

UC Davis 2020 | Sustainability Course Inventory

Sustainability-focused courses

Years: 2016-2017, 2017-2018, 2018-2019

Red = cross-listed

U = undergraduate, G = graduate

Title	Course Description	Course	Department	Level
Diaspora & New Black Identities	Critical analysis about what it means to be Black/African American in the United States today. Topics include old and new diasporas, immigration, national origin, language, religion, class, education, politics, identity and cultural heritage.	AAS 172	African American Studies	U
Race & Ethnicity in Latin America	Social and political effects of racial and ethnic categorization in Latin America, including issues of economic production, citizenship, national belonging, and access to resources. Emphasis is on peoples of African, Indigenous, and Asian descent.	AAS 180	African American Studies	U
Ethics of Animal Use	Ethical issues relating to animal use in contemporary society. Integration of philosophical theories with scientific evidence relating to animal behavior, mentality, and welfare. Uses of animals in agriculture, research, and as companions. Ethical responsibilities regarding wildlife and the environment.	ANS 170	Animal Science	U
Economic Development	Major issues encountered in emerging from international poverty, problems of growth and structural change, human welfare, population growth and health, labor markets and internal migration. Important issues of policy concerning international trade and industrialization.	ARE 115A	Agriculture & Resource Economics	U
Introduction to Atmospheric Chemistry	Quantitative examination of current local, regional and global problems in atmospheric chemistry (including photochemical smog, acid deposition, climate change, and stratospheric ozone depletion) using fundamental concepts from chemistry. Basic chemical modeling of atmospheric reaction systems.	ATM 160	Atmospheric Science	U
Raptor Biology	Study of birds of prey: classification, distribution, habits, migration, unique anatomical and physiological adaptations, natural and captive breeding, health and diseases, environmental concerns, conservation, legal considerations, rehabilitation, and falconry. Includes two Saturday field trips.	AVS 115	Animal Science	U
Chicana/o & Latina/o Health Care Issues	Overview of health issues of Chicanas/os and Latinas/os in the State of California; role of poverty/lack of education in limited access to health care.	CHI 021	Chicana/o Studies	U
Chicana/o & Latina/o Health Care Issues	Overview of health issues of Chicanas/os and Latinas/os in the State of California; role of poverty/lack of education and limited access to health care. All course instruction in Spanish. May be taught abroad.	CHI 021S	Chicana/o Studies	U
Qualitative Research Methods	Dominant models of qualitative inquiry in educational and social science research as well as mestizo approaches to research with latinos. Emphasis given to choosing and designing culturally appropriate strategies to investigate latino health, education, social context, and policy issues.	CHI 023	Chicana/o Studies	U
Comparative Health: Top Leading Causes of Death	Introduction to the epidemiology of the leading causes of death for ethnic/racial minorities. Assessment of disproportionate rates at which ethnic/racial minorities suffer and die from chronic and infectious diseases and injuries and statistical methods used to calculate these rates.	CHI 040	Chicana/o Studies	U
Women of Color Reproductive Health & Reproductive Politics in a Global Perspective	Study contemporary issues in reproductive health and reproductive politics, both globally and in the U.S., for women of color.	CHI 114	Chicana/o Studies	U
Chicana/ o Psychology	Introduction to the field of Chicana/o psychology. Analysis of socio-cultural context of Chicanas/os and Latinas/os. Special attention to issues of ethnic identity development, bilingualism, and development of self esteem. Impact of minority experience, migration, acculturation are examined.	CHI 120	Chicana/o Studies	U
Chicana/ o Community Mental Health	Mental health needs, problems, and service utilization patterns of Chicanas/os and Latinas/os will be analyzed. An analysis of social service policy, and the economic context of mental health programs.	CHI 121	Chicana/o Studies	U
Bi-National Health	Examination of health status and intervention strategies presented in public health care settings, private clinics and by indigenous healers in Mexico. Analysis of impact of high risk diseases. Offered in a Spanish speaking country under supervision of UC Davis faculty/lecturer; may be taught abroad.	CHI 145S	Chicana/o Studies	U
Indigenous Healing & Biodiversity in Latin America	Contrast between western and traditional healing practices in Latin America and the role of the natural environment in creating sustainable health delivery systems. Questions of health status attributable to public health and environmental risk factors. May be taught abroad.	CHI 147S	Chicana/o Studies	U
Community Development	Introduction to principles and strategies of community organizing and development. Examination of non-profit organizations, citizen participation, poverty reduction, community needs assessment, and regional development strategies. Comparison of community development approaches of the U.S.A./California with other western and non-western societies.	CRD 152	Human Ecology	U

Materials & Methods in Interior Design	Introduction to the finish materials used for interior design with special emphasis on sustainable and recycled products. Performance factors, relative costs and energy impacts, installation conditions and construction details, and design potential for a full range of interior materials.	DES 138	Design	U
Civil Infrastructure & Society	Introduction to civil infrastructure and its relationship with society and the natural environment. Exposure to innovative research on civil engineering and environmental systems. Participation in laboratory experiments illustrative of the solution of representative but simplified engineering problems.	ECI 003	Civil & Environmental Engineering	U
Introduction to Environmental Engineering	Introduction to topics in environmental engineering; discussion on influence of literary work, art, and media on the evolution of environmental engineering practice, relevant laws, and regulations; presentations of historical case studies.	ECI 040	Civil & Environmental Engineering	U
Introduction to Fluid Mechanics for Civil & Environmental Engineers	Fluid flow in civil & environmental engineering, basis for design, buoyancy, hydrostatics, gravity dams, hydraulic modeling: similarity & scaling, conservation laws, flow in bends, nozzles, pipes, pumps, turbines, complimentary lab experiments.	ECI 100	Civil & Environmental Engineering	U
Biological Principles for Environmental Engineering	Fundamental microbiology concepts for environmental engineers; provides background needed for the application of water and wastewater treatment, bioremediation, air pollution control and biotransformations in environmental engineered systems.	ECI 140C	Civil & Environmental Engineering	U
Water & Wastewater Treatment System Design	Evaluation and design of water and wastewater treatment systems.	ECI 140D	Civil & Environmental Engineering	U
Groundwater Systems Design	Groundwater occurrence, distribution, and movement; groundwater flow systems; radial flow to wells and aquifer testing; aquifer management; groundwater contamination; solute transport by groundwater; fate and transport of subsurface contaminants. Groundwater supply and transport modeling.	ECI 144	Civil & Environmental Engineering	U
Water Resources Simulation	Computer simulation techniques in the analysis, design and operation of surface water systems; modeling concepts and practices with application to surface runoff; water quality in rivers and streams and dispersion of contaminants in water bodies.	ECI 146	Civil & Environmental Engineering	U
Water Resources Engineering Planning	Basic engineering planning concepts; role of engineering, economic, environmental and social information and analysis; institutional, political and legal aspects. Case studies and computer models illustrate the planning of water resource systems.	ECI 155	Civil & Environmental Engineering	U
Economic Development	Major macroeconomic issues of developing countries. Issues include problems in generating capital, conduct of monetary and fiscal policies, foreign aid and investment. Important issues of policy concerning international borrowing and external debt of developing countries.	ECN 115B	Economics	U
Economic Development	Major macroeconomic issues of developing countries. Issues include problems in generating capital, conduct of monetary and fiscal policies, foreign aid and investment. Important issues of policy concerning international borrowing and external debt of developing countries.	ECN 115BY	Economics	U
Economics of the Labor Market	Theory of labor supply and demand; determination of wages and employment in the labor market. Policy issues: labor force participation by married women; minimum wages and youth unemployment; effect of unions on wages.	ECN 151A	Economics	U
Economics of Human Resources	Human resource analysis; introduction to human capital theory and economics of education; the basic theory of wage differentials, including theories of labor market discrimination; income distribution; poverty. Policy issues; negative income tax; manpower training programs; incomes policy.	ECN 151B	Economics	U
Principles of Hydrologic Science	Topics include hydrology (surface and ground water), hydraulic flow through porous media, water in the soil-plant-atmosphere continuum, water quality, flow through open channels, and representative water-resource problems.	ESM 100	Environmental Science & Policy	U
Global Environmental Interactions	Relationships among climate, hydrology, biogeochemical cycles, soils and vegetation distribution in diverse landscapes and biomes. Emphasis on physical, chemical, and biological processes affecting ecosystems from the poles to the equator, and human impacts on the environment.	ESM 120	Environmental Science & Policy	U
Integrating Environmental Science & Management	Practical aspects of environmental improvement through integrated analyses of contemporary issues or problems associated with advocacy, regulation, science and resource management from the perspectives of the physical and ecological sciences and current policy/management.	ESM 195	Environmental Science & Policy	U
Principles of Environmental Science	Application of physical and chemical principles, ecological concepts, and systems approach to policy analysis of atmospheric environments, freshwater and marine environments, land use, energy supplies and technology, and other resources.	ESP 110	Environmental Science & Policy	U
Oceanography	Advanced oceanographic topics: Chemical, physical, geological, and biological processes; research methods and data analysis; marine resources, anthropogenic impacts, and climate change; integrated earth/ocean/atmosphere systems; weekly lab and one weekend field trip.	ESP 116N	Environmental Science & Policy	U

Coastal Oceanography	Oceanography of coastal waters, including bays, river plumes, nearshore and estuaries; focus on transport patterns, how they are forced and implications for ecological and environmental problems. Pertinent for students in	ESP 152	Environmental Science & Policy	U
Wetland Ecology Laboratory	Modern and classic techniques in wetland field ecology. Emphasis on sampling procedures, vegetation analysis, laboratory analytical procedures, and examples of successful wetland restoration techniques.	ESP 155L	Environmental Science & Policy	U
Applied Research Methods	Research methods for analysis of urban and regional land use, transportation, and environmental problems. Survey research and other data collection techniques; demographic analysis; basic forecasting, air quality, and transportation models. Collection, interpretation, and critical evaluation of data.	ESP 178	Environmental Science & Policy	U
Oceanography	Advanced oceanographic topics: Chemical, physical, geological, and biological processes; research methods and data analysis; marine resources, anthropogenic impacts, and climate change; integrated earth/ocean/atmosphere systems; weekly lab and one weekend field trip.	GEL 116N	Geology	U
Irrigation Principles & Practices	General course for agricultural and engineering students dealing with soil and plant aspects of irrigation and drainage. Soil-water principles including water movement, plant responses to irrigation regimes, water use by crops; also irrigation systems and water quality.	HYD 110	Land, Air, & Water Resources	U
Social Change & Agricultural Development	How social and cultural factors influence technological change in agriculture; theories of diffusion of innovations; social impact analysis and technology assessment.	IAD 103	Plant Sciences	U
Urban Design & Planning Studio	Studio designing large-scale landscapes at regional, sub-regional, and neighborhood scales. Focuses on understanding complex social, economic, and environmental factors, developing sustainability priorities and strategies, and applying them through design and policy.	LDA 171	Human Ecology	U
Seminar on Alternatives in Agriculture	Seminar on topics related to alternative theories, practices and systems of agriculture and the relationship of agriculture to the environment and society. Scientific, technological, social, political and economic perspectives.	PLS 190	Plant Sciences	U
Soils in Our Environment	Soils in our global ecosystem; soils as natural bodies formed by interactive environmental processes; soil response to use and management; sustainable use of soil resources; role of soils in agricultural and environmental issues; role of soils in our daily lives.	SSC 010	Land, Air, & Water Resources	U
Health & Medicine in a Global Context	Recent works in medical anthropology and the science studies of medicine dealing with social and cultural aspects of global health issues such as AIDS, pandemics, clinical trials, cultural differences in illnesses, diabetes, organ trafficking, medical technologies, illness narratives, and others.	STS 129	Science & Technology Studies	U
Multiracial Asian Pacific American Issues	Introduction to the experiences of biracial and multiracial Asian Pacific people in the U.S., concentrating on theories of race, racial identity formation, culture, media, and anti-racist struggles. Critical approaches to the analysis of popular media and academic representations.	ASA 115	Asian American Studies	U
Food Systems	Social aspects of agri-food systems. Social science perspectives applied to food and agricultural sustainability in relation to ecology, knowledge, technology, power, governance, labor, social difference, and social movements. Social and environmental effects of commodity chains in comparative global context.	CRD 020	Human Ecology	U
Health Care to Underserved Populations	Discusses sociocultural perspectives of underserved populations in California impacting their health; roles of family/interpersonal relationships in making health care decisions; and clinician's perspectives in treating people of cultures which are unfamiliar and/or uncomfortable with Western medicine.	FAP 195	Family & Community Medicine	U
Laboratory in Biology & Conservation of Wild Birds	Laboratory exercises in bird species identification, anatomy, molts, age and sex, specialized adaptations, behavior, research, with emphasis on conservation of wild birds. Several weekend field trips, after class bird walks, and independent bird study are required.	WFC 111L	Wildlife, Fish, & Conservation Biology	U
Animal Biology	Animal management and conservation. Societal concerns arising from management and conservation issues, including economics, aesthetics, regulations, safety, public perspectives and advocacy	ABI 050C	Entomology & Nematology	U
Irrigation Practices for an Urban Environment	Basic design, installation, and operation principles of irrigation systems for turf and landscape: golf courses, parks, highways, public buildings, etc. Emphasis on hardware association with sprinkler and drip/trickle systems.	ABT 165	Biological & Agricultural Engineering	U
Environmental Analysis Using GIS	Ecosystem and landscape modeling with emphasis on hydrology and solute transport. Spatial analysis of environmental risk analysis including ecological risk assessment, natural resource management. Spatial database structures, scripting, data models, and error analysis in GIS.	ABT 182	Biological & Agricultural Engineering	U
Concepts in Agricultural & Environmental Education	Philosophy and nature of formal and non-formal agricultural and environmental education programs. Emphasis on understanding the role of the teacher and observing a variety of programs.	AED 100	Animal Science	U

Art, Architecture, & Human Rights	Study of human rights as they relate to art, architecture, and cultural heritage. Examines museums, art collections, and cultural-heritage management, their relation to the cultural prerogatives of communities and indigenous groups, and protection of cultural heritage during war and conflict.	AHI 120A	Art History	U
Nature & Culture in America	Uses and abuses of nature in America; patterns of inhabitation, exploitation, appreciation, and neglect; attention to California; emphasis on metaphor as a key to understanding ourselves and the natural world; attention to models of healing: stewardship, ecology, the "rights" movement.	AMS 001E	American Studies	U
Introductory Aquaculture	Historical and contemporary aquacultural practices. Interaction between the aqueous culture environment and the biology of aquatic animals. Impact of economics and governmental policies on the development of aquaculture. Interaction of aquacultural practices with larger societal goals.	ANS 018	Animal Science	U
Sustainable Animal Agriculture	Current applications of sustainable animal agriculture including the challenges of animal production, animal needs, animal well-being, and protection of the environment and resources for future food supply systems. Various scenarios for meeting sustainability objectives are evaluated using computing modeling.	ANS 112	Animal Science	U
Environmental Stewardship in Animal Production Systems	Management principles of environmental stewardship for grazing lands, animal feeding, operations and aquaculture operations; existing regulations, sample analyses, interpretation and utilization of data, evaluation of alternative practices, and policy development.	ANS 129	Animal Science	U
Ecology, Nature, & Society	Interdisciplinary study of diversity and change in human societies, using frameworks from anthropology, evolutionary ecology, history, archaeology, psychology, and other fields. Topics include population dynamics, subsistence transitions, family organization, disease, economics, warfare, politics, and resource conservation.	ANT 101	Anthropology	U
Indigenous Peoples & Natural Resource Conservation	Integration of the interests of resident and indigenous peoples with the conservation of natural resources and ecosystems, using case study examples from both the developing and developed world.	ANT 103	Anthropology	U
Cultural Politics of the Environment	Political economy of environmental struggles. Relationship between social inequality (based on race, class and/or gender) and ecological degradation. Articulation of local peoples, national policy, and the international global economy in the contestation over the use of environmental resources.	ANT 104N	Anthropology	U
Women & Development	Current Third World and Western development issues concerning women in agriculture, industry, international division of labor, political movements, revolutions, politics of health, education, family and reproduction. Impact of colonialism, capitalism, the world system, and international feminism on women and development.	ANT 126B	Anthropology	U
Health & Medicine in a Global Context	Recent works in medical anthropology and the science studies of medicine dealing with social and cultural aspects of global health issues such as AIDS, pandemics, clinical trials, cultural differences in illnesses, diabetes, organ trafficking, medical technologies, illness narratives, and others.	ANT 129	Anthropology	U
Ecology & Politics	Analysis of the complex interactions between ecological dynamics and political processes employing the emerging approach of political ecology. Case studies of environmental degradation (e.g., desertification, logging, mineral extraction, petroleum, water) from various cultural and geographic regions.	ANT 131	Anthropology	U
Race, Class, Gender Systems	Comparative analysis of class/race/gender inequality, concentrating on the ways in which beliefs about descent, "blood," and biological difference interact with property and marital systems to affect the distribution of power in society.	ANT 139AN	Anthropology	U
Contemporary Societies & Cultures of Latin America	Introduction to contemporary social structure of Latin America. Origins, maintenance and changes in inequality: economic responses to poverty, sociocultural responses to discrimination, and political responses to powerlessness.	ANT 144	Anthropology	U
Primate Conservation Biology	Study of the taxonomic, ecological and cultural diversity of Primates and how human activities impact tropical ecosystems. Emphasis on case studies and applied research methods. Includes discussion about career opportunities in conservation.	ANT 155	Anthropology	U
Population, Environment & World Agriculture	Economic analysis of interactions among population, environment, natural resources and development of world agriculture. Introduces students to economic thinking about population growth, its causes and consequences for world food demand, and environmental and technological limits to increasing food supplies.	ARE 015	Agriculture & Resource Economics	U
Economics of Agricultural Sustainability	Application of economic concepts to agro-environmental issues relevant to agricultural sustainability. Topics include market efficiency, production externalities, government policies, agricultural trade, product differentiation, all linked to sustainability issues. Case studies include biofuels, genetically modified foods and geographically differentiated products.	ARE 121	Agriculture & Resource Economics	U
Resource & Environment Policy Analysis	Natural resource use problems with emphasis on past and current policies and institutions affecting resource use; determinants, principles, and patterns of natural resource use; property rights; conservation; private and public resource use problems; and public issues.	ARE 147	Agriculture & Resource Economics	U

Resource & Environmental Policy Analysis	Natural resource use problems with emphasis on past and current policies and institutions affecting resource use; determinants, principles, and patterns of natural resource use; property rights; conservation; private and public resource use problems; and public issues.	ARE 147M	Agriculture & Resource Economics	U
Economics of Global Poverty Reduction: What Works & Why	Application of microeconomic theory and econometrics to understand causes of poverty and critically evaluate poverty alleviation policies in low income countries.	ARE 166	Agriculture & Resource Economics	U
Natural Resource Economics	Economic concepts and policy issues associated with natural resources, renewable resources (ground water, forests, fisheries, and wildlife populations) and non-renewable resources (minerals and energy resources, soil).	ARE 175	Agriculture & Resource Economics	U
Environmental Economics	Role of the environment in economic activity and methods for protecting and enhancing environmental quality; implications of market failures for public policy; design of environmental policy; theory of welfare measurement; measuring the benefits of environmental improvement.	ARE 176	Agriculture & Resource Economics	U
Global Climate Change	Scientific concepts needed to understand climate and climate change. Principles of regional variations in climate. Understanding observed seasonal, decadal and millennial changes. Analysis of the Antarctic ozone hole, El Nino and human-induced global warming.	ATM 005	Atmospheric Science	U
Fundamentals of Atmospheric Pollution	Effects of human emissions on the atmosphere: smog, ozone pollution, and ozone depletion; indoor air pollution; global warming; acid rain. Impacts of these problems on the earth, ecosystems, and humans. Strategies to reduce atmospheric pollution.	ATM 006	Atmospheric Science	U
Modern Climate Change	Factors that determine the Earth's climate, including natural and human-caused changes. Impacts of climate change. Possible future climates and policies to reduce human emissions of greenhouse gases.	ATM 116	Atmospheric Science	U
Air Pollution	Physical and technical aspects of air pollution. Emphasis on geophysical processes and air pollution meteorology as well as physical and chemical properties of pollutants.	ATM 149	Atmospheric Science	U
Birds, Humans & the Environment	Interrelationships of the worlds of birds and humans. Lectures, discussions, field trips and projects focus on ecology, avian evolution, physiology, reproduction, flight, behavior, folklore, identification, ecotoxicology and conservation. Current environmental issues are emphasized. Half-day field trip.	AVS 013	Land, Air, & Water Resources	U
Community Development Perspectives on Environmental Justice	Environmental justice social movements; inequitable distribution of pollution on low-income communities of color; histories, policies, and innovations associated environmental justice movements in the United States and around the world.	CRD 149	Human Ecology	U
Social Inequality: Issues & Innovations	Focus on the dimensions, causes, and means of alleviating social inequality in the U.S. Examination and analysis of major theories and forms (class, race/ethnicity, gender, and citizenship status) of inequality. Policy-based and grassroots approaches to change.	CRD 172	Human Ecology	U
Sustainable Design	Principles, practice and materials of contemporary sustainable design in the context of environmental crisis. History of sustainable design in relation to the fields of product design, material science, energy, architecture, and transportation.	DES 127A	Design	U
Studio Practice in Sustainable Design	Analysis and practice of sustainable design within studio context. Design project that incorporate the reuse of post consumer waste; standard materials vs. sustainable materials; Cradle to Cradle philosophy and practice. Field trips required.	DES 127B	Design	U
Bioenvironmental Engineering	Biological responses to environmental conditions. Principles and engineering design of environmental control systems. Overview of environmental pollution problems and legal restrictions for biological systems, introduction of environmental quality assessment techniques, and environmental pollution control technologies.	EBS 135	Biological & Agricultural Engineering	U
Process Economics & Green Design	Senior design experience in process and product creation and design with multiple realistic constraints. Cost accounting and capital investment estimation. Profitability analysis techniques. Green chemistry, health risk assessment and life cycle assessment concepts.	ECH 158A	Chemical Engineering	U
Urban Systems & Sustainability	Systems-level approach of how to evaluate and then modify sustainability of urban systems based on interaction with natural environments. Topics include: definition/metrics of urban sustainability; system analyses of urban systems; enabling technology, policies, legislation; measures and modification of ecological footprints.	ECI 123	Civil & Environmental Engineering	U
Building Energy Performance	Mechanisms of energy consumption in buildings including end uses, thermal loads, ventilation, air infiltration, thermal energy distribution, and HVAC systems; energy performance simulation; methods and strategies of energy efficiency.	ECI 125	Civil & Environmental Engineering	U
Green Engineering Design & Sustainability	Application of concepts, goals and metrics of sustainability, green engineering and industrial ecology to engineering design. Other topics include life-cycle assessments, analysis of environmental management systems, and economics of pollution prevention and sustainability.	ECI 143	Civil & Environmental Engineering	U

Air Pollution	Physical and technical aspects of air pollution. Emphasis on geophysical processes and air pollution meteorology as well as physical and chemical properties of pollutants.	ECI 149	Civil & Environmental Engineering	U
Air Pollution Control System Design	Design and evaluation of air pollution control devices and systems.	ECI 150	Civil & Environmental Engineering	U
Energy & Environmental Aspects of Transportation	Engineering, economic, and systems planning concepts. Analysis and evaluation of energy, air quality and selected environmental attributes of transportation technologies. Strategies for reducing pollution and petroleum consumption in light of institutional and political constraints. Evaluation of vehicle emission models.	ECI 163	Civil & Environmental Engineering	U
Transportation Policy	Transportation and associated environmental problems confronting urban areas, and prospective technological and institutional solutions. Draws upon concepts and methods from economics, engineering, political science and environmental studies.	ECI 165	Civil & Environmental Engineering	U
Economic Development	Major issues encountered in emerging from international poverty, including problems of growth and structural change, human welfare, population growth and health, labor markets and internal migration. Important issues of policy concerning international trade and industrialization.	ECN 115A	Economics	U
Energy Economics	Application of theoretical and empirical models to examine efficiency in energy production and use. Energy and environmental policy, market structure and power, global climate change, optimal regulation, and real-world applications; e.g., California electricity crisis.	ECN 125	Economics	U
Poverty, Inequality & Public Policy	Examination of the economics of poverty and inequality in the United States, including measurement, trends, and related policies.	ECN 133Y	Economics	U
Energy & Climate Policy	Fundamentals of energy technology, economics, and policy. Survey and analysis of current and prospective climate policies at the local and global level, including but not limited to cap-and-trade, emissions offsets, intensity standards, technology standards, mandates and subsidies.	ECN 216	Economics	U
Introduction to Environmental Education	Study of history, philosophy, principles and approaches to environmental education (EE) and outreach; learning theories, teaching strategies and techniques in EE and outreach; evaluation of EE curricula in non-formal and in-school contexts; observing, aiding and facilitating local environmental education programs.	EDU 142	Education	U
Issues in Engineering Design	Covers various electrical and computer engineering standards and realistic design constraints including economic, manufacturability, sustainability, ethical, health & safety, environmental, social, and political.	EEC 196	Electrical & Computer Engineering	U
Combustion & the Environment	Introduction to combustion kinetics; premixed and diffusion flames; turbulent combustion; pollutant formation; examples of combustion devices such as internal combustion engines, gas turbines, furnaces and incinerators; alternative fuels.	EME 161	Mechanical & Aerospace Engineering	U
Internal Combustion Engines & Future Alternatives	Fundamentals of internal combustion engine design and performance. Future needs to adapt to environmental concerns, and the feasibility of better alternatives in the future.	EME 163	Mechanical & Aerospace Engineering	U
Sustainable Energy Technologies: Batteries, Fuel Cells, & Photovoltaic Cells	Basic principles of future energy devices such as lithium batteries, fuel cells, and photovoltaic cells. Examines the current status of these energy technologies and analyze challenges that still must be overcome.	EMS 170	Materials Science & Engineering	U
Environmental Physics & Society	Impact of humankind on the environment are discussed from the point of view of the physical sciences. Calculations based on physical principles will be made, and the resulting policy implications are considered.	ENG 160	Engineering	U
Science & Technology of Sustainable Power Generation	Focus on scientific understanding and development of power generation that is the basis of modern society. Concentration on power generation methods that are sustainable, in particular, discussion of the most recent innovations.	ENG 188	Engineering	U
Introduction to Environmental Horticulture/Urban Forestry	Introduction to the use of plants to enhance the physical, visual and social environment, the use of ecological principles in developing sustainable, low maintenance landscape systems, and the career opportunities in these areas.	ENH 001	Plant Sciences	U
Urban Forestry	Principles and practices of planning and managing urban vegetation. Basics of tree appraisal, natural resource inventory, and development of long term urban forest management plans.	ENH 100	Plant Sciences	U
Genetics & Plant Conservation: The Biodiversity Crisis	Conservation of genic diversity, measurement of diversity, threats to diversity and reasons for protection, the process of extinction, distribution of diversity, determination of what to conserve and means of conservation. Examples drawn largely from forest tree species.	ENH 150	Plant Sciences	U
Restoration Ecology	Broad, interdisciplinary approach to effective restoration. Design and implementation of restoration projects based on principles of physiology, population, community, ecosystem and landscape ecology.	ENH 160	Plant Sciences	U
Restoration Ecology Laboratory	Companion field course to ENH 160. Series of part-day and all day visits to various field sites, involving site evaluations, guest field presentations by local restorationists, and actual restoration activities.	ENH 160L	Plant Sciences	U

Arthropod Pest Management	Sustainable management & ecology of arthropod pests in agricultural systems. Techniques for effective, management of arthropod pests via in-depth knowledge about pest biology, life strategies, spatial ecology, and food web functions. Lab & field trip exercises in applied research in pest management, ecology, and evolution using digital technologies (apps, remote sensing, cloud-based decision support).	ENT 110	Entomology	U
Water Quality at Risk	Natural and human threats to water quality. Balance of science and policy in all aspects of attaining, maintaining, and managing water quality, water contamination. Decoding popular media coverage of water quality and water contamination.	ESM 008	Environmental Science & Policy AND Land, Air, & Water Resources	U
Water Science & Management	Role of water as an essential natural resource in contemporary society. Aspects of the scientific method, including descriptions of natural phenomena and underlying physical causes. Water for cities, agriculture, industry, wildlife and recreation; case studies of water management.	ESM 121	Environmental Science & Policy AND Land, Air, & Water Resources	U
Air as a Resource	Degradation of the atmospheric resource, historical aspects and effects of air pollution examined. Evaluation of primary gaseous and particulate pollutants and discussion of their impact.	ESM 131	Environmental Science & Policy AND Land, Air, & Water Resources	U
Environmental Analysis	Analysis of the physical, biological, and social interactions which constitute environmental problems. Emphasis on analysis of environmental problems, the consequences of proposed solutions, and the interaction of environmental science and public policy in creating solutions.	ESP 001	Environmental Science & Policy	U
Current Issues in the Environment	Science behind environmental issues, and policies affecting our ability to solve domestic and international environmental problems. Resources, environmental quality, regulation, environmental perception and conservation. Integrative case studies.	ESP 010	Environmental Science & Policy	U
Ecology, Nature, & Society	Interdisciplinary study of diversity and change in human societies, using frameworks from anthropology, evolutionary ecology, history, archaeology, psychology, and other fields. Topics include population dynamics, subsistence transitions, family organization, disease, economics, warfare, politics, and resource conservation.	ESP 101	Environmental Science & Policy	U
Marine Environmental Issues	Examination of critical environmental issues occurring in coastal waters including the effects of climate change, overfishing, and other human impacts. Through readings and group discussions, students will develop an integrative understanding of the oceanographic and ecological processes.	ESP 111	Environmental Science & Policy	U
Environmental Law	Introduction for non-Law School students to some of the principal issues in environmental law and the judicial interpretation of some important environmental statutes, e.g., NEPA.	ESP 161	Environmental Science & Policy	U
Environmental Policy	Compares economic with socio-cultural approaches to understanding the causes of environmental problems and strategies for addressing them. Includes different approaches to the policy process, policy instruments, and environmental behavior. Applies these principles to several problems.	ESP 162	Environmental Science & Policy	U
Energy & Environmental Aspects of Transportation	Engineering, economic, and systems planning concepts. Analysis and evaluation of energy, air quality and selected environmental attributes of transportation technologies. Strategies for reducing pollution and petroleum consumption in light of institutional and political constraints. Evaluation of vehicle emission models.	ESP 163	Environmental Science & Policy	U
Climate Policy	Models, data and assumptions behind competing arguments regarding societal response to the prospect of climate change at the state, national and international level from economic, ethical and policy science perspectives.	ESP 165	Environmental Science & Policy	U
Ocean & Coastal Policy	Overview of U.S. and International ocean and coastal policy, including energy, coastal land-use and water quality, protected areas and species.	ESP 166	Environmental Science & Policy	U
Energy Policy	Survey of primary energy resources (fossil, renewable, nuclear), energy conversion methods, future energy demand scenarios, and environmental impacts of energy. Overview of energy policy in the U.S. Analysis of policy alternatives for addressing energy-related environmental and national security issues.	ESP 167	Environmental Science & Policy	U
Methods of Environmental Policy Evaluation	Evaluation of alternatives for solution of complex environmental problems; impact analysis, benefitcost analysis, distributional analysis, decision making under uncertainty, and multi-objective evaluation.	ESP 168A	Environmental Science & Policy	U
Methods of Environmental Policy Analysis	Continuation of ESP 168A. Emphasis on examination of the literature for applications of research & evaluation techniques to problems of transportation, air & water pollution, land use, and energy policy.	ESP 168B	Environmental Science & Policy	U
Water Policy & Politics	Governance of water, including issues of water pollution/quality and water supply. Politics of water decision-making and effectiveness of water policy. Broad focus on federal water policy, with case examples from nationally significant U.S. watersheds.	ESP 169	Environmental Science & Policy	U
Conservation Biology Policy	Analysis of policies designed to conserve species and their habitats. Emphasis on how individual incentives affect the success of conservation policies. Valuation of endangered species and biodiversity. Criteria for deciding conservation priorities.	ESP 170	Environmental Science & Policy	U

Natural Resource Economics	Economic concepts and policy issues associated with natural resources, renewable resources (ground water, forests, fisheries, and wildlife populations) and non-renewable resources (minerals and energy resources, soil).	ESP 175	Environmental Science & Policy	U
Environmental Impact Assessment	Introduction to the information resources and methods typically used in environmental impact analysis. Emphasis on how environmental information is applied to planning, environmental regulation, and public policymaking, with case studies from California land use and natural resource policy.	ESP 179	Environmental Science & Policy	U
Workshop on Food System Sustainability	First in a two-quarter senior capstone course sequence. Identify projects addressing specific problems and opportunities of sustainable agriculture and food systems, form multidisciplinary teams, and identify and consult with key stakeholders to understand their needs and concerns.	ESP 191A	Environmental Science & Policy	U
Workshop on Food System Sustainability	Continuation of ESP 191A. Teams conduct analyses of a specific issue in sustainable agriculture or food systems, prepare a critical assessment of technological, economic, environmental, and social dimensions of options for action and present their results to stakeholders.	ESP 191B	Environmental Science & Policy	U
Introduction to Environmental Toxicology	Hazardous substances, their effects on humans and their actions and movement in the environment. Emphasis on substances of current concern.	ETX 010	Environmental Toxicology	U
Principles of Environmental Toxicology	Principles of toxicology with a focus on environmental, industrial, and natural chemicals. Topics include fate and effects of chemicals in organisms and the environment, air pollutants, insecticides, aquatic toxicology, endocrine disruptors, biomarkers and bioassays, and risk assessment.	ETX 101	Environmental Toxicology	U
Environmental Fate of Toxicants	Properties of toxic chemicals influencing their distribution and transformations; action of environmental forces affecting toxicant breakdown, movement, and accumulation; sources and occurrence of major classes of environmental toxicants.	ETX 102A	Environmental Toxicology	U
Perspectives in Aquatic Toxicology	Toxic substances, their fate in marine and freshwater systems, and their effects on aquatic organisms, populations, and ecosystems. Emphasis will be on substances and issues of current concern.	ETX 120	Environmental Toxicology	U
Environmental Stress & Development in Marine Organisms	Taught at Bodega Marine Laboratory. Effects of environmental and nutritional stress, including pollutants, on development and function in embryos and larvae of marine organisms. Emphasis on advanced experimental methods.	ETX 127	Environmental Toxicology	U
Environmental Toxicology of Air Pollutants	Field trip required. Toxicology of air pollutants in the ambient, indoor, and occupational environments. Health effects, sources, environmental fates, pulmonary responses, sampling and analyses, and air-quality criteria and standards. Field trip required.	ETX 131	Environmental Toxicology	U
Health Risk Assessment of Toxicants	Current practices of health risk assessment of environmental chemicals using toxicological principles and their application to regulatory control of these chemicals.	ETX 135	Environmental Toxicology	U
Legal Aspects of Environmental Toxicology	Federal and California legislation concerning air and water pollution, pesticide use, food and feed additives, consumer protection, and occupational exposure to toxic substances; roles of federal regulatory agencies; alternatives to government control.	ETX 138	Environmental Toxicology	U
Marine Environmental Issues	Examination of critical environmental issues occurring in coastal waters including the effects of climate change, overfishing, and other human impacts. Through readings and group discussions, students will develop an integrative understanding of the oceanographic and ecological processes.	EVE 111	Evolution & Ecology	U
Marine Ecology	Processes affecting the distribution, abundance, and diversity of plant and animal life in the sea. Introduction to marine habitat diversity and human impacts on marine ecosystems.	EVE 115	Evolution & Ecology	U
Global Change Ecology	Treatment of historical evolution of the biosphere resulting from physical, chemical, and biological influences. Special focus upon changes caused by humans. Topics pertain to biodiversity, resources, conservation, and ecosystem services.	EVE 120	Evolution & Ecology	U
Modern & Ancient Global Environmental Change	Fundamental scientific concepts underlying issues such as global warming, pollution, and the future of nonsustainable resources presented in the context of anthropogenic processes as well as natural forcing of paleoenvironmental change throughout Earth's history.	GEL 010	Geology	U
Energy & the Environment	Conventional and alternative energy resources and their environmental impacts. Basic principles, historical development, current advantages and disadvantages, future prospects. Oil, natural gas, coal, nuclear, wind, geothermal, water, tidal, solar, hydrogen, and other sources of energy for the 21st century.	GEL 018	Geology	U
Earth History: Paleoclimates	Geological and environmental factors controlling climate change, the greenhouse effect with a detailed analysis of the history of Earth's climate fluctuations over the last 600 million years. Past and present climate records are used to examine potential future climatic scenarios.	GEL 108	Geology	U
Ecogeomorphology of Rivers & Streams	Integrative multidisciplinary field analysis of streams. Class project examines hydrology, geomorphology, water quality and aquatic and riparian ecology of degraded and pristine stream systems. Includes cooperative two-week field	GEL 136	Geology	U

Global Environmental History	Global, comparative study of how environmental change, human perceptions of nature, and manipulations of nature have changed over time. Primary focus post-1500, emphasis on critically analyzing many common ideas of environmental change.	HIS 108	History	U
Environmental Change, Disease & Public Health	Analysis of environmental changes from pre-history to the present and their influence on disease distribution, virulence and public health. Focus on critical study of many human-driven environmental changes and the accelerated transformation/spread of pathogens under globalization.	HIS 109	History	U
Human Rights in Latin America	History of the origins, denial and protection of Human Rights in Latin America. Emphasis on dictatorships, political violence, social resistance, democracy, justice, accountability, truth commissions, memory.	HIS 161	History	U
American Environmental History	American history through connections between people and nature, pre-Columbus to climate change. Native America; conquest; epidemics; extinctions; industrialization; pollution; environmentalism; climate change and global warming; ideas of nature.	HIS 172	History	U
Human Wrongs/Human Rights	Introduction to Human Rights and the problems they seek to address. Using key episodes of inhumanity like slavery, genocide, and racism. Examines how international movements for social justice led to the emergence of the international Human Rights system.	HMR 001	Humanities	U
Human Rights, Gender, & Sexuality	Gender and sexuality in the context of human rights. Topics include women's participation in the public sphere, the right to change gender, the right for family privacy, and the right to marriage.	HMR 138	Humanities	U
Human Rights in Latin America	History of the origins, denial and protection of Human Rights in Latin America. Emphasis on dictatorships, political violence, social resistance, democracy, justice, accountability, truth commissions, memory.	HMR 161	Humanities	U
Water, Power, Society	Water resources issues. How water has been used to gain and wield socio-political power. Water resources development in California as related to current and future sustainability of water quantity and quality. Roles of science and policy in solving water problems.	HYD 010	Land, Air, & Water Resources	U
Ecohydrology	Movement and storage of water in individual ecosystems and the integrated functioning of water and biota at the watershed scale.	HYD 143	Land, Air, & Water Resources	U
Water Law	Principles and issues of California Water Law. Types of water rights, groundwater rights and management, and protection of instream uses. Water projects, role of federal government and federal/state relations. Basic water quality acts, endangered species act, water transfers and current water issues.	HYD 150	Land, Air, & Water Resources	U
Environmental Analysis using GIS	Ecosystem and landscape modeling with emphasis on hydrology and solute transport. Spatial analysis of environmental risk analysis including ecological risk assessment, natural resource management. Spatial database structures, scripting, data models, and error analysis in GIS.	HYD 182	Land, Air, & Water Resources	U
Agroforestry: Global & Local Perspectives	Traditional and evolving use of trees in agricultural ecosystems; their multiple roles in environmental stabilization and production of food, fuel, and fiber; and socioeconomic barriers to the adoption and implementation of agroforestry practices.	IAD 160	Plant Sciences	U
Program Development for International Agriculture	Principles of leadership and management for international agricultural development. Organizations and organizational behavior, and the implications for planning and administering organizations involved in the global development effort.	IAD 170	Plant Sciences	U
Sustainable Development: Theory & Practice	Origins, theoretical perspectives, and practical applications of the concept of sustainable development across scales (site, building, neighborhood, city, region, and nation) through lectures, sketch exercises, student projects, walking tours.	LDA 003	Human Ecology	U
Site Ecology	Introduction to ecological concepts, including nutrient dynamics, population regulation, community structure, ecosystem function. Principles will be applied to human activities such as biological conservation, ecological restoration, landscape planning, and management. Weekly lab devoted to field exercises in local ecosystems.	LDA 050	Human Ecology	U
Directed Group Study in Landscape Architecture	Directed group study.	LDA 098	Human Ecology	U
Green Building, Design, & Materials	Sustainable design and construction techniques at site and building scales. Emphasizes real-world case studies, analysis of opportunities for actual sites, and application of LEED and Sustainable Sites green rating systems.	LDA 140	Human Ecology	U
Applying Sustainable Strategies	Capstone class examines case studies and techniques of sustainable development. Student teams will develop detailed proposals for real-world sites.	LDA 142	Human Ecology	U
California Indian Environmental Policy I	Contemporary California Indian environmental policy issues, with a focus on water, minerals, contamination, and alliance-building. Issues will be placed within historical and political context, drawing on theories of Native environmental ethics, environmental justice, and Federal Indian law.	NAS 161	Native American Studies	U
Environmental Stress & Development in Marine Organisms	Taught at Bodega Marine Laboratory. Effects of environmental and nutritional stress, including pollutants, on development and function in embryos and larvae of marine organisms. Emphasis on advanced experimental methods.	NUT 127	Nutrition	U

Environmental Ethics	Conceptual and ethical issues concerning the environment. Extension of ethical theory to animals, all life, and ecosystem wholes. Topics may include contemporary environmental issues such as global warming, sustainability and biodiversity.	PHI 120	Philosophy	U
Special Topics in Physics	Topics vary, covering areas of contemporary research in physics.	PHY 150	Physics	U
Environmental Physics & Society	Impact of humankind on the environment are discussed from the point of view of the physical sciences. Calculations based on physical principles will be made, and the resulting policy implications are considered.	PHY 160	Physics	U
Introduction to Plant Pathology	The nature, cause, and control of plant diseases.	PLP 120	Plant Pathology	U
Agriculture, Nature & Society	Multiple perspectives and connections between natural sciences, social sciences, and agriculture. Emphasizes agriculture's central position between nature and society and its key role in our search for a productive, lasting and hospitable environment. Several full-period field trips provide hands-on learning.	PLS 001	Plant Sciences	U
Just Coffee: The Biology, Ecology & Socioeconomic Impacts of the World's Favorite Drink	Coffee used as a case study to examine biological, ecological and social factors influencing sustainability of farming systems and how food production systems impact human well-being.	PLS 007	Plant Sciences	U
Just Coffee: The Biology, Ecology & Socioeconomic Impacts of the World's Favorite Drink	Coffee used as a case study to examine biological, ecological and social factors influencing sustainability of farming systems and how food production systems	PLS 007V	Plant Sciences	U
Plants & Society	Dependence of human societies on plant and plant products. Plants as resources for food, fiber, health, enjoyment and environmental services. Sustainable uses of plants for food production, raw materials, bioenergy, and environmental conservation. Global population growth and future food supplies.	PLS 012	Plant Sciences	U
Introduction to Sustainable Agriculture	Multidisciplinary introduction to agricultural sustainability with a natural sciences emphasis. Sustainability concepts and perspectives. Agricultural evolution, history, resources and functions. Diverse agricultural systems and practices and their relative sustainability. Laboratories provide direct experience with selected agricultural practices and systems.	PLS 015	Plant Sciences	U
Organic Crop Production Practices	Principles and practices of organic production of annual crops. Including organic crops, soil, and pest management, cover cropping, composting, seeding, transplanting, irrigation, harvesting and marketing.	PLS 049	Plant Sciences	U
Agriculture & the Environment	Focus on the interaction between agriculture and the environment to address the principles required to analyze conflict and develop solutions to complex problems facing society.	PLS 101	Plant Sciences	U
Concepts in Pest Management	Introduction to the ecological principles of integrated pest management, biology of different classes of pests and the types of losses they cause, population assessment, evaluation of advantages and disadvantages of different techniques used for pest management, IPM programs.	PLS 105	Plant Sciences	U
Rangelands: Ecology, Conservation & Restoration	Introduction to the ecological principles and processes important for an understanding of the dynamics of range ecosystems. Emphasis on ecological and evolutionary concepts underlying management strategies for conserving biological diversity and environmental quality in rangelands.	PLS 130	Plant Sciences	U
Sustainability & Agroecosystem Management	Interdisciplinary analysis of agricultural production and food systems with primary emphasis on biophysical processes. General concepts governing the functioning of temperate and tropical agroecosystems in relation to resource availability, ecological sustainability, and socio-economic viability. Comparative ecological analyses of agroecosystems.	PLS 150	Plant Sciences	U
Agroforestry: Global & Local Perspectives	Traditional and evolving use of trees in agricultural ecosystems; their multiple roles in environmental stabilization and production of food, fuel, and fiber; and socioeconomic barriers to the adoption and implementation of agroforestry practices.	PLS 160	Plant Sciences	U
Ecosystem & Landscape Ecology	Integration of concepts to understand and manage ecosystems in a complex and changing world. Emphasis on interactions among biotic, abiotic & human factors and changes over space/time. Local to global controls over water, carbon and nutrients across ecosystems/landscapes.	PLS 163	Plant Sciences	U
Practicum in Ecological Restoration	Hands-on field exposure to various aspects of ecological restoration throughout the seasonal restoration cycle with real-world practitioners. Emphasis on grassland/rangeland, riparian, and oak woodland communities.	PLS 164	Plant Sciences	U
One Health: Human, Animal & Environment Interfaces	Introduction to fundamentals, challenges, and opportunities in One Health using local and global health case studies. Animal, human, and environmental health problems, along with tools and transdisciplinary approaches, will be introduced to foster innovative thinking that addresses complex issues.	PMI 129Y	Pathology, Microbiology, & Immunology	U
Climate Change & Politics	Analysis of political institutions' response and adaptation to climate change.	POL 012B	Political Science	U
Environmental Politics & Administration	Environment as a political issue in the United States. Development of administrative mechanisms for handling environmental problems. Changing role of Congress, the presidency, the bureaucracy and the courts in environmental policy formulation and implementation.	POL 107	Political Science	U

Justice, Equity, & Privacy in Medical Humanities	Global issues of justice, equity, and fairness in healthcare and biomedical research. Emphasis on issues of race, gender, paternalism, and genetic privacy. Texts include scholarly articles, fiction, and film.	RST 152	Religious Studies	U
Feeding the World: Influences on the Global Food Supply	Scientific principles and dynamic interactions involved in food production, food processing, nutrition, and agribusiness. Physical, biological and social science issues influencing the availability and safety of the food supply worldwide.	SAS 002	Science & Society	U
Feeding the World: Influences on the Global Food Supply	Scientific principles and dynamic interactions involved in food production, food processing, nutrition, and agribusiness. Physical, biological and social science issues influencing the availability and safety of the food supply worldwide.	SAS 002V	Science & Society	U
Water in Popular Culture	Importance of water in many aspects of society as revealed through a survey of its depictions in film.	SAS 004	Science & Society	U
Pathways to Discovery: Science & Society	Highlights a current issue and/or controversy found in contemporary society and looks at how this problem impacts and is affected by the physical, social and biological sciences. Topics vary.	SAS 005	Science & Society	U
Water Quality at Risk	Natural and human threats to water quality. Balance of science and policy in all aspects of attaining, maintaining, and managing water quality, water contamination. Decoding popular media coverage of water quality and water contamination.	SAS 008	Science & Society	U
Crisis in the Environment	Explores contemporary environmental issues by examining the causes, effects and solutions to a wide range of environmental problems facing the global ecosystem. Integrated discussion of political, societal and economic impact linkages with environmental problems. May be taught abroad.	SAS 009	Science & Society	U
Water, Power, Society	Water resources issues. How water has been used to gain and wield socio-political power. Water resources development in California related to current and future sustainability of water quantity and quality. Roles of science and policy in solving water problems.	SAS 010	Science & Society	U
Plants & Society	Dependence of human societies on plant and plant products. Plants as resources for food, fiber, health, enjoyment and environmental services. Sustainable uses of plants for food production, raw materials, bioenergy, and environmental conservation. Global population growth and future food supplies.	SAS 012	Science & Society	U
Global Climate Change: Convergence of Biological, Geophysical, & Social Sciences	Causes of global climate change and the biological, geophysical, and social consequences of such change. Methods used by different scientists for predicting future events. Complexity of global affairs. Decision making under uncertainty.	SAS 025	Science & Society	U
Global Climate Change: Convergence of Biological, Geophysical, & Social Sciences	Causes of global climate change and the biological, geophysical, and social consequences of such change. Methods used by different scientists for predicting future events. Complexity of global affairs. Decision making under uncertainty.	SAS 025V	Science & Society	U
Environmental Change, Disease & Public Health	Analysis of environmental changes from pre-history to the present and their influence on disease distribution, virulence and public health. Focus on critical study of many human-driven environmental changes and the accelerated transformation/spread of pathogens under globalization.	SAS 109	Science & Society	U
Global Poverty: Critical Thinking & Taking Action	Social science and engineering analysis of causes and effects of world poverty and of policies to reduce it via economic growth, foreign aid, and community-level interventions; e.g., in potable water, sanitation, lighting, small scale energy, irrigation, health and microfinance.	SAS 121	Science & Society	U
Education & Inequality in the U.S.	Functions of schooling in contemporary U.S. society. Racial, ethnic, social class, and gender inequalities in student outcomes. Consideration of classic and current controversies in the sociology of education and education policy.	SOC 124	Sociology	U
Industrialization & Social Change	Selected technological and social factors. Preconditions of economic development and industrialization. Social, political, and cultural issues at various levels of economic development. Major historical differences and major current trends. Emphasis either on highly industrialized countries or on less developed countries.	SOC 141	Sociology	U
Sociology of the Environment	Production, consumption, and urban expansion. Basic social logics surrounding current problems of resource scarcity (environmental extractions) and excess wastes (environmental additions). Ways that society can change and re-organize itself to become more environmentally conscious and hence ecologically sustainable.	SOC 160	Sociology	U
Soils in Land Use & the Environment	Soils are considered as elements in land use planning and environmental quality. Topics include: soil survey reports, remote sensing, land capability classification, soil erosion/conservation, waste disposal on soils and soil reclamation. One one-day field trip.	SSC 118	Land, Air, & Water Resources	U
Writing in the Disciplines: Environmental Writing	Advanced instruction in writing and practice in effective styles of communication in the fields of environmental study, policy, or advocacy.	UWP 102G	University Writing Program	U
Global Population, Health, & Environment	Students critically examine multi-scale processes involving human, animal, and ecosystem health. Online team and independent work engage local and global topics around population pressures on environments and environmental pressures on populations.	VME 057V	Public Health	U

Infectious Disease in Ecology & Conservation	Introduction to the dynamics and control of infectious disease in wildlife, including zoonotic diseases and those threatening endangered species. Basic epidemiological models and application to field data. Scientists' role in developing disease control policies.	VME 158	Public Health	U
Wildlife Ecology & Conservation	Introduction to the ecology and conservation of vertebrates. Complexity and severity of world problems in conserving biological diversity.	WFC 010	Wildlife, Fish, & Conservation Biology	U
Introduction to Conservation Biology	Introduction to conservation biology including both biological and social issues related to the loss of species and habitats. Intended for students with no background in biological sciences.	WFC 051	Wildlife, Fish, & Conservation Biology	U
Field Methods in Wildlife, Fish, & Conservation Biology	Introduction to field methods for monitoring and studying wild vertebrates and their habitats, with an emphasis on ecology and conservation. Required weekend field trips.	WFC 100	Wildlife, Fish, & Conservation Biology	U
Biology & Conservation of Wild Birds	Phylogeny, distribution, migration, reproduction, population dynamics, behavior and physiological ecology of wild birds. Emphasis on adaptations to environments, species interactions, management, and conservation.	WFC 111	Wildlife, Fish, & Conservation Biology	U
Biology & Conservation of Fishes	Evolution, ecology, and conservation of marine and freshwater fishes.	WFC 120	Wildlife, Fish, & Conservation Biology	U
Laboratory in Biology & Conservation of Fishes	Morphology, taxonomy, conservation, and identification of marine and freshwater fishes with emphasis on California species.	WFC 120L	Wildlife, Fish, & Conservation Biology	U
Physiological Ecology of Wildlife	Principles of physiological ecology, emphasizing vertebrates. Ecological, evolutionary, and behavioral perspectives on physiological mechanisms used by animals to adapt to their environment, including consideration of climate-change and other threats to biodiversity. Tropical, temperate, and polar ecosystems are highlighted.	WFC 130	Wildlife, Fish, & Conservation Biology	U
Marine Conservation Science	Key differences between marine and terrestrial ecosystems, major stressors of marine ecosystems (e.g., fisheries, pollution, bioinvasions, climate change and habitat destruction) and their consequences. Laws and agencies responsible for addressing problems, and the policies used.	WFC 144	Wildlife, Fish, & Conservation Biology	U
Wildlife Ecology	Ecology of wild vertebrates, including habitat selection, spatial organization, demography, population dynamics, competition, predation, herbivory, energetics, and community dynamics, set in the context of human-caused degradation of environments in North America.	WFC 151	Wildlife, Fish, & Conservation Biology	U
Ecology of Human-Wildlife Conflicts	Ecological approaches to managing wild vertebrates that come into conflict with agriculture, public health, or the conservation of biodiversity.	WFC 152	Wildlife, Fish, & Conservation Biology	U
Conservation Biology	Introduction to conservation biology and background to the biological issues and controversies surrounding loss of species and habitats.	WFC 154	Wildlife, Fish, & Conservation Biology	U
Climate Change Ecology	Ecological responses to current and expected future climate change, across levels of biological organization from individuals to ecosystems.	WFC 168	Wildlife, Fish, & Conservation Biology	U
Advanced Physiological Ecology of Wildlife	Advanced principles of physiological ecology. Ecological, evolutionary and behavioral perspectives on physiological mechanisms used by animals to adapt to their environment in the context of climate change and other threats to biodiversity. Primary literature will form the basis of discussion.	WFC 230	Wildlife, Fish, & Conservation Biology	U
Politics of Life in Africa	Existing (in)capacities in the structures of state and society in Africa for people to live well. Topics include institutions and practices that define state and civil society encounters in Africa; democracy, ethnicity, economic crisis, religion, citizenship, etc. May be taught abroad.	AAS 177	African American Studies	U
Water Quality Management for Aquaculture	Basic principles of water chemistry and water treatment processes as they relate to aquacultural systems.	ABT 161	Biological & Agricultural Engineering	U
Technology in American Lives	Technology as both a material cultural force and a symbol in American culture; the lives of engineers at work and play; images of the engineer and technology in popular culture; social political and ethical issues raised by technology.	AMS 005	American Studies	U
Introductory Animal Science	Growth, reproduction, lactation, inheritance, nutrition, and disease control in domesticated animals and species used in aquaculture; the application of sciences to animal production.	ANS 002	Animal Science	U
Anthropology of Development	Theories of development and current critiques. Colonial legacies and post-colonial realities. Roles of the state and NGOs, population migrations, changing gender identities, cash-earning strategies, and sustainability issues. Stresses importance of cultural understandings in development initiatives. Case studies emphasizing non-industrial societies.	ANT 126A	Anthropology	U
Migration & the Politics of Place & Identity	Internal and international migration from an anthropological perspective, including causes, processes, and political, economic, and cultural effects of spatial mobility and displacement. Emphasizes the interplay of identity, place, and power in diverse cultural and historical contexts.	ANT 130BN	Anthropology	U
Anthropology of Ocean Worlds	Exploration of various oceanic cultures and their engagement with the sea. Piracy, smuggling, exchange, maritime legal regimes, offshore policing, media	ANT 133	Anthropology	U
Cooperative Business Enterprises	Study of cooperative business enterprise in the United States and elsewhere; economic theories of behavior, principles of operation, finance, decision-making, and taxation.	ARE 132	Agricultural & Resource Economics	U

Agricultural Labor	Analysis of labor markets with focus on U.S. and world agriculture. Labor supply, demand, market equilibrium; why farm labor markets are different; global trends in farm labor; U.S. farm labor history; unions and collective bargaining; immigration policy.	ARE 150	Agricultural & Resource Economics	U
Hydroclimatology	Examination of climate as the forcing function for the hydrologic system. Emphasis on seasonal variations in the relationship between precipitation and evapotranspiration for meso-scale areas. Watershed modeling of floods and drought for evaluating the effects of climatic fluctuations.	ATM 115	Atmospheric Science	U
Psychology Perspectives Chicana/o & Latina/o Family	Role of migration and acculturation on family structure and functioning. From a psychological and Chicana/o Studies perspective, contemporary gender roles and variations in family structures are examined. Special topics include family violence, addiction, family resilience and coping strategies.	CHI 122	Chicana/o Studies	U
Decolonizing Spirit	Legacies of colonization and decolonization; indigenous forms of spirituality and sacredness. Emphasis on remembering traditions, practices, relations, and forms of indigenous knowledge.	CHI 148	Chicana/o Studies	U
International Community Development: Asia	Examination and analysis of community development efforts in a range of Asian countries and the impact of global forces in different settings. Includes classroom lectures, workshops, field trips, and collaborative action research projects. Taught abroad.	CRD 153A	Human Ecology	U
International Community Development: Europe	Examination and analysis of community development efforts in Europe and the impact of global forces in different settings. Alternative strategies with emphasis on self-reliance and locally controlled development. Based in Freiburg, Germany, including field trips to France and Switzerland; taught abroad.	CRD 153B	Human Ecology	U
Social Theory & Community Change	Comparative overview of the dominant social science paradigms for the study of community development and change. Among the paradigms discussed are functionalism, conflict theory/Marxism, structuralism, community capitals, social exchange, post-positivism, feminist theories and social constructivism.	CRD 154	Human Ecology	U
Community Economic Development	How government and community organizations help firms grow and create jobs through local economic development corporations, small business centers, revolving loan funds, incubators, and other programs. Techniques to analyze community economic potential and identification of appropriate intervention tools. Group project.	CRD 156	Human Ecology	U
Politics & Community Development	Analyzes political, economic and sociocultural forces shaping the form and function of local communities in the U.S. Considers theories of the state, the community and social change and case studies of actual community development in comparative historical perspective.	CRD 157	Human Ecology	U
Community Governance	Governing institutions and political processes at the local level. Local government organization, community autonomy, leadership, political change, policy development, and select policy issues including public finance. Topics change depending on student interest. Field research on coalition building or policy issues in select communities.	CRD 158	Human Ecology	U
People, Work & Technology	Analysis of the relationship between work, technology, and the human experience. Theories of the causes and consequences of labor	CRD 162	Human Ecology	U
Theories of Organizations & Their Role in Community Change	Planned change within and through community organizations. Private voluntary organizations, local community associations, and local government. Relationship between community organizations and social capital. Collaborative original data gathering and professional report writing.	CRD 164	Human Ecology	U
Housing & Social Policy	Social impact, economics, and politics of housing in the United States. Special attention given to federal, state, and local policy and program strategies to produce and preserve affordable housing and inclusive neighborhoods.	CRD 171	Human Ecology	U
Transnational Community Development	The effects of grassroots, non-state, non-corporate actors from abroad on local, national and international development. Socioeconomic, political, and cultural implications of transnational actions undertaken by international non-governmental organizations, individual migrants, and migrant grassroots civic organizations.	CRD 180	Human Ecology	U
Graphitecture: Architecture in the Age of New Media	New media and its impact on environmental design; analysis of contemporary projects at the intersection of architecture and new media; time-based strategies of representation; digital narrative.	DES 156	Design	U
Engineering Hydrology	The hydrologic cycle. Evapotranspiration, interception, depression storage and infiltration. Streamflow analysis and modeling. Flood routing through channels and reservoirs. Frequency analysis of hydrologic variables. Precipitation analysis for hydrologic design. Hydrologic design.	ECI 142	Civil & Environmental Engineering	U
Hydraulic Structure Design	Project-based course on the design of an integrated urban drainage system with focus on consideration of design alternatives, multiple realistic constraints, quantification of uncertainty, codes and standards, technical drawing and cost analysis.	ECI 145	Civil & Environmental Engineering	U
Water Quality Management	Basic concepts of water quality measurements and regulations. Introduction to physical, biological and chemical processes in natural waters. Fundamentals of mass balances in water and wastewater treatment.	ECI 148A	Civil & Environmental Engineering	U

Economics of International Immigration	Introduction to research on the economics of immigration. Immigrant demographics and reasons for migrating. Immigrant success and effects on native populations. Influence of immigrants on those left behind. Discussion of migration policy in the US and other countries.	ECN 117	Economics	U
Public Finance	Economic burden of taxation; equity and efficiency considerations in tax design; structure and economic effects of the U.S. tax system (including personal income tax, corporation income tax, and property tax); tax loopholes; recent developments; tax reform proposals.	ECN 131	Economics	U
Environmental Monitoring	Instrumentation and methods for environmental and ecological monitoring; GPS, sensors, datalogging, and GIS. Wide range of measurement techniques for environmental parameters.	ESM 108	Environmental Science & Policy AND Land, Air, & Water Resources	U
Marine & Coastal Field Ecology	Ecology of marine populations and communities living in diverse habitats along the California coast. Hands-on learning using scientific process and tools of the biological trade to address ecological questions arising during field trips. Critical thinking through discussing scientific literature.	ESP 124	Environmental Science & Policy	U
Urban & Regional Planning	How cities plan for growth in ways that minimize environmental harm. Standard city planning tools (general plan, zoning ordinance) and innovative new approaches. Focus on planning requirements and practices in California. Relationships between local, regional, state, and federal policy.	ESP 171	Environmental Science & Policy	U
Plant-Water-Soil Relationships	Principles of plant interactions with soil and atmospheric water environments and practical applications to crop management (e.g., irrigation) and plant ecophysiology (e.g., drought).	HYD 124	Land, Air, & Water Resources	U
Introduction to International Agricultural Development	Theories, practices and institutions relating to agricultural development; the interaction of changing social, cultural and economic organization through successive stages of economic development; impact of new agricultural technology on underdeveloped regions.	IAD 010	Plant Sciences	U
Community Nutrition	Nutrition problems in contemporary communities and of selected target groups in the United States and in developing countries. Nutrition programs and policy, principles of nutrition education.	NUT 118	Nutrition	U
Evolution of Crop Plants	Origins of crops and agriculture, including main methodological approaches, centers of crop biodiversity, dispersal of crops, genetic and physiological differences between crops and their wild progenitors, agriculture practiced by other organisms, and role and ownership of crop biodiversity.	PLB 143	Plant Biology	U
Physiology of Environmental Stresses in Plants	Stress concepts and principles; molecular, physiological, developmental and morphological characteristics enabling plants to avoid or tolerate environmental stresses; stress acclimation and adaptation processes; responses of wild and cultivated species to drought, flooding, nutrient deficiencies, salinity, toxic ions, extreme temperatures, etc.	PLS 157	Plant Sciences	U
Basic Concepts in Political Theory	Analysis of such concepts as the individual, community, liberty, equality, justice, and natural law as developed in the works of the major political philosophers.	POL 004	Political Science	U
Ethnic Self-Determination & International Conflict	Compares the claims of the state and ethnic peoples in countries undergoing internal conflicts; e.g., South Africa, Northern Ireland. Analyzes the role of the international community in facilitating the peaceful resolution of conflicts.	POL 126	Political Science	U
Directed Group Study	Group study on focused topics in Sustainable Agriculture & Food Systems. Varies according to instructor. Course plan is adapted to student need and interest in conjunction with the expertise of the instructor.	SAF 198	Land, Air, & Water Resources	U
Sustainable Nutrient Management	Availability of nutrients in organic and conventional agricultural, vineyard, orchard and plantation forest soils; management of fertilizers, cover crops, compost, sewage sludge and manures for crop production and to prevent loss to the environment is emphasized.	SSC 109	Land, Air, & Water Resources	U
Viticultural Practices	Field oriented experience in the principles and practices of grapevine production, including vineyard establishment, vine training, trellising, canopy management practices, irrigation and water management, and methods of crop adjustment for improvement of fruit quality. One field trip required.	VEN 101C	Viticulture & Enology	U
Soils in Viticulture	Landscape distribution, physical and chemical processes in viticultural soils. Site evaluation procedures, best soil management practices, vineyard fertilization, and soil health monitoring.	VEN 112	Viticulture & Enology	U
Integrated Construction for Green Civil Systems	Working within multidisciplinary teams, a heuristic learning environment, and multiple realistic constraints, an integrated design process will be applied to the construction of a project-based green and sustainable civil system.	ECI 128	Civil & Environmental Engineering	U
Climate Policy	Models, data and assumptions behind competing arguments regarding societal response to the prospect of climate change at the state, national and international level from economic, ethical and policy science perspectives.	ESP 165N	Environmental Science & Policy	U
Policy Making in Natural Resource Agencies	Analysis of factors that shape the behavior and performance of public agencies responsible for natural resource management and environmental protection.	ESP 166	Environmental Science & Policy	U
Human Rights	Introduction to the interdisciplinary study of the origins, evolution, denial and protection of Human Rights.	RST 134	Religious Studies	U

Human Rights, Gender, and Sexuality	Gender and sexuality in the context of human rights. Topics include women's participation in the public sphere, the right to change gender, the right for family privacy, and the right to marriage.	RST 138	Religious Studies	U
Water and Wastewater Treatment System Design: Senior Design Experience	Design and evaluation of water and wastewater treatment systems.	ECI 148B	Civil & Environmental Engineering	U
Economic Development	Macroeconomic issues of developing countries. Issues include problems in generating capital, conduct of monetary and fiscal policies, foreign aid and investment. Important issues of policy concerning international borrowing and external debt of developing countries.	ARE 115B	Human Ecology	U
Birds, Humans and the Environment	Interrelationships of the worlds of birds and humans. Lectures, discussions, field trips and projects focus on ecology, avian evolution, physiology, reproduction, flight, behavior, folklore, identification, ecotoxicology and conservation. Current environmental issues are emphasized. Half-day field trip.	AVS 013	Land, Air, & Water Resources	U
Food Systems	Social aspects of agri-food systems. Social science perspectives applied to food, agriculture, and sustainability in relation to power, labor, knowledge, technology, governance, and social movements. Discussions of specific commodity chains and their social and environmental effects in comparative global context.	CRD 020	Human Ecology	U
Materials and Methods in Interior Design	Introduction to finish materials used for interior design with special emphasis on sustainable and recycled products. Performance factors, relative costs and energy impacts, installation conditions and construction details, and design potential for a full range of interior materials. Two field trips required.	DES 138	Design	U
Materials and Methods in Interior Design	Introduction to the finish materials used for interior design with special emphasis on sustainable and recycled products. Performance factors, relative costs and energy impacts, installation conditions and construction details, and design potential for a full range of interior materials.	DES 138	Design	U
Water Quality Management	Basic concepts of water quality. Fundamentals of water and wastewater treatment processes. Analysis of treatment process flowsheets. Analysis of water quality management alternatives.	ECI 148A	Civil & Environmental Engineering	U
Oceanography	Advanced oceanographic topics: Chemical, physical, geological, and biological processes; research methods and data analysis; marine resources, anthropogenic impacts, and climate change; integrated earth/ocean/atmosphere systems; weekly lab and one weekend field trip.	ESP 116N	Environmental Science & Policy	U
Ecosystem & Landscape Ecology	Integration of concepts to understand and manage ecosystems in a complex and changing world. Emphasis on interactions among biotic, abiotic and human factors and changes over space/time. Local to global controls over water, carbon and nutrients across ecosystems/landscapes.	PLS 163	Plant Sciences	U
Gender and Sexuality	Gender and sexuality in foraging bands, horticultural and pastoral tribes, agricultural and industrial states. Debates on cultural evolution and distribution of gender hierarchies. Impact of politics, economics, religion, social practices, women's movements on gender and sexuality. Culture, nature and sexuality.	ANT 139BN	Anthropology	U
Indigenous Peoples and Natural Resource Conservation	Integration of the interests of resident and indigenous peoples with the conservation of natural resources and ecosystems, using case study examples from both the developing and developed world.	ANT 103	Anthropology	U
Women and Development	Current Third World and Western development issues concerning women in agriculture, industry, international division of labor, political movements, revolutions, politics of health, education, family and reproduction. Impact of colonialism, capitalism, the world system, and international feminism on women and development.	ANT 126B	Anthropology	U
Health and Medicine in a Global Context	Recent works in medical anthropology and the science studies of medicine dealing with global health issues such as AIDS, pandemics, clinical trials, cultural differences in illnesses, diabetes, organ trafficking, medical technology and delivery, illness narratives, and others.	ANT 129	Anthropology	U
Health and Medicine in a Global Context	Recent works in medical anthropology and the science studies of medicine dealing with social and cultural aspects of global health issues such as AIDS, pandemics, clinical trials, cultural differences in illnesses, diabetes, organ trafficking, medical technologies, illness narratives, and others.	ANT 129	Anthropology	U
Ecology and Politics	Analysis of the complex interactions between ecological dynamics and political processes employing the emerging approach of political ecology. Case studies of environmental degradation (e.g. desertification, logging, mineral extraction, petroleum, water) from various cultural and geographic regions.	ANT 131	Anthropology	U
Contemporary Societies and Cultures of Latin America	Introduction to contemporary social structure of Latin America. Origins, maintenance and changes in inequality: economic responses to poverty, sociocultural responses to discrimination, and political responses to powerlessness.	ANT 144	Anthropology	U
Resource and Environment Policy Analysis	Natural resource use problems with emphasis on past and current policies and institutions affecting resource use; determinants, principles, and patterns of natural resource use; property rights; conservation; private and public resource use problems; and public issues.	ARE 147	Agricultural & Resource Economics	U

Resource and Environmental Policy Analysis	Natural resource use problems with emphasis on past and current policies and institutions affecting resource use; determinants, principles, and patterns of natural resource use; property rights; conservation; private and public resource use problems; and public issues.	ARE 147M	Agricultural & Resource Economics	U
The Economics of Global Poverty Reduction: What Works and Why	Application of microeconomic theory and econometrics to understand causes of poverty and critically evaluate poverty alleviation policies in low income countries.	ARE 166	Agricultural & Resource Economics	U
Natural Resource Economics	Economic concepts and policy issues associated with natural resources, renewable resources (ground water, forests, fisheries, and wildlife populations) and non-renewable resources (minerals and energy resources, soil). (Same course as Environmental Science and Policy 175.)	ARE 175	Agricultural & Resource Economics	U
Environmental Economics	Role of the environment in economic activity and methods for protecting and enhancing environmental quality; implications of market failures for public policy; design of environmental policy; theory of welfare measurement; measuring the benefits of environmental improvement.	ARE 176	Agricultural & Resource Economics	U
Contemporary Issues of Asian Americans	Introduction to Asian American Studies through the critical analysis of the impact of race, racism, ethnicity, imperialism, militarism, and immigration since post-World War II on Asian Americans. Topics may include sexuality, criminality, class, hate crimes, and inter-ethnic relations.	ASA 002	Asian American Studies	U
Asian Diasporas	Asian diasporic communities and the experiences of its members in the United States and internationally. Community building, cyberspace, gender issues, labor, transnational practices, effects of globalization, political organizing, homeland politics, humanitarian projects, citizenship and nationalism.	ASA 114	Asian American Studies	U
Climate Change	Climate trends and patterns spanning the recent past and the future. Emphasis on natural processes that produce climate variations and human influence on these processes. Evidence of climate change and the role of global climate models in understanding climate variability.	ATM 116	Atmospheric Studies	U
Climate Change	Climate trends and patterns spanning the recent past and the future. Emphasis on natural processes that produce climate variations and human influence on these processes. Evidence of climate change and the role of global climate models in understanding climate variability.	ATM 116	Atmospheric Studies	U
Air Pollution	Physical and technical aspects of air pollution. Emphasis on geophysical processes and air pollution meteorology as well as physical and chemical properties of pollutants.	ATM 149	Atmospheric Studies	U
Chicana/o and Latina/o Health Care Issues	Overview of health issues of Chicanas/os and Latinas/os in the State of California; role of poverty/lack of education and limited access to health care. All course instruction for this course will be in Spanish.	CHI 021S	Chicana/o Studies	U
Indigenous Healing and Biodiversity in Latin America	Contrast between western and traditional healing practices in Latin America and the role of the natural environment in creating sustainable health delivery systems. Questions of health status attributable to public health and environmental risk factors.	CHI 147S	Chicana/o Studies	U
The Community	Basic concepts of community analysis and planned social change. The dynamics of community change through case studies of communities including peasant, urban ghetto, suburban mainline, and California farm workers.	CRD 001	Human Ecology	U
Ethnicity and American Communities	Historical and cultural survey of the role of various ethnic groups in the development of American communities. Examines ethnicity as a cultural factor, ethnicity as power and issues related to selected American ethnic groups.	CRD 002	Human Ecology	U
Housing and Social Policy	Social impact, economics, and politics of housing in the United States. Special attention given to federal, state, and local policy and program strategies to produce and preserve affordable housing and inclusive neighborhoods.	CRD 171	Human Ecology	U
Social Inequality: Issues and Innovations	Focus on the dimensions, causes, and means of alleviating social inequality in the U.S. Examination and analysis of major theories and forms (class, race/ethnicity, gender, and citizenship status) of inequality. Policy-based and grassroots approaches to change.	CRD 172	Human Ecology	U
Sustainable Design	Principles, practice and materials of contemporary sustainable design in the context of environmental crisis. History of sustainable design in relation to the fields of textiles, visual communication, interior architecture, exhibition design and lighting.	DES 127A	Design	U
Sustainable Design	Principles, practice and materials of contemporary sustainable design in the context of environmental crisis. History of sustainable design in relation to the fields of textiles, visual communication, interior architecture, exhibition design and lighting.	DES 127A	Design	U

Studio Practice in Sustainable Design	Analysis and practice of sustainable design within studio context. Design project that incorporate the reuse of post consumer waste; standard materials vs. sustainable materials; Cradle to Cradle philosophy and practice; biomimicry; Life Cycle Analysis. Required field trips.	DES 127B	Design	U
Process Economics and Green Design	Senior design experience in process and product creation and design with multiple realistic constraints. Cost accounting and capital investment estimation. Profitability analysis techniques. Green chemistry, health risk assessment and life cycle assessment concepts.	ECH 158A	Chemical Engineering	U
Integrated Construction for Green Civil Systems	Working within multidisciplinary teams and a heuristic learning environment, an integrated design process will be applied to the construction of a project-based green and sustainable civil system.	ECI 128	Civil & Environmental Engineering	U
Green Engineering Design and Sustainability	Application of concepts, goals, and metrics of sustainability, green engineering, and industrial ecology to the design of engineered systems. Life-cycle analyses, waste audit and environmental management systems, economics of pollution prevention and sustainability, and substitute materials for products and processes.	ECI 143	Civil & Environmental Engineering	U
Green Engineering Design and Sustainability	Application of concepts, goals and metrics of sustainability, green engineering and industrial ecology to engineering design. Other course topics include life-cycle assessments, analysis of environmental management systems, and economics of pollution prevention and sustainability.	ECI 143	Civil & Environmental Engineering	U
Air Pollution Control System Design: Senior Design Experience	Design and evaluation of air pollution control devices and systems.	ECI 150	Civil & Environmental Engineering	U
Water Resources Engineering Planning	Basic engineering planning concepts; role of engineering, economic, environmental and social information and analysis; institutional, political and legal aspects. Case studies and computer models illustrate the planning of water resource systems.	ECI 155	Civil & Environmental Engineering	U
Energy and Environmental Aspects of Transportation	Engineering, economic, and systems planning concepts. Analysis and evaluation of energy, air quality and selected environmental attributes of transportation technologies. Strategies for reducing pollution and petroleum consumption in light of institutional and political constraints. Evaluation of vehicle emission models.	ECI 163	Civil & Environmental Engineering	U
Energy and Environmental Aspects of Transportation	Engineering, economic, and systems planning concepts. Analysis and evaluation of energy, air quality and selected environmental attributes of transportation technologies. Strategies for reducing pollution and petroleum consumption in light of institutional and political constraints. Evaluation of vehicle emission models.	ECI 163	Civil & Environmental Engineering	U
Civil and Environmental Engineering Senior Design	Culminating design experience for civil engineering and environmental engineering majors. Student teams work closely with faculty, city officials or consulting clients to propose, implement and validate a unique solution to a real-world problem.	ECI 193A	Civil & Environmental Engineering	U
Energy Economics	Application of theoretical and empirical tools to the energy sector. Topics include energy and environmental policy, program evaluation, the California energy crisis, market structure and power, global climate change, and command-and-control regulation.	ECN 125	Economics	U
Efficiency in Energy Markets	Application of theoretical and empirical models to examine efficiency in energy production and use. Energy and environmental policy, market structure and power, global climate change, optimal regulation, and real-world applications; e.g., California electricity crisis.	ECN 125	Economics	U
Poverty, Inequality and Public Policy	Examination of the economics of poverty and inequality in the United States, including measurement, trends, and related policies.	ECN 133Y	Economics	U
Combustion and the Environment	Introduction to combustion kinetics; the theory of pre-mixed flames and diffusion flames; turbulent combustion; formation of air pollutants in combustion systems; examples of combustion devices which include internal combustion engines, gas turbines, furnaces and waste incinerators; alternative fuel sources.	EME 161	Mechanical & Aerospace Engineering	U
Internal Combustion Engines and Future Alternatives	Fundamentals of internal combustion engine design and performance. Future needs to adapt to environmental concerns, and the feasibility of better alternatives in the future.	EME 163	Mechanical & Aerospace Engineering	U
Sustainable Energy Technologies: Batteries, Fuel Cells, and Photovoltaic Cells	Basic principles of future energy devices such as lithium batteries, fuel cells, and photovoltaic cells. Examines the current status of these energy technologies and analyze challenges that still must be overcome.	EMS 170	Materials Science & Engineering	U
Introduction to Environmental Horticulture/Urban Forestry	Introduction to the use of plants to enhance the physical, visual and social environment. The use of ecological principles in developing sustainable, low maintenance landscape systems will be presented. Career opportunities will be discussed.	ENH 001	Plant Sciences	U
Urban Forestry	Principles and practices of planning and managing urban vegetation. Basics of tree appraisal, natural resource inventory, and development of long term urban forest management plans.	ENH 100	Plant Sciences	U
Restoration Ecology	Conceptual bases of restoration ecology; tools used by restoration ecologists to solve practical problems; scope and success of actual restoration projects.	ENH 160	Plant Sciences	U

Restoration Ecology	Application of ecological complexity to restoration design, implementation and monitoring across variable environments and under changing environmental conditions. Integration of physiology, population, community, ecosystem, and landscape ecology.	ENH 160	Plant Sciences	U
Literature and the Environment	Historical and/or thematic survey of topics in writing about the environment.	ENL 184	English	U
Biodiversity	Introduction to nature, scope and geographical distribution of biodiversity (diversity of life, with emphasis on plants and animals, especially insects). Humans and biodiversity - domestication, aesthetics, ethics and valuation. Species richness and "success". Biodiversity through time; monitoring, evaluation and conservation. Biomes-global, continental and Californian.	ENT 002	Entomology	U
Marine Environmental Issues	An examination of critical environmental issues occurring in coastal waters. Course links together material from concurrent courses at BML to develop an integrative understanding of marine environments and their	ESP 111	Environmental Science & Policy	U
Energy and Environmental Aspects of Transportation	Analysis and evaluation of energy, air quality and selected environmental attributes of transportation technologies. Strategies for reducing pollution and petroleum consumption in light of institutional and political constraints. Evaluation of vehicle emission models.	ESP 163	Environmental Science & Policy	U
Energy and Environmental Aspects of Transportation	Engineering, economic, and systems planning concepts. Analysis and evaluation of energy, air quality and selected environmental attributes of transportation technologies. Strategies for reducing pollution and petroleum consumption in light of institutional and political constraints. Evaluation of vehicle emission models.	ESP 163	Environmental Science & Policy	U
Water Policy and Politics	The governance of water, including issues of water pollution/quality and water supply. The politics of water decision-making and effectiveness of water policy. Broad focus on federal water policy, with case examples from nationally	ESP 169	Environmental Science & Policy	U
Urban and Regional Planning	How cities plan for growth in ways that minimize environmental harm. Standard city planning tools (general plan, zoning ordinance) and innovative new approaches. Focus on planning requirements and practices in California. Relationships between local, regional, state, and federal policy.	ESP 171	Environmental Science & Policy	U
Natural Resource Economics	Economic concepts and policy issues associated with natural resources, renewable resources (ground water, forests, fisheries, and wildlife populations) and non-renewable resources (minerals and energy resources, soil).	ESP 175	Environmental Science & Policy	U
Modern and Ancient Global Environmental Change	Fundamental scientific concepts underlying issues such as global warming, pollution, and the future of unsustainable resources presented in the context of anthropogenic processes as well as natural forcing of paleoenvironmental change throughout Earth's history.	GEL 010	Geology	U
Energy and the Environment	Conventional and alternative energy resources and their environmental impacts. Basic principles, historical development, current advantages and disadvantages, future prospects. Oil, natural gas, coal, nuclear, wind, geothermal, water, tidal, solar, hydrogen, and other sources of energy for the 21st century.	GEL 018	Geology	U
American Environmental History	Examination of changing relations between people and nature in the area of the current United States from pre-Columbian times to the present. Topics include ecological change; perceptions of nature; social conflicts over "proper" uses of nature; environmental movement.	HIS 172	History	U
Art, Architecture, and Human Rights	Study of human rights as they relate to art, architecture, and cultural heritage. Examines museums, art collections, and cultural-heritage management, their relation to the cultural prerogatives of communities and indigenous groups, and protection of cultural heritage during war and conflict.	HMR 120A	Humanities	U
Special Topics in Human Rights	Thematic study of human rights. Topics may include contemporary or historical issues in the promotion, protection, and violation of human rights; human rights and the arts, religion, literature are possible topical areas.	HMR 130	Humanities	U
Human Rights	Introduction to the interdisciplinary study of the origins, evolution, denial and protection of Human Rights.	HMR 134	Humanities	U
Human Rights in the Middle East	Study of the experience of Human Rights in the modern Middle East, with special attention to the Human Rights issues raised by events of Arab Spring; Palestine-Israel conflict; history of genocide, mass killing and totalitarianism in the region.	HMR 136	Humanities	U
Human Rights, Gender, and Sexuality	Gender and sexuality in the context of human rights. Topics include women's participation in the public sphere, the right to change gender, the right for family privacy, and the right to marriage.	HMR 138	Humanities	U
Runoff, Erosion and Water Quality Management in the Tahoe Basin	Practical hydrology and runoff water quality management from Tahoe Basin slopes. Development of hillslope and riparian restoration concepts, modeling and applications from physical science perspectives including precipitation-runoff relationships, sediment transport, and detention ponds. Five days of instruction in Tahoe City.	HYD 147	Land, Air, & Water Resources	U

Environmental Analysis using GIS	Ecosystem and landscape modeling with emphasis on hydrology and solute transport. Spatial analysis of environmental risk analysis including ecological risk assessment, natural resource management. Spatial database structures, scripting, data models, and error analysis in GIS.	HYD 182	Land, Air, & Water Resources	U
Social Change and Agricultural Development	How social and cultural factors influence technological change in agriculture; theories of diffusion of innovations; social impact analysis and technology assessment.	IAD 103	Plant Sciences	U
Agroforestry: Global and Local Perspectives	Traditional and evolving use of trees in agricultural ecosystems; their multiple roles in environmental stabilization and production of food, fuel, and fiber; and socioeconomic barriers to the adoption and implementation of agroforestry practices.	IAD 160	Plant Sciences	U
Sustainable Development: Theory and Practice	Origins, theoretical perspectives, and practical applications of the concept of sustainable development at a number of scales (site, building, neighborhood, city, region, and nation) through lectures, sketch exercises, student projects, walking tours.	LDA 003	Human Ecology	U
Sustainable Development: Theory and Practice	Origins, theoretical perspectives, and practical applications of the concept of sustainable development at a number of scales (site, building, neighborhood, city, region, and nation) through lectures, sketch exercises, student projects, walking tours.	LDA 003	Human Ecology	U
Green Building, Design, and Materials	Sustainable design and construction techniques at site and building scales. Emphasizes real-world case studies, analysis of opportunities for actual sites, and application of LEED and Sustainable Sites green rating systems.	LDA 140	Human Ecology	U
Rangelands: Ecology, Conservation and Restoration	Introduction to the ecological principles and processes important for an understanding of the dynamics of range ecosystems. Emphasis on ecological and evolutionary concepts underlying management strategies for conserving biological diversity and environmental quality in rangelands.	PLS 130	Plant Science	U
Environmental Politics and Administration	Environment as a political issue in the United States. Development of administrative mechanisms for handling environmental problems. Changing role of Congress, the presidency, the bureaucracy and the courts in environmental policy formulation and implementation	POL 107	Political Science	U
The Politics of Global Inequality	Long-standing division of the global system into richer and poorer regions poses many important problems in international political economy. Course presents a theoretical background to North-South issues and analyses of current problems in economic and political relations.	POL 124	Political Science	U
The Politics of Global Inequality	Analysis of current economic and political international relations resulting from a long standing division of the global system into rich and poor regions.	POL 124	Political Science	U
Water Quality at Risk	Natural and human threats to water quality. Balance of science and policy in all aspects of attaining, maintaining, and managing water quality, water contamination. Decoding popular media coverage of water quality and water contamination.	SAS 008	Science & Society	U
Race Relations	Functions of the social definitions of race and racial groups. Analysis of racial conflict, oppression, and other forms of ethnic stratification. Models of ethnic interaction and social change. Emphasis on racial relationships within the U.S.	SOC 130	Sociology	U
Sociology of Third World Development	Introduction to theories and contemporary issues in the sociology of development. Topics such as urbanization, rural/agrarian change, class, status groups, international division of labor, sectoral shifts, international capital, informal economy, gender, and political processes are analyzed within a comparative-historical framework.	SOC 145A	Sociology	U
Sociology of Third World Development	Introduction to theories and contemporary issues in the sociology of development. Topics such as urbanization, rural/agrarian change, class, status groups, international division of labor, sectoral shifts, international capital, informal economy, gender, and political processes are analyzed within a comparative-historical framework.	SOC 145A	Sociology	U
Gender and Rural Development in the Third World	Political-economic analysis of women and work during the process of socioeconomic change in the world with particular attention to the family/household context.	SOC 145B	Sociology	U
Sociology of the Environment	Production, consumption, and urban expansion. Basic social logics surrounding current problems of resource scarcity (environmental extractions) and excess wastes (environmental additions). Ways that society can change and re-organize itself to become more environmentally conscious and hence ecologically sustainable.	SOC 160	Sociology	U
Sociology of Violence and Inequality	How systems of social inequality organize the practice of violence. Definitions of violence and issues affecting the social capacity for violence. Analysis and comparison of different forms of violence associated with race, class, gender relations and social organization.	SOC 171	Sociology	U

Markets, Culture and Inequality in China	Economic and political systems and patterns of social interaction and inequality in China. State and corporate structures and practices, market and consumer behaviors, social mobility and stratification, protest and resistance.	SOC 188	Sociology	U
Health Disparities in the U.S.	Introduction to the principles and practice of health disparities research.	SPH 105	Public Health	U
Health Disparities in the U.S.	Introduction to the principles and practice of health disparities research.	SPH 113	Public Health	U
Soil and Water Chemistry	Soil solution and solid-phase chemistry of soils in relation to agricultural and environmental concerns. Interactions between soil solids, precipitates and solution phases: mineralogy, ion exchange, adsorption, weathering and buffering, soil colloidal behavior, models of solution and solid-phase interactions.	SSC 102	Land, Air, & Water Resources	U
Soils in Land Use and the Environment	Soils are considered as elements in land use planning and environmental quality. Topics include: soil survey reports, remote sensing, land capability classification, soil erosion/conservation, waste disposal on soils and soil reclamation. One one-day field trip.	SSC 118	Land, Air, & Water Resources	U
Writing in the Professions: Writing for Social Justice	Advanced instruction in writing for Social Justice, using an interdisciplinary approach combining feminist, critical race, ethnic, cultural, and transnational studies; practice in techniques of research and styles of communication for diverse audiences. Suitable for activists in community organizing, non-profits, politics.	UWP 104J	University Writing Program	U
Biology and Conservation of Wild Mammals	Origins, evolution, diversification, and geographical and ecological distributions of mammals. Morphological, physiological, reproductive, and behavioral adaptations of mammals to their environment.	WFC 110	Wildlife, Fish, & Conservation Biology	U
Laboratory in Biology and Conservation of Wild Mammals	Laboratory exercises in the morphology, systematics, species identification, anatomy, and adaptations of wild mammals to different habitats.	WFC 110L	Wildlife, Fish, & Conservation Biology	U
Biology and Conservation of Wild Birds	Phylogeny, distribution, migration, reproduction, population dynamics, behavior and physiological ecology of wild birds. Emphasis on adaptations to environments, species interactions, management, and conservation.	WFC 111	Wildlife, Fish, & Conservation Biology	U
Laboratory in Biology and Conservation of Wild Birds	Laboratory exercises in bird species identification, anatomy, molts, age and sex, specialized adaptations, behavior, research, with emphasis on conservation of wild birds. Several weekend field trips, after class bird walks, and independent bird study are required. Limited enrollment.	WFC 111L	Wildlife, Fish, & Conservation Biology	U
Biology and Conservation of Fishes	Evolution, ecology, and conservation of marine and freshwater fishes.	WFC 120	Wildlife, Fish, & Conservation Biology	U
Laboratory in Biology and Conservation of Fishes	Morphology, taxonomy, conservation, and identification of marine and freshwater fishes with emphasis on California species. Limited enrollment.	WFC 120L	Wildlife, Fish, & Conservation Biology	U
Laboratory in Biology and Conservation of Fishes	Morphology, taxonomy, conservation, and identification of marine and freshwater fishes with emphasis on California species.	WFC 120L	Wildlife, Fish, & Conservation Biology	U
Ecological Management of Problem Wildlife	Ecological approaches to managing wild vertebrates that cause problems for agriculture, public health, or conservation of biodiversity.	WFC 152	Wildlife, Fish, & Conservation Biology	U
Conservation Biology	Introduction to conservation biology and background to the biological issues and controversies surrounding loss of species and habitats. Review of species' recovery plan.	WFC 154	Wildlife, Fish, & Conservation Biology	U
Science, Gender, and Social Justice	Critical reading and reflection on the history of Western science, scientific institutions and the changing role of science in relation to inequalities of class, race, gender and sexuality, and global struggles for equality and justice.	WMS 148	Gender, Sexuality, & Women's Studies	U
Gender and Experience of Race	Exploration of the co-construction of "race" and gender in comparative national historical contexts and contemporary lived experience. Study of intersections of race and gender in identities and how institutions, labor migration, social movements and consumption shape racialized gendered identities.	WMS 175	Gender, Sexuality, & Women's Studies	U
Nature and Culture in America	Uses and abuses of nature in America; patterns of inhabitation, exploitation, appreciation, and neglect; attention to California; emphasis on metaphor as a key to understanding ourselves and the natural world; attention to models of healing: stewardship, ecology, the "rights" movement.	AMS 001E	American Studies	U
Anglos, Latinos and the Spanish Black Legend: The Origins and Educational Implications of Anti-Hispanic Prejudice	Examination of anti-Hispanic prejudice in the United States focusing on the "Black Legend," a 16th Century anti-Spanish myth underpinning the doctrine of "Manifest Destiny." Exploration of the Legend's presence in contemporary American society through interviews and analysis of school textbooks.	EDU 147	Education	U
Cultural Diversity and Education	Analysis of research on learning styles among culturally diverse students with review and evaluation of responsive curricula and classroom teaching techniques. The ethnographic interview as a research tool.	EDU 153	Education	U
Diversity in the K-12 Classroom	Analysis of research on learning styles among culturally diverse students with review and evaluation of responsive curricula and classroom teaching techniques. The ethnographic interview as a research tool.	EDU 153	Education	U
	Intersection of gender and law in North America from the colonial period			

Gender and Justice in American History	through the 20th century. Topics include witchcraft, suffrage, child custody, protective labor laws, regulation of sexuality. Analysis of legal change, trials, and cultural influences.	HIS 182	History	U
Infectious Disease in Ecology and Conservation	Introduction to the dynamics and control of infectious disease in wildlife, including zoonotic diseases and those threatening endangered species. Basic epidemiological models and application to field data. Scientists' role in developing disease control policies.	VME 158	Public Health	U
Disease Intervention and Policy	Examination of the prevention and treatment of diseases affecting humans, animals, and plants. Case studies will illustrate the merits of a unified approach to promoting health at local, regional, and global scales.	GDB 102	Plant Pathology	U
The Political Economy of International Migration	Analysis of worldwide migration patterns, and social scientific theories of international and transnational migration. Focus in economical, political, and social impact of immigration and potential for international and regional cooperation.	IRE 104	Political Science	U
Racial Politics	Race, racial attitudes and racial policies in the United States with a specific emphasis on African Americans.	POL 176	Political Science	U
Introduction to Design	Introduction to the design discipline through readings, writing, visual problem solving, and critical analysis. Topics: design principles and elements, vocabulary, color theory, Gestalt principles, conceptualization strategies. Role of designer and products in contemporary culture including social responsibility and sustainability.	DES 001	Design	U
Introduction to Design	Introduction to design discipline through readings, writing, visual problem solving, and critical analysis. Topics: design principles and elements, vocabulary, color theory, Gestalt principles, conceptualization strategies. Role of designer and	DES 001	Design	U
Basic Landscape Design Studio	Introduction to basic aesthetic, functional, social, and environmental considerations in landscape design. Provides a broad foundation in landscape design methodologies and skills necessary to create environmentally and socially responsible landscape designs.	LDA 070	Human Ecology	U
Philosophy of Law	Philosophical theories of the nature of law, legal obligation, the relation of law and morals. Problems for law involving liberty and justice: freedom of expression, privacy, rights, discrimination and fairness, responsibility, and punishment.	PHI 119	Philosophy	U
International Law	Selected topics in international law; territory, sovereign immunity, responsibility, the peaceful settlement or nonsettlement of international disputes.	POL 122	Political Science	U
The Constitutional Politics of the Equality	Constitutional politics of equality in the American political system; issues surrounding constitutional doctrine and judicial policymaking; special attention on racial and sexual equality.	POL 152	Political Science	U
Directed Group Study	Group study on focused topics in Sustainable Agriculture and Food Systems. Varies according to instructor. Course plan is adapted to student need and interest in conjunction with the expertise of the instructor.	SAF 198	Land, Air, & Water Resources	U
Topics in Public Health	Seminar on key issues and current topics in public health.	SPH 190	Public Health	U
Health and Medicine in a Global Context	Recent works in medical anthropology and the science studies of medicine dealing with global health issues such as AIDS, pandemics, clinical trials, cultural differences in illnesses, diabetes, organ trafficking, medical technology and delivery, illness narratives, and others.	STS 129	Science & Technology Studies	U
Health and Medicine in a Global Context	Recent works in medical anthropology and the science studies of medicine dealing with social and cultural aspects of global health issues such as AIDS, pandemics, clinical trials, cultural differences in illnesses, diabetes, organ trafficking, medical technologies, illness narratives, and others.	STS 129	Science & Technology Studies	U
Introduction to World Trade in Textiles & Clothing	Structure of the global fiber/textile/apparel complex and its distribution patterns with an overview of political, economic and technological factors that are changing these industries and their markets.	TXC 174	Textiles & Clothing	U
Queer Studies	Study of queer sexualities, identities, theories, practices. Alternative sexualities as historical, social, and cultural constructions in intersections with race, gender, class, nationality. Interdisciplinary exploration of sexual liberation and the regulation of sexuality through history, theory and expressive cultural forms.	WMS 170	Gender, Sexuality, & Women's Studies	U
Microdevelopment Theory & Methods II	Extension of development theory and microeconomic methods. Agricultural growth and technological change; poverty and income inequality; multisectoral, including village and regional models. Computable general equilibrium methods and applications.	ARE 215C	Agriculture & Resource Economics	G
Applied Dynamic Structural Econometric Modeling	Covers structural econometric models of static games of incomplete information, single-agent dynamic optimization problems and multi-agent dynamic games, with a focus on applications to issues relevant to the environment, energy, natural resources, agriculture, and development.	ARE 255	Agriculture & Resource Economics	G

Planning for Health	Focused on the intersection of city planning and public health. The health of an individual or community is determined not only by the health care they receive, but also by the natural, social, physical, economic, and political environment. Covers topics such as food access, air quality, water quality, waste and energy infrastructure, community engagement, and the planning process. Provides an overview of available public spatially explicit data.	CRD 200	Human Ecology	G
Media Innovation & Community Development	Role of innovative media in communities and social change. Studies historical, practical and theoretical issues involving media in community organizing, social justice movements, democracy initiatives, and economic justice.	CRD 249	Human Ecology	G
Theory & Issues in Design	Perspectives on theoretical and aesthetic issues related to the design professions such as methodology in historical and contemporary contexts, implications of technology on design theory and practice, and design relationships to environmental sustainability, recycling, and other social issues.	DES 221	Design	G
Energy Systems	Theory and application of energy systems. Systems analysis, energy conversion technologies, environmental considerations, economics and system optimization.	EBS 216	Biological & Agricultural Engineering	G
Water Resource Planning & Management	Applications of deterministic and stochastic mathematical programming techniques to water resource planning, analysis, design, and management. Water allocation, capacity expansion, and reservoir operation. Conjunctive use of surface water and groundwater. Water quality management. Irrigation planning and operation models.	EBS 243	Biological & Agricultural Engineering	G
Air Quality	Factors determining air quality. Effects of air pollutants. Physical and chemical fundamentals of atmospheric transport and reaction. Introduction to dispersion modeling.	ECI 242	Civil & Environmental Engineering	G
Transport, Mixing & Water Quality in Estuaries & Wetlands	Principal causes of mixing and transport in estuaries and wetlands, and their impacts on water quality. Topics include advection/diffusion; tides; transverse mixing; longitudinal dispersion; sediment transport; nutrient cycling; computer modeling of estuaries. Case studies of specific systems.	ECI 264B	Civil & Environmental Engineering	G
Environmental Policy Process	Introduction to selected topics of the policy process and applications to the field of environmental policy. Develops critical reading skills, understanding of policy theory, and an ability to apply multiple theories to the same phenomena.	ECL 212A	Ecology	G
Environmental Policy Evaluation	Method and practice, philosophical basis, and political role of policy analysis. Reviews basic concepts from economic theory; how and why environmental problems emerge in a market economy; and tools necessary for solving environmental problems.	ECL 212B	Ecology	G
Ecology & Agriculture	Ecological principles as relevant to agriculture. Integration of ecological approaches into agricultural research to increase ecosystem functions and services. Topics include crop autoecology, biotic interactions among crops and pests, ecosystem and landscape ecology.	ECL 216	Ecology	G
Ecological Genetics: Applied Genetics for Ecology, Health, & Conservation of Natural Populations	Introduction to the field of applied ecological genetics to include applications in conservation ecology, population genetics, population biology, wildlife health and disease ecology.	ECL 242	Ecology	G
Geomorphology & River Management	Impacts of management and land use activities on the geomorphology of rivers and streams. Evaluation and use of analytical tools for river assessment. Assessment of river and stream restoration strategies and emerging issues in river management.	GEL 230	Geology	G
Topics in Biogeography	Current topics in historical and ecological biogeography, including macroecology and areography, GIS and remote sensing, phylogeography, vegetation, plant and animal community and species geography. Systematics, climate change, and conservation will be addressed.	GEO 210	Geography	G
Land Use	Local agencies, developers, environmental interest groups, and others who regularly deal with the administrative and legislative applications of land use planning and development laws. Topics include zoning, general plans, local government land use regulation, and related areas of litigation. Expanding role of the California Environmental Quality Act.	LAW 256	Law	G
Environmental Epidemiology	Examination of the human health effects and the risk of disease from community, occupational, and personal exposure to toxic substances.	EPI 251	Epidemiology	G
Path to Zero Net Energy	Zero Net Energy concepts and social, technical, economic, and environmental considerations. Multidisciplinary research and analysis for clients.	ABT 212	Biological & Agricultural Engineering	G
Economic Analysis of Resource & Environmental Policies	Development of externality theory, market failure concepts, welfare economics, theory of renewable and non-renewable resource use, and political economic models. Applications to policy issues regarding the agricultural/environment interface and managing resources in the public domain.	ARE 275	Agriculture & Resource Economics	G
Environmental Economics: Externalities	Introduces fundamental and recent research in environmental economics, focusing on the design, implementation and evaluation of environmental policy instruments to correct market failures. Exposure to economic theories and empirical techniques frequently used in this field.	ARE 276A	Agriculture & Resource Economics	G

Environmental Economics: Non-Market Valuation	Second Ph.D. field course in environmental economics, covering theory and econometrics of methods for valuing non-market goods and environmental quality changes. Topics include revealed preference (travel cost, hedonics, sorting equilibrium) and stated preference (contingent valuation, choice experiments, conjoint analysis) techniques.	ARE 276B	Agriculture & Resource Economics	G
Natural Resource Economics	Application of capital theory and dynamic methods to issues of optimal use of renewable and nonrenewable resources. Examination of policy issues associated with forests, fisheries, groundwater, energy resources, watersheds, soil, global climate, and wildlife.	ARE 277	Agriculture & Resource Economics	G
Climate Change, Water & Society	Integration of climate science and hydrology with policy to understand hydroclimatology and its impact upon natural and human systems. Assignments: readings, take-home examination on climate and hydrologic science, paper that integrates course concepts into a research prospectus or review article.	ATM 245	Atmospheric Science	G
Political Ecology of Community Development	Community development from the perspective of geographical political ecology. Social and environmental outcomes of the dynamic relationship between communities and land-based resources, and between social groups. Cases of community conservation and development in developing and industrialized countries.	CRD 244	Human Ecology	G
Group Study		CRD 298	Human Ecology	G
Understanding Climate Change: Causes & Consequences	Diverse physical processes that govern climate and drive climate change. Observational, experimental and modeling techniques and methods used in the development of our scientific understanding of the Earth system.	ECI 246N	Civil & Environmental Engineering	G
Water Resource Management	Engineering, institutional, economic, and social basis for managing local and regional water resources. Examples in the context of California's water development and management. Uses of computer modeling to improve water management.	ECI 267	Civil & Environmental Engineering	G
Transportation-Air Quality: Theory & Practice	Health and regulatory aspects of airborne pollutants. Principles of modeling vehicle emissions. Conformity issues and the regulatory framework. Regional and micro-scale modeling.	ECI 269	Civil & Environmental Engineering	G
Advanced Water Resources Management	Discussion of technical papers related to planning theory, system maintenance, regionalization, multi-objective methods, risk analysis, institutional issues, pricing model application, economic development, forecasting, operations, and other topics.	ECI 270	Civil & Environmental Engineering	G
Water Resources Systems Engineering	Planning and management of water resource systems. Deterministic and stochastic simulation and optimization techniques. Capacity design and operation of reservoir systems for water supply, hydropower, flood control, and environmental objectives.	ECI 273	Civil & Environmental Engineering	G
Issues in Conservation Biology	Graduate-level introduction to current research in conservation biology. Emphasizes reading and discussing primary literature. Specific topics will reflect the research interests of UC Davis conservation biology faculty.	ECL 208	Ecology	G
Climate Change, Water & Society	Integration of climate science and hydrology with policy to understand hydroclimatology and its impact upon natural and human systems. Assignments: readings, take-home examination on climate and hydrologic science, paper that integrates course concepts into a research prospectus or review article.	ECL 245	Ecology	G
Energy & Climate Policy	Fundamentals of energy technology, economics, and policy. Survey and analysis of current and prospective climate policies at the local and global level, including but not limited to cap-and-trade, emissions offsets, intensity standards, technology standards, mandates and subsidies.	ECN 216	Economics	G
Beginning Issues & Practices: Diversity Issues for Educational Leaders	Diversity of stakeholders and community issues in California schools and colleges will be explored. Emphasis will be placed on the interaction between underrepresented segments of society and educational institutions. Best Practices in leading diverse schools will be explored.	EDU 282B	Education	G
Policy: Formulating & Influencing Policy	Conduct critical analyses of policy at the federal, judicial, state, regional and local levels. Specific California and federal policy environment structures, processes and people will be examined for intended consequences, ethical dilemmas, social justice and equity issues.	EDU 284B	Education	G
Life Cycle Assessment for Sustainable Engineering	Life cycle assessment methodology. Emphasis on applications to infrastructure and energy systems. Life cycle design, life cycle cost methods, other tools from industrial ecology, and links to policy.	EGG 201	Electrical & Computer Engineering	G
Energy & Climate Policy	Fundamentals of energy technology, economics, and policy. Survey and analysis of current and prospective climate policies at the local and global level, including but not limited to cap-and-trade, emissions offsets, intensity standards, technology standards, mandates and subsidies.	EGG 202	Electrical & Computer Engineering	G
Analysis of Environmental Management & Policy	Introduction to rational decision making for public policy problems. Modeling natural/human system interactions, data gathering and hypothesis testing. Predicting outcomes of policy options.	ENV 200A	Environmental Policy & Management	G
Environmental Policy Evaluation	Method and practice, philosophical basis, and political role of policy analysis. Reviews basic concepts from economic theory; how and why environmental problems emerge in a market economy; and tools necessary for solving environmental problems.	ENV 200B	Environmental Policy & Management	G

Environmental Law	Roles of legislatures, agencies, and courts in creating and interpreting law; legal strategies for addressing environmental problems; major environmental statutes; and the relationship between federal and state/local legal authority.	ENV 201	Environmental Policy & Management	G
Strategies of Environmental Administration & Management	Bureaucracy and public management, organizational theory, analysis of environmental management by US agencies, NGOs, and business. Overview of natural resource management, analyzes the strengths and limitations of different administrative approaches.	ENV 202	Environmental Policy & Management	G
Environmental Policy Clinic	Teams of students analyze an environmental policy problem from scientific, legal, and economic perspectives. Hands-on learning partnering with rotating clients.	ENV 203	Environmental Policy & Management	G
Health & Ecological Risk Analysis	Methodological approach to risk analysis for human and animal-related health and ecological issues. Basic principles of risk analysis, including perception, communication, assessment and management. Emphasis on the assessment of risk.	EPI 224	Epidemiology	G
Environmental Policy Evaluation	Method and practice, philosophical basis, and political role of policy analysis. Reviews basic concepts from economic theory; how and why environmental problems emerge in a market economy; and tools necessary for solving environmental problems.	ESP 212B	Environmental Science & Policy	G
Economic Analysis of Resource & Environmental Policies	Development of externality theory, market failure concepts, welfare economics, theory of renewable and non-renewable resource use, and political economic models. Applications to policy issues regarding the agricultural/environment interface and managing resources in the public domain.	ESP 275	Environmental Science & Policy	G
Environmental Toxicants	Toxic chemicals: selected topics illustrating their occurrence, structure, and the reactions underlying detection, toxicity, fate, and ecological importance.	ETX 203	Environmental Toxicology	G
Ecotoxicology	Principles of toxicology as applied to chemical action on natural populations, communities, and ecosystems. Physical, chemical, and biological characteristics which influence ecotoxic effects, modeling, and field research. Selected case histories are analyzed and presented in class.	ETX 240	Environmental Toxicology	G
Health Care to Underserved Populations	Discusses sociocultural perspectives of underserved populations impacting health; roles of family/interpersonal relationships in making health care decisions; the nature of ethnic/racial/socioeconomic health care disparities; and clinicians' perspectives in treating people of cultures which are unfamiliar and/or uncomfortable with Western medicine.	FAP 490	Family & Community Medicine	G
Sustainable Food Systems	Environmental impacts of food systems. Methods for quantifying resource use and managing waste for food production and processing. Influence of policies, technologies, and consumer demand on advancing sustainable food systems.	FST 228	Food Science	G
Oceans & Climate Change	Modern climate change and linkages between the ocean-atmosphere-cryosphere-terrestrial climate system. Importance of the ocean in forcing climate change, and the impacts of anthropogenic processes on the ocean. Topics vary. Offered irregularly.	GEL 232	Geology	G
Water Resource Management	Engineering, institutional, economic, and social basis for managing local and regional water resources. Examples in the context of California's water development and management. Uses of computer modeling to improve water management.	GEO 212	Geography	G
Memory, Culture, & Human Rights	Explores the multiple convergences among memory, culture, and human rights. Discusses diverse approaches to how societal actors in different historical, cultural, and national settings, construct meanings of past political violence, inter-group conflicts, and human rights struggles.	HMR 200B	Humanities	G
Climate Change, Water & Society	Integration of climate science and hydrology with policy to understand hydroclimatology and its impact upon natural and human systems. Assignments: readings, take-home examination on climate and hydrologic science, paper that integrates course concepts into a research prospectus or review article.	HYD 245	Land, Air, & Water Resources	G
Economics of Small Farms & Farming Systems	Economic perspective on small farm development. Establishes a basis for predicting farmers' responses to changes in the economic environment, and for proposing government policies to increase small farm production and improve farmer and national welfare.	IAD 201	Plant Sciences	G
Analysis & Determinants of Farming Systems	Unifying concepts of cropping systems in temperate and tropical climatic zones; agroecosystems stability, diversity and sustainability; management strategies, resource use efficiency and their interactions; role of animals, their impact on energy use efficiency, nutrient cycling, and providing food and power..	IAD 202N	Plant Sciences	G
Project Planning & Evaluation	Interdisciplinary setting for application of student skills and specialization to a "real world" development project. Focus on team-building and effective interdisciplinary problem-solving methods, with the objective of producing a project document and presentation within a specified deadline.	IAD 203N	Plant Sciences	G
International Environmental Law	Elective Course for Environmental Law Certificate Program. May satisfy Advanced Writing Requirement with professor's permission. Provides an overview of the structure and basic principles of international environmental law and policy.	LAW 230	Law	G

International Human Rights	Introduces international human rights legal system through an examination of its historical origins and precursors and a review of its international legal backdrop, including the character and sources of international law, the UN Charter and the UN system.	LAW 248B	Law	G
Business & Human Rights	Explores the human rights responsibilities of businesses from legal, ethical, historical, and comparative perspectives. Equips students with the tools to be sensitive to human rights considerations as legal practitioners or in other fields of endeavor.	LAW 248C	Law	G
United Nations Human Rights Practicum I	Opportunity to work in support of the mandate of the United Nations Special Rapporteur in the field of cultural rights.	LAW 248CA	Law	G
United Nations Human Rights Practicum II	Build on the knowledge of the workings of the United Nations human rights system they gained in Practicum I, and gain further advanced experience working with UN documents, with individual cases in the field and with thematic reports.	LAW 248CB	Law	G
Women's Human Rights	Overview of international legal and institutional system for the protection of women's human rights from an academic perspective and the view of the practitioner. Includes the (CEDAW), violence against women, sexual and reproductive rights, economic rights, and more.	LAW 259B	Law	G
Water Law	Property rights in surface waters, including riparian rights, prior appropriation, and public rights use of water bodies; environmental constraints on exercise of water rights; groundwater rights and management; federal allocation and control of water resources; legal aspects of interstate allocation.	LAW 264	Law	G
Ocean & Coastal Law	Introduction to the goals and challenges of coastal and ocean policy; the complicated web of public and private interests in coastal lands and ocean waters; regulation of coastal development; domestic and international fisheries management; and preservation of ocean resources.	LAW 264A	Law	G
Natural Resources Law Seminar	In-depth coverage of two foundational principles of natural resources law: public trust doctrine and private property rights protected under the Takings Clause of the U.S. and many state constitutions.	LAW 265	Law	G
Energy Law Seminar	The history, law, and public policy of energy regulation in the United States with an emphasis on economic and environmental regulation. Competitive restructuring of the natural gas and electric utility industries emphasized. The basic regulatory schemes for other energy sources such as hydroelectric power, coal, oil, and nuclear power explored. Recommended to anyone who has an interest in the energy sector, various models of economic regulation, or regulated industries.	LAW 282	Law	G
Renewable Energy Seminar	Provides a broad overview of renewable energy law and policy with a particular focus on the California policy context. Topics include renewable electricity, California's renewable portfolio standard, and project development.	LAW 282A	Law	G
Environmental Law	Introduction to environmental law, focusing primarily on federal law.	LAW 285	Law	G
California Environmental Issues	The "Nation-state" of California has for many years been a national and global leader in environmental law and policy. Survey of key California environmental law and policy issues.	LAW 285A	Law	G
Environmental Practice	Examines underlying theory and practice in securing compliance with our major environmental laws.	LAW 285B	Law	G
Food Systems Law & the Environment	Explores the various legal structures surrounding the governance of our food system; we will cover environmental regulation (or lack thereof), food safety laws, trade laws, and labor laws.	LAW 285C	Law	G
Climate Change Law & Policy	Addresses the legal and public policy dimensions of climate change, perhaps the most important environmental issue of our time.	LAW 285E	Law	G
Environmental Justice	Introduction to the field of environmental justice.	LAW 285F	Law	G
Public Land Law	Legal aspects of federal land management, including the history of public land law, the scope of federal and state authority over the federal lands, and the allocation of public land resources among competing uses.	LAW 287	Law	G
Poverty Law	Explore the theory and practice of law pertaining to the enactment and enforcement of laws regulating or aiding the poor and other disadvantaged persons.	LAW 287A	Law	G
Social Justice Law Review	The Social Justice Law Review is a publication of the UC Davis School of Law that addresses the unique concerns of social justice in the American legal system.	LAW 411B	Law	G
Environmental Law & Policy Journal	Environs is a biannual environmental law and policy journal that provides an open forum for the discussion of current environmental issues, particularly those pertaining to the state of California.	LAW 418	Law	G
Aoki Water Justice Clinic	Aoki Water Justice Clinic trains students to use community lawyering and transactional legal tools to ensure that low-income, California communities receive safe, clean, and affordable drinking water.	LAW 445A	Law	G
Advanced Aoki Water Justice Clinic	The Advanced Aoki Water Justice Clinic allows students to leverage their legal research and practical lawyering skills to advance policies that ensure that low-income, California communities receive safe, clean, and affordable drinking water.	LAW 445B	Law	G

Environmental Law Externship	Practical experience in environmental law. Students will work in an approved government, non-profit or private law office engaged in some form of environmental law work for a minimum of eight hours per week. Students must prepare a journal describing and reflecting upon their clinical experience, and meet periodically with the instructor.	LAW 450	Law	G
Landscape Conservation	Focus is on land planning, design, and management techniques to further the goal of resource preservation. Examines current critical theory in the establishment and management of conservation areas.	LDA 280	Human Ecology	G
Sustainable Manufacturing & Design	Definitions, methods, and dimensions of sustainability in manufacturing and product design. Emphasis on resource efficiency and life cycle engineering in the context of the production environment.	MAE 256	Mechanical & Aerospace Engineering	G
Climate Risks & Opportunities	Provide a working knowledge of the risks and opportunities arising from climate change and climate policy for businesses.	MGB 415	Management	G
Corporate Social Responsibility	Learn practical information that will help students understand the basics of designing, managing and evaluating an effective CSR program. Expose students to a basic set of CSR issues in the context of cross-purpose business challenges and then focus on the analysis and critical decisions that managers must make to move their business and their social agenda forward.	MGP 433	Management	G
Corporate Social Responsibility	Learn practical information that will help students understand the basics of designing, managing and evaluating an effective CSR program. Expose students to a basic set of CSR issues in the context of cross-purpose business challenges and then focus on the analysis and critical decisions that managers must make to move their business and their social agenda forward.	MGT 433	Management	G
Race & Health in the United States	Race as a social construct and unequal health care distribution in the United States. Practical health care leadership to end racial inequalities in health.	NRS 213	Nursing	G
Environmental Ethics	Intensive treatment of one or more topic(s) in environmental ethics, such as biodiversity, sustainability, composition of the moral community, invasive species, endangered species, applications of ethical theories to contemporary environmental issues.	PHI 220	Philosophy	G
Advanced Topics in Conservation Genetics	In-depth study of topics related to the application of genetic tools to wildlife conservation. Topics will vary annually, but may include use of non-invasive methods of genetic assessment and monitoring of wildlife populations. Students will lead discussions on assigned readings.	PHR 243	Population Health & Reproduction	G
Principles of Environmental Health Science	Principles, approaches and issues related to environmental health. Recognizing, assessing, understanding and controlling the impact of people on their environment and the impact of the environment on the public.	SPH 262	Public Health	G
Selected Topics in Transportation Technology & Policy	Directed group study of special topics with instruction carried out through lecture or laboratory, or a combination of both.	TTP 289A	Transportation	G
Selected Topics in Transportation Technology & Policy	Directed group study of special topics with instruction carried out lecture or laboratory, or a combination of both.	TTP 289B	Transportation	G
Recent Advances in Textiles	Critical reading and evaluation on selected topics of current interest in textiles. Multidisciplinary aspects of the topics selected will be stressed.	TXC 293	Textiles	G
Infectious Disease in Ecology & Conservation	Presentation, analysis and discussion of primary literature on the dynamics and control of infectious disease in wildlife, including zoonotic diseases and those threatening endangered species. Multidisciplinary approach combines perspectives of ecology and veterinary medicine.	VME 258	Public Health	G
Advanced Physiological Ecology of Wildlife	Advanced principles of physiological ecology. Ecological, evolutionary and behavioral perspectives on physiological mechanisms used by animals to adapt to their environment in the context of climate change and other threats to biodiversity. Primary literature will form the basis of discussion.	WFC 230	Wildlife, Fish, & Conservation Biology	G
Scientific Literacy & Science Education Reform	Current trends in science education reform locally, regionally, and nationally focusing on scientific literacy. Equity, access and "science for all."	EDU 264	Education	G
Corporate Social Responsibility	Learn practical information that will help students understand the basics of designing, managing and evaluating an effective CSR program. Expose students to a basic set of CSR issues in the context of cross-purpose business challenges and then focus on the analysis and critical decisions that managers must make to move their business and their social agenda forward.	MGB 433	Management	G
Climate Risks & Opportunities	Provide a working knowledge of the risks and opportunities arising from climate change and climate policy for businesses.	MGP 415	Management	G
Advanced Nutritional Energetics	History of nutritional energetics. Evaluation of energy transformations associated with food utilization. Energy expenditures at cellular, tissue, and animal levels as affected by diet and physiological state. Current and future feeding systems.	ABG 205	Animal Biology	G
Climate Dynamics	Dynamics of large-scale climatic variations over time periods from weeks to centuries. Description of the appropriate methods of analysis of atmospheric and oceanic observations. Conservation of mass, energy and momentum. Introduction to the range of climate simulations.	ATM 241	Atmospheric Science	G

Transformation of Work	Exploration of the ways that the experience, organization, and systems of work are being reconfigured in the late-20th century. The impacts of economic restructuring on local communities and workers.	CRD 247	Human Ecology	G
Applied Environmental Chemistry: Inorganic	Chemistry of natural and polluted waters. Topics include chemical, kinetic and equilibrium principles, redox reactions, gas solution and solid-solution equilibria, thermodynamics, carbonate systems, coordination chemistry, interfacial phenomena.	ECI 245A	Civil & Environmental Engineering	G
Community Development Theory	Introduction to theories of community development and different concepts of community, poverty, and development. Emphasis on building theory, linking applied development techniques to theory, evaluating development policy, and examining case studies of community development organizations and projects.	GEO 240	Geography	G
Horticulture & Agronomy: Practices	Introduction to horticultural and agronomic cropping systems. Covers current applied research within agroecology, crop improvement, crop production, postharvest biology.	HRT 200B	Horticulture & Agronomy	G
Philosophy & Practice of Agricultural Development	Introduces key elements of philosophy and practice of agricultural development in less developed countries; major paradigms of development; historical context within which these paradigms operate; various development techniques and initiatives emerging from agricultural production to institutional capacity building and management.	IAD 200N	Plant Sciences	G
Restorative Justice	Explore both the theory and practice of restorative justice as an alternative approach to the retributive justice model of our current criminal law system and many other institutions.	LAW 210F	Law	G
Aoki Center Restorative Justice Practicum	Learn about restorative justice principles and practices, receive training in restorative justice facilitation, and participate in and lead restorative justice circles in Davis & Sacramento schools, Yolo County Juvenile Hall, and other venues.	LAW 210G	Law	G
Public Health Law	Public health law, seen broadly, is the government's power and responsibility to ensure the conditions for the population's health.	LAW 286B	Law	G
Reproductive Rights, Law, & Policy	Addresses a variety of laws and practices that affect reproductive health and procreative decision making.	LAW 286E	Law	G
Ecologies of Infrastructure	Focus on design practices and theory associated with ecological conceptions of infrastructure, including networked infrastructure, region, bioregion, regionalization, ecological engineering, reconciliation ecology, novel ecosystems, and theory/articulation of landscape change.	LDA 215	Human Ecology	G
Food & the City	Exploration of theory and practice related to the design and planning of alternative and resilient food systems, including urban agriculture, agrihoods, and agri-/rural tourism. Includes investigation of urban-rural connections and case-studies of regional urban agriculture projects.	LDA 216	Human Ecology	G
Population Health & System Science	Addresses the social, economic, cultural, policy-related, and environmental factors that affect the health of populations and individuals, and the role of health care systems (locally, regionally, nationally, and globally) in moderating the effects of these factors. Content builds on MDS 415A & MDS 415B, the TeamPEACE (Teamwork for Professionalism, Ethics, and Cultural Enrichment) curriculum in Doctoring 1, and students' lived experience in UC Davis free clinics.	MDS 415C	Public Health	G
Health Policy Lecture Series	Lecture series provides an overview of local, state, national and international health policy. The current challenges health care reform implementation is facing provides how medical students can successfully advocate for changes in health policy.	MDS 485	Public Health	G
Emerging Issues at the Interface of Animal, Human, & Ecosystem Health	Introduce one health topics emphasizing relationships between environmental, animal and human health. Topics include ecosystem change and impacts on animals and humans, cross-species disease transmission and approaches for addressing critical data gaps to inform ecosystem health and disease prevention.	MPM 201	Preventative Veterinary Medicine	G
Fostering Healthy Communities	Focuses on populations & communities, and emphasizes working with diverse communities in providing health promotion, chronic disease management, transitional support and crisis intervention. Develop skills to critically analyze and shape health policy and develop accessible community resources.	NRS 427	Nursing	G
Field Research Methods in International Nutrition	Issues and problems related to implementation of nutrition field research in less-developed countries, including ethics; relationships with local governments, communities, and scientists; data collection techniques and quality assurance; field logistics; research budgets; and other administrative and personal issues.	NUT 258	Nutrition	G
Epidemiological Approaches to Waterborne Zoonotic Pathogens	Waterborne zoonotic diseases remain a significant cause of human illness. Review key waterborne pathogens; their biology, fate and transport in aquatic systems; on-farm management practices for reducing microbial contamination of California's fresh and marine aquatic resources from livestock production systems.	PHR 210	Population Health & Reproduction	G
Environmental Quality Modeling	Mathematical modeling of environmental quality, with emphasis on mathematical models of water quality, their structure, capabilities and limitations; sensitivity and reliability, as analytical and/or predictive tools.	ECI 244	Civil & Environmental Engineering	G

Life Cycle Assessment for Sustainable Engineering	Life cycle assessment methodology is taught emphasizing applications to infrastructure and energy systems. Life cycle design, life cycle cost methods, other tools from industrial ecology, and links to policy are covered as well.	ECI 244	Civil & Environmental Engineering	G
Sustainable Transportation Technology and Policy	Role of technical fixes and demand management in creating a sustainable transportation system. Emphasis on technology options, including alternative fuels, electric propulsion, and IVHS. Analysis of market demand and travel behavior, environmental impacts, economics and politics.	ECI 252	Civil & Environmental Engineering	G
Sustainable Transportation Technology and Policy	Role of technical fixes and demand management in creating a sustainable transportation system. Emphasis on technology options, including alternative fuels, electric propulsion, and IVHS. Analysis of market demand and travel behavior, environmental impacts, economics and politics.	ESP 252	Environmental Science & Policy	G
Renewable Energy Seminar	Seminar will provide a broad overview of renewable energy law and policy with a particular focus on the California policy and institutional context.	LAW 282AT	Law	G
United Nations Human Rights Practicum II	Offers students the opportunity to work in support of the United Nations Special Rapporteur in the field of cultural rights at an advanced level. They will gain heightened expertise in cultural rights, and in-depth experience with the UN.	LAW 248DT	Law	G
Restorative Justice	Explore both the theory and practice of restorative justice as an alternative approach to the retributive justice model of our current criminal law system and many other institutions.	LAW 210FT	Law	G
The Economics of Small Farms and Farming Systems	Economic perspective on small farm development. Establishes a basis for predicting farmers' responses to changes in the economic environment, and for proposing government policies to increase small farm production and improve farmer and national welfare.	IAD 201	Plant Sciences	G
Political Ecology of Community Development	Community development from the perspective of geographical political ecology. Social and environmental outcomes of the dynamic relationship between communities and land-based resources, and between social groups. Cases of community conservation and development in developing and industrialized countries.	CRD 244	Human Ecology	G
Air Quality Modeling	Modeling of urban and regional air quality problems including gas-phase chemical reactions, aqueous-phase chemical reactions, phase partitioning, and numerical solution schemes.	ECI 241	Civil & Environmental Engineering	G
Environmental Policy Process	Introduction to selected topics in the policy process, applications to the field of environmental policy. Develops critical reading skills, understanding of frameworks of the policy process and political behavior, and an ability to apply multiple frameworks to the same phenomena.	ECL 212A	Ecology	G
Environmental Policy Evaluation	Methods and practices of policy analysis; philosophical and intellectual bases of policy analysis and the political role of policy analysis.	ECL 212B	Ecology	G
Ecology and Agriculture	Ecological principles and relationships as applied to agriculture. Integration of ecological approaches into agricultural research to develop environmentally sound management practices. Topics include crop autoecology, biotic interactions among crops and pests, and crops systems ecology.	ECL 216	Ecology	G
Ecological Genetics: Applied Genetics for Ecology, Health, and Conservation of Natural Populations	Introduction to the field of applied ecological genetics to include applications in conservation ecology, population genetics, population biology, wildlife health and disease ecology.	ECL 242	Ecology	G
Participatory Action Research (PAR)	Principles and strategies of PAR and related methodologies that emphasize collaborating with those affected by the issue being researched in order to educate, take action or effect social change. Conduct interviews with potential collaborators, case analyses and research proposals.	EDU 238	Education	G
Low Power Digital Integrated Circuit Design	IC design for low power and energy consumption. Low power architectures, logic styles and circuit design. Variable supply and threshold voltages. Leakage management. Power estimation. Energy sources, power electronics, and energy recovery. Applications in portable electronics and sensors. Thermodynamic limits.	EEC 216	Electrical & Computer Engineering	G
Environmental Policy Process	Introduction to selected topics in the policy process, applications to the field of environmental policy. Develops critical reading skills, understanding of frameworks of the policy process and political behavior, and an ability to apply multiple frameworks to the same phenomena.	ESP 212A	Environmental Science & Policy	G
Environmental Policy Process	Introduction to selected theories of the policy process and applications to the field of environmental policy. Develops critical reading skills, understanding of policy theory, and an ability to apply multiple theories to the same phenomena.	ESP 212A	Environmental Science & Policy	G
Environmental Policy Evaluation	Methods and practices of policy analysis; philosophical and intellectual bases of policy analysis and the political role of policy analysis.	ESP 212B	Environmental Science & Policy	G
The Oceans and Climate Change	Modern climate change and linkages between the ocean-atmosphere-cryosphere-terrestrial climate system. Importance of the ocean in forcing climate change, and the impacts of anthropogenic processes on the ocean. Topics vary.	GEL 232	Geology	G

History, Theory and Criticism of Human Rights	Introduces the advanced study of Human Rights and the theoretical and practical elaboration of the international Human Rights system. Seminar will engage with criticism of Human Rights and develop research and teaching within disciplinary and interdisciplinary frameworks.	HMR 200A	Humanities	G
Memory, Culture, and Human Rights	Explores the multiple convergences among memory, culture, and human rights. Discusses diverse approaches to how societal actors in different historical, cultural, and national settings, construct meanings of past political violence, inter-group conflicts, and human rights struggles.	HMR 200B	Humanities	G
Analysis and Determinants of Farming Systems	The unifying concepts of cropping systems in temperate and tropical climatic zones; agroecosystems stability, diversity and sustainability; management strategies, resource use efficiency and their interactions; the role of animals, their impact on energy use efficiency, nutrient cycling, and providing food and power.	IAD 202N	Plant Sciences	G
Analysis and Determinants of Farming Systems	Unifying concepts of cropping systems in temperate and tropical climatic zones; agroecosystems stability, diversity and sustainability; management strategies, resource use efficiency and their interactions; role of animals, their impact on energy use efficiency, nutrient cycling, and providing food and power..	IAD 202N	Plant Sciences	G
International Human Rights -- Refugee Law	Covers the international and US refugee law regime; tracing the development of the Refugee Convention and the US Refugee Act of 1980.	LAW 248B	Law	G
International Human Rights -- Refugee Law	Explores the treatment of refugees, asylees, and forced migrants in the U.S. legal system.	LAW 248B	Law	G
Natural Resources Law Seminar	Seminar devoted to in-depth coverage of a specific topic or topics in natural resources law. Elective course for Environmental Law Certificate Program.	LAW 265	Law	G
Environmental Law	An introduction to federal and state environmental law, including coverage of historical development of environmental law; the role of courts, the legislature and the executive branch in the development and implementation of environmental policy; allocation of authority among different levels of government; the role of market forces in environmental decisions; the major regulatory strategies that have been applied to control environmental harm, and enforcement of environmental law. Major statutes considered include the National Environmental Policy Act, Endangered Species Act, Clean Air Act and Clean Water Act.	LAW 285	Law	G
Environmental Law	An introduction to federal and state environmental law, including coverage of historical development of environmental law; the role of courts.	LAW 285	Law	G
California Environmental Issues Seminar	The "nation-state" of California has for many years been a national and global leader in environmental law and policy. Survey of key California environmental law and policy issues.	LAW 285A	Law	G
California Environmental Issues	"Nation-state" of California has for many years been a national and global leader in environmental law and policy. Survey of key California environmental law and policy issues.	LAW 285A	Law	G
Environmental Law and Policy Journal	Each year nearly 100 King Hall students work together to publish Environs. Getting involved with the journal will provide you with the chance to develop essential skills that will benefit you throughout school and career.	LAW 418	Law	G
Landscape Conservation	Focus is on land planning, design, and management techniques to further the goal of resource preservation. Examines current critical theory in the establishment and management of conservation areas.	LDA 280	Human Ecology	G
PRIME Seminar Series: Fall Quarter	Weekly seminar series covering the following areas: community engagement, Healthcare to rural and under served populations, health policy and advocacy, leadership, technology and health equity and disparity.	MDS 490A	Public Health	G
PRIME Seminar Series: Healthcare to Rural Underserved Populations	Seminar series will provide a forum to discuss health care for rural and other populations who have geographic, economic or physical difficulty accessing health care; models for care delivery in rural settings; and opportunities for physicians in rural areas.	MDS 490B	Public Health	G
PRIME Seminar Series: Winter Quarter	Weekly seminar series covering the following areas: community engagement, Healthcare to rural and under served populations, health policy and advocacy, leadership, technology and health equity and disparity.	MDS 490B	Public Health	G
PRIME Seminar Series: Healthcare Policy and Advocacy	Seminar series will introduce students to health policy, including current health legislation and provide examples for student involvement in health advocacy and social justice movements.	MDS 490C	Public Health	G
PRIME Seminar Series: Spring Quarter	Weekly seminar series covering the following areas: community engagement, Healthcare to rural and under served populations, health policy and advocacy, leadership, technology and health equity and disparity.	MDS 490C	Public Health	G
PRIME Seminar Series: Summer Quarter	Weekly seminar series covering the following areas: community engagement, Healthcare to rural and under served populations, health policy and advocacy, leadership, technology and health equity and disparity.	MDS 490D	Public Health	G
Climate Risks and Opportunities	Provide a working knowledge of the risks and opportunities arising from climate change and climate policy for businesses.	MGB 415	Management	G

Climate Risks and Opportunities	Provide a working knowledge of the risks and opportunities arising from climate change and climate policy for businesses.	MGP 415	Management	G
Health Disparities in the U.S.	Introduction to the principles and practice of health disparities research.	SPH 205	Public Health	G
Health Disparities in the U.S.	Introduction to the principles and practice of health disparities research.	SPH 213	Public Health	G
Sustainable Vineyard Development	Application of plant, meteorological, soil, water, GIS, and economic sciences to sustainable vineyard development. Preparation of a comprehensive study to determine the viticultural and economic feasibility of a given site for raisin, table, or wine grape production.	VEN 216	Viticulture & Enology	G
Water and Waste Treatment	Characteristics of water and airborne wastes; treatment processes and process kinetics; treatment system design.	ECI 243A	Civil & Environmental Engineering	G
Water and Waste Treatment	Continuation of course 243A. Aeration, thickening, biological processes, design of biological treatment systems.	ECI 243B	Civil & Environmental Engineering	G
Race and Health in the United States	Interprofessional course facilitates the professional and personal developmental of medical students and other health professions students who think they would like to be leaders in securing equity in population health and work environments.	MDS 445	Public Health	G
Health Care to Rural and Underserved Populations	Discusses sociocultural perspectives of underserved populations impacting health; roles of family/interpersonal relationships in making health care decisions; the nature of ethnic/racial/socioeconomic health care disparities; and clinicians' perspectives in treating people of cultures which are unfamiliar and/or uncomfortable with Western medicine.	FAP 490	Family & Community Medicine	G
Public Benefits Law	Will explore the theory and practice of law pertaining to the enactment and administration of public benefits programs for poor and other disadvantaged persons in our society.	LAW 287A	Law	G
Applied Microeconomics II: Welfare Analysis and Imperfect Competition	Methods of applied welfare economics with emphasis on problems arising in agriculture and the environment. Models of imperfectly competitive markets and their application to industries and institutions in the agricultural sector.	ARE 202C	Agriculture & Resource Economics	G
Individual Study	Individual study for the designated emphasis in human rights.	HMR 299	Humanities	G
Philosophy and Practice of Agricultural Development	Introduction to key elements of the philosophy and practice of agricultural development in less developed countries. Introduction to the major paradigms of development, the historical context within which these paradigms	IAD 200N	Plant Sciences	G
Aoki Center Restorative Justice Practicum	Learn about restorative justice principles and practices, receive training in restorative justice facilitation, and participate in and lead restorative justice circles in Davis and Sacramento schools, Yolo County Juvenile Hall, and other venues.	LAW 210G	Law	G
Physical Planning and Design	Regulation, design, and development of the built landscape, planning and land development processes, zoning and subdivision regulation, site planning, urban design goals and methods, public participation strategies, creatively designing landscapes to meet community and ecological goals.	LDA 205	Human Ecology	G
Topics in Public Health	Seminar on key issues and current topics in public health. Course begins in August SSII. Students must enroll in August, then Fall and Winter. The course is a series but grades and units are given at end of each quarter.	SPH 290	Public Health	G
Topics in Public Health	Key issues and current topics in public health. Course begins in August SSII. Students must enroll in August, then Fall and Winter. The course is a series but grades and units are given at end of each quarter.	SPH 290	Public Health	G

Sustainability-inclusive courses

Years: 2016-2017, 2017-2018, 2018-2019

Red = cross-listed

U = undergraduate, G = graduate

Title	Course Description	Course	Department	Level
Survey of Ethnicity in the US	Sociological and historical analysis of the experience, culture, and relations of and between groups considered racial and/or ethnic minorities in the United States.	AAS 100	African American Studies	U
Black Female Experience in Contemporary Society	Black female social, intellectual, and psychological development. Black women's contributions in history, literature, and social science; life experiences of Black women and philosophical underpinnings of the feminist movement.	AAS 123	African American Studies	U
Psychology of the African American Experience	Introduction to the psychological issues faced by African Americans. Description of any disparities in mental health care experienced by African American and Diaspora populations in the United States. Analysis of issues from European/Western and Afrocentric frame of reference. Emphasis on Optimal Theory, a psychological theory based on an Afrocentric world view.	AAS 141	African American Studies	U
The Politics of Resources	Examination of the ways in which the processes of the extraction, purification and use of natural resources and the complex regimes of valuation and commodification they (re)produce lead to cooperation and conflict in contemporary Africa and beyond.	AAS 176	African American Studies	U
African Modernity & Globalization	Exploration of modernity and globalization and their dimensions and impacts in/on Africa. Examination of modern necessities and constraints in Africa in relation to (neo)colonialism, transnational encounters, technology, gender, risk, ritual, identity, culture, etc.	AAS 178	African American Studies	U
Understanding Architecture	Development of architecture and urban design; how form, space, order are conceived and used across eras and cultures. Examines the function and organization of space, technological problems of construction, visual qualities of architecture, and social issues connected to architecture.	AHI 025	Art History	U
Contemporary Architecture	Introduction to world architecture and urban design since circa 1966. Relation of influential styles, buildings, and architects to postmodern debates and to cultural, economic, technological and environmental change.	AHI 187	Art History	U
Animal Welfare	Application of principles of animal behavior and physiology to assessment and improvement of the welfare of wild, captive, and domestic animals. Topics include animal pain, stress, cognition, motivation, emotions, and preferences, as well as environmental enrichment methods.	ANS 103	Animal Science	U
Ancient Crops & People	The archaeological evidence for domestication of plants and the origins of agricultural societies. Anthropological context of agriculture and the effects on sexual division of labor, social inequality, wealth accumulation, warfare, human health, and sedentism.	ANT 024	Anthropology	U
Ancient Animals & People	History of human and animal relationships and how animals have influenced social and economic structures of past societies. Why, when and how humans used animals in the context of hunting, domestication, secondary products, ritual, companionship, and conservation.	ANT 025	Anthropology	U
Economic Development	Macroeconomic issues of developing countries. Issues include problems in generating capital, conduct of monetary and fiscal policies, foreign aid and investment. Important issues of policy concerning international borrowing and external debt of developing countries.	ARE 115B	Agriculture & Resource Economics	U
Asian Diasporas	Asian diasporic communities and the experiences of its members in the United States and internationally. Community building, cyberspace, gender issues, labor, transnational practices, effects of globalization, political organizing, homeland politics, humanitarian projects, citizenship and nationalism.	ASA 114	Asian American Studies	U
South Asian American History, Culture, & Politics	South Asian American experiences, focusing on the histories, cultures, and politics of Indian, Pakistani, Bangladeshi, and Sri Lankan communities in the U.S. Interdisciplinary approaches to migration, labor, gender, racialization, ethnicity, youth, community mobilization.	ASA 150F	Asian American Studies	U
Asian American Legal History	Legal history of Asian Americans, from the mid-19th century to present. Laws and administrative policies affecting Asian American communities, including those governing immigration, social and economic participation, WWII internment, and affirmative action.	ASA 155	Asian American Studies	U
Feminist Media Production	Media production as a mode of cultural criticism, furthering feminist and social justice goals. Fundamentals of camera, editing and distribution via a social engagement model. Study and hands-on response to key historic and contemporary feminist and social justice media discourses.	CDM 105	Cinema & Digital Media	U
Sociology of the Chicana/o Experience	The Chicana/o experience in the American society and economy viewed from theoretical perspectives. Immigration, history of integration of Chicana/o labor into American class structure, education inequality, ethnicity, the family and Chicana/o politics. (Former course SOC 110.)	CHI 110	Chicana/o Studies	U
Chicanas/Mexicanas in Contemporary Society	Analysis of the role and status of Chicanas/Mexicanas in contemporary society. Special emphasis on their historical role, the political, economic and social institutions that have affected their status, and their contributions to society and their community. (Former CHI 102.)	CHI 111	Chicana/o Studies	U
Latin American Women's Engagement in Social Movements	Examination of how women of different racial/ethnic and class backgrounds in Latin America challenge their marginalization. Exploration of US foreign policy, its effects on Latin American's institutions and on Latin American citizens. Using Chicana feminist perspective.	CHI 113	Chicana/o Studies	U
Communication Campaigns	Strategic uses of media and interpersonal communication channels in health, environmental advocacy, and political campaigns. Emphasis on general principles relevant to most campaign types, including public information, social marketing, and media advocacy campaigns.	CMN 146	Communications	U
Persuasive Technologies	Designing and testing ethical, technology-based communication interventions in the domains of health, marketing, education, and environment. Social media, mobile apps, wearable devices, recommendation systems, serious games, and augmented reality.	CMN 178	Communications	U
The Community	Basic concepts of community analysis and planned social change. The dynamics of community change through case studies of communities including peasant, urban ghetto, suburban mainline, and California farm workers.	CRD 001	Human Ecology	U
Ethnicity & American Communities	Historical and cultural survey of the role of various ethnic groups in the development of American communities. Examines ethnicity as a cultural factor, ethnicity as power and issues related to selected American ethnic groups.	CRD 002	Human Ecology	U
Community Youth Development	Community influences on youth well-being, youth as agents of community change, and policies to support healthy communities for young people. Special emphasis on disparities in youth well-being related to race.	CRD 147	Human Ecology	U
Daylighting & Interior Design	Emphasis on understanding the effect of daylight on the perception of interior designs as well as on vision, luminous and thermal comfort, health and energy efficiency.	DES 137A	Design	U
Groundwater Hydrology	Fundamentals of groundwater flow and contaminant hydrology. Occurrence, distribution, and movement of groundwater. Well-flow systems. Aquifer tests. Well construction operation and maintenance. Groundwater exploration and quality assessment. Agricultural threats to groundwater quality: fertilizers, pesticides, salts.	EBS 144	Biological & Agricultural Engineering	U
Environmental Analysis of Aqueous Systems	Introduction to "wet chemical" and instrumental techniques commonly used in the examination of water and wastewater and associated data analysis.	ECI 140A	Civil & Environmental Engineering	U
Public Microeconomics	Public expenditures; theory and applications. Efficiency and equity of competitive markets; externalities, public goods, and market failures; positive and normative aspects of public policy for expenditure, including benefit-cost analysis. Topics include consumer protection, pollution, education, poverty and crime.	ECN 130	Economics	U
Youth in Revolt	American literary and cultural representations of adolescence as a time of rebellious refusals and wild behaviors in relation to questions of gender and sexuality, psychological states, economic pressures, racial inequality, and	ENL 053	English	U

Literature & the Environment	Historical and/or thematic survey of topics in writing about the environment.	ENL 184	English	U
Biodiversity	Introduction to nature, scope and geographical distribution of biodiversity (diversity of life, with emphasis on plants and animals, especially insects). Humans and biodiversity - domestication, aesthetics, ethics and valuation. Species richness and "success". Biodiversity through time; monitoring, evaluation and conservation. Biomes-global, continental and Californian.	ENT 002	Entomology	U
Freshwater Macroinvertebrates	Biology, ecology and taxonomy of freshwater macroinvertebrates, including insects, crustaceans, molluscs, worms, leeches, flatworms and others. Adaptations to life in freshwater. Aquatic food webs. Uses of macroinvertebrates in water quality monitoring. Field trips during regular lab hours.	ENT 116	Entomology	U
Role of Fire in Natural Ecosystems	Fire regimes and roles in major North American vegetation types, especially in the west. Physics of fire, fire effects on organisms and ecosystem functioning, reconstructing fire histories, fire in resource management, and fire use by indigenous people.	ESM 141	Environmental Science & Policy AND Land, Air, & Water Resources	U
Trees & Forests	Biological structure and function of trees as organisms; understanding of forests as communities and as ecosystems; use of forests by humans; tree phenology, photosynthesis, respiration, soil processes, life histories, dormancy, forest biodiversity, and agroforestry.	ESM 144	Environmental Science & Policy AND Land, Air, & Water Resources	U
Environmental Remote Sensing	Overview of satellite, airborne, and ground-based remote sensing, building on properties of electromagnetic radiation. Applications include hydrologic processes, weather and climate, ecology and land use, soils, geology, forestry, and agriculture. Computer based analysis and visualization of images and processing techniques.	ESM 186	Environmental Science & Policy AND Land, Air, & Water Resources	U
Genes & the Environment	Evaluation of evidence that human health and disease susceptibility result from complex interactions between genes and the environment. Emphasis on cancer, metabolic, cardiovascular, and neurological health outcomes	ETX 140	Environmental Toxicology	U
Exposure & Dose Assessment	Exposure component of risk assessment; specifically, the presence and/or formation of toxic substances in environmental media, their movement within and between contaminated media, and the contacts of human populations with those media.	ETX 146	Environmental Toxicology	U
Biodiversity	Introduction to nature, scope and geographical distribution of biodiversity (the diversity of life, with emphasis on plants and animals, especially insects). Humans and biodiversity - domestication, aesthetics, ethics and valuation. Species richness and "success". Biodiversity through time; monitoring, evaluation and conservation. Biomes - global, continental and Californian.	EVE 002	Evolution & Ecology	U
Life in the Sea	Diversity of life in the sea; adaptations to physical/chemical ocean environment; marine science research methods; utilization of living marine resources by humans; factors and processes that influence diversity of sea life, including humans.	EVE 012	Evolution & Ecology	U
Molecular Ecology	Use of molecular tools to answer fundamental questions in ecology and evolution of natural populations. Use of DNA and protein sequences to measure diversity and natural selection within and between populations and species and application to the fields of ecology and conservation. Hands-on manipulation and analysis of data in R.	EVE 109	Evolution & Ecology	U
Ecology of Tropical Latitudes	Biological, physical, and human-related aspects of the ecology of low latitudes. Distribution, numbers, and relationships of tropical organisms. Problems of development and conservation in the context of ecological and evolutionary theory.	EVE 138	Evolution & Ecology	U
Biogeography	Movements of terrestrial organisms. The role of geologic, climatic, and biologic changes in the geographic distribution of organisms.	EVE 147	Evolution & Ecology	U
Introduction to Film Studies	Analysis of film form and narrative, including cinematography, editing, and sound. Issues in film studies, including authorship, stardom, race, gender, class, and cultural identity. Includes introduction to selected cinematic movements and national film traditions.	FMS 001	Cinema & Digital Media	U
Rivers	Introduction to geomorphology, climate and geology of rivers and watersheds, with case examples from California. Assessment of impacts of logging, agriculture, mining, urbanization and water supply on river processes. Optional river field trips.	GEL 035	Geology	U
Earth History: Sediments & Strata	Sediment formation, transport, and deposition. Interpretations of sedimentary processes across landscapes and through time in the context of environmental and geological problems. Reconstruction of ancient environmental change from sedimentary rocks.	GEL 109	Geology	U
Non-Renewable Natural Resources	Origin, occurrence, and distribution of non-renewable resources, including metallic, nonmetallic, and energy-producing materials. Problems of discovery, production, and management. Estimations and limitations of reserves, and their sociological, political, and economic effects.	GEL 130	Geology	U
Risk: Natural Hazards & Related Phenomena	Risk, prediction, prevention and response for earthquakes, volcanic eruptions, landslides, floods, storms, fires, impacts, global warming.	GEL 131	Geology	U
Biological Oceanography	Ecology of major marine habitats, including intertidal, shelf benthic, deep-sea and plankton communities. Existing knowledge and contemporary issues in research. Segment devoted to human use. One weekend field trip required.	GEL 150C	Geology	U
Women & Gender in America, to 1865	History of women and gender in America through 1865, emphasizing intersections of gender, race, class, and sexuality. Topics include interracial marriage, slavery, witchcraft, meanings of motherhood, war, domestic labor, moral reform, women's rights, migrations, the effects of commercialization and industrialization.	HIS 072A	History	U
The United States Since World War II, 1945 to the Present	America's struggle to respond to new complexities in foreign relations, social tensions, family changes and media. Emphasis on such topics as: Cold War; anticommunist crusade; civil rights, feminist and environmentalist movement; New Left; counterculture; Vietnam; Watergate; and the moral majority.	HIS 174C	History	U
History of Black People & American Race Relations: 1860-Present	History of black people and race relations from 1860-present. Emphasis on Civil War, Reconstruction, Segregation, Age of Accommodation, black nationalism, urbanization, civil rights, and changing ideology of race relations.	HIS 177B	History	U
History of Sexuality in America	History of sexuality in America from pre-European through the late-20th century. Topics include birth control, marriage, sexual violence, prostitution, inter-racial relationships, heterosexuality and homosexuality, the feminist, gay, and lesbian liberation movements, AIDS, commercialization of sexuality.	HIS 184	History	U
Art, Architecture, & Human Rights	Study of human rights as they relate to art, architecture, and cultural heritage. Examines museums, art collections, and cultural-heritage management, their relation to the cultural prerogatives of communities and indigenous groups, and protection of cultural heritage during war and conflict.	HMR 120A	Humanities	U
Groundwater Hydrology	Fundamentals of groundwater flow and contaminant hydrology. Occurrence, distribution, and movement of groundwater. Well-flow systems. Aquifer tests. Well construction operation and maintenance. Groundwater exploration and quality assessment. Agricultural threats to groundwater quality: fertilizers, pesticides, salts.	HYD 144	Land, Air, & Water Resources	U
Water Science & Design	Introduction to watershed engineering, storm water management, design of hydraulic systems. Topics include hydrological risk analysis, flood routing, design storms, open channel flow, pipes, culverts, spillways, and detention basins. Class project and field trips will apply theory to real-life problems.	HYD 145	Land, Air, & Water Resources	U
Hydrogeology & Contaminant Transport	Physical and chemical processes affecting groundwater flow and contaminant transport, with emphasis on realistic hydrogeologic systems. Groundwater geology and chemistry. Fundamentals of groundwater flow and transport analysis. Laboratory includes field pumping test and work with physical and computer models.	HYD 146	Land, Air, & Water Resources	U
Runoff, Erosion & Water Quality Management	Practical hydrology and runoff water quality management from disturbed watersheds. Development of hillslope and soils restoration concepts and practice, modeling and application.	HYD 147	Land, Air, & Water Resources	U

Native Foods & Farming of the Americas	Crop domestication, agrobiodiversity, and cuisines of the Americas. Cultural and social history of native American foods like maize, potatoes, quinoa, chocolate, peppers, beans, avocados, etc. Discussion of socio-economic, environmental, legal challenges facing indigenous and peasant farmers today.	NAS 123	Native American Studies	U
Ethical & Social Problems in Contemporary Society	Philosophical issues and positions involved in contemporary moral and social problems. Possible topics include civil disobedience and revolution, racial and sex discrimination, environment, population control, technology and human values, sexual morality, freedom in society.	PHI 014	Philosophy	U
Agricultural Biotechnology & Public Policy	Examination of the development and deployment of agricultural biotechnologies, particularly transgenic crop plants, microorganisms and animals, with consideration of conventional agriculture, public perceptions of technologies, food safety, environmental impact, public policies and regulations.	PLP 140	Plant Pathology	U
Ethnobotany	Relationships and interactions between plants and people, including human perceptions, management, and uses of plants, influences of plants on human cultures, and effects of human activity on plant ecology and evolution. Concepts, questions, methods, and ethical considerations in ethnobotanical research.	PLS 141	Plant Sciences	U
Trees & Forests	Biological structure and function of trees as organisms; understanding of forests as communities and as ecosystems; use of forests by humans; tree phenology, photosynthesis, respiration, soil processes, life histories, dormancy, forest biodiversity, and agroforestry.	PLS 144	Plant Sciences	U
California Plant Communities	Ecology, distribution, and species of California's plant communities. Environmental forces that determine these communities, the threats they face, and their conservation and restoration opportunities.	PLS 147	Plant Sciences	U
Urban Ecology	Application of fundamental concepts and approaches in landscape and ecosystem ecology to urban ecosystems. Ecological and social drivers and responses. Landscape heterogeneity, nutrient dynamics, invasive species, altered hydrology and climate, and pollution. Discussion of primary literature.	PLS 162	Plant Sciences	U
Race Relations	Functions of the social definitions of race and racial groups. Analysis of racial conflict, oppression, and other forms of ethnic stratification. Models of ethnic interaction and social change. Emphasis on racial relationships within the U.S.	SOC 130	Sociology	U
Sociology of Violence & Inequality	How systems of social inequality organize the practice of violence. Definitions of violence and issues affecting the social capacity for violence. Analysis and comparison of different forms of violence associated with race, class, gender relations and social organization.	SOC 171	Sociology	U
Social Policy (Hybrid Version)	Examination of social policies that affect the well-being of individuals, families and groups, including such policies as old-age pensions, health insurance, and aid to the poor.	SOC 185Y	Sociology	U
Natural History of California's Wild Vertebrates	Examination of the natural history of California's wild vertebrates (fish, amphibians, reptiles, birds, and mammals), including their biogeography, systematics, ecology and conservation status.	WFC 050	Wildlife, Fish, & Conservation Biology	U
Herpetology	Evolution and ecology of the world's diverse reptiles and amphibians. Emphasis on adaptations to environments, species interactions, management, and conservation.	WFC 134	Wildlife, Fish, & Conservation Biology	U
Gender & Law	Exploration of women's legal rights in historical and contemporary context, discussing a variety of legal issues and applicable feminist theories. Topics include constitutional equal protection, discrimination in employment and education, sexual orientation discrimination, and the regulation of abortion.	WMS 140	Gender, Sexuality, & Women's Studies	U
Social & Psychological Perspectives of Asian Americans	Major psychosocial issues of Asian Americans. Theories and empirical research that address cultural values, behavioral norms, ethnic stereotypes, racism, acculturation, ethnic identity development, family communication, stressors and social support systems, academic achievement, interpersonal effectiveness, and psychopathology.	ASA 003	Asian American Studies	U
Introduction to Atmospheric Science	Fundamental principles of the physics, chemistry, and fluid dynamics underlying weather and climate. Solar radiation, the greenhouse effect, and the thermal budget of the Earth. Clouds and their formation, convection, precipitation, mid-latitude storm systems.	ATM 060	Atmospheric Science	U
Boundary-Layer Meteorology	Dynamics of the atmosphere nearest the Earth's surface. Friction and heat transfer. Properties of turbulent flows; statistical and spectral techniques; use and interpretation of differential equations. Emphasis on the importance to weather, air pollution, and the world's oceans.	ATM 158	Atmospheric Science	U
Introduction to Design	Introduction to design discipline through readings, writing, visual problem solving, and critical analysis. Topics: design principles and elements, vocabulary, color theory, Gestalt principles, conceptualization strategies. Role	DES 001	Design	U
Health Economics	The health care market, emphasizing the role and use of economics. Individual demand, provision of services by doctors and hospitals, health insurance, managed care and competition, the role of government access to health care.	ECN 132	Economics	U
Introduction to Mechanical Vibrations	Free and forced vibrations in lumped-parameter systems with and without damping; vibrations in coupled systems; electromechanical analogs; use of energy conservation principles.	ENG 122	Engineering	U
Primate Evolutionary Ecology	Examination of the ecology of primates within an evolutionary framework. Theoretical concepts in individual, population, and community ecology, illustrated with primate (and other vertebrate) examples, with additional discussion of primate and rainforest conservation.	ANT 154B	Anthropology	U
Cultural Diversity & Education in a Sociopolitical Context	Introduction to cultural diversity and education in a sociopolitical context. Interactive course. Small and large-group discussions explore, extend, and apply readings; range of writing genres for responses to assignments and course themes; lectures, slide shows, speakers, brief fieldwork, and presentations.	EDU 150	Education	U
Diversity in the K-12 Classroom	Analysis of research on learning styles among culturally diverse students with review and evaluation of responsive curricula and classroom teaching techniques. The ethnographic interview as a research tool.	EDU 153	Education	U
Chemical & Drug Use & Abuse	Overview of chemical use and abuse in our society. Effects of chemicals (therapeutic drugs, pesticides, food additives, herbal remedies, environmental contaminants, and recreational drugs) on humans and other living systems.	ETX 030	Environmental Toxicology	U
Wild Davis: A California Naturalist Certification Course	Natural history and urban ecology of Davis. Basics of ecological observation, community science and service, and California's unique natural communities. If fee is paid, completion of the course provides certification in the UC California Naturalist Program.	EVE 016	Evolution & Ecology	U
Contemporary Ethical Issues	Presents challenging, contemporary ethical issues from a multi-cultural perspective. Rotating topics will include Ethical Eating, Capital Punishment, Euthanasia, Poverty, and Animal Rights.	RST 010	Religious Studies	U
Public Lands Management	Investigation of alternative approaches to public lands management by Federal and state agencies. Role each agency's legislation plays in determining the range of resource allocations.	ESP 172	Environmental Science & Policy	U
Quantitative Analysis of Environmental Toxicants	Sample preparation methods for trace analysis of environmental toxicants. Concept and techniques of advanced analytical instrumentation. Interpretation and use of analytical data.	ETX 102B	Environmental Toxicology	U
Biology & Conservation of Wild Mammals	Origins, evolution, diversification, and geographical and ecological distributions of mammals. Morphological, physiological, reproductive, and behavioral adaptations of mammals to their environment.	WFC 110	Wildlife, Fish, & Conservation Biology	U
Environmental Water Chemistry	Practical aspects of water chemistry in the environment, including thermodynamic relations, coordination chemistry, solubility calculations, redox reactions and rate laws. Computer modeling of the evolution in water chemistry from contact with minerals and gases.	CHE 100	Chemistry	U
The Black Family In America	Analysis of social science research to examine relationship between black (African-descent) family structures, patterns of functioning, and political, economic, and social conditions in the U.S.	AAS 133	African American Studies	U
Internship in African-American & African Studies	Supervised internship in community, government, or private institutions, in all subject areas offered by the African American & African Studies Program.	AAS 192	African American Studies	U

The Museum in the Age of Spectacle	The institution of the museum in the context of modernity, nationalism, (post)colonialism, and the society of spectacle. Designed to bring art objects of the Manetti Shrem collection, global art history, and foundational critical theory together in a meaningful and experimental way.	AHI 123	Art History	U
American Lives Through Autobiography	American culture as understood through the individual life stories told by Americans, with attention to the roles of gender, race, ethnicity, social class, and sexual orientation in the individual's life course.	AMS 001C	American Studies	U
The Lives of Men in America	Interdisciplinary examination of the lives of boys and men in America, toward understanding cultural definitions of masculinity, the ways individuals have accepted or resisted these definitions, and the broader consequences of the struggle over the social construction of gender.	AMS 154	American Studies	U
Race, Culture & Society in the United States	Interdisciplinary examination of the significance of race in the making of America; how race shapes culture, identities and social processes in the United States; the interweaving of race with gender, class and nationhood in self and community.	AMS 156	American Studies	U
Equine Behavior & Welfare	Improve the understanding and application of good welfare practices when managing, training, transporting, treating, or breeding equine. Recognize changes in behavior or causes related to comprised health or welfare.	ANS 108	Animal Science	U
Techniques & Practices of Fish Culture	Daily care and maintenance of fish in residential aquariums, research and commercial facilities. Biological and environmental factors important to sound management of fish. Laboratories focus on fish culture including growth trials and biochemical assays.	ANS 136	Animal Science	U
Techniques & Practices of Avian Culture	Daily care and maintenance of birds for research, commercial production and companion or hobby uses. Biological and environmental factors important to sound management of birds. Laboratories focus on bird husbandry, management and care and include growth trials and biochemical assays.	ANS 137	Animal Science	U
Management of Laboratory Animals	Laboratory animal management procedures in view of animal physiology, health and welfare, government regulations, and experimental needs. Clinical techniques using rodents and rabbits as models.	ANS 140	Animal Science	U
Dairy Cattle Production	Scientific principles from genetics, nutrition, physiology, and related fields applied to conversion of animal feed to human food through dairy animals. Management and economic decisions are related to animal biology considering the environment and animal well-being. Mandatory Saturday field-trip.	ANS 146	Animal Science	U
Sexualities	Introduction to the study of sexuality, particularly to the meanings and social organization of same-sex sexual behavior across cultures and through time. Biological and cultural approaches will be compared, and current North American issues placed in a wider comparative context.	ANT 030	Anthropology	U
Cultures of Consumerism	Aspects of modern consumer cultures in capitalist and socialist countries. Transformations of material cultures over the past century. Case studies on the intersections of gender, class, and culture in everyday consumption practices.	ANT 034	Anthropology	U
Special Topics in Medical Anthropology	Introduction to critical medical anthropology. Topics include anthropological analysis of bio-medicine, psychiatry, systems of knowledge and healing, the body, emotions, and clinical encounters in a cross-cultural perspective.	ANT 121	Anthropology	U
Economic Anthropology	The varieties of production, exchange, and consumption behavior in precapitalist economies, their interaction with culture and social-political organization, and the theories that account for these phenomena. The effects of capitalism on precapitalist sectors.	ANT 122A	Anthropology	U
Kinship & Social Organization	Comparative examination of personal kinship, descent, marriage, household and family organizations; the theories that account for variation, and recent advances in the treatment of these data.	ANT 128A	Anthropology	U
Intermediate Microeconomics: Theory of Production & Consumption	Theory of individual consumer and market demand; theory of production and supply of agricultural products, with particular reference to the individual firm; price determination, and employment of resources under pure competition.	ARE 100A	Agriculture & Resource Economics	U
Agricultural Policy	Analytical treatment of historical and current economic problems and governmental policies influencing American agriculture. Uses of economic theory to develop historical and conceptual understanding of the economics of agriculture; how public policy influences the nature and performance of American agriculture.	ARE 120	Agriculture & Resource Economics	U
Theoretical Perspective in Asian American Studies	Explores major theories of race and its intersections with class, gender, and sexuality from interdisciplinary perspective. Introduces key theoretical developments, issues, debates. Through case studies, analyzes ways various theoretical frameworks and perspectives have been incorporated into range of scholarship.	ASA 102	Asian American Studies	U
Asian American Youth	Social experiences of diverse groups of Asian American youth. Ways in which youth themselves actively create cultural expressions and political interventions.	ASA 116	Asian American Studies	U
Filipino American Experience	Examination of the relationship between the Filipino-American community, the Philippine home community and the larger American society through a critical evaluation of the historical and contemporary conditions, problems and prospects of Filipinos in the U.S.	ASA 150	Asian American Studies	U
Topics in Asian American Studies: Policy & Community	Intensive treatment of a topic in Asian American Studies: policy and community.	ASA 189D	Asian American Studies	U
Severe & Unusual Weather	Introduction to physical principles of severe and unusual weather: flood, blizzards, thunderstorms, lightning, tornadoes, and hurricanes. Emphasis on scientific perspective and human context. Not open to students who have received credit for ATM 100. (Former ATM 100.)	ATM 010	Atmospheric Science	U
Weather Observation & Analysis	Acquisition, distribution and analysis of meteorological data. Vertical sounding analysis, stability indices, probability of local severe weather, weather map analysis. Use of National Weather Service analyses and forecast products. Laboratory makes use of computer-generated analyses.	ATM 110	Atmospheric Science	U
Molecular Control of Biosystems	Fundamentals of molecular biomedicine covering state-of-the-art methods for quantitative understanding of gene regulation and signal transduction networks at different levels of organization in health and disease. Topics include classic genetic systems, synthetic circuits, networks disrupted in disease and cancer.	BIM 152	Biomedical Engineering	U

Professionalism & Ethics in Genomics & Biotechnology	Real and hypothetical case studies to illustrate ethical issues in genomics and biotechnology. Training and practice in difficult ethical situations and evaluating personal and social consequences.	BIT 171	Faculty includes members of the Departments of Animal Science; Engineering: Chemical Engineering & Materials Science; Computer Science; Engineering: Biological & Agricultural; Food Science & Technology; Land, Air, & Water Resources; Plant Pathology; Plant Sciences; Viticulture & Enology; and the College of Biological Sciences.	U
Epic Television: The Golden Age of TV? Sopranos, Wire, Girls, Walking Dead	Critically celebrated scripted television since the mid-1990s. Key themes including class, ethnicity, race, violence, and US politics. Major developments in the medium's history as context for recent wave of epic television.	CDM 156	Cinema & Digital Media	U
United States Political Institutions & Chicanas/os	Overview of the major political institutions and ideologies of the United States and the Chicana/o people's historical and contemporary role in, effects from, and responses to them. Theory, method and critical analysis.	CHI 030	Chicana/o Studies	U
Globalization, Transnational Migration, & Chicana/o & Latina/o Communities	Chicana/o and Latina/o migration experiences within a global context. Topics include national and/or transnational migration in Mexico, Central America, and the United States.	CHI 112	Chicana/o Studies	U
Political Economy of Chicana/o Communities	Historical and contemporary study of political and economic forces which define and influence the development of Chicana/o communities. Includes critiques of traditional and Marxian theories and concepts applicable to Chicana/o communities, case studies of Chicana/o communities, especially in California and Texas.	CHI 132	Chicana/o Studies	U
Community-Based Participatory Research & Chicana/o & Latina/o Health	Overview of CBPR, as well as methodological CBPR considerations in building community partnerships, community assessment, issue analysis, research planning, data gathering, and data sharing with Chicana/o and Latina/o communities in particular.	CHI 141	Chicana/o Studies	U
Chicana & Chicano Narrative	Exploration of contemporary forms of the Chicana and Chicano narrative, encompassing visual art, fiction, poetry, film, theater, and creative nonfiction. Exposure to a variety of artists and scholars whose work shapes our evolving understanding of the Chicana/o experience.	CHI 157	Chicana/o Studies	U
Mexican & Chicano Mural Workshop	The Mural: a collective art process that empowers students and people through design and execution of mural paintings in the tradition of the Mexican Mural Movement; introduces materials and techniques.	CHI 171	Chicana/o Studies	U
Organization of Economic Space	Globalization and technological restructuring of economic activity focusing on new spatial patterns of production and circulation and their implications for workers, communities and societies, both in the U.S. and around the globe.	CRD 141	Human Ecology	U
Rural Change in the Industrialized World	Geography of rural environment with emphasis on rural restructuring. Demographics, community, economy, governance, agriculture, and environmental conservation in rural areas of industrialized world. Case studies from and comparisons drawn between North America, Europe, Australia, New Zealand, and Japan.	CRD 142	Human Ecology	U
Chemical Principles for Environmental Engineers	Aqueous chemistry; equilibrium relationships; carbonate system; thermodynamics; kinetics & rate laws; precipitation, adsorption, & volatilization phenomenon; oxidation & reduction reactions; pH, pE and	ECI 140B	Civil & Environmental	U
Soil Mechanics	Soil formations, mass-volume relationships, soil classification, effective stress, soil-water-void relationships, compaction, seepage, capillarity, compressibility, consolidation, strength, states of stress and failure, lateral earth pressures, and slope stability.	ECI 171	Civil & Environmental Engineering	U
Soil Mechanics Laboratory	Laboratory studies utilizing standard testing methods to determine physical, mechanical and hydraulic properties of soil and demonstration of basic principles of soil behavior.	ECI 171L	Civil & Environmental Engineering	U
Pavement Engineering	Pavement types (rigid, flexible, unsurfaced, rail), their applications (roads, airfields, ports, rail) and distress mechanisms. Materials, traffic and environment characterization. Empirical and mechanistic-empirical design procedures. Maintenance, rehabilitation and reconstruction; construction quality; asphalt concrete mix design.	ECI 179	Civil & Environmental Engineering	U
International Microeconomics	International trade theory: impact of trade on the domestic and world economies; public policy toward external trade.	ECN 160A	Economics	U
Engineering Economics	The analysis of problems in engineering economy; the selection of alternatives; replacement decisions. Compounding, tax, origins and cost of capital, economic life, and risk and uncertainty are applied to methods of selecting most economic alternatives.	ENG 106	English	U
Professional Responsibilities of Engineers	Organization of the engineering profession; introduction to contracts, specifications, business law, patents, and liability; discussion of professional, ethical, societal, and political issues related to engineering.	ENG 190	English	U
Introduction to Environmental Plants	Classification, nomenclature and variation of environmental plants. The use of floral and vegetative characteristics and terminology to key unknown plants. Characteristics of plant groups and basics of climate, soils and plant selection. Identification of 150 common landscape plants.	ENH 006	Plant Sciences	U
Woody Plants in the Landscape: Growth, Ecology & Management	Principles and practices of managing trees and shrubs in the urban landscape and other managed environments. Topics include woody plant form; growth response and adaptation; tree management in relation to soil, moisture, climate; plant problems.	ENH 133	Plant Sciences	U
Art, Science & the World of Insects	Fusion of entomology and art to create an appreciation of insect biology, ecology, interactions with humans and importance in human culture. Multidisciplinary approaches in education and career paths in entomology and art will be highlighted.	ENT 001	Entomology	U
General Entomology	Biology, anatomy, physiology, development, classification, ecology and relation of insects to human welfare.	ENT 100	Entomology	U
Insect Ecology	Introduction to insect ecology combining fundamental concepts and questions in ecology with ideas, hypotheses and insights from insects. Integrates aspects of individual, population, community and ecosystem ecology.	ENT 105	Entomology	U
Senior Honor Thesis	Independent study, guided research on an environmentally related subject of special interest to the student.	ESM 194H	Environmental Science & Policy AND Land, Air, & Water Resources	U
General Ecology	Theoretical and experimental analysis of the distribution, growth and regulation of species populations; predator-prey and competitive interactions; and the organization of natural communities. Application of evolutionary and ecological principles to selected environmental problems.	ESP 100	Environmental Science & Policy	U

Limnology	Biology and productivity of inland waters with emphasis on the physical and chemical environment.	ESP 151	Environmental Science & Policy	U
Limnology Laboratory	Limnological studies of lakes, streams, and reservoirs with interpretation of aquatic ecology.	ESP 151L	Environmental Science & Policy	U
The Policy Process	Alternative models of public policymaking and application to case studies in the U.S. and California.	ESP 160	Environmental Science & Policy	U
Food Toxicology	Chemistry and biochemistry of toxins occurring in foods, including plant and animal toxins, intentional and unintentional food additives. The assessment of food safety and toxic hazards.	ETX 128	Environmental Toxicology	U
Population Biology of Invasive Plants & Weeds	Origin and evolution of invasive plant species and weeds, reproduction and dispersal, seed ecology, modeling of population dynamics, interactions between invasive species, native species, and crops, biological control. Laboratories emphasize design of competition experiments and identification of weedy species.	EVE 119	Evolution & Ecology	U
Paleobotany	Introduction to plant fossil record, beginning with invasion of land in the Silurian, emphasizing origin and evolution of major groups and adaptations and changing composition and distribution of floras in relation to plate tectonics and climatic change.	EVE 140	Evolution & Ecology	U
International Perspectives in Exercise Biology	Compare and contrast exercise science issues between the US and an international location. Identify political, economic, cultural, technological and environmental issues that impact human exercise, physical activity, wellness, and sport from a global perspective.	EXB 189	Neurobiology, Physiology, & Behavior	U
Modern French Culture	Survey of modern French culture from the Dreyfus affair to the present day. Topics may include women and French culture, decolonialization and modernization, education, social welfare and immigration.	FRE 108	French	U
Principles of Food Science	Food science fundamentals. Fresh and processed food technologies; world food problems; food composition; food microbiological and toxicological safety; food laws; evaluation of acceptability and nutritional value.	FST 001	Food Science	U
Food Science, Folklore & Health	Ancient and modern food folklore in relation to health and well-being. Food safety, organic food, herbalism, food preservation, and nutritional enhancement.	FST 010	Food Science	U
Introduction to Food Preservation	Introduction to modes of fresh food preservation including use of chemicals and microbes, heat and energy, control of water and atmosphere, and by indirect approaches such as packaging, hygienic design and sanitation.	FST 050	Food Science	U
Food in American Culture	Relationship between food and culture; relationship between food and the social order; influences on eating habits and the tensions between them including identity, convenience, and responsibility; multiple disciplines and genres.	FST 055	Food Science	U
Disease Intervention & Policy	Examination of the prevention and treatment of diseases affecting humans, animals, and plants. Case studies illustrate the merits of a unified approach to promoting health at local, regional, and global scales.	GDB 102	Plant Pathology	U
Earthquakes & Other Earth Hazards	Impact of earthquakes, tsunami, volcanoes, landslides, and floods on humans, structures, and the environment. Discussion of the causes and effects of disasters and catastrophes, and on prediction, preparation, and mitigation of natural hazards.	GEL 017	Geology	U
Volcanoes	Role of eruptions, and eruptive products of volcanoes in shaping the planet's surface, influencing its environment, and providing essential human resources.	GEL 032	Geology	U
Hydrogeology & Contaminant Transport	Physical and chemical processes affecting groundwater flow and contaminant transport, with emphasis on realistic hydrogeologic systems. Groundwater geology and chemistry. Fundamentals of groundwater flow and transport analysis. Laboratory includes field pumping test and work with physical and computer models.	GEL 156	Geology	U
Medicine's Histories: Human & Veterinary Medicine from the Ancient World to One Health	Global, comparative study of the related histories of human and veterinary medicine from the ancient world to today's interdisciplinary One Health. Emphasis on reintegration of human and veterinary medicine to meet the biggest health challenges today.	HIS 107	History	U
Physical Hydrology	Introduction to the processes that constitute the hydrologic cycle. Special emphasis on a quantitative description of the following processes: precipitation, infiltration, evaporation, transpiration, surface runoff, and groundwater runoff.	HYD 141	Land, Air, & Water Resources	U
Field Methods in Hydrology	Measurement methods and data analysis for evaluation of water storage, movement and contamination in the field. Equipment such as data loggers, water and sediment samplers, pressure transducers, weather stations, surveying equipment, and flow meters will be used.	HYD 151	Land, Air, & Water Resources	U
Community Participation & Design	Introduction to community participation and design. Incorporates social and cultural factors, public and community processes, theories and practices related to human-environment behavior; community involvement in design, social analysis, community engagement, accessibility, diversity and politics of place.	LDA 141	Human Ecology	U
Site Planning & Design Studio	Application of place-making and problem-solving skills to local landscape sites. Analysis of social and environmental conditions in the field. Lectures link design projects to contemporary theories and practices.	LDA 170	Human Ecology	U
Analysis of Molecular Genetic Circuits	Project-based course focused on problem-solving strategies in biology and medicine. Testing hypotheses by translating real-world problems into an appropriate mathematical model and translating the results into real-world understanding.	MIC 117	Microbiology	U
Topics in Middle East & South Asian Studies	Comparative perspective on the Middle East and South Asia. Topics may include: modernity, religious traditions, colonialism, subalternity and social movements, gender and sexuality, history and memory, science and development, ritual and performance, public culture, diasporas.	MSA 180	Middle East/South Asian Studies	U
Indigenous & Minority Languages	Survey of the status of indigenous, immigrant, and other minority languages in the Americas and around the world. Topics include linguistic diversity, language endangerment & revitalization, heritage language maintenance in immigrant communities, and language change due to transcultural interactions.	NAS 007	Native American Studies	U
Journalistic Practicum in Nutrition	Critical analysis and discussion of current, controversial issues in nutrition; use of journalistic techniques to interpret scientific findings for the lay public. Students required to write several articles for campus media.	NUT 129	Nutrition	U
Principles of Healthful Living	Application of scientific and empirical knowledge to personal, family, and community health problems.	PHE 044	Physical Education	U
Philosophy of Law	Philosophical theories of the nature of law, legal obligation, the relation of law and morals. Problems for law involving liberty and justice: freedom of expression, privacy, rights, discrimination and fairness, responsibility, and punishment.	PHI 119	Philosophy	U
Bioethics	In-depth coverage of topics in bioethics including resource allocation, measures of health and disease/disability, public health, and ethical issues related to research on human subjects and emerging technologies.	PHI 121	Philosophy	U
Physics of California	Conceptual understanding of the physics underlying regional sports in CA. Focus on skiing, surfing, and scuba diving. Atmospheric phenomena common in CA, local weather patterns and microclimates, applications to CA energy, and water are also discussed.	PHY 010CY	Physics	U
Environmental Interactions of Cultivated Plants	Principles of plant interactions with their physical and biological environments and their acquisition of the resources needed for growth and reproduction. Emphasis on how management practices and environmental conditions affect crop productivity.	PLS 100C	Plant Sciences	U
Principles of Agronomic Crop Production Systems	Principles, practices and technologies of agronomic cropping systems, including crop systematics, physiology, agroecology, equipment, and management. Cropping systems analysis and integration of economic and ecological decision-making considerations involved in crop production. One weekend field trip required.	PLS 111	Plant Sciences	U
Forage Crop Production	Forages as a world resource in food production. Ecological principles governing the adaptation, establishment, growth and management of perennial and annual forages, including pastures, rangelands and hay; aspects of forage quality which affect feeding value to livestock.	PLS 112	Plant Sciences	U

Introduction to Plant Breeding	Principles, methods and applications of plant breeding and genetics to the improvement of crop plants. Illustration of how plant breeding is a dynamic, multidisciplinary, constantly-evolving science. Laboratory emphasizes hands-on experience in the basics of breeding through experiments.	PLS 154	Plant Sciences	U
Comparative Development: Political Development in Modernizing Societies	Nature and sequence of political development; its economic and social concomitants; role of elites, military, bureaucracy, and party systems; social stratification and group politics; social mobilization and political participation; instability, violence, and the politics of integration.	POL 142A	Political Science	U
Politics of Africa: Issues in Contemporary African Politics	African politics since the end of the Cold War. Topics include: Strategic Security Approach, Democratization, Human Rights, HIV/AIDS, African Peacekeeping, Terrorism, Religious and Ethnic Conflict, Debt and Stalled Development.	POL 146A	Political Science	U
Special Studies in Comparative Politics	Intensive examination of one or more special problems appropriate to comparative politics. Coverage is given to formal and informal political institutions, economically developing and developed countries, and non-democratic, democratic, and democratizing countries.	POL 179	Political Science	U
Forests & Society	Sociology, natural history and current issues of the world's forests. Application of scientific principles in outdoor laboratories and on-campus field trips.	SAS 014	Science & Society	U
Global Social Change: An Introduction to Macrosociology	Introduction to change and diversity in world history, including the United States. Examines population and family, technological change and economic development, power and status, culture and identity.	SOC 005	Sociology	U
Sociology of Labor & Employment	Labor and employment issues in the contemporary United States with some use of historical and comparative materials. Topics include strategies pursued by employers and employees, labor market discrimination and the	SOC 011	Sociology	U
The Political Economy of International Migration	Analysis of worldwide migration patterns, and social scientific theories of international and transnational migration. Focus in economical, political, and social impact of immigration and potential for international and regional cooperation.	SOC 104	Sociology	U
Society, Culture, & Health	Analysis of how socio-cultural factors shape illness experience. Evaluation of how certain conditions come to be understood as health conditions; illness identities and biographies; doctor-patient interactions; biomedical cultures; and how race, ethnicity, and gender shape health practices.	SOC 162	Sociology	U
Population Health: Social Determinants & Disparities in Health	Survey of the social determinants and disparities in health: measurement of population health; health transitions and global disparities; domestic disparities in health by class, race/ethnicity, nativity, gender, and sexual orientation; social determinants including social support, social stress, neighborhoods, and policy.	SOC 163	Sociology	U
Health Policy & Politics	Introduction to health policy and politics, including health care access and delivery, and policies related to health inequalities, the social determinants of illness and health behaviors.	SOC 164	Sociology	U
Introduction to Public Health	Provide basic concepts and controversies in public health, basic science of public health, social and behavioral factors in health and disease, environmental and occupational health issues, the relationship of public health to the medical care system and health care reform.	SPH 101	Public Health	U
Study in Community & International Health	Study and experience for undergraduate students in any number of areas in community and international health.	SPH 198	Public Health	U
Research in Community & International Health	Student will work with faculty member in areas of research interest, including but not limited to injury control, international health, health policy, occupational and environmental health, health promotion and wellness, women's health, and health demographics.	SPH 199	Public Health	U
Soil Physics	Physical properties of soil. Principles of water, gas, heat, and solute movement in soil with selected examples related to soil and water management. Influence of soil properties on transfer processes.	SSC 107	Land, Air, & Water Resources	U
Soil Microbiology	Major groups of microorganisms in soil, their interrelationships, and their responses to environmental variables. Role of microorganisms in cycling of nutrients. Plant-microbe relationships. Transformations of organic and inorganic pollutants.	SSC 111	Land, Air, & Water Resources	U
Soil Ecology	Overview of living constituents of soils, their interactions, importance to, and impact on biogeochemical cycles, decomposition, and soil properties. Practical applications of soil biological diversity are emphasized.	SSC 112	Land, Air, & Water Resources	U
Viticultural Practices	Identification, cultivation, and use of the major wine, table, raisin, and rootstock cultivars. Includes practices specific to the fall such as fruit contracts, maturity sampling, harvesting, cover crops, and soil-pests. One field trip required.	VEN 101A	Viticulture & Enology	U
Grapevine Growth & Physiology	Botanical aspects including morphology and domestication will precede lectures covering flower development and energy budget concepts. Impact of physiological variables such as photosynthesis translocation, mineral nutrition, and water relations on fruit ripening and composition will be covered.	VEN 110	Viticulture & Enology	U
Ecology of Waterfowl & Game Birds	Detailed examination of distribution, behavior, population dynamics, and management of waterfowl and upland game birds.	WFC 136	Wildlife, Fish, & Conservation Biology	U
Feminist Media Production	Media production as a mode of cultural criticism, furthering feminist/ social justice activist goals. Fundamentals of camera, editing and distribution via a social engagement model. Study and hands-on response to key historic and contemporary feminist and social justice media discourses.	WMS 165	Gender, Sexuality, & Women's Studies	U
Literature as Aesthetics of Resistance	Literature by women and other marginal groups which embody dissent and subversion as a means of challenging the status quo and to affect social transformation.	WMS 179	Gender, Sexuality, & Women's Studies	U
Survey of Chicana/ o Art	Survey of contemporary Chicana/o art in context of the social turmoil from which it springs. Includes political use of the poster and the mural, the influence of the Mexican mural and graphic movement, and social responsibility of the artist.	CHI 070	Chicana/o Studies	U
Chicana/ o Art Expression Through Silk Screen	Introductory level studio course using silk screen and basic printing techniques to explore and develop images of Chicana/o cultural themes and expressions. Students experiment with images and symbols from their immediate environment/culture. Integrated approach to Chicana/o philosophy of art.	CHI 073	Chicana/o Studies	U
Community Media Production	Use of video and new media tools to address social issues among neighborhood and community groups.	TCS 111	Cinema & Digital	U
Techniques and Practices of Fish Culture	Daily care and maintenance of fish in the personal aquarium, research, and commercial facilities. Biological and environmental factors important to sound fish management. Laboratories focus on fish culture and include growth trials.	ANS 136	Animal Science	U
Education in the African-American Community	Examination of the history of the education of African Americans in the United States. Examination and critique of contemporary theories concerning the schooling of African Americans. (Former course 140.)	AAS 130	African American Studies	U
Diaspora and New Black Identities	Critical analysis about what it means to be Black/African American in the United States today. Topics include old and new diasporas, national origin, language, religion, class, education, politics, identity and cultural heritage.	AAS 172	African American Studies	U
Politics of Life in Africa	Existing (in)capacities in the structures of state and society in Africa for people to live well. Topics include institutions and practices that define state and civil society encounters in Africa; democracy, ethnicity, economic crisis, religion, citizenship, etc.	AAS 177	African American Studies	U
Race and Ethnicity in Latin America	The social and political effects of racial and ethnic categorization in Latin America, including issues of economic production, citizenship, national belonging, and access to resources. Emphasis is on peoples of African, Indigenous, and Asian descent.	AAS 180	African American Studies	U
A Decade in American Civilization	Close examination of a single decade in American civilization; the connections between the history, literature, arts, customs, and ideas of Americans living in the decade. Issues and representations of race, class, gender, age, and sexuality in the decade.	AMS 110	American Studies	U
Race, Culture and Society in the United States	Interdisciplinary examination of the significance of race in the making of America; how race shapes culture, identities and social processes in the United States; the interweaving of race with gender, class and nationhood in self and community.	AMS 156	American Studies	U

Animal Welfare	Application of principles of animal behavior and physiology to assessment and improvement of the welfare of wild, captive, and domestic animals. Topics include animal pain, stress, cognition, motivation, emotions, and preferences, as well as environmental enrichment methods.	ANS 103	Animal Science	U
Ecology, Nature, and Society	Interdisciplinary study of diversity and change in human societies, using frameworks from anthropology, evolutionary ecology, history, archaeology, psychology, and other fields. Topics include population dynamics, subsistence transitions, family organization, disease, economics, warfare, politics, and resource conservation.	ANT 101	Anthropology	U
Postmodernism(s) & Culture	U.S.-European postmodern condition. "Modernity" as an incomplete project for subordinated groups. Economic, social, technological and political conditions leading to postmodern aesthetics, in comparison with postcolonialism, feminism and minority discourse.	ANT 125B	Anthropology	U
Anthropology of Development	Theories of development and current critiques. Colonial legacies and post-colonial realities. Roles of the state and NGOs, population migrations, changing gender identities, cash-earning strategies, and sustainability issues. Stresses importance of cultural understandings in development initiatives. Case studies emphasizing non-industrial societies.	ANT 126A	Anthropology	U
Peoples of the Middle East	Peoples of the Middle East (including North Africa). Discussions of class relations, kinship organization, sex/gender systems, religious beliefs and behavior, ethnic relations, political systems. Impact of world systems, political and religious movements and social change. (Former course 136.)	ANT 142	Anthropology	U
Bi-National Health	Examination of health status and intervention strategies presented in public health care settings, private clinics and by indigenous healers in Mexico. Analysis of impact of high risk diseases. Offered in a Spanish speaking country under supervision of UC Davis faculty/lecturer	CHI 145S	Chicana/o Studies	U
Chicanas and Latinas in the U.S.: Historical Perspectives	Historical issues in the lives of Chicanas, Puertorriquetas, and Cubans in the U.S. and their countries of origin.	CHI 181	Chicana/o Studies	U
Community Development	Introduction to principles and strategies of community organizing and development. Examination of non-profit organizations, citizen participation, poverty reduction, community needs assessment, and regional development strategies. Comparison of community development approaches of the U.S.A./California with other western and non-western societies.	CRD 152	Human Ecology	U
People, Work and Technology	Analysis of the relationship between work, technology, and human experience. Theories of the causes and consequences of labor process change; impacts of race/ethnicity, class, gender, and citizenship status on work; responses of workers, communities, and policy-makers to workplace changes.	CRD 162	Human Ecology	U
Comparative Ethnicity	Role of ethnicity in shaping social systems and interaction. Analytical approaches to and issues arising from the study of ethnicity, through utilization of data from a range of different societies.	CRD 176	Human Ecology	U
Ideologies of Design	Introduction to the history and theory of design in particular relation to political, philosophical, cultural, economic, and environmental debates and objectives.	DES 040B	Design	U
Lighting Technology and Interior Design	Introduction to lighting design and technology. Understanding the role of lighting in the development of functional and aesthetically pleasing environments. Energy efficiency in lighting.	DES 136A	Design	U
Principles of Daylighting	The impact of natural light on the built environment and methods to control glare and maximize energy savings.	DES 137A	Design	U
Daylighting and Interior Design	Emphasis on understanding the effect of daylight on the perception of interior designs as well as on vision, luminous and thermal comfort, health and energy efficiency.	DES 137A	Design	U
Daylighting Design Studio	Daylighting design issues; ambient and task lighting; lighting requirements in residential, commercial, and industrial applications; daylight analysis and design; side and top lighting; glazing selection; shading systems; integration with electric lighting; daylighting and energy efficiency; photo-sensor lighting controls.	DES 137B	Design	U
Hydraulic Structure Design: Senior Design Experience	Project-based course covering the design of an integrated urban drainage system, including consideration of design alternatives, multiple realistic constraints (public safety, economic, environmental, sustainability and health), quantification of hydrologic uncertainty, codes and standards, design drawings and specifications and cost analysis.	ECI 145	Civil & Environmental Engineering	U
Water Resources Simulation	Computer simulation techniques in the analysis, design and operation of surface water systems; modeling concepts and practices with application to surface runoff; water quality in rivers and streams and dispersion of contaminants in water bodies.	ECI 146	Civil & Environmental Engineering	U
Water Quality Management	Basic concepts of water quality measurements and regulations. Introduction to physical, biological and chemical processes in natural waters. Fundamentals of mass balances in water and wastewater treatment.	ECI 148A	Civil & Environmental Engineering	U
Water Quality Management Systems Design	Application of the principles of fluid mechanics to the analysis and design of flow measuring devices, pumps and pump station design, water distribution systems, wastewater collection systems, water and wastewater treatment plant headloss analysis, and bioremediation systems.	ECI 148B	Civil & Environmental Engineering	U
Economics of Human Resources	Human resource analysis; introduction to human capital theory and economics of education; the basic theory of	ECN 151B	Economics	U
Stuff: Diversity of Materials in Our Lives	Role of materials in technological societies and their impact on our way of living. Exploration of how materials are extracted from the earth, processed, and shaped into products, including discussion of disposal and re-use of materials.	EMS 002	Materials Science & Engineering	U
Materials Marvels	Role of materials in technological societies and their impact on our way of living. Exploration of how materials are extracted from the earth, processed, and shaped into products, including discussion of disposal and re-use of materials.	EMS 002	Materials Science & Engineering	U
Materials in Engineering Design	Quantitative treatment of materials selection for engineering applications. Discussion of design and material selection strategy; process and process selection strategy; process economics; life-cycle thinking and eco-design. Use of materials selection software.	EMS 180	Materials Science & Engineering	U
Freshwater Macroinvertebrates	Biology, ecology and taxonomy of freshwater macroinvertebrates, including insects, crustaceans, molluscs, worms, leeches, flatworms and others. Adaptations to life in freshwater. Aquatic food webs. Uses of macroinvertebrates in water quality monitoring. Field trips during regular lab hours.	ENT 116	Entomology	U
Environmental Remote Sensing	Overview of satellite, airborne, and ground-based remote sensing. Building on properties of EM Radiation, isotropic and non-isotropic scattering and absorption, examines applications in hydrologic processes, weather and climate, ecology and land use, soils, geology, forestry, and agriculture.	ESM 186	Environmental Science & Policy AND Land, Air, & Water Resources	U
Ecology, Nature, and Society	Interdisciplinary study of diversity and change in human societies, using frameworks from anthropology, evolutionary ecology, history, archaeology, psychology, and other fields. Topics include population dynamics, subsistence transitions, family organization, disease, economics, warfare, politics, and resource conservation.	ESP 101	Environmental Science & Policy	U
Principles of Environmental Science	Application of physical and chemical principles, ecological concepts, and systems approach to policy analysis of atmospheric environments, freshwater and marine environments, land use, energy supplies and technology, and other resources.	ESP 110	Environmental Science & Policy	U
Biological Oceanography	Ecology of major marine habitats, including intertidal, shelf benthic, deep-sea and plankton communities. Existing knowledge and contemporary issues in research. Segment devoted to human use.	ESP 150C	Environmental Science & Policy	U
Public Lands Management	Investigation of alternative approaches to public lands management by Federal and state agencies. The role each agency's legislation plays in determining the range of resource allocations.	ESP 172	Environmental Science & Policy	U

Applied Research Methods	Research methods for analysis of urban and regional land use, transportation, and environmental problems. Survey research and other data collection techniques; demographic analysis; basic forecasting, air quality, and transportation models. Collection, interpretation, and critical evaluation of data.	ESP 178	Environmental Science & Policy	U
Epidemiology	Principles and practice of epidemiology as applied to human, animal, and plant populations and the environment in which these populations co-exist. Quantitative analysis of both infectious and non-infectious disease. Inter-dependence between epidemiological analysis, decision-making and policy formulation will be highlighted.	GDB 101	Plant Pathology	U
The Oceans	Introductory survey of the marine environment. Oceanic physical phenomena, chemical constituents and chemistry of water, geological history, the seas biota and human utilization of marine resources	GEL 016	Geology	U
Earth History: Sediments and Strata	Principles of stratigraphic and sedimentologic analysis. Evaluation of historical and modern global changes in sedimentation within terrestrial and marine environments. Examination of the plate tectonic, climatic and oceanographic factors controlling the distribution and exploitation of economic fluids within sedimentary rocks.	GEL 109	Geology	U
Risk: Natural Hazards and Related Phenomena	Risk, prediction, prevention and response for earthquakes, volcanic eruptions, landslides, floods, storms, fires, impacts, global warming.	GEL 131	Geology	U
Women and Gender in Latin American History	Roles of women and men in the history of Latin America, with an emphasis on the intersection of gender with racial and class categories. Introduction to the theoretical premises of women's and gender history.	HIS 159	History	U
War, Prosperity, and Depression: United States, 1917-1945	America's emergence as a world power, the business culture of the 1920s, the New Deal and World War II. Emphasis on such issues as government regulation of the economy, welfare capitalism, and class, racial, ethnic, and gender conflicts.	HIS 174B	History	U
Landscape Meaning	Overview of the meaning of landscapes as manifested in designed and natural landscapes, everyday and sacred environments, parks, plazas, community gardens and found spaces. Introduction to the profession of landscape architecture and methods used to design, plan and manage landscapes.	LDA 001	Human Ecology	U
History of Landscape Architecture	Introduction to the history of landscape architecture, emphasizing landscape design as a product of cultural, political, social, and environmental factors. Topics include the history of gardens, parks, community design and environmental planning.	LDA 030	Human Ecology	U
Site Ecology	Introduction to ecological concepts, including nutrient dynamics, population regulation, community structure, ecosystem function. Principles will be applied to human activities such as biological conservation, ecological restoration, landscape planning, and management. Weekly laboratory devoted to field exercises in local ecosystems.	LDA 050	Human Ecology	U
Community Design & Planning	Introduction to community design and planning in landscape architecture projects. Incorporates social and cultural factors, public and community processes, theories and practices related to human-environment behavior; community involvement in design, social analysis, community engagement, accessibility, diversity and politics of place.	LDA 141	Human Ecology	U
Urban Design and Planning Studio	Studio designing large-scale landscapes at regional, sub-regional, and neighborhood scales. Focuses on understanding complex social, economic, and environmental factors, developing sustainability priorities and strategies, and applying them through design and policy.	LDA 171	Human Ecology	U
Native American Experience	Introduction to the diverse cultures of Native American peoples from North, Central, and South America. Emphasis on Native American voices in the expression of cultural views and in the experience of conflicting values.	NAS 010	Native American Studies	U
Stereotyping, Prejudice, and Stigma	Social psychological underpinnings of stereotyping, prejudice, and stigma from sociocultural, motivational, and cognitive perspectives. Topics include: origins, maintenance, change, effects on person perception and memory, and the automaticity/controllability of stereotyping and prejudice.	PSC 157	Psychology	U
Contemporary Ethical Issues	This course presents challenging, contemporary ethical issues from a multi-cultural perspective. Rotating topics will include Ethical Eating, Capital Punishment, Euthanasia, Poverty, and Animal Rights.	RST 010	Religious Studies	U
Contemporary Ethical Issues	Discussion of the readings assigned for course 10 and completion of a major research paper.	RST 010A	Religious Studies	U
Feeding the Planet: Influences on the Global Food Supply	Scientific principles and dynamic interactions involved in food production, food processing, nutrition, shelf life and marketing from differing viewpoints. Physical, biological and social science issues influencing the availability and safety of the food supply worldwide.	SAS 002	Science & Society	U
Genetic Engineering in Medicine, Agriculture, and Law	Historical and scientific study of the impact of genetic engineering in medicine, agriculture, and law, including examination of social, ethical, and legal issues raised. Offered in a distance-learning format.	SAS 070A	Science & Society	U
Environmental Soil Chemistry	Soil chemistry processes related to the fate and transport of contaminants in soil. Soil minerals, natural organic matter, surface charge, soil solution chemistry, redox reactions in soil, and sorption of inorganic and organic contaminants.	SSC 102	Land, Air, & Water Resources	U
Physiological Ecology of Wildlife	Principles of physiological ecology, emphasizing vertebrates. Ecological, evolutionary, and behavioral perspectives on physiological mechanisms used by animals to adapt to their environment, in the context of climate-change and other threats to biodiversity. Tropical, temperate, and polar ecosystems are highlighted.	WFC 130	Wildlife, Fish, & Conservation Biology	U
Physiological Ecology of Wildlife	Principles of physiological ecology, emphasizing vertebrates. Ecological, evolutionary, and behavioral perspectives on physiological mechanisms used by animals to adapt to their environment, including consideration of climate-change and other threats to biodiversity. Tropical, temperate, and polar ecosystems are highlighted.	WFC 130	Wildlife, Fish, & Conservation Biology	U
Introduction to Women and Gender Studies	Interdisciplinary introduction surveys and integrates anthropological, artistic, cultural studies, historical, legal, literary, philosophical, psychological, scientific, and sociological perspectives on the study of gender and its relationship to race, sexuality, class, and other aspects of social experience.	WMS 050	Gender, Sexuality, & Women's Studies	U
Introduction to Critical Gender Studies	Introduction to interdisciplinary, critical gender studies. Addresses the emergence of women's, gender and feminist studies internationally, its links to women's movements, and its influence within the various arts, humanities and social science disciplines.	WMS 050	Gender, Sexuality, & Women's Studies	U
Introduction to Feminist Theory	Introduction to the emergence of feminist theory and to key concepts in feminist theorizing. Examination of past and current debates over sexuality, race, identity politics, and the social construction of women's experience.	WMS 103	Gender, Sexuality, & Women's Studies	U
Globalization, Gender and Identity	Feminist theories on affects of gender on self and identity and cross cultural study as it intersects gender with race, class, ethnicity. Impact of globalization processes on gender and identity.	WMS 182	Gender, Sexuality, & Women's Studies	U
Globalization, Gender and Culture	Critical gender analysis of globalization as a process of interconnected cultural, social and economic transformations inflected by gender, nation, class and race/ethnicity. Critical self-reflection and social observation skills.	WMS 182	Gender, Sexuality, & Women's Studies	U
Gender in the Arab World	Examination of the history, culture, and social/political/economic dynamics of gender relations and gendering in the Arab world.	WMS 184	Gender, Sexuality, & Women's Studies	U
Women and Islamic Discourses	Introduction to debate/discourses about women and Islam. Transformations in debate/discourses in colonial and postcolonial periods in the Middle East & South Asia. Comparative study of debate/discourses on family, work, law, sexuality, religion, comportment, human rights, feminist and religious movements.	WMS 185	Gender, Sexuality, & Women's Studies	U

Ethics of Animal Use	Ethical issues relating to animal use in contemporary society. Integration of philosophical theories with scientific evidence relating to animal behavior, mentality, and welfare. Uses of animals in agriculture, research, and as companions. Ethical responsibilities regarding wildlife and the environment.	ANS 170	Animal Science	U
Agricultural Labor	Importance of family and hired labor in agriculture; farm labor market; unions and collective bargaining in California agriculture; simulated collective bargaining exercise; effects of unions on farm wages and earnings.	ARE 150	Agriculture & Resource Economics	U
Agricultural Labor	Analysis of labor markets with focus on U.S. and world agriculture. Labor supply, demand, market equilibrium; why farm labor markets are different; global trends in farm labor; U.S. farm labor history; unions and collective bargaining; immigration policy.	ARE 150	Agriculture & Resource Economics	U
Raptor Biology	Study of birds of prey: classification, distribution, habits and habitats, migration, unique anatomical and physiological adaptations, natural and captive breeding, health and diseases, environmental concerns, conservation, legal considerations, rehabilitation, and falconry. Includes two Saturday field trips.	AVS 115	Animal Science	U
Process Design and Analysis I	Process and product creation and design. Cost accounting and capital investment estimation. Profitability analysis techniques. Green chemistry, health risk assessment and life cycle assessment concepts.	ECH 158A	Chemical Engineering	U
Water and Wastewater Treatment System Design	Evaluation and design of water and wastewater treatment systems.	ECI 140D	Civil & Environmental Engineering	U
Feminist Cultural Studies	The histories, theories, and practices of feminist traditions within cultural studies.	AMS 139	American Studies	U
Modern Chinese: Reading and Discussion	Continuation of course 111. Further development of communication skills in Modern Standard Mandarin-speaking environments. Reading dialogues/articles pertaining to contemporary China issues and discuss ethical, moral, aesthetic, social, and cultural concerns. Studying strategies for moving between simplified and traditional Chinese characters.	CHN 112	East Asian Languages & Cultures	U
Modern Chinese: Reading and Discussion	Continuation of course 112, further developing communication skills in Modern Standard Mandarin-speaking environments. Read dialogues/articles pertaining to contemporary China issues and discuss ethical, moral, aesthetic, social, and cultural concerns. Study strategies for moving between simplified and traditional Chinese characters.	CHN 113	East Asian Languages & Cultures	U
Experimental Fashion & Textile Design	Experimental approaches to fashion and textile design. Emphasis on developing conceptual ideas and translating them into one-of-a-kind garments and soft products. Exploration of a variety of current topics including sustainability, pattern design, new technologies, and social activism.	DES 170	Design	U
Deterministic Optimization and Design	Operations research. Optimization techniques such as linear programming, dynamic programming, and non-linear programming. Applications in water, transportation, environmental, infrastructure systems, and other civil engineering disciplines through computer-based course projects	ECI 153	Civil & Environmental Engineering	U
Topics in Diasporic Literatures and Migration	Study of literatures, histories, and cultures of one or more diasporic groups.	ENL 141	English	U
Literature of California	California literature in the context of California's social, political, and intellectual history. Reading of poetry, fiction, and essays. Emphasis on nineteenth- and twentieth-century naturalists, turn of the century novelists, the Beats, and writers of the last two decades.	ENL 182	English	U
Italian-American Cinema	Exploration of representations of Italian-American identity in American (U.S.) cinema. Analysis of both Hollywood and independently produced films, especially as they represent ethnicity, gender, and social class of Italian Americans.	FMS 120	Cinema & Digital Media	U
Historical Ecology	Ancient ecosystems and the factors that caused them to change. Species, expansion, evolution of new modes of life, geologically induced variations in resource supply, and extinction provide historical perspective on the biosphere of future.	GEL 144	Geology	U
Trees and Forests	Biological structure and function of trees as organisms; understanding of forests as communities and as ecosystems; use of forests by humans; tree phenology, photosynthesis, respiration, soil processes, life histories, dormancy, forest biodiversity, and agroforestry.	PLS 144	Plant Sciences	U
Industrialization and Social Change	Selected technological and social factors. Preconditions of economic development and industrialization. Social, political, and cultural issues at various levels of economic development. Major historical differences and major current trends. Emphasis either on highly industrialized countries or on less developed countries.	SOC 141	Sociology	U
Asian American Legal History	Legal history of Asian Americans, from the mid-19th century to present. Laws and administrative policies affecting Asian American communities, including those governing immigration, social and economic participation, WWII internment, and affirmative action.	ASA 155	Asian American Studies	U
Topics in Asian American Studies: Politics and Social Movements	Intensive treatment of a topic in Asian American Studies: politics and social movements.	ASA 189I	Asian American Studies	U
Communication Campaigns	Strategic uses of media and interpersonal communication channels in health, environmental advocacy, and political campaigns. Emphasis is on general principles relevant to most campaign types, including public information, social marketing, and media advocacy campaigns.	CMN 146	Communications	U
Social Media	Application of theories of communication to the study and design of social media. Examination of social media in various contexts such as health, political movements, and collaboration. Topics include motivations for membership, participation, virality, social-technical capital, and privacy.	CMN 174	Communications	U
Community Economic Development	How government and community organizations help firms grow and create jobs through local economic development corporations, small business centers, revolving loan funds, incubators, and other programs. Techniques to analyze community economic potential and identification of appropriate intervention tools. Group project.	CRD 156	Human Ecology	U
Politics and Community Development	Analyzes political, economic and sociocultural forces shaping the form and function of local communities in the U.S. Considers theories of the state, the community and social change and case studies of actual community development in comparative historical perspective.	CRD 157	Human Ecology	U
Small Community Governance	Governing institutions and political processes in rural and small urban places. Local government organization, community autonomy, leadership, political change, policy development, and select policy issues including public finance. Field research on political processes or policy issues in select communities.	CRD 158	Human Ecology	U
Economics of the Labor Market	Theory of labor supply and demand; determination of wages and employment in the labor market. Policy issues: labor force participation by married women; minimum wages and youth unemployment; effect of unions on wages.	ECN 151A	Economics	U
Ecogeomorphology of Rivers and Streams	Integrative multidisciplinary field analysis of streams. Class project examines hydrology, geomorphology, water quality and aquatic and riparian ecology of degraded and pristine stream systems. Includes cooperative two-week field survey in remote wilderness settings with students from diverse scientific backgrounds.	GEL 136	Geology	U
Hydrogeology and Contaminant Transport	Physical and chemical processes affecting groundwater flow and contaminant transport, with emphasis on realistic hydrogeologic systems. Groundwater geology and chemistry. Fundamentals of groundwater flow and transport analysis. Laboratory includes field pumping test and work with physical and computer models.	GEL 156	Geology	U
Genocide	Comparative and critical study of the modern phenomenon of genocide from religious, ethical and historical perspectives.	HMR 131	Humanities	U
Plant-Water-Soil Relationships	Principles of plant interactions with soil and atmospheric water environments and practical applications to crop management (e.g., irrigation) and plant eco-physiology (e.g., drought).	HYD 124	Land, Air, & Water Resources	U
Hydrological Processes in Ecosystems	Movement and storage of water are integral parts of landscape and ecosystem functioning. Hydrological processes in individual ecosystems and the role of water linking the myriad components of the landscape.	HYD 143	Land, Air, & Water Resources	U
Equipment and Technology for Small Farms	Types and characteristics of agricultural equipment and technologies	IAD 143	Plant Sciences	U

Equipment and Technology for Agriculture	appropriate for small commercial farming. Adjustment and calibration of equipment. Selection of and budgeting for equipment.	PLS 476	Plant Sciences	U
History of Environmental Design	History of Environmental Design across disciplines, including landscape architecture, planning, community and urban design.	LDA 030	Human Ecology	U
Site Planning and Design Studio	Application of place-making and problem-solving skills to local landscape sites. Analysis of social and environmental conditions in the field. Lectures link design projects to contemporary theories and practices. Includes workshops in computer-aided drafting.	LDA 170	Human Ecology	U
Principles of Agronomic Crop Production Systems	Principles, practices and technologies of agronomic cropping systems, including crop systematics, physiology, agroecology, equipment, and management. Cropping systems analysis and integration of economic and ecological decision-making considerations involved in crop production. One weekend field trip required.	PLS 111	Plant Sciences	U
The Politics of Interdependence	In the past several decades, growing economic interdependence has generated new problems in international relations. Course deals with difficulties in managing complex interdependence and its implication on national policies and politics.	POL 123	Political Science	U
Women in Politics	The role of women in American politics. Historical experiences; contemporary organizations and strategies; areas of legislative concern; the impact of differences in social class, race, and ethnicity upon the involvement of women in politics.	POL 166	Political Science	U
Deviance	Social structural sources, institutional practices and microprocesses associated with illegality, evil, disease, immorality, disability, racial and class differences, citizenship, and the body. Special emphasis on expert knowledge and the production and management of social difference.	SOC 120	Sociology	U
Health Policy and Politics	Introduction to health policy and politics, including health care access and delivery, and policies related to health inequalities, the social determinants of illness and health behaviors.	SOC 164	Sociology	U
Population	Introduction to the study of human population, including theories and statistical measures; social causes and consequences of population trends; changes in population structure; geographical distribution, migration, sociopsychological factors affecting fertility.	SOC 170	Soo	U
Theory and History of Sexualities	Key issues in the social construction, organization, and reproduction of sexualities such as the intersection of sexual identity with gender, race, ethnicity, and class, and the relation between movements for sexual liberation and the regulation of the body.	WMS 070	Gender, Sexuality, & Women's Studies	U
Feminist Interpretations of Contemporary Western Thought	Introduction to deciphering, demystifying, and interpreting poststructuralist, postmodern, and postcolonial thought from a feminist perspective: applications to gender, race, sexuality, and class.	WMS 137	Gender, Sexuality, & Women's Studies	U
Transnational Studies of Dress, Fashion, and Gender	Dress and fashion as cultural communication, aesthetic expression, capitalist commodity. History, sociology, semiotics of fashion. Fashion as means of gender oppression and liberation. Use of dress in identity construction across cultures. Clothing workers on the global assemblyline.	WMS 138	Gender, Sexuality, & Women's Studies	U
Critical Fashion Studies	Feminist cultural studies of style-fashion-dress through transnational circuits, personal subjectivities. Fashion as means of gender oppression and liberation. Histories and discourses of masculinities and femininities. Clothing works on global assembly line. Use of dress in construction / regulation of identities.	WMS 138	Gender, Sexuality, & Women's Studies	U
Gender and Law	Exploration of womens legal rights in historical and contemporary context, discussing a variety of legal issues and applicable feminist theories. Topics include constitutional equal protection, discrimination in employment and education, sexual orientation discrimination, and the regulation of abortion.	WMS 140	Gender, Sexuality, & Women's Studies	U
Arthropod Pest Management	Development of the ecological basis for the integrated pest management paradigm with emphasis on agriculture. Ecological and practical aspects of control tactics. Laboratory emphasizes identification of pests and beneficials of agriculture and urban situations.	ENT 110	Entomology	U
Human Sexuality	Vocabulary, structure/function of reproductive system; sexual response; pre-natal development; pregnancy and childbirth; development of sexuality; rape and sexual assault; birth control; sexually transmitted diseases; homosexuality; establishing/maintaining intimacy; sexual dysfunctions; communication; enhancing sexual interaction, cultural differences in attitudes towards sexuality.	HDE 012	Human Development	U
Pest Control Practices	Practical and theoretical considerations of pest control systems and techniques. Design, selection, and use of mechanical systems for field, orchard, greenhouse, and vector control use. Biological, legal, and environmental considerations in pest control and pesticide application.	ABT 233	Biological & Agricultural Engineering	G
Human Applications of Foraging Theory	Foraging theory models and their use in ethnographic and archaeological analyses of human behavior, with a focus on hunter-gatherers and resource selection, patch use, population and habitat, central places, sharing, stochastic processes, population dynamics, and conservation behavior.	ANT 263	Anthropology	G
Open Macroeconomics of Development	Models and policy approaches regarding trade, monetary and fiscal issues, capital flows and debt are discussed in the macroeconomic framework of an open developing country. Basic analytical focus is real exchange rate and its impact on sectoral allocation of resources.	ARE 215B	Agriculture & Resource Economics	G
Agricultural Policy	Nature, formation, evolution, and institutions of economic policy applied to food, agricultural, and rural issues. Examples for detailed consideration include food security, commodity issues, and trade policy. Analytical approaches include static and dynamic welfare analysis, policy design, and political-economic analysis.	ARE 233	Agriculture & Resource Economics	G
Directed Group Study	Advanced study through special seminars, informal group studies, or group research on problems for analysis and experimentation. Sections:(1) Managerial Economics; (2) Agricultural Policy; (3) Community & Regional Development; (4) Natural Resources; (5) Human Resources; (6) Research Methods & Quantitative Analysis.	ARE 298	Agriculture & Resource Economics	G
Individual Study	Sections: (1) Managerial Economics; (2) Agricultural Policy; (3) Community & Regional Development; (4) Natural Resources; (5) Human Resources; (6) Research Methods & Quantitative Analysis; and (7) Dissertation Research Prospectus.	ARE 299	Agriculture & Resource Economics	G
Community Based Health Research	Provides knowledge and skills to plan and implement public health projects that highlight the intersection of social determinants of health within a community empowerment framework.	CHI 241	Chicana/o Studies	G
Memory, Culture, & Human Rights	Explores the multiple convergences among memory, culture, and human rights. Discusses diverse approaches to how societal actors in different historical, cultural, and national settings, construct meanings of past political violence, inter-group conflicts, and human rights struggles.	CST 210	Cultural Studies	G
Waste Management for Biological Production Systems	Characterization of solid and liquid wastes from animal, crop, and food production systems. Study of methods and system design for handling, treatment, and disposal/utilization of these materials.	EBS 245	Biological & Agricultural Engineering	G
Water Quality	Quality requirements for beneficial uses of water. Hydrologic cycle of quality. Hydromechanics in relation to quality of surface and groundwaters; transport and fate of waterborne pollutants. Heat budget for surface waters; predictive methods; introduction to water quality modeling.	ECI 240	Civil & Environmental Engineering	G
Transport, Mixing & Water Quality in River & Lakes	Principal causes of mixing and transport in rivers, lakes and reservoirs, and their impacts on water quality. Case studies of specific lakes and rivers.	ECI 264A	Civil & Environmental Engineering	G
Earth & Rockfill Dams	Site selection; design considerations; layout; seismic effects including considerations of fault movements; construction; environmental considerations, instrumentation; maintenance remediation and retrofit of existing dams.	ECI 288	Civil & Environmental Engineering	G
Advanced Population Dynamics	Logical basis for population models, evaluation of simple ecological models, current population models with age, size, and stage structure, theoretical basis for management and exemplary case histories. Emphasis on development and use of realistic population models in ecological research.	ECL 262	Ecology	G

Language & Literacy in Linguistic Minorities	Analysis and application of research on oral language development and literacy in language minority students, through the development, implementation, and evaluation of research-based language arts curriculum.	EDU 253	Education	G
Energy Systems	Theory and application of energy systems. Systems analysis, energy conversion technologies, environmental considerations, economics and system optimization.	EGG 200	Electrical & Computer Engineering	G
Mathematical Models in Epidemiology	Theory of epidemics and mathematical modeling concepts for infectious diseases to include discrete and continuous time models, their use to explore disease dynamics and investigate prevention and control strategies for human and veterinary infectious diseases.	EPI 277	Epidemiology	G
Topics in Paleocceanography	Critical discussion and review of selected topics in paleocceanography and paleoclimatology relating to the history of the processes controlling and affecting climate change and ocean circulation throughout the geologic record. Topics vary. Offered irregularly.	GEL 228	Geology	G
Physical Geography Traditions & Methods	Discussion of the physical science tradition in geography, including key concepts and current research in climatology, geomorphology, soils geography, biogeography, climate change, watershed science, and coastal studies. Research paradigms, programs, and methods as used by physical geographers will be discussed.	GEO 211	Geography	G
Political Ecology of Community Development	Community development from the perspective of geographical political ecology. Social and environmental outcomes of the dynamic relationship between communities and land-based resources, and between social groups. Cases of community conservation and development in developing and industrialized countries.	GEO 254	Geology	G
Global Political Ecology	Background, genesis, current debates in political ecology. Examination of political-economic and social-cultural causes of environmental change. Introduction to development theory, globalization, history of science and power/knowledge. Cases of social movements, justice, resistance, gender, race and class. Focus outside North America.	GEO 260	Geology	G
Water Resource Planning & Management	Applications of deterministic and stochastic mathematical programming techniques to water resource planning, analysis, design and management. Water allocation, capacity expansion, and reservoir operation. Conjunctive use of surface water and groundwater. Water quality management. Irrigation planning and operation models.	HYD 243	Land, Air, & Water Resources	G
International Joint Ventures	International and U.S. business and legal transactions. Legal planning, problem solving, decision making and negotiations related to the break-up and dissolution of a major international joint venture. U.S. laws including finance, tax, bankruptcy, labor, antitrust, environmental, corporate structures and intellectual property. Offered every three years.	ICL 204	International Commercial Law	G
Policy Advocacy	In-depth examination of the legislative process both within the California Legislature and from the advocates' perspective. Train in key policy advocacy skills by legislative leaders and social justice advocates.	LAW 253	Law	G
Tribal Justice	Examines the administration of justice within tribal governments and courts and the efforts of advocates to achieve justice for tribes through litigation, policy advocacy, public education, organizing, and inter-governmental collaboration.	LAW 277A	Law	G
Urban Planning & Design	Regulation, design, and development of the built landscape, planning and land development processes, zoning and subdivision regulation, site planning, urban design goals and methods, public participation strategies, creatively designing landscapes to meet community and ecological goals.	LDA 205	Human Ecology	G
Hybrid Electric Vehicle System Theory & Design	Advanced vehicle design for fuel economy, performance, and low emissions, considering regulations, societal demands and manufacturability. Analysis and verification of computer design and control of vehicle systems in real vehicle tests. Advanced engine concepts.	MAE 258	Mechanical & Aerospace Engineering	G
Race & Health in the United States	Interprofessional course facilitates the professional and personal developmental of medical students and other health professions students who think they would like to be leaders in securing equity in population health and work environments.	MDS 445	Public Health	G
Renewable Energy Ventures: Planning, Funding & Regulatory Risk Assessment for Entrepreneurs & Investors	Advanced innovation lab will introduce students to issues addressed by entrepreneurs and investors in renewable ventures. Lectures, simulations, case studies and practical experience of the presenters will be delivered.	MGP 428	Management	G
Native American Public Health: Topics & Issues	Introduction to Native American public health issues and contributing causal factors (including environmental justice and historical trauma); the dimensions of cultural competency in diagnosis and service provision; the structure of Native health care institutions; and debates in Native treatment modalities.	NAS 240	Native American Studies	G
Health Status & Care Systems	Comparative health status data, major current health issues globally, nationally, regionally. Theoretical perspectives on social, political, economic determinants of health. Health-care systems examined, linked to data, and evaluated in regards to outcomes. Aging, rural, ethnic minority populations highlighted.	NRS 201	Nursing	G
Public Health Issues in California's Central Valley	Public health issues in California's Central Valley, including the influences of migration, racial and ethnic diversity, the agricultural industry, environmental exposures, and rurality.	SPH 202	Public Health	G
Population Health	Principles of evidence-based medicine, study design and inference, and disease transmission in populations. Topics include biostatistics, outbreak investigation and response, diagnostic tests, vaccine strategies, food safety, foreign animal diseases, and impact of environmental health on animals and humans.	VET 414	Vet Med	G
Group Study	The chemistry and biochemistry of foods, nutritional chemicals, pesticides, and other special topics as they apply to agricultural and environmental chemistry.	AGC 298	Agriculture & Environmental Chemistry	G
Research on Response to Culturally Diverse Literature, K-12	Research on response to culturally diverse literature in classrooms and other K-12 settings. Topics include reader response theories, values in expanding the literary canon, problems of cultural authenticity, resistance to multicultural literature, and instruction for diverse texts and learners.	EDU 247	Education	G
Low Power Digital Integrated Circuit Design	Integrated circuit design for low power and energy consumption. Low power architectures, logic styles and circuit design. Variable supply and threshold voltages. Leakage management. Power estimation. Energy sources, power electronics, and energy recovery. Applications in portable electronics and sensors. Thermodynamic limits.	EEC 216	Electrical & Computer Engineering	G
Current Topics in Agricultural Entomology & Bee Biology	Discussion of advanced topics about the biology, ecology, behavior, and management of pest and beneficial insects.	ENT 295	Entomology	G
Applied Phylogenetics	Applications of phylogenetic methods to fields outside of systematics. Core lectures/labs in remedial phylogenetics, phylogeography, conservation and comparative morphology. Special topics vary yearly.	EVE 211	Evolution & Ecology	G
Species & Speciation	Current status of species concepts, models of speciation, current research on speciation, and relevance of species to conservation biology.	EVE 220	Evolution & Ecology	G
Ethical Issues in Earth Science	Reading and discussion of ethical issues arising in the earth sciences. Topics include scientific misconduct, gender equity in science, authorship of scientific papers, establishing priorities in research, and related issues. Offered irregularly.	GEL 391	Geology	G
Hillslope Geomorphology & Sediment Budgets	Exploration of theoretical and empirical foundations of sediment production on hillslopes using computer models and field experiments to promote an understanding of how watersheds evolve naturally and with human impacts.	HYD 252	Land, Air, & Water Resources	G
Renewable Energy Ventures: Planning, Funding & Regulatory Risk Assessment for Entrepreneurs & Investors	Advanced innovation lab will introduce students to issues addressed by entrepreneurs and investors in renewable ventures. Lectures, simulations, case studies and practical experience of the presenters will be delivered.	MGB 428	Management	G
Life Cycle Assessment for Sustainable Engineering	Life cycle assessment methodology. Emphasis on applications to infrastructure and energy systems. Life cycle design, life cycle cost methods, other tools from industrial ecology, and links to policy.	ECI 244A	Civil & Environmental Engineering	G

Microdevelopment Theory & Methods II	Extension of development theory and microeconomic methods. Agricultural growth and technological change; poverty and income inequality; multisectoral, including village and regional models. Computable general equilibrium methods and applications.	ECN 215C	Economics	G
Environmental Policy Process	Introduction to selected theories of the policy process and applications to the field of environmental policy. Develops critical reading skills, understanding of policy theory, and an ability to apply multiple theories to the same phenomena.	ESP 212A	Environmental Science & Policy	G
Environmental Law Seminar: Emerging Technologies & the Environment	Examines legal regimes that might apply to various emerging technologies and consider governance mechanisms and reforms that might enable more foresighted and participatory development and management of technology.	LAW 285G	Law	G
Evolution & Human Behavior	Exploration of the links between behavioral ecological theory and human cultural variation, focusing on reproduction, marriage, parental investment and family structure; implications of evolutionary theory for social organization in human communities, historical and contemporary.	ANT 262	Anthropology	G
Microdevelopment Theory & Methods I	Agricultural development theory, with a focus on microeconomics. Agricultural household behavior with and without imperfections and uncertainty. Analysis of rural land, labor, credit and insurance markets, institutions, and contracts.	ARE 215A	Agriculture & Resource Economics	G
Economics of Agriculture	Analytic treatment of the historical development and contemporary role of agriculture in the global, U.S. and California economies. Uses economic reasoning and evidence to develop historical and conceptual understanding of the economics of agriculture, agricultural issues, and related government policies.	ARE 223	Agriculture & Resource Economics	G
Organizational Effectiveness Workshop	Examine leadership, communication, and project management within the business, legal and societal contexts in which analytics is applied. Emphasis on privacy, data security, responsibility, and ethics.	BAX 403	Business Analytics	G
Children, Adolescents, & the Media	Theory and research on the uses and effects of traditional and new media on children and adolescents, emphasizing social, emotional, cognitive, and physical development. Methodological approaches and ethical issues in studies of underage populations. Parent and family mediation of effects.	CMN 253	Communications	G
Community Development Theory	Introduction to theories of community development and different concepts of community, poverty, and development. Emphasis on building theory, linking applied development techniques to theory, evaluating development policy, and examining case studies of community development organizations and projects.	CRD 240	Human Ecology	G
The Economics of Community Development	Economic theories and methods of planning for communities. Human resources, community services and infrastructure, industrialization and technological change, and regional growth. The community's role in the greater economy.	CRD 241	Human Ecology	G
The Political Economy of Urban & Regional Development	How global, political and economic restructuring and national and state policies are mediated by community politics; social production of urban form; role of the state in uneven development; dynamics of urban growth and decline; regional development in California.	CRD 245	Human Ecology	G
The Political Economy of Transnational Migration	Theoretical perspectives and empirical research on social, cultural, political, and economic processes of transnational migration to the U.S. Discussion of conventional theories will precede contemporary comparative perspectives on class, race, ethnicity, citizenship, and the ethnic economy.	CRD 246	Human Ecology	G
Aquatic Medicine	Focus on the application of basic fish health principles to address current problems as experienced by fish as held for research, as large populations in state fish hatcheries and as part of the collection of large public/private aquaria.	DVM 498	Vet Med	G
Water & Waste Treatment	Characteristics of water and airborne wastes; treatment processes and process kinetics; treatment system design.	ECI 243A	Civil & Environmental Engineering	G
Applied Environmental Chemistry: Organic	Transport and transformation of organic chemicals in the environment. Topics include application of thermodynamics to predict solubility and activity coefficients; distribution of organic chemicals between the aqueous phase and air, solvent, or solid phases; chemical, photochemical and biological transformation reactions.	ECI 245B	Civil & Environmental Engineering	G
Aerosols Laboratory	Methods of generation and characterization of aerosols. Detailed topics may include flow rate measurement, aerosol generation, aerosol collection, ions measurement, metals measurement, and carbon measurement.	ECI 247L	Civil & Environmental Engineering	G
Stochastic Hydrology & Hydraulics	Physics-based stochastic methods in modeling hydrologic and hydraulic processes; theory for modeling hydrologic-hydraulic governing equations as stochastic partial differential equations applied to various hydrologic-hydraulic processes under uncertainty, including transport, open channel flow, overland flow, soil water flow, and groundwater.	ECI 265	Civil & Environmental Engineering	G
Computational River Mechanics I	Unsteady open channel flows, computation of water surface profiles, shallow water equations, St. Venant equations, method of characteristics, finite difference methods, stability and accuracy of explicit and implicit schemes, flood routing in simple and compound channels, advection of plumes.	ECI 277A	Civil & Environmental Engineering	G
Computational River Mechanics II	Open channel flows, physical aspects of river mechanics, formulation of depth-averaged equations, boundary conditions, coordinates transformation and grid generation, finite-difference solution techniques, applications to two-dimensional momentum and pollutant transport in rivers.	ECI 277B	Civil & Environmental Engineering	G
Pavement Design & Rehabilitation	Advanced pavement design and structural/functional condition evaluation for concrete and asphalt pavements. Highways, airfields, port facilities; new facilities, rehabilitation, reconstruction. Mechanistic-empirical procedures, materials, climate and traffic characterization. Use of current design methods; recent developments and research.	ECI 282	Civil & Environmental Engineering	G
Principles & Applications of Ecology	Covers principles of community structure and functioning, species diversity patterns, ecosystem ecology and biogeochemistry, landscape ecology, biogeography and phylogenetics.	ECL 200AN	Ecology	G
Principles & Applications of Ecology	Provides a broad background in the principles and applications of ecology, and serves as a foundation for advanced ecology courses. Topics include ecophysiology, behavioral ecology, population ecology, genetics and evolution. Emphasis on historical developments, current understanding, and real world applications.	ECL 200BN	Ecology	G
Community Ecology	Introduction to literature and contemporary research into processes structuring ecological communities.	ECL 205	Ecology	G
Plant Population Biology	Introduction to theoretical and empirical research in plant population biology. Emphasis placed on linking ecological, ecological and genetic approaches to plant population biology.	ECL 207	Ecology	G
Marine Ecology: Concepts & Practice	Critical review and analysis of concepts and practices in modern marine ecology at the interface of several fields of study including oceanography, evolution, behavior, and physiology. Emphasis on critical thinking, problem solving, and hands-on study. Two field trips required.	ECL 214	Ecology	G
Research Conference in Ecology	Critical presentation and evaluation of current literature and ongoing research in ecology. Requirements include active participation in weekly discussions and the presentation of a paper or chapter once per quarter.	ECL 271	Ecology	G
Seminar in Ecology	Topics in ecology. Students are expected to present an oral seminar on a particular aspect of the general topic under consideration.	ECL 290	Ecology	G
Microdevelopment Theory & Methods I	Agricultural development theory, with a focus on microeconomics. Agricultural household behavior with and without market imperfections and uncertainty. Analysis of rural land, labor, credit and insurance markets, institutions, and contracts.	ECN 215A	Economics	G
Labor Economics	Philosophy, theory and history of American and foreign labor movements; union structure, organization and collective bargaining under changing labor market conditions; current labor market issues.	ECN 250A	Economics	G
Labor Economics	Microeconomic theory of labor supply and labor demand, estimation of labor supply and demand functions; human capital theory; labor market analysis.	ECN 250B	Economics	G
International Economics	Theory of trade determinants; gains from trade; tariffs and effective protection; economic unions.	ECN 260A	Economics	G

Education Finance Policy	Examination of (1) United States financing public education, (2) the relationship between school finance and education policy, and (3) the relationship between education finance and education practice.	EDU 229	Education	G
Primary Care Clinics-Clinica Tepati	Medical students will learn counseling, diagnosis and treatment of patients with chronic and acute disease under supervision of physician. Provides exposure to special health care needs of various ethnic and poverty-level populations.	FAP 434	Family & Community Medicine	G
Primary Care Clinics-Imani Clinic	Learn counseling, diagnosis and treatment of patients with chronic and acute disease under supervision of physician. Provides exposure to special health care needs of various ethnic and poverty-level populations.	FAP 435	Family & Community Medicine	G
Primary Care Clinics: Knights Landing	Learn counseling, diagnosis and treatment of patients with chronic and acute disease under supervision of physician. Provides exposure to special health care needs of various ethnic and poverty-level populations in the community of Knights Landing.	FAP 437	Family & Community Medicine	G
Ecologies of Infrastructure	Focus on design practices and theory associated with ecological conceptions of infrastructure, including networked infrastructure, region, bioregion, regionalization, ecological engineering, reconciliation ecology, novel ecosystems, and theory/articulation of landscape change.	GEO 215	Geography	G
Urban Planning & Design	Regulation, design, and development of the built landscape, planning and land development processes, zoning and subdivision regulation, site planning, urban design goals and methods, public participation strategies, creatively designing landscapes to meet community and ecological goals.	GEO 233	Geography	G
The Economics of Community Development	Economic theories and methods of planning for communities. Human resources, community services and infrastructure, industrialization and technological change, and regional growth. The community's role in the greater economy.	GEO 241	Geography	G
The Political Economy of Urban & Regional Development	How global, political and economic restructuring and national and state policies are mediated by community politics; social production of urban form; role of the state in uneven development; dynamics of urban growth and decline; regional development in California.	GEO 245	Geography	G
Ecohydraulics	Use of 2D hydrodynamic modeling to perform instream flow assessment by exploring flow-dependent hydraulic patterns at multiple spatial scales and extrapolating results with empirical and analytical functions to evaluate geomorphic resilience and ecological functions.	HYD 254Y	Land, Air, & Water Resources	G
Numerical Modeling of Groundwater Systems	Finite difference and finite element techniques in modeling groundwater flow and transport. Fundamentals of constructing and calibrating models with hands-on applications. Methods and limitations of numerical solution of transport equations. Model interpretation and ethics.	HYD 269	Land, Air, & Water Resources	G
Medicos-Global Health Sciences	Travel to foreign country for four weeks to collaborate with faculty from local universities and work in urban and rural environments, including hands-on experience with clinic patients. Cultural exchange and awareness of global health care.	IMD 465	Internal Medicine	G
Practicum in Community Health Clinics	Students are assigned to clinical settings that demonstrate ethnic, urban/rural, or other related aspects of clinical community health. Through active participation in health care delivery, students are able to relate conceptual with practical aspects of primary health care.	IMD 494	Internal Medicine	G
Corporate Integrity & Responsibility	Equips future business lawyers with the legal knowledge and technical skills to better understand, the U.S, European and Asian (select jurisdictions) regulatory responses to ethical and socially responsible corporate governance practices. Instruction seeks to re-define the aim of corporate governance as a tool to address efficiency, reduce agency costs and improve access to capital, as well as an emerging anti-corruption tool and a means to ensure more ethical corporate behavior.	LAW 215B	Law	G
Labor Law	Survey of the legislative, administrative, and judicial regulation of labor relations under federal law. Historical development of labor law, the scope of national legislation, unions, strikes, picketing, and collective bargaining agreements.	LAW 251	Law	G
Statutory Interpretation	Elective course for Environmental Law Certificate Program. Provides an introduction to the theory and practice of statutory interpretation.	LAW 257B	Law	G
Employment Discrimination	Examine federal laws prohibiting employment discrimination, including Title VII of the Civil Rights Act of 1964, the Equal Pay Act, the Age Discrimination in Employment Act, the Americans with Disabilities Act, the Rehabilitation Act of 1973, and § 1981.	LAW 260	Law	G
Employment Law	Provides an overview of employment law, labor law and employment discrimination law and aims to serve as a foundation for understanding the law and policy (statutory and common law) that surround the employer-	LAW 260A	Law	G
Health Care Law	Addresses legal issues raised in general areas: access to health care and health care financing. Course materials and discussion focus on both public and private aspects of these issue areas.	LAW 286	Law	G
Employment Relations Externship	Practical experience in employment relations, including employment discrimination and public sector labor law. Work under the direct supervision of a government lawyer. Opportunity to participate in a range of with emphasis on observation and participation in actual investigation, interviewing, drafting pleading, and attendance at hearings.	LAW 455	Law	G
Environment & Behavior	Factors that influence human's interaction with their surroundings and the mechanisms used for recognizing and addressing general and specific human needs in community design and development decisions.	LDA 270	Human Ecology	G
Topics in Health Care Improvement	Lecture series will cover major topics in health care improvement, presented by guest speakers who are leaders in the field.	MDS 486	Public Health	G
Community Health Scholars Seminar A	Longitudinal year-long course starting on July 1 and concluding at the end of Block 2. Focuses on immersing students in their respective communities to understand the strengths and challenges they face in relation to health.	MDS 490A	Public Health	G
Community Health Scholars Seminar B	Longitudinal year-long course starting on July 1 and concluding at the end of Block 2. Focuses on immersing students in their respective communities to understand the strengths and challenges they face in relation to health.	MDS 490B	Public Health	G
Community Health Scholars Seminar C	Longitudinal year-long course starting on July 1 and concluding at the end of Block 2. Focuses on immersing students in their respective communities to understand the strengths and challenges they face in relation to health.	MDS 490C	Public Health	G
Community Health Scholars Seminar D	Longitudinal year-long course starting on July 1 and concluding at the end of Block 2. Focuses on immersing students in their respective communities to understand the strengths and challenges they face in relation to health.	MDS 490D	Public Health	G
Project Management with Applications in Healthcare	Focuses on the heart of healthcare administration and how project management can be applied as a key lever to increase efficiency, decrease costs and improve the patient experience.	MGP 432	Management	G
Project Management with Applications in Healthcare	Focuses on the heart of healthcare administration and how project management can be applied as a key lever to increase efficiency, decrease costs and improve the patient experience.	MGT 432	Management	G
Analysis of Molecular Genetic Circuits	Project-based course focused on problem-solving strategies in biology. Emphasis on testing hypotheses by translating real-world problems into an appropriate mathematical model and translating the results into real-world understanding.	MIC 217	Microbiology	G
Community Development for Sovereignty & Autonomy	Examines a sample of contemporary indigenous communities from south, central and north America with the goal of understanding and evaluating the strategies adopted by Native American communities to develop and implement forms of sovereignty or autonomous self-management.	NAS 212	Native American Studies	G
Colonialism, Neoliberalism, & Indigenous Self-Determination	History, political economy and legacies of imperial/colonial systems. Continuities and discontinuities with corporate globalization and neoliberalism. Focus on resistance and self-determination of indigenous peoples, but with comparison to other groups.	NAS 220	Native American Studies	G
Community Connections	Community-based learning and experiences including community participation, assessment, data collection and analysis using multiple approaches, community health improvement projects, collaborative leadership practice, all with the guidance of community members and nursing faculty.	NRS 206	Nursing	G

Social, Cultural, & Behavioral Determinants of Health	Effects of globalization, political systems, local and global economies, culture, race, class, gender, and sexuality on population health.	NRS 220	Nursing	G
Psychosocial Wellness & Illness	Explore the biological, psychological, cultural, societal, and environmental factors that affect psychological wellness and illness. Practice providing care to individuals and families experiencing disruptions in mental health secondary to physical or psychiatric illness, trauma or loss.	NRS 423	Nursing	G
Collaborative Practice A	Interprofessional course uses experiential learning activities including simulation, role play, and case studies. Concepts include but are not limited to; communication, person-centered care, ethical decision making, end-of-life decisions, culturally appropriate care, quality and safety, social justice, and professionalism.	NRS 429A	Nursing	G
Collaborative Practice B	Interprofessional course uses experiential learning activities including simulation, role play, and case studies. Concepts include but are not limited to; communication, person-centered care, ethical decision making, end-of-life decisions, culturally appropriate care, quality and safety, social justice, and professionalism.	NRS 429B	Nursing	G
Collaborative Practice C	Interprofessional course uses experiential learning activities including simulation, role play, and case studies. Concepts include but are not limited to; communication, person-centered care, ethical decision making, end-of-life decisions, culturally appropriate care, quality and safety, social justice, and professionalism.	NRS 429C	Nursing	G
Collaborative Practice D	Interprofessional course uses experiential learning activities including simulation, role play, and case studies. Concepts include but are not limited to; communication, person-centered care, ethical decision making, end-of-life decisions, culturally appropriate care, quality and safety, social justice, and professionalism.	NRS 429D	Nursing	G
Collaborative Practice E	Interprofessional course uses experiential learning activities including simulation, role play, and case studies. Concepts include but are not limited to; communication, person-centered care, ethical decision making, end-of-life decisions, culturally appropriate care, quality and safety, social justice, and professionalism.	NRS 429E	Nursing	G
Collaborative Practice F	Interprofessional course uses experiential learning activities including simulation, role play, and case studies. Concepts include but are not limited to; communication, person-centered care, ethical decision making, end-of-life decisions, culturally appropriate care, quality and safety, social justice, and professionalism.	NRS 429F	Nursing	G
Supervised Clinical Practice-Rural Health	Rural health rotations focus on providing care in medically underserved rural sites. Students will experience care across the continuum in ambulatory, inpatient, and community based settings.	NRS 480	Nursing	G
International Nutrition	Epidemiology, etiology, and consequences of undernutrition, with particular focus on the nutritional problems of children and women in low income populations.	NUT 219A	Nutrition	G
International Nutrition	Intervention programs to prevent or ameliorate nutritional problems in low-income populations. Planning, implementing, and evaluating nutrition intervention programs.	NUT 219B	Nutrition	G
Shifa Clinic	Interaction with patients from multiple ethnic and cultural backgrounds under the direct supervision of a physician/preceptor. Women's health issues and primary care issues in a diversely mixed population.	OBG 494	Obstetrics & Gynecology	G
Principles of Population Biology	Principles of multi-species communities. Topics include competition, mutualism, metapopulations, food webs and trophic cascades, interactions between simple ecological communities, island biogeography, succession, and large-scale patterns.	PBG 200B	Population Biology	G
PBGG Core Course Series - Spring quarter	The third of three PBGG graduate core courses. Coverage includes (1) plant water relations, (2) cellular & long distance transport processes, (3) mineral nutrition, (4) environmental impacts on growth & development, (5) stress perception & responses, (6) canopy processes, and (7) plant interactions with other organisms.	PBI 200C	Plant Biology	G
Physiology of Herbicidal Action	Study of the fundamental processes involved in the physiological action of herbicides. Detailed consideration of the fate of herbicides in plants.	PBI 212	Plant Biology	G
Epidemiology of the Zoonoses	Epidemiological, biological and ecological features of some major infections shared by humans and other animals. Wildlife and domestic animals zoonoses of major health and economic significance are presented to illustrate how knowledge of zoonoses epidemiology is essential for implementing control measures.	PHR 212	Population Health & Reproduction	G
Introduction to Public Health	Provides an overview of public health. Covers the history of public health in the U.S.; defines its major functions and constituencies; and, introduces fundamental principles of epidemiology, biostatistics, behavioral sciences, environmental health, infectious diseases, and reducing health disparities.	SPH 201	Public Health	G
Globalization & Health: Evidence & Policies	Provides an overview of the evidence on the multiple effects of globalization policies on health.	SPH 204	Public Health	G
Health Communication	Health communication theories and research traditions. Topics include consumer health information seeking; physician-patient interaction; information, social marketing, "edutainment," and media advocacy campaigns; social networks and coping; media influences on health; and new communication technologies in health promotion and healthcare delivery.	SPH 232	Public Health	G
Research in Community & International Health	Work with faculty member in areas of research interest, including but not limited to injury control, international health, health policy, occupational and environmental health, health promotion and wellness, women's health, and health demographics.	SPH 299	Public Health	G
Community Health Preceptorship	Participate at state or county health department or other public health organization in on-going investigations into current public health problems, e.g., birth defects, cancer control, diabetes, hypertension, injury control, infectious diseases, aging, Alzheimer's disease, and smoking and tobacco use control.	SPH 465	Public Health	G
Theory & Philosophy of the Designed Environment	Examines the major theories of environmental design. Epistemology of design serves as framework to examine modern landscape architecture, architecture, urban design and planning. Normative theories of design are reviewed along with the social and environmental sciences.	LDA 201	Human Ecology	G
Water Law	Property rights in surface waters, including riparian rights, prior appropriation, and public rights use of water bodies; environmental constraints on exercise of water rights; groundwater rights and management; federal allocation and control of water resources; legal aspects of interstate allocation.	LAW 264	Law	G
Farmworkers and the Law	Provides an overview of California and federal laws impacting farmworkers and how such laws have been applied to regulate working conditions in agriculture.	LAW 285D	Law	G
Environmental Quality Modeling	Mathematical modeling of environmental quality, with emphasis on mathematical models of water quality, their structure, capabilities and limitations; sensitivity and reliability, as analytical and/or predictive tools.	ECI 244	Civil & Environmental Engineering	G
Life Cycle Assessment for Sustainable Engineering	Life cycle assessment methodology is taught emphasizing applications to infrastructure and energy systems. Life cycle design, life cycle cost methods, other tools from industrial ecology, and links to policy are covered as well.	ECI 244	Civil & Environmental Engineering	G
Sustainable Transportation Technology and Policy	Role of technical fixes and demand management in creating a sustainable transportation system. Emphasis on technology options, including alternative fuels, electric propulsion, and IVHS. Analysis of market demand and travel behavior, environmental impacts, economics and politics.	ECI 252	Civil & Environmental Engineering	G
United Nations Human Rights Practicum II	Offers students the opportunity to work in support of the United Nations Special Rapporteur in the field of cultural rights at an advanced level. They will gain heightened expertise in cultural rights, and in-depth experience with the UN.	LAW 248DT	Law	G
Restorative Justice	Explore both the theory and practice of restorative justice as an alternative approach to the retributive justice model of our current criminal law system and many other institutions.	LAW 210FT	Law	G
Products Liability	Civil action for harm to the consumer resulting from defective products. Includes manufacturing defects, warning defects and design defects.	LAW 253	Law	G

Critical Discourse in Context of Social Issues	Advanced course for second-year Graduate students. Discussion of social, political, cultural, and economic issues in a constantly changing world. How contemporary art practice are affected by global issues.	ART 290D	Art Studio	G
Theory and Issues in Design	Perspectives on theoretical and aesthetic issues related to the design professions such as methodology in	DES 221	Design	G
Energy Systems	Theory and application of energy systems. System analysis including input-output analysis, energy balances, thermodynamic availability, economics, environmental considerations. Energy conversion systems and devices including cogeneration, heat pump, fuel cell, hydroelectric, wind, photovoltaic, and biomass conversion processes.	EBS 216	Biological & Agricultural Engineering	G
Solar Thermal Engineering	Familiarity with FORTRAN language. Analysis and design of solar energy collection systems. Sunearth geometry and estimation of solar radiation. Steady state and dynamic models of solar collectors. Modeling of thermal energy storage devices. Computer simulation.	EBS 218	Biological & Agricultural Engineering	G
Pilot Plant Laboratory	Laboratory investigation of physical, chemical, and biological processes for water and wastewater treatment.	ECI 243L	Civil & Environmental	G
Water Resource Management	Engineering, institutional, economic, and social basis for managing local and regional water resources. Examples in the context of California's water development and management. Uses of computer modeling to improve water management.	ECI 267	Civil & Environmental Engineering	G
Water Resource Systems Engineering	Planning, design, and management of water resource systems. Application of deterministic and stochastic optimization techniques. Water allocation, capacity expansion, and design and operation of reservoir systems. Surface water and groundwater management.	ECI 273	Civil & Environmental Engineering	G
Advanced Soil Mechanics	Site investigation methods: CPT, SPT, pressuremeter, vane, seismic investigation, electrical properties. Slope stability, including seepage pressures and earthquake effects. Slope stabilization and reinforcement methods. Centrifuge modeling.	ECI 281B	Civil & Environmental Engineering	G
Topics in Paleoclimatology	Critical discussion and review of selected topics in paleoclimatology and paleogeography relating to the history of the processes controlling and affecting climate change and ocean circulation throughout the geologic record. Topics vary.	GEL 228	Geology	G
Geomorphology and River Management	Impacts of management and land use activities on the geomorphology of rivers and streams. Evaluation and use of analytical tools for river assessment. Assessment of river and stream restoration strategies and emerging issues in river management.	GEL 230	Geology	G
Water Law	Property rights in surface waters, including riparian rights, prior appropriation, and public rights use of water bodies; environmental constraints on exercise of water rights; groundwater rights and management; federal allocation and control of water resources; legal aspects of interstate allocation.	LAW 264	Law	G
Ocean and Coastal Law	Introduction to the goals and challenges of coastal and ocean policy; the complicated web of public and private interests in coastal lands and ocean waters; regulation of coastal development; domestic and international fisheries management; and preservation of ocean resources.	LAW 264A	Law	G
Native American Law Seminar	Legal relations between Native American tribes and the federal and state governments. Topics will include the basic jurisdictional conflicts which dominate this area of law and will cover specific areas such as land rights, hunting and fishing rights, water rights, domestic relations law, and environmental protection. Religious freedom and repatriation will also be covered. Issues regarding terminated and non-recognized tribes will also be addressed.	LAW 277	Law	G
Native American Law Seminar	Seminar focuses on legal relations between Native American tribes and the federal and state governments.	LAW 277	Law	G
Native American Law	Seminar focuses on legal relations between Native American tribes and the federal and state governments.	LAW 277	Law	G
Theory and Philosophy of the Designed Environment	Examines the major theories of environmental design. Epistemology of design serves as framework to examine modern landscape architecture, architecture, urban design and planning. Normative theories of design are reviewed along with the social and environmental sciences.	LDA 201	Human Ecology	G
Stochastic Contaminant Transport	Stochastic theory of molecular diffusion covered by means of Taylor-Chandrasekhar theory. Turbulence diffusion covered in the Lagrangian-Eulerian frameworks. Application of theory to contaminant transport in groundwater aquifers, atmosphere, river and oceanic environments.	ECI 265	Civil & Environmental Engineering	G
Ethical Issues in Earth Science	Reading and discussion of ethical issues arising in the earth sciences. Topics include scientific misconduct, gender equity in science, authorship of scientific papers, establishing	GEL 391	Geology	G
Physical Planning and Design	Regulation, design, and development of the built landscape, planning and land development processes, zoning and subdivision regulation, site planning, urban design goals and methods, public participation strategies, creatively designing landscapes to meet community and ecological goals.	GEO 233	Geography	G
Project Planning and Evaluation	Interdisciplinary setting for application of student skills and specialization to a "real world" development project. Focus on team-building and effective interdisciplinary problem-solving methods, with the objective of producing a project document and presentation within a specified deadline.	IAD 203N	Plant Sciences	G
Seminar in International Agricultural Development	Discussion and critical evaluation of advanced topics and issues in international agricultural development. May be repeated for credit.	IAD 290	Plant Sciences	G
International Environmental Law	Provides an overview of the structure and basic principles of international environmental law and policy.	LAW 230	Law	G
Feminist Legal Theory	Provides an overview of gender justice issues.	LAW 259	Law	G
Ocean and Coastal Law	An introduction to the goals and challenges of coastal and ocean policy.	LAW 264A	Law	G
International Intellectual Property and Development	In September 2007, the World Intellectual Property Organization adopted a development agenda that would rewrite that body's mandate, placing the concerns of the poor at the center of international intellectual property law and policy.	LAW 274A	Law	G
Health Care Law	Addresses legal issues raised in three general areas: access to health care, health care financing, and quality of care. Course materials and discussion will focus on both public and private aspects of these issue areas.	LAW 286	Law	G
Environment and Behavior	Factors that influence human's interaction with their surroundings and the mechanisms used for recognizing and addressing general and specific human needs in community design and development decisions.	LDA 270	Human Ecology	G
Principles of Public Health and Preventive Medicine	Course focuses on the bedrock themes of public health: populations and prevention.	MDS 415	Medical Science	G
Supervised Clinical Practice-Rural Health	Rural health rotations focus on providing care in medically underserved rural sites. Students will experience care across the continuum in ambulatory, inpatient, and community based settings.	NRS 480	Nursing	G
Sociology of Education	Overview of sociological theories accounting for the form, role, and evolution of educational systems. Emphasis on empirical research on education and social stratification and application to educational policy. Topics include tracking, racial/ ethnic achievement inequalities, school organization, and the immigrant experience.	SOC 224	Sociology	G
Migration and Health	Principles of migration and health. Topics will include demographics, public health intervention programs, health care delivery, occupational health, and effects of international migration on the health in communities of origin, transit and destination. Guest presentations by outside experts.	SPH 212	Public Health	G
Ecologies of Infrastructure	Focus on design practices and theory associated with ecological conceptions of infrastructure, including networked infrastructure, region/bioregion/regionalization, ecological engineering, reconciliation ecology, novel ecosystems, and theory/articulation of landscape change.	LDA 215	Human Ecology	G

Keyword or Phrases Used

access to water
acidification
accountable institution*
active participation
adaptive capacity
in/adequate housing
affordable +access, +education, +medicines, +vaccines
afforestation
AIDS
(indoor) air quality
agroecolog*
alien specie*
alternative +energy, +fuel*, +transportation
anthropogenic +stressors
aquaculture
basic +needs, +rights
biodigest*
biodiversity
biofuel
biolog* +integrate, +farm
biomass
biomaterial*
biomimicry
biosphere
bodily health
bribery
building +material*, +envelop, +façade
built environment
cap and trade/cap-and-trade
carbon +footprint, +neutral, +offset, +sequestration, +tax
capacity-building
CDP (Carbon Disclosure Project)
child labor
citizen +science
civil societ*
clean +air, +energy, +fuels
climate +adaptation, +energy, +change, +protection, +science
climate-related
CO2 emission
coastal eutrophication
collaborative
common good
communicable disease*
community +development
compost*
conflict-related death
conserv*
contaminat*
cooling +efficiency
cooperation
corporate +social +responsibility
corrupt*
cover crop
cruelty to animal*
cultural +diversity, +heritage, +significance
culture of tolerance
daylighting
debt +relief, +restructur*
decent work
deforest*
degrad*
dematerializ*
demilitariz*

democra*
depletion of resource*
desalination
desertification
developing countr*
dignity
direct participation
disability-sensitive
disaster*
discriminat*
disparit*
dissent
distribution of wealth
divers*
drinking water
drought +tolerant
Earth
ecolog*
economic justice
ecosystem*
ecotour*
effective +governance, +institutions
electric vehicle*
embedded energy
embodied +energy
emergency preparedness
emission*
empower*
enabling +technolog*
endangered spec*
energy +efficien*, +policy
entrepreneurship
environment* +justice, +health
equal* +access ,+opportunit*, +partners, +pay ,+rights
equit*
ethic*
exploit*
extinct*
extreme +events, +weather
fair +trade, +wage
family planning
feedstock*
FERC (U.S. Federal Energy Regulatory Commission's)
finite world
fish stock*
fisher*
flood* +plain
food +in/security, +loss, +reserves, +waste
footprint
forced +labor, +marriage
forest +area, +loss
fossil +fuel*
freedom of +association, +expression, +opinion
freshwater
full employment
fundamental freedom*
future generation*
gap between rich and poor
gender +disparities, +in/equality, +pay gap, +sensitive
genetic +diversity, +resources
genital mutilation
geoengineering
geothermal
GIIN (Global Impact Investing Network)

global +citizenship, +community, +consequence*, +dialogue,
+governance, +health risk*, +partnership*, +warming
green +cover, +space, +building, +economy, +supply chain, +vehicle*,
+engineering design, +chemistry
greenhouse gas* | GHG
harassment
harmony with nature
hazardous +chemical*, +substance*, +waste
health +disparit*, +worker
heating, ventilation and air conditioning
heat island*
hepatitis B
HIV infection*
horticulture
human* +communit*, +impact, +health, +right*
hunger
HVAC
hybrid +vehicle
hydrogen +fuel cell
IFRIC3 (International Financial Reporting Interpretations Committee No.
3)
illegal fishing
illicit +arm*, +financ*
impact +invest*, +fund*
inclusive
indigenous people*
industrial ecology
inequalit*
informal +employment, +settlement*
initiative
injustice*
innovation
integrated +pest management, +weed management
intentional homicide
interdependen*
invasive spacies
justice for all
labor +rights, +standards
land consumption
landscape architecture
least developed countr*
LED
legitimate institution*
life cycle +analysis, +assessment
light-emitting +diodes
lighting technolog*
literacy
livelihood
living being*
local breed*, +culture*, +material*
loss of species
low +carbon, +till* +impact infrastructure, +green infrastructure, +impact
development, +green development
malaria
malnutrition
marine +acidity, +debris, +life, +resources
material +consumption, +intensity, +sufficiency
maternal mortality
meaningful participation
methane
micro/enterprise/finance
migrant* +workers
minorit*
mitigation

modeling +building*, +vehicle*, climate
moral and spiritual education
mortality rate
multi-stakeholder partnership*
mutual understanding
native spec*
natural +capital, +heritage, +resource*
naturalist
net zero energy
no-till*
non-discrimination
non-renew*
non-violen*
numeracy
ocean acidification
occupational injur*
open +defecation, +exchange
organic* +agriculture, +farming, +food, +produce, +system
organized crime*
over/consumption/fishing
ozone
participatory
particulate matter*
peace*
permaculture
persons with disabilit*
photovoltaic
plastic
poaching

policy +energy, +transportation, +carbon, +economic, +procurement

pollut*
population growth
potable water
power generat*
poverty
precarious employment
precautionary approach
preservation
prevent* +death
priority species
protect +and restore, +the rights
protected area
pro-poor
public +domain, +space, +transport*
quality +education, +of life
radioactive
recycl*
red list
reforestation
regenerat* +capacit*
renewable* +energy, +resources
representative decision-making
reproductive +health, +right*
residual waste
resilien* +infrastructure
resource +economics, +efficiency, +use efficiency, +management,
+scarcity
respect for nature
responsib*
responsive +decision-making, +institution
restor*
reuse
reverence for life

rising sea level
river +system*
road traffic
rule of law
rural infrastructure
safe*
SDG*
shared responsibilit*
slavery
slum
small and medium sized enterprise* | SME
small island developing state | SIDS
small-scale +industries, +fisheries, +producer
social +and environmental standards, +challenge, +cost, +ent*, +equity,
+imperative, +justice, +protection, +responsib*, +system*
soil +erosion, +fertil*, +quality
solar*
solid waste
solidarity
source +reduction
spiritual wisdom
SRI (socially responsible investment)
STARS
stewardship
strengthen +famil*, +local communit*
struggle
substance abuse
suffering
sufficient food
suicide
un/sustain* +investing, +supply chain, +engineering design
Sustainable Development Goal*
tenure right*
the poor
thermal energ*
threatened spec*
tobacco use
torture
toxic
traditional knowledge
trafficking
transparen*
transport* system
tree*
triple bottom line
tropical disease
tuberculosis
UN
UNPRI
un/contaminated soil
undernourishment
unemployment
unintentional poisoning
United Nations +Principles of Responsible Investment
universal +access, +health coverage
unpaid work
unregulated fishing
unsentenced detainee
untreated wastewater
urban +planning, +sprawl
urbanization
violen* +conflict
VOCs

volatile organic compound*

voting right*

vulnerable +group

waste +generation, +management, +reduction

water +conservation, +demand, +efficiency, +harvesting, +quality,

+resources, +scarcity, +stress, +borne disease

weapons of mass destruction

well-being

(animal, human) welfare

wholeness

wildlife

wind +energy

wisdom

youth employment

zero ,+net, +tariff, +waste

Department Count

Method: I filtered true on "Sustainability-Focused" & false on "Sustainability-Inclusive", & then saw which departments were filtered, & then recorded them on the Word Doc. Then I switched the true/false filter (marking false on "Sustainability-Focused" & true on "Sustainability-Inclusive"), & then added the departments that were not already listed in this Word Doc.

UNDERGRAD 2016-2017	UNDERGRAD 2017-2018	UNDERGRAD 2018-2019
Total Departments: 78	Total Departments: 70	Total Departments: 68
<ol style="list-style-type: none"> 1. African American Studies 2. Agricultural & Resource Econ 3. Agricultural Dean's Office 4. American Studies 5. Animal Science 6. Anthropology 7. Art & Art History 8. Asian American Studies 9. Biological & Agric Engr 10. Biological Sciences 11. Biomedical Engineering 12. Chemistry 13. Chicano/a Studies 14. Cinema & Digital Media 15. Communication 16. Design 17. East Asian Lang & Cultures 18. Economics 19. Education 20. Engineering 21. Engineering – Chemical 22. Engineering – Computer Science 23. Engineering – Civil & Environmental 24. Engineering – Electrical & Comp 25. Engineering – Mechanical & Aero 26. English 27. Engr – Biological & Agric 28. Engr – Chemical & Material Sci 29. Entomology & Nematology 30. Environmental Sci & Policy 31. Environmental Toxicology 32. Evolution & Ecology 33. Family & Comm Medicine – MD 34. Food Science & Technology 35. French & Italian 36. Geology 37. German & Russian 38. History 39. Human Ecology 40. Humanities 41. Interdept Program in Classics 42. Internal Medicine - MD 43. Land, Air, & Water Resources 44. Letters & Science Deans Office 45. Linguistics 46. Management 47. Material Science & Engineering 48. Mathematics 49. Medieval Studies 50. Medicine & Epidemiology – VM 51. Microbiology 52. Middle East/South Asian Studies 53. Molecular & Cellular Biology 54. Music 55. Native American Studies 56. Neurobiology, Physio, & Behavr 57. Nutrition 58. Obstetrics & Gynecology - MD 59. Pathology, Micro, & Immun – VM 	<ol style="list-style-type: none"> 1. African American Studies 2. Agricultural & Resource Econ 3. Agricultural Dean's Office 4. American Studies 5. Animal Science 6. Anthropology 7. Asian American Studies 8. Biological & Agric Engr 9. Biological Sciences 10. Biomedical Engineering 11. Chemistry 12. Chicano/a Studies 13. Cinema & Digital Media 14. Communication 15. Design 16. East Asian Lang & Cultures 17. Economics 18. Education 19. Engineering 20. Engineering - Chemical 21. Engineering – Civil & Environmental 22. Engineering – Computer Science 23. Engineering – Electrical & Comp 24. Engineering – Mechanical & Aero 25. English 26. Engr – Biological & Agric 27. Entomology & Nematology 28. Environmental Sci & Policy 29. Environmental Toxicology 30. Evolution & Ecology 31. Food Science & Technology 32. French & Italian 33. Family & Comm Medicine – MD 34. Geology 35. History 36. Human Ecology 37. Internal Medicine - MD 38. Land, Air, & Water Resources 39. Letters & Science Deans Office 40. Linguistics 41. Management 42. Material Science & Engineering 43. Mathematics 44. Microbiology 45. Middle East/South Asian Studies 46. Molecular & Cellular Biology 47. Medicine & Epidemiology – VM 48. Music 49. Native American Studies 50. Nutrition 51. Obstetrics & Gynecology – MD 52. Pathology, Micro, & Immun – VM 53. Philosophy 54. Physical Education 55. Physics 56. Plant Biology 57. Plant Pathology 58. Plant Sciences 59. Political Science 	<ol style="list-style-type: none"> 1. African American Studies 2. Agricultural & Resource Econ 3. Agricultural Dean's Office 4. American Studies 5. Animal Science 6. Anthropology 7. Art & Art History 8. Asian American Studies 9. Biological & Agric Engr 10. Biological Sciences 11. Biomedical Engineering 12. Chemistry 13. Chicano/a Studies 14. Cinema & Digital Media 15. Communication 16. Design 17. East Asian Lang & Cultures 18. Economics 19. Education 20. Engineering 21. Engineering – Computer Science 22. Engineering – Chemical 23. Engineering – Civil & Environmental 24. Engineering – Electrical & Comp 25. Engineering – Mechanical & Aero 26. English 27. Entomology & Nematology 28. Environmental Sci & Policy 29. Environmental Toxicology 30. Evolution & Ecology 31. Family & Comm Medicine – MD 32. Food Science & Technology 33. French & Italian 34. Geology 35. History 36. Human Ecology 37. Humanities 38. Interdept Program in Classics 39. Internal Medicine – MD 40. Land, Air, & Water Resources 41. Linguistics 42. Management 43. Mathematics 44. Microbiology 45. Molecular & Cellular Biology 46. Music 47. Native American Studies 48. Neurobiology, Physio, & Behavr 49. Nutrition 50. Obstetrics & Gynecology – MD 51. Philosophy 52. Physical Education 53. Physics 54. Plant Biology 55. Plant Pathology 56. Plant Sciences 57. Political Science 58. Psychology 59. Public Health Sciences

60. Philosophy
 61. Physical Education
 62. Physics
 63. Plant Biology
 64. Plant Pathology
 65. Plant Sciences
 66. Political Science
 67. Psychology
 68. Public Health Sciences
 69. Religious Studies
 70. Science & Technology Studies
 71. Sociology
 72. Spanish & Portuguese
 73. Textiles & Clothing
 74. Theatre & Dance
 75. University Writing Program
 76. Viticulture & Enology
 77. Wildlife, Fish, & Conservtn Bio
 78. Women's Studies

60. Public Health Sciences
 61. Religious Studies
 62. Science & Technology Studies
 63. Sociology
 64. Spanish & Portuguese
 65. Theatre & Dance
 66. Textiles & Clothing
 67. University Writing Program
 68. Viticulture & Enology
 69. Wildlife, Fish, & Conservation Bio
 70. Women's Studies

60. Religious Studies
 61. Science & Technology Studies
 62. Sociology
 63. Spanish & Portuguese
 64. Textiles & Clothing
 65. University Writing Program
 66. Viticulture & Enology
 67. Wildlife, Fish, & Conservation Bio
 68. Women's Studies

GRAD 2016-2017

Total Departments: 57

1. African American Studies
 2. Agricultural & Resource Econ
 3. Animal Science
 4. Anthropology
 5. Art & Art History
 6. Biological & Agric Engr
 7. Biological Sciences
 8. Biomeidcal engineering
 9. BioSci Graduate Grp Cluster
 10. Chemistry
 11. Chicano/a Studies
 12. Communication
 13. Comparative Literature
 14. Design
 15. Economics
 16. Education
 17. Engineering – Computer Science
 18. Engineering - Chemical
 19. Engineering – Civil & Environmental
 20. Engineering – Mechanical & Aero
 21. English
 22. Engr – Biological & Agric
 23. Entomology & Nematology
 24. Environmental Sci & Policy
 25. Environmental Toxicology
 26. Evolution & Ecology
 27. Food Science & Technology
 28. French & Italian
 29. Geology
 30. German & Russian
 31. History
 32. Human Ecology
 33. Interdept Program in Classics
 34. Internal Medicine - MD
 35. Land, Air, & Water Resources
 36. Law
 37. Management
 38. Mathematics
 39. Medical Microbiology – MD
 40. Medical Pathology & Lab Med
 41. Medicine & Epidemiology – VM
 42. Molecular & Cellular Biology
 43. Music

GRAD 2017-2018

Total Departments: 63

1. African American Studies
 2. Agricultural & Resource Econ
 3. Anat, Physio, & Cell Biol - VM
 4. Animal Science
 5. Anthropology
 6. Art & Art History
 7. Biological & Agric Engr
 8. Biological Sciences
 9. Biomedical Engineering
 10. BioSci Graduate Grp Cluster
 11. Chemistry
 12. Chicano/a Studies
 13. Communication
 14. Comparative Literature
 15. Design
 16. Economics
 17. Education
 18. Engineering - Chemical
 19. Engineering – Civil & Environmental
 20. Engineering – Mechanical & Aero
 21. English
 22. Engr – Biological & Agric
 23. Entomology & Nematology
 24. Environmental Sci & Policy
 25. Environmental Toxicology
 26. Evolution & Ecology
 27. Food Science & Technology
 28. French & Italian
 29. Geology
 30. German & Russian
 31. History
 32. Human Ecology
 33. Internal Medicine - MD
 34. Land, Air, & Water Resources
 35. Law
 36. Management
 37. Materials Science & Engineering
 38. Mathematics
 39. Medical Microbiology – MD
 40. Medical Pathology & Lab Med
 41. Medicine & Epidemiology – BM
 42. Molecular & Cellular Biology
 43. Music

GRAD 2018-2019

Total Departments: 66

1. African American Studies
 2. Agricultural & Resource Econ
 3. American Studies
 4. Anat, Physio, & Cell Biol - VM
 5. Animal Science
 6. Anthropology
 7. Art & Art History
 8. Biological & Agric Engr
 9. Biological Sciences
 10. Biomedical Engineering
 11. BioSci Graduate Grp Cluster
 12. Chemistry
 13. Chicano/a Studies
 14. Communication
 15. Comparative Literature
 16. Design
 17. Economics
 18. Education
 19. Engineering – Computer Science
 20. Engineering – Chemical
 21. Engineering – Electrical & Comp
 22. Engineering – Civil & Environmental
 23. Engineering – Mechanical & Aero
 24. English
 25. Engr – Biological & Agric
 26. Entomology & Nematology
 27. Environmental Sci & Policy
 28. Environmental Toxicology
 29. Evolution & Ecology
 30. Food Science & Technology
 31. French & Italian
 32. Geology
 33. German & Russian
 34. History
 35. Human Ecology
 36. Internal Medicine - MD
 37. Land, Air, & Water Resources
 38. Law
 39. Management
 40. Materials Science & Engineering
 41. Mathematics
 42. Medical Microbiology – MD
 43. Medical Pathology & Lab Med

44. Native American Studies
45. Neurology – MD
46. Nursing
47. Nutrition
48. Pathology, Micro, & Immun – BM
49. Philosophy
50. Physics
51. Plant Pathology
52. Plant Sciences
53. Political Science
54. Population Hlth & Reprod – VM
55. Public Health Sciences
56. Psychology
57. Textiles & Clothing

44. Native American Studies
45. Neurology – MD
46. Nursing
47. Nutrition
48. Pathology, Micro, & Immun – VM
49. Philosophy
50. Physics
51. Plant Pathology
52. Plant Sciences
53. Population Hlth & Reprod – VM
54. Public Health Sciences
55. Psychology
56. Science & Technology Studies
57. Sociology
58. Statistisc
59. Textiles & Clothing
60. Threatre & Dance
61. University Writing Program
62. Viticulture & Enology
63. Wildlife, Fish, & Conservation Bio

44. Medicine & Epidemiology – VM
45. Microbiology
46. Music
47. Native American Studies
48. Neurology - MD
49. Nursing
50. Nutrition
51. Pathology, Micro, & Immun – VM
52. Philosophy
53. Physics
54. Plant Pathology
55. Plant Sciences
56. Population Health & Reprod – VM
57. Psychology
58. Public Health Sciences
59. Religious Studies
60. Sociology
61. Spanish & Portuguese
62. Statistics
63. Theatre & Dance
64. Textiles & Clothing
65. University Writing Program
66. Viticulture & Enology