public health, microbiological, social, and economical issues in foodborne diseases; also heavy metals, pesticides, and toxic chemicals	Related	Health, Economics, Hazards, Food
PB HLTH	267B	Characterization of Airborne Contaminants	SP	Behavior of gases/vapors/aerosols; mechanisms of absorption/elimination of inhaled toxicants; measuring airborne chemicals and particles	Focused	Health, Air
PB HLTH	267D	Health Impact Assessment	SP	Inform and improve social decisions in order to improve environmental, economic, and social conditions for optimal population health	Focused	Health, Analysis
PB HLTH	269E	Current Topics in Environmental Medicine	F	Covers established environmental diseases as well as impacts of some emerging exposures of concern	Focused	Health, Environment, Disease
PB HLTH	270	Introduction to Environmental Health Sciences	F	Course covers the breadth of hazards to chemical, biological, and physical agents of concern to environmental health professionals	Focused	Health, Hazards, Environment
PB HLTH	270A	Exposure Assessment and Control	F	Methods and procedures for the estimation and control of human exposure to chemical, physical, and biological agents of concern	Focused	Health, Analysis
PB HLTH	C270B	Advanced Toxicology	SP	Interpret data and apply knowledge to evaluate risk from exposure to toxic chemicals, including drugs and environmental contaminants	Related	Toxicology, Risk, Chemistry, Drugs, Environment
PB HLTH	270C	Practical Toxicology	SP	This course will focus on cutting-edge issues involving real-world toxicology in drug discovery, pesticide regulation, stem cell research, etc	Related	Toxicology, Issues, Pesticides, Drugs
PB HLTH	271E	Science and Policy for Environment and Health	SP	Paradigms including the precautionary principle and environmental justice; and key elements of risk assessment and cost-benefit analysis	Focused	Health, Environmental Justice, Risk, Analysis
PB HLTH	271G	Global Environmental Change for Health Scientists	SP	Epidemiology, risk assessment, and statistical methods appropriate for understanding the impact of climate on health in populations	Focused	Health, Environment, Risk, Analysis, Climate, Change, Global
PB HLTH	272A	Geographic Information Science for Public and Environmental Health	SP	Introductory knowledge of past, present, and possible future applications of GIS for health and environmental studies	Related	GIS, Health, Environment
PB HLTH	272B	Case Studies in Environmental and Occupational Epidemiology	SP	Will focus on key epidemiologic methods as they arise in the study of environmental hazards in the community and workplace	Related	Health, Environment, Hazards
PUB POL	101	Introduction to Public Policy Analysis	F, SP	A systematic and critical approach to evaluating and designing public policies. Includes environmental policy	Related	Policy, Analysis, Environment
PUB POL	182/282	Environment and Technology from the Policy and Business Perspective	F, SP	Uses specific technologies to survey environmental policy and management; complexities of policy-making with diverse interest groups	Focused	Policy, Management, Technology, Environment
PUB POL	C184/C284	Energy and Society	F, SP	Energy sources, uses, and impacts: introduction to the technology, politics, economics, and environmental effects of energy in society	Focused	Energy, Society, Impacts, Technology, Economics, Politics
PUB POL	C253	International Economic Development Policy	F	Development/application of policy to developing-world problems related to poverty, macroeconomics, and environmental sustainability	Related	Development, Policy, Poverty, Environment, Sustainability, Global
SOC WEL	293	Social Welfare Theory: Policy Implications	SP	Major theoretical perspectives include institutionalism, welfare pluralism, regulationism, multiculturalism, ecologism, developmentism	Related	Policy, Welfare, Regulation, Development
SOCIO	123	Corporate Social Responsibility and Green Business	F, SP	Corporate social responsibility with emphasis on "green business", ways in which corporations minimize their impact on the environment	Focused	Sociology, Business, Environment
SOCIO	C126	Social Consequences of Population Dynamics	F	Includes, resource issues, economic development, the environment, population control, family planning, birth control, aging	Related	Sociology, Population, Resources, Development, Environment
SOCIO	128	Society and the Environment	F	Social construction of nature, early industrialization and natural resource use, social movements, and impacts of late capitalism	Focused	Sociology, Environment, Resources, Capitalism
SOCIO	137AC	Environmental Justice: Race, Class, Equity, and the Environment	SP	Environmental justice, analyzing the implications of race, class, labor, and equity on environmental degradation and regulation	Focused	Environmental Justice, Race, Labor, Regulation
SOCIO	205U	Supervised Preparatory Course Work: Society and Environment	F	Introductory study of a sociological field, including participation in the appropriate undergraduate course in that field	Related	Sociology, Environment
UGIS	162E	Environmental Policymaking and the Politics of Climate Change	F, SP	Dynamics of global environmental treaty-making after first studying the development of U.S. environmental protection efforts	Focused	Environment, Policy, Climate, Global
UGIS	167	Environmental Regulation and Policy	F	Challenges in environmental protection goals, including climate change, and tensions with economic/societal imperatives	Focused	Environment, Regulation, Climate, Policy
