Last Updated 7/27/2017

Course	Department	Instructor (most recent)	Semester (most recent)	Graduate/ Undergraduate	Course Description	Prerequisites
Economics and Policy of Production, Technology and Risk in Agricultural and Natural Resources, (A,RESEC 241)	Agricultural and Resource Economics	David Zilbeman, Ethan Ligon	Fall 2017	Graduate	This course covers alternative models of production, resource and environmental risk management; family production function; adoption and diffusion; innovation and intellectual property rights; agricultural and environmental policies and their impact on production and the environment; water resources; pest control; biotechnology; and optimal control over space and time.	201 and 202, or Economics 201A-201B, or consent of instructor.
Rural Economic Development Workshop (A,RESEC 259)	Agricultural and Resource Economics	Elisabeth Sadoulet	Fall 2017	Graduate	Presentation and criticism of ongoing research by faculty, staff and students. Not necessarily offered every semester.	
Empirical Energy and Enviromental Economics (A<RESEC 264)	Agricultural and Resource Economics	Meredith Fowlie	Spring 2017	Graduate	This course is designed to help prepare graduate students to conduct empirical research in energy and environmental economics. The course has two broad objectives. The first is to develop an in-depth understanding of specific empirical methods and research designs that are routinely used in the field of energy and environmental economics. The second is to familiarize students with some of the economic theories and institutions that are most relevant to empirical work in this area.	
Agricultural, Food, and Resource Poliy Workshop (A,RESEC 249)	Agricultural and Resource Economics	Brian Wright	Fall 2017	Graduate	Presentation and criticism of ongoing research by faculty, staff and students. Not necessarily offered every semester.	
Empirical International Trade and Investment, (A,RESEC 232)	Agricultural and Resource Economics	Staff	Before Spring 2013	Graduate	Empirical aspects on international trade, foreign investment, and the environment. Issues related to testing various trade models. Topics include: testing trade models (HO, Ricardo, Specific Sector); gravity models; linkages between openness and growth; trade orientation and firm performance; pattern of trade; trade and the environment; labor markets and trade. New topics in international trade with empirical applications, such as trade models with heterogeneous firms, outsourcing and foreign investment.	
Issues and Concepts in Agricultural Economics, (A,RESEC 202)	Agricultural and Resource Economics	J.M. Perloff, David Sunding	Spring 2017	Graduate	History, institutions, and policies affecting agriculture markets and environmental quality. Producer behavior over time and under uncertainty. Asset fixity and agricultural supply models.	Economics 201A-201B or consent of instructor.
Production, Industrial Organization, and Regulation in Agriculture (A,RESEC 201)	Agricultural and Resource Economics	L.S. Karp, D.L. Sunding	Fall 2015	Graduate	Basic concepts of micro and welfare economics: partial and general equilibrium. Industrial organization: monopolistic competition, vertical integration, price discrimination, and economics of information with applications to food retailing, cooperatives, fishing, and energy.	Economics 201A or equivalent or consent of instructor.
Intro to American Studies (AMERSTD 10)	Amercian Studies	Kathleen Moran, Margaretta Lovell	Fall 2017	Undergraduate	Special Title Food Culture in America Special Title This course will introduce students to the interdisciplinary field of American Studies, taking “Food” as its central theme. We will explore the social history, political economy and "aesthetics" of eating and cooking in America. Specific topics will include the development and importance of New World agriculture, the design of shopping and eating spaces, eco history, the objects we use in the kitchen, the use of food as a metaphor in literature and in popular culture, food service workers, ethnic foods, food advertising, food photography, fast food, the “slow” food movement, and food biographies. We will also consider the specific food culture of Berkeley, and explore the rise of the so-called Berkeley "gourmet ghetto." Course Goals: This course is meant to enable you to think and do research as an interdisciplinary scholar, specifically to give you the tools to do readings of a literary text, a painting, a common object, a film, a space. You will also learn the basics of conducting an interview, drawing a floorplan, recording and analyzing behaviors. You will practice historical research—gathering and evaluating evidence--as well as practice the skills involved in finding a thesis and arguing it persuasively.	
Holocene Paleoecology: How Humans Changed the Earth, (ANTHRO C129D)	Anthropology	Kirch	Spring 2016	Undergraduate	Since the end of the Pleistocene and especially with the development of agriculturally based societies humans have had cumulative and often irreversible impacts on natural landscapes and biotic resources worldwide. Thus "global change" and the biodiversity crisis are not exclusively developments of the industrial and post-industrial world. This course uses a multi-disciplinary approach, drawing upon methods and data from archaeology, palynology, geomorphology, paleontology, and historical ecology to unravel the broad trends of human ecodynamics over the past 10,000 years. Also listed as Anthropology C129D.	Either Anthropology 2 or Biology 1A.

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American Materian Cultures (ANTHRO 121AC)	Anthropology	Staff	Spring 2017	Undergraduate	Patterns in material culture as it reflects behavioral and psychological aspects of American culture since the 17th century. Topics include architecture, domestic artifacts, mortuary art, foodways, and trash disposal.	
Special Topics: Current Issues in Hunter-Gatherer Archaeology and Anthropology	Anthropology	Junko Habu	Fall 2017	Graduate		
Special Topics in Archaeology: Food Studies (ANTHRO 230-001)	Anthropology	Christine Hastorf	Fall 2017	Graduate		
Antropology of Food (ANTHRO 140)	Anthropology	Christine Hastrof	Fall 2017	Undergraduate	This course examines the place of food in society and includes discussions of identity, taste, taboos, ritual, traditions, nationalism, health, alcohol use, civilizing society, globalism, and the global politics of food.	
Urban Farming (ARCH 202)	Architecture	Renee Chow	Fall 2015	Graduate		
Urban Farming (ARCH 202)	Architecture	Renee Chow	Fall 2014	Graduate		
Introduction to Asia (ASIANST 10)	Asian Studies	Crystal ohen	Fall 2017	Undergraduate	This course is designed to interest students in Asian cultures early in their undergraduate studies. Topics such as trade, social and political formations, religions, food, and expressive culture that have been important in history as well as in contemporary times in East, South, and Southeast Asia will serve as unifying themes. Comparative thinking across regions of Asia and the perspectives of multiple disciplines will be brought to bear on the themes.	
Biotechnology, (BIO ENG 22)	Bioengineering	L. Lee, Dueck	Before Fall 2015	Undergraduate	This course is intended to introduce students to a variety of fields that fall under the biotechnology umbrella. In general, these fields include medical, microbial, agricultural, animal, and forensic biotechnology. Students in this course will learn the types of biotechnology projects currently being worked on, as well as the techniques and assays used within these projects.	22L (must be taken concurrently).
Planning for Sustainability (CYPLAN 119	City and Regional Planning	Charisma Acey	Fall 2017	Undergraduate	This course examines how the concept of sustainable development applies to cities and urban regions and gives students insight into a variety of contemporary urban planning issues through the sustainability lens. The course combines lectures, discussions, student projects, and guest appearances by leading practitioners in Bay Area sustainability efforts. Ways to coordinate goals of environment, economy, and equity at different scales of planning are addressed, including the region, the city, the neighborhood, and the site.	
Healthy Cities, (CRP 256)	City and Regional Planning	Jason Corburn	Fall 2017	Graduate	Exploration of common origins of urban planning and public health, from why and how the fields separated and strategies to reconnect them, to addressing urban health inequities in the 21st century. Inquiry to influences of urban population health, analysis of determinants, and roles that city planning and public health agencies - at local and international level - have in research, and action aimed at improving urban health. Measures, analysis, and design of policy strategies are explored.	
Geotechnical and Geoenvironmental Engineering (CIVENG 175)	Civil and Environmental Engineering	Jonathan Bray	Fall 2017	Undergraduate	Soil formation and identification. Engineering properties of soils. Fundamental aspects of soil characterization and response, including soil mineralogy, soil-water movement, effective stress, consolidation, soil strength, and soil compaction. Use of soils and geosynsynthetics in geotechnical and geoenvironmental applications. Introduction to site investigation techniques. Laboratory testing and evaluation of soil composition and properties.	
Chemisrty of Soils (CIV ENG C116)	Civil and Environmental Engineering	Laura Lammers	Spring 2017	Undergraduate	Chemical mechanisms of reactions controlling the fate and mobility of nutrients and pollutants in soils. Role of soil minerals and humus in geochemical pathways of nutrient biovailability and pollutant detoxification. Chemical modeling of nutrient and pollutant soil chemistry. Applications to soil acidity and salinity.	
Technologies for Sustainable Societies, (CIV ENG 292A)	Civil and Environmental Engineering	Horvath, Agogino	Fall 2017	Graduate	Exploration of selected important technologies that serve major societal needs, such as shelter, water, food, energy, and transportation, and waste management. How specific technologies or technological systems do or do not contribute to a move toward sustainability. Specific topics vary from year to year according to student and faculty interests.	Graduate standing or consent of instructor., Must be taken on a satisfactory/unsatisfactory basis.
Principles of Natural Resource Management (DEVP 227)	Development Practice	Staff	Spring 2017	Graduate	This course will introduce concepts in natural resource management. Segment 1 will cover basic modeling, techniques, and methodology in natural resource mamangement and sustainability. Segment 2 will address genetic resources and agriculture. Segment 3 will cover principles of natural resource management, namely water and air, in the development context. Segment 4 profides an overview of major concepts in the conservation of biodiversity. Students are expected to present research reports based on case studies.	

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Advanced Studies in Development Studies "Development and the Environment" (DEVSTD 150-002)	Development Studies	Tiffany Page	Fall 2017	Undergraduate	Special Title "Development and the Environment" Class Description We will examine the social, economic and environmental impact of the way countries are pursuing economic development, including the expansion of mining in certain countries, oil and natural gas extraction, export agriculture, agro-fuel production, hydroelectric energy, eco-tourism, and the fishing industry. We will also consider the development challenges produced by climate change and how communities and countries are responding and adapting. We will examine what has and has not been accomplished in the various international summits that have occurred around the environment, as well as the regulatory framework that has emerged to address environmental concerns. And, finally, we will examine the sustainable development discourse, as well as the various ideas about what is sustainable development.	
Natural Resource Economics (ECON C102)	Economics	Larry Karp	Fall 2017	Undergraduate	Introduction to the economics of natural resources. Land and the concept of economic rent. Models of optimal depletion of nonrenewable resources and optimal use of renewable resources. Application to energy, forests, fisheries, water, and climate change. Resources, growth, and sustainability.	
Intro to Environmental Economics and Policy (ECON C3)	Economics	Peter Berck	Fall 2017	Undergraduate	Introduction to microeconomics with emphasis on resource, agricultural, and environmental issues.	
Special Topics: Arts of Writing: Academic Writing, Grant Writing, Food Writing	English	Schweik, Susan and Rahimtool, Samia Shabnam	Spring 2016	Undergraduate	This course for juniors and seniors will help students develop writing skills through intensive focus on the demands of three very different modes: academic argument, popular and creative food writing (essay, poetry, travel, memoir, manifesto), and grant-writing. Reading and thinking together about good food, slow food, food memory, food access, sustainability, health, hunger, student food insecurity and food justice, we will alternate between 1) working on key skills for sophisticated academic writing, 2) writing creatively, meditatively, politically and playfully about food, and 3) collaborating on drafting an actual grant application in partnership with a local community organization. This last will be at the heart of this service-learning course. Nadine Cruz has written: "Service is a process of integrating intention with action in a context of movement toward a just relationship…an intentionally designed program, a process of learning through reflection on the experience of doing service." Writing is necessary for a great deal of action in the world, and it is a critical tool for reflection. Students in this class will hone argumentative and creative writing skills, learn the basics of the grant-writing process, gain valuable real-world writing experience, and explore ways of using writing as a tool for integrating action, intention and reflection. Plus we'll eat well and maybe cook together.This small seminar will be limited to twelve students.	
Modeling and Management of Biological Resources (ESPM C104)	Enviromental Science, Policy, and Management	Wayne Getz	Fall 2017	Undergraduate	Models of population growth, chaos, life tables, and Leslie matrix theory. Harvesting and exploitation theory. Methods for analyzing population interactions, predation, competition. Fisheries, forest stands, and insect pest management. Genetic aspects of population management. Mathematical theory based on simple difference and ordinary differential equations. Use of simulation packages on microcomputers (previous experience with computers not required).	
Molecular Approaches to Enviromental Problem (ESPM C192)	Enviromental Science, Policy, and Management	Steven Lindow	Fall 2017	Undergraduate	Seminar in which students consider how modern biotechnological approaches, including recombinant DNA methods, can be used to recognize and solve problems in the area of conservation, habitat and endangered species preservation, agriculture and environmental pollution. Students will also develop and present case studies of environmental problems solving using modern molecular methods.	
International Rural Development Policy (ESPM 165)	Enviromental Science, Policy, and Management	Claudia Carr	Spring 2017	Undergraduate	Comparative analysis of policy systems governing natural resource development in the rural Third World. Emphasis on organization and function of agricultural and mineral development, with particular consideration of rural hunger, resource availability, technology, and patterns of international aid.	

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Special Topics in ESPM: :Sustainable Water and Food Security" (ESPM 150)	Enviromental Science, Policy, and Management	Staff	Spring 2017	Undergraduate	Sustainable water and food security	
Fish Ecology (ESPM C115C)	Enviromental Science, Policy, and Management	Stephanie Carlson	Spring 2017	Undergraduate	Introduction to fish ecology, with particular emphasis on the identification and ecology of California's inland fishes. This course will expose students to the diversity of fishes found in California, emphasizing the physical (e.g., temperature, flow), biotic (e.g., predation, competition), and human-related (e.g., dams, fisheries) factors that affect the distribution, diversity, and abundance of these fishes.	
Soil Characteristics (ESPM 120)	Enviromental Science, Policy, and Management	Celibe Pallud	Fall 2016	Undergraduate	Introduction to physical, engineering, chemical, and biological properties of soil; methods of soil description, identification, geographic distribution and uses; the role of soil in supplying water and nutrients to plants; and soil organisms. Soil management for agriculture, forestry, and urban uses will also be discussed. Includes a Saturday field trip.	
Sociology and Political Ecology of Agro-Food systems (ESPM 155AC)	Enviromental Science, Policy, and Management	Kathryn De Master	Fall 2016	Undergraduate	Sociology and political ecology of agro-food systems; explores the nexus of agriculture, society, the environment; analysis of agro-food systems and social and environmental movements; examination of alternative agricultural initiatives--(i.e. fair trade, food justice/food sovereignty, organic farming, urban agriculture).	
Agricultural Ecology (ESPM 118)	Enviromental Science, Policy, and Management	Miguel Altieri	Fall 2017	Undergraduate	Examines in a holistic framework fundamental biological, technical, socio-economic, and political processes that govern agroecosystem productivity and stability. Management techniques and farming systems' designs that sustain longterm production are emphasized. One Saturday field trip and one optional field trip.	
Environmental Policy, Administration, and Law (ESPM 60)	Enviromental Science, Policy, and Management	Alastair Iles	Fall 2017	Undergraduate	Introduction to U.S. environmental policy process focuses on history and evolution of political institutions, importance of property, federal and state roles in decision making, and challenges of environmental policy. Emphasis is on use of science in decision making, choices between regulations and incentives, and role of bureaucracy in resource policy. Case studies on natural resource management, risk management, environmental regulation, and environmental justice.	
Modeling and Management of Biological Resources (ESPM C104)	Enviromental Science, Policy, and Management	Wayne Getz	Fall 2017	Undergraduate	Models of population growth, chaos, life tables, and Leslie matrix theory. Harvesting and exploitation theory. Methods for analyzing population interactions, predation, competition. Fisheries, forest stands, and insect pest management. Genetic aspects of population management. Mathematical theory based on simple difference and ordinary differential equations. Use of simulation packages on microcomputers (previous experience with computers not required).	
Americans and the Global Forest (ESPM C11)	Enviromental Science, Policy, and Management	Lynn Huntsinger	Spring 2017	Undergraduate	This course challenges students to think about how individual and American consumer decisions affect forest ecosystems around the world. A survey course that highlights the consequences of different ways of thinking about the forest as a global ecosystem and as a source of goods like trees, water, wildlife, food, jobs, and services. The scientific tools and concepts that have guided management of the forest for the last 100 years, and the laws, rules, and informal institutions that have shaped use of the forests, are analyzed.	

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Community Engagment in Food Systems (ESPM 197)	Enviromental Science, Policy, and Management	Paul Roge	Fall 2016	Undergraduate	This course is a required component of UC Berkeley's Food Systems minor, an interdisciplinary program that explores the role of food and agriculture systems within the environment and society. To take this course, students must be working toward the minor and of junior or senior standing. Our global food system is in crisis. Billions of people are undernourished; industrial farming causes pollution; food workers are exploited. Troubled by the unsustainability and injustice that pervade the system, farmers, researchers, policymakers, and citizens are seeking solutions from agroecological farm management to policies that regulate agricultural chemicals. You'll engage experientially and critically as you work with a community partner in our food system. Through reflection, you'll gain insight into the problems with our current food system, the challenges faced by those who want change, and the opportunities to overcome these challenges.	
Race, Science, and Resource Policy (ESPM 258)	Enviromental Science, Policy, and Management	Jeffrey Romm	Fall 2017	Graduate	This course addresses explantation and strategy in natural resource policy with an emphasis on whether, why, and how (a) 'race' distributes access to and control of environmental resources, (b) 'science' creates and arrays perceptions, organization and control of these resources, and (c) public policy shapes racial disparities in natural resource opportunities. Topics are drawn primarily from issues in metropolitan, agricultural, and public resource systems.	
Seminar in Range Ecosystem Planning and Policy, (ESPM 280)	Enviromental Science, Policy, and Management	James Bartolome	Fall 2016	Graduate	A seminar course dealing with selected current topics in range ecosystem planning and policy.	
Sustenance and Soverignty: The Sociology of Agriculture and Food Systems (ESPM 290)	Enviromental Science, Policy, and Management	Kathryn De Master	Fall 2015	Graduate	This graduate seminar explores the sociology of agriculture and food systems, addressing key theories and topics in the field. We begin with the antecedents of the sociology of agriculture, including foundational classical agrarian theories and some investigations into the distinct but related field of peasant studies. We then proceed to an overview of the field, from its emergence to present day, before delving into a series of topical foci and analyses.	
Agroecology and Ecosystem Services (ESPM 290)	Enviromental Science, Policy, and Management	Claire Kremen	Fall 2014	Graduate		
Biodiversity and Human Health (ESPM 290)	Enviromental Science, Policy, and Management	Claire Kremen	Spring 2015	Graduate	This interdisciplinary seminar, co-taught by a physician and a conservation biologist, will explore the bidirectional relationship between human and ecosystem health. Focusing on our food production system, we will investigate how promoting biodiversity, ecosystem repair and resource conservation relate to our health. Participants will have the opportunity to participate in individual or group projects.	
Sociology of Agriculture (ESPM 230)	Enviromental Science, Policy, and Management	Kathryn De Master	Fall 2015	Graduate	This graduate seminar explores the sociology of agriculture and food systems, addressing key theories and topics in the field. We begin with the antecedents of the sociology of agriculture, including foundation classical agrarian theories and an overview of the field, followed by topics ranging from pesticide drift to agricultural labor injustice to food sovereignty movements and more. This course is most appropriate for students with some background in agri-food and social systems.	
The Biosphere (ESPM 2)	Enviromental Science, Policy, and Management	Dennis Baldocchi, Ronald Amundson	Fall 2017	Undergraduate	An introduction to the unifying principles and fundamental concepts underlying our scientific understanding of the biosphere. Topics covered include the physical life support system on earth; nutrient cycles and factors regulating the chemical composition of water, air, and soil; the architecture and physiology of life; population biology and community ecology; human dependence on the biosphere; and the magnitude and consequences of human interventions in the biosphere.	
Introduction to Environmental Economics and Policy (ENVECON C1)	Environmental Economics and Policy	Peter Berck	Fall 2017	Undergraduate	Introduction to microeconomics with emphasis on resource, agricultural, and environmental issues.	
Microeconomic Theory with Application to Natural Resources (ENVECON 100)	Environmental Economics and Policy	Ethan Ligon	Fall 2017	Undergraduate	Covers the basic microeconomic tools for further study of natural resource problems. Theory of consumption, production, theory of the firm, industrial organization, general equilibrium, public goods and externalities. Applications to agriculture and natural resources.	

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Natural Resource Economics (ENVECON C102)	Environmental Economics and Policy	Larry Karp	Fall 2017	Undergraduate	Introduction to the economics of natural resources. Land and the concept of economic rent. Models of optimal depletion of nonrenewable resources and optimal use of renewable resources. Application to energy, forests, fisheries, water, and climate change. Resources, growth, and sustainability.	
Agricultural and Enviromental Policy (ENVECON 141)	Environmental Economics and Policy	David Zilberman	Fall 2017	Undergraduate	This course considers the formation, implementation, and impact of public policies affecting agriculture and the environment. Economic approaches to public lawmaking, including theories of legislation, interest group activity, and congressional control of bureaucracies. Case studies include water allocation, endangered species protection, water quality, food safety, drainage, wetlands, pesticides, and farmworker safety. Emphasis on examples from California.	
Modeling and Management of Biological Resources, (ENVECON C115)	Environmental Economics and Policy	Wayne M. Getz	Fall 2017	Undergraduate	Models of population growth, chaos, life tables, and Leslie matrix theory. Harvesting and exploitation theory. Methods for analyzing population interactions, predation, competition. Fisheries, forest stands, and insect pest management. Genetic aspects of population management. Mathematical theory based on simple difference and ordinary differential equations. Use of simulation packages on microcomputers (previous experience with computers not required). Also listed as Environ Sci, Policy, and Management C104.	
Industrial Organization with Applications to Agriculture and Natural Resources, (ENVECON 142)	Environmental Economics and Policy	Staff	Spring 2016	Undergraduate	Organization and performance of agricultural and resource markets. Conduct of firms within those markets, such as price competition, product differentiation, predatory pricing, vertical integration, dealer networks and advertising. The role of public policy in the markets. Case studies include oil cartel OPEC, agricultural cooperatives, vertical integration of food processors and franchising of fast-food chains. Discussion sections cover empirical applications of theory presented during lectures for current environmental and agricultural policies.	
Economics of Race, Agriculture, and the Environment, (ENVECON 140AC)	Environmental Economics and Policy	Jeffrey M. Romm	Before Fall 2015	Undergraduate	This course examines whether and how economic processes explain shifting formations of race and differential experiences among racial groups in U.S. agricultural and environmental systems. It approaches economic processes as organizing dynamics of racial differentiation and integration, and uses comparative experience among different racial and ethnic groups as sources of evidence against which economic theories of differentiation and integration can be tested.	1, or one lower division course in a social science, or consent of instructor.
Food and the Environment, (GEOG 130)	Geography	Nathan Sayre, Michael Watts	Summer 2017	Undergraduate	How do human populations organize and alter natural resources and ecosystems to produce food? The role of agriculture in the world economy, national development, and environmental degradation in the Global North and the Global South. The origins of scarcity and abundance, population growth and migration, hunger, and poverty.	
Global Ecology and Development, (GEOG 35)	Geography	Michael Watts	Before Fall 2013	Undergraduate	Problems of Third World poverty and development have come to be seen as inseparable from environmental health and sustainability. The course explores the global and interconnected character of environment and development in the less developed world. Drawing on case studies of the environmental problems of the newly industrializing states, food problems, and environmental security in Africa, and the global consequences of tropical deforestation in Amazonia and carbon dioxide emissions in China, this course explores how growth and stagnation are linked to problems of environmental sustainability.	
California, (GEOG 50 AC)	Geography	Lunine, S R	Fall 2017	Undergraduate	California had been called "the great exception" and "America, only more so." Yet few of us pay attention to its distinctive traits and to its effects beyond our borders. California may be "a state of mind," but it is also the most dynamic place in the most powerful country in the world, and would be the 8th largest economy if it were a country. Its wealth has been built on mining, agriculture, industry, trade, and finance. Natural abundance and geographic advantage have played their parts, but the state's greatest resource has been its wealth and diversity of people, who have made it a center of technological and cultural innovation from Hollywood to Silicon Valley. Yet California has a dark side of exploitation and racialization.	

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Global Environmental Politics, (GEOG 138)	Geography	Sandy Brown	Fall 2013	Undergraduate	Political factors affecting ecological conditions in the Third World. Topics include environmental degradation, migrations, agricultural production, role of international aid, divergence in standard of living, political power, participation and decision making, access to resources, global environmental policies and treaties, political strife and war.	
Special Topics: The Political Ecology of Land Grabs: Food, Resources, Enviroment, and Development (GEOG 170)	Geography	Staff	Fall 2016	Undergraduate	This course is designed to provide a vehicle for instructors to address a topic with which they are especially concerned; usually more restricted than the subject matter of a regular lecture course. Topics will vary with instructor. See departmental announcements.	
Prehistoric Agriculture, (GEOG 109)	Geography	Roger Byrne	Fall 2014	Undergraduate	Agricultural origins and dispersals in the light of recent biological and archaeological evidence.	
Perspectives For Sustainable Rural Development (GLOBAL 123L)	Global Studies	Clara Nicholis	Fall 2017	Undergraduate	This course analyzes the ecological, socio-economic and policy challenges and opportunities facing the rural population of Latin America in today?s globalized economy. After a critique of the impacts of conventional, agro-export development models of agricultural development (green revolution, non-traditional export crops, biotechnology, biofuels, etc.) the elements of a sustainable agroecological development path are discussed, a path that emphasizes: farmers empowerment, local production for food sovereignty, poverty reduction, cultural identity and natural resource and biodiversity conservation. Technical, institutional, policy and market requirements for sustainable agriculture are also analyzed in detail.	
Food Venture Lab	Haas School of Business	Rosenzweig, W	Fall 2015	Undergraduate	The Food Venture Lab is focused on enabling students to identify and define pressing challenges and unmet needs in the food-system and develop market-based, entrepreneurial solutions to solve them. It blends design thinking, lean-launch, rapid prototyping, business model development and venture formation into a rapid paced and accelerated experiential learning program. This is a 1 unit course taking place on Wednesday evenings from 6-9:30pm.	Any non-Haas student interested in the course should email FTacademics@haas.berkeley.edu and they will be directed to the official request system
Proseminar: Problems in Interpretation in the Several Fields of History: United States - Foodways in American History (HISTORY 103D 006)	History	N/A	Fall 2017	Undergraduate	This course will introduce students to the history of foodways in North America from the Columbian Exchange through late twentieth century. Through the lens of food, students will examine major themes in American environmental history, social and cultural history, and the history of globalization and capitalism. Key topics include: the environmental impact of the Columbian Exchange; the legacy of slavery on American and global foodways; the role of food in constructing American identities, including understandings of race, gender, class, and immigrant communities; the industrialization and regulation of food production; the rise of nutrition science and public health movements; and the countercultural food movement of the late twentieth century. The course will also focus on historical methods, examining how historians form research questions and use primary and secondary sources to construct historical arguments. The course will prepare students to write their 101 thesis by guiding them through the process of writing a research prospectus on any topic in the history of foodways in North America.	
Freshman Seminar: Ethnobiology, Nutrition, and Global Food Systems (INTEGBI 24 005)	Integrative Biology	Thomas J Carlson	Fall 2017	Undergraduate	We will explore the ethnobiological systems around the world that generate thousands of different species of plants and animals eaten by humans. We will examine the historical, cultural, commercial, and biological factors that have resulted in the worldwide consumption of certain plant and animal species. We will also compare the nutritional qualities, health effects, and carbon footprint of conventional industrial food, organic food, locally grown food, and food that is hunted or gathered. In this seminar we will read Michael Pollan's Omnivore's Dilemma and view the documentary film Food Inc. Any interested Freshmen are welcome.	

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Holocene Paleoecology: How Humans Changed the Earth, (INTEGBI C155)	Integrative Biology	Kirch	Spring 2014	Undergraduate	Since the end of the Pleistocene and especially with the development of agriculturally based societies humans have had cumulative and often irreversible impacts on natural landscapes and biotic resources worldwide. Thus "global change" and the biodiversity crisis are not exclusively developments of the industrial and post-industrial world. This course uses a multi-disciplinary approach, drawing upon methods and data from archaeology, palynology, geomorphology, paleontology, and historical ecology to unravel the broad trends of human ecodynamics over the past 10,000 years. Also listed as Anthropology C129D.	Either Anthropology 2 or Biology 1A.
The Economics of Climate Change, (IAS C175)	International And Area Studies	Anthoff	Fall 2014	Undergraduate	The course will start with a brief introduction and evaluation of the scientific aspects behind climate change. Economic models will be developed to analyze the impacts of climate change and provide and critique existing and proposed policy tools. Specific topics studied are impacts on water resources and agriculture, economic evaluation of impacts, optimal control of greenhouse gases, benefit cost analysis, international treaty formation, discounting, uncertainty, irreversibility, and extreme events. Also listed as Environmental Economics and Policy C175.	
Reading italian Literature (ITALIAN 104)	Italian Studies	Danielle Callegari	Fall 2016	Undergraduate	A Feast of Words: Italian Literature in 12 Meals From Dante and Catherine of Siena to Italo Calvino and Dacia Maraini, the Italian authors who have enchanted the imagination and installed themselves as canonical figures have persistently relied on food in their writing. While the general allure of a gastronomic theme might seem obvious to us, literary representations of food in fact contain complicated and profound messages. Taking up twelve iconic meals as depicted in Italian literature across the ages, we will strive to find a thread that connects them and leads us to see how food can be used to express everything from religious convictions to political strategies to social values and more. Our goal will be to interpret these gastronomic moments in classic texts in order to understand how authors manipulated the universal appeal and collective values of food to communicate with their audiences and comment on their society. We will use a variety of sources - audio, image, text - and tap into the greater resources of the UC Berkeley environment - its museums, libraries, film centers - to enhance our exploration of the relationship between food and Italian literature.	Italian Studies 101A and 101B or permission of the instructor
A Cultural History of Italiy Through Food (ITALIAN 120)	Italian Studies	Danielle Callegari	Spring 2017	Undergraduate	The idea of Italy is inextricably tied to great food and Italians are known the world over for their excellent cooking and love of eating, rooted in a recognizable gastronomic canon and iconic exports: chianti, pizza, gelato. Yet, what precisely makes food so important to “Italianità”? To understand why Italian consciousness within and beyond the peninsula roots itself in gastronomy, our course will train a serious critical lens on the world of Italian food, re-constructing Italian history and culture as we de-construct the Italian meal, trying to find within it the seeds of an imagined community and a political reality. Our goal will be to answer questions such as: what makes a national identity and what makes a national cuisine?; how is food wielded as a tool of political power?; what makes food important to Italy and Italians specifically, when compared with other European nations and ethnic identities?; how has Italian cuisine changed from the birth of the Italian vernacular (in the late Middle Ages) to the unification of the Italian nation state (late 19th century) to today? To answer these questions we will investigate sources as diverse as the lineage of Italian cookbooks, written and visual representations of Italian food and eating, and models of ancient and modern dining spaces and rituals, among others.	
Advanced Grammar, Reading, and Composition (IS 101B)	Italian Studies	Giuliana Perco	Spring 2016	Undergraduate	Italian Studies 101B is a reading and writing intensive course for students who are already proficient in Italian. Its goal is to help students improve their grammar and perfect their writing and reading skills, in preparation for advanced literature courses in Italian.A variety of authentic texts of a different nature, from literature, to news articles, as well as video, audio clips, and songs will be included in the materials for the course. This semester, the course will revolve around "made in Italy" icons, one of which is food--the focus of the first half of the semester. In this class, we will be discussion fundamental questions on food sustainability, food production and marketing, food scarcity, politics and food, GMOs, and more. We will also cover the Slow Food Movement, "Terra Madre," the effort to preserve seed, and the Italian movement "Libera terra," which reclaims land previously controlled by criminal organizations and uses for sustainable, organic, and 'legal' agriculture while employing disadvantaged members of society.	

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Science Reporting--How to Read, Make Sense of, and Write about Emerging Research in Food and Nutrition (JOURN 219)	Journalism	Marion Nestle	Spring 2015	Graduate		
Master's Project Seminar (Following the Foodchain), (JOURN 294)	Journalism	Michael Pollan	Spring 2014	Graduate	Advanced study of methods of reporting developments in such fields as science, education, health, or the environment.	
Ecological Analysis, (LD ARCH 110)	Landscape Architecture and Environmental Planning	Dronova	Fall 2017	Undergraduate	Analysis of environmental factors, ecosystem functions, and ecosystem dynamics, as related to decision-making for landscape planning and design.	
Ecological Analysis Laboratory, (LD ARCH 110L)	Landscape Architecture and Environmental Planning	Dronova	Fall 2017	Undergraduate	Introduction to field techniques for assessment of landscape factors. Factors include topography, geology, climate, soil, hydrology, flora, vegetation, and wildlife.	
Landscape Plants: Identification and Use (LD ARCH 112)	Landscape Architecture and Environmental Planning	Kooyumjian	Spring 2017	Undergraduate	This course is an introduction to the identification and recognition, as well as design applications and uses, of plants in the landscape. Through lectures, assignments, and fieldwork, the course provides class participants with an appreciation of the importance of vertical vegetation as a design element. Students will be introduced to a variety of built projects and plants commonly used in Bay Area landscapes.	
Environmental Science for Sustainable Development, (LD ARCH 12)	Landscape Architecture and Environmental Planning	Louise Mozingo	Fall 2017	Undergraduate	The scientific basis of sustainability, explored through study of energy, water, food, natural resources, and built environment. Physical/ecological processes and systems, and human impacts from the global scale to local energy/resource use. Energy and water audits of University of California at Berkeley, opportunities to increase sustainability of processes/practices. Discussion/lab section involves data collection/analysis (e.g., Strawberry Creek, atmospheric particulates) and integrative sustainability assessment project.	
Sustainable Landscapes and Cities, (LD ARCH 130)	Landscape Architecture and Environmental Planning	Stryker	Spring 2016	Undergraduate	This course introduces the foundations of sustainability most related to the restoration, design, and creation of landscapes and cities. The underlying principles of ecology, nature, and democracy are concretized in centered-ness, connectedness, fairness, sensible status seeking, sacredness, particular-ness, selective diversity, density and smallness, limited extent, adaptability, everyday future, naturalness, inhabiting science, reciprocal stewardship, and pacing.	
The American Designed Landscape Since 1850, (LD ARCH C171)	Landscape Architecture and Environmental Planning	Mozingo	Fall 2017	Undergraduate	This course surveys the history of American landscape architecture since 1850 in four realms: 1) urban open spaces--that is squares, plazas, parks, and recreation systems; 2) urban and suburban design; 3) regional and environmental planning; 4) gardens. The course will review the cultural and social contexts which have shaped and informed landscape architecture in the United States since the advent of the public parks movement, as well as, the aesthetic precepts, environmental concerns, horticultural practices, and technological innovations of American landscapes. Students will complete a midterm, final, and a research assignment. Also listed as American Studies C171.	
Advanced Studies in Latin American Studies: Perspectives for Sustainable Rural Development in Latin America (LATAMST150)	Latin American Studies	Clara Nicholis	Fall 2017	Undergraduate	This course analyzes the ecological, socio-economic and policy challenges and opportunities facing rural populations of Latin America in today's globalized economy. After a critique of the impacts of conventional, agro-export development models of agricultural development (green revolution, non-traditional export crops, biotechnology, biofuels etc) the elements of a sustainable agroecological development path is discussed, a path that emphasizes: farmers empowerment, local production for food sovereignty, poverty reduction, cultural identity and natural resource and biodiversity conservation. Technical, institutional, policy and market requirements for a sustainable agriculture are also analyzed in detail.	

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Public Law and Policy Workshop: Advanced Constitutional and Administrative Law Topics (Law 220.G)	Law	Daniel A. Farber, Holly Doremus	Spring 2017	Graduate	This seminar will present papers on public law by leading scholars from Berkeley Law and other schools. Topics this semester will include technological advances and public law (such as constitutional and administrative law). Students are expected to read the papers in advance and to participate in a workshop with the author. Grade will be based on four response papers and on class participation. Confirmed speakers will present papers on electronic surveillance and the Fourth Amendment, gene editing and the law, climate change, empirical study of urban crime, food safety, DNA and the criminal justice system, and drones and cyberwar. Students with an interest in law and technology, as well as student interested in constitutional and administrative law, are encouraged to enroll.	
Policy Change and the Role of Lawyers (Law 226.7 sec 1)	Law	Christopher Edley, Jr. ,Maria Echaveste	Spring 2017	Graduate	Legal training is useful for several roles related to shaping public policy, most obviously as “outside” lobbyists and as “inside” drafters and advisers on questions of what is permissible under a statute or the Constitution. There are many dimensions to these various roles. This course explores all of these, and examines how “thinking like a lawyer” so often confers power by virtue of the value lawyerly work contributes to complex policy transactions. Course readings and discussion will touch on several areas of policy, among them: education reform; immigration reform; responses to the risk of domestic terrorism; climate change; worker rights; and food policy. Students will learn some general aspects of administrative law, legislative process, regulations relating to lobbying, federalism, and professional ethics.	Open to 1L students only
Food Law and Policy, (Law 220F)	Law	Van Houweling, Sugarman	Spring 2015	Graduate	This seminar will explore a wide range of issues related to food law and policy. Topics will likely include food safety, food labeling and marketing, regulation and patenting of genetically-modified organisms, farm subsidies, treatment of livestock, farm labor, organic farming standards, hunger and obesity, international trade in food, and promotion of local and sustainable agriculture. Students will read a variety of materials in preparation for weekly discussions and will each write a 30+-page research paper.	
Protecting Products of Place (Law 276.69)	Law	Richard Mendelson	Spring 2017	Graduate	Geographical indications (GIs) identify goods whose quality, reputation, or other characteristics are essentially attributable to their geographic origin. Well-known examples in the U.S. are "FLORIDA" for oranges, "IDAHO" for potatoes, "VIDALIA" for onions, and "NAPA VALLEY" for wines. This class examines GIs and the laws governing their use for wines and other alcoholic beverages, foods, textiles, and handicrafts. We examine the national laws on the registration and defense of GIs in the U.S., the European Union, India, and China, including sui generis GI laws, trademark laws (common law GIs, certification marks, collective marks, and trademarks), and appellations of origin. From an international perspective, we focus on the World Trade Organization's TRIPS Agreement (Agreement on Trade-Related Aspects of Intellectual Property Rights) and the negotiations to extend the special protection for wines and spirits to other goods and services and to claw back generic terms.	
Wine Law (Law 278.8)	Law	Bonnington	Fall 2017	Graduate	California accounts for 90 percent of all wines produced in the United States and is the fourth largest wine producer in the world behind France, Italy and Spain. The California wine industry has an annual impact of $51.8 billion on the state’s economy and $125.3 billion on the national economy. Wine is the number one finished agricultural product in the state. This course examines the major legal issues facing the wine industry in the areas of constitutional law, administrative law, intellectual property, land use and contractual relationships. Specific topics include Prohibition and Twenty-first Amendment jurisprudence, federal and state alcohol beverage regulatory systems (market structure, licensing, product standards, trade practices), wine labeling, appellations of origin, wine and health, land use planning and resource conservation issues for vineyards and wineries and contractual relationships between members of the wine industry. There are no prerequisites.	

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Environmental Law Clinic (Law 2295.5E sec. 1)	Law	Polsky, Vohryzek	Fall 2017	Graduate	The Environmental Law Clinic (295.5E; 4 units) will have a varied issue docket that spans local to global matters, and provides hands-