UGIS	176	Ensuring Food Safety: Role of Producers, Consumers, and Public Health Agencies	SP	Facilitating/enhancing efforts by public health agencies, food producers, manufacturers, distributors, and others, to ensure food safety	Related	Food, Safety, Health
UGIS	187	Environmental Regulation and Policy	F	Challenges in environmental protection goals, including climate change, and tensions with economic/societal imperatives	Focused	Environment, Regulation, Climate, Policy
DECALS						
ESPM	98/198	The Environmental Issue In Film: Avatar to Wall-E	F	Communicate how current environmental problems/topics are presented and portrayed through feature length films and documentaries	Focused	Environment, Problems, Film
ERG	98/198	ENERGY DeCal	F	Course will give an intro to energy topics and explore the social, environmental and economic consequences of our carbon-based economy	Focused	Energy, Environment, Economics, Carbon
EDU	98/198	Foundation for Sustainable Development: Argentina	F	Working with the Foundation for Sustainable Development in designing a project that will be implemented in Salta, Argentina by students	Focused	Development, Sustainability
GEO	98/198	American Folklore of Appalachia: Narrative, Natural Resources, and Oppression	F	What stories are known/told about this area with environmental justice struggles, poverty, militant organizing, and cultural oppression?	Related	Environmental Justice, Poverty, Culture
ECON	98/198	China's Energy Needs	F	Focus on domestic issues such as China's emerging green energy industry; its reliance on coal-fired electric plants, environmental issues	Focused	Energy, Environment, China
AMERST	98/198	Rethinking Water	F	Focus on the interconnectedness of contemporary issues with water, energy and food and how they may be responded to	Focused	Water, Energy, Food
CIV ENG	98/198	Sustainable Transportation, Smartphones, and You!	F	How interdisciplinary studies like engineering, planning, politics, and psychology work together to promote green transportation choices	Focused	Transportation, Sustainability, Planning, Politics
ESPM	98/198	Strawberry Creek Restoration Project	F, SP	Opportunities to physically modify your campus in an effort to restore Strawberry Creek to a more native setting	Related	Restoration, Local
ESPM	98/198	Berkeley Urban Garden Internship	F	Different dimensions of today's food system and to different players who participate in, study, or work to change the food system	Related	Food, Local, Garden
NST	98/198	Bare Abundance: The Excess and Inequity of Our Food System	SP	Learn about, discuss, critique, and participate in the local food justice movement	Focused	Food, Justice
ERG	98/198	Energy Efficiency & Alternative Fuels	F, SP	Course will give an intro to energy topics and explore the social, environmental and economic consequences of our carbon-based economy	Focused	Energy, Environment, Economics, Carbon
LEGALST	98/198	Law and Our Food	SP	Discuss the role of government, lawyers, industries, and consumers in regards to our nation's food supply and overall health implications	Related	Law, Food, Health
CIV ENG	98/198	The Quantified Self and Transportation	SP	Will teach students how to look into their health life, character, and long time habits to understand what they can do to make a change	Related	Transportation, Health, Behavior
IB	98/198	The Blue Planet: Water In Our World	SP	Chemistry of water, complex ecosystems, human rights and public policy linked to water; the interconnected world of water	Related	Water, Chemistry, Ecosystems, Rights, Policy
ESPM	98/198	Organic Gardening & Food Justice	SP	Intro to basic theories and methods of organic gardening, and opportunity for gardeners to practice skills and grow organic food	Focused	Food, Justice, Organic, Garden
ESPM	98/198	Berkeley in the Global Food System	F, SP	Analyze social, economic, and environmental areas related to food systems and explore contemporary issues/solutions to these problems	Focused	Food, Environment, Local, Global
IAS	98/198	Thirst: Water and International Human Rights	F	A solution oriented, multi-disciplinary approach to human rights and water	Related	Water, Rights
CIV ENG	98/198	Smartphones, Persuasive Technology, & You!	F, SP	Allow students to examine their personality, health, environmental impacts, and long-term habits	Related	Health, Environment, Behavior, Technology
IB	98/198	Human Health and the Organic Garden	F	Explore material from the IB department to better understand the benefits plant based nutrition and medicine have on human health	Related	Health, Organic, Garden, Nutrition
ESPM	98/198	Environmental Student Organizations at Cal	SP	Contacts, resources, and support needed to become empowered and integrate themselves into a campus full of environmental clubs	Related	Environment, Organization
ESPM	98/198	Reading, Writing, and Realizing our Environment	SP	Understanding of, and engagement with, life of Berkeley in the Bay Area; experiment with creative forms to express relationship to place	Related	Environment, Writing, Local
ESPM	98/198	Student Environmental Activism	SP	To introduce students to environmental activism and to inspire involvement within the campus environmental community	Related	Environmental activism, Campus community
ENVDES	98/198	Building Sustainability at Cal	SP	Course will provide students with introductory knowledge of waste, energy, environmental education, and sustainable design	Focused	Sustainability, Waste, Climate, Education
ESPM	98/198	Human and Ecosystem Health	SP	Introduces students to the intersections of human, animal and environmental health	Related	Health, Ecosystems, Humans

Focused: 242
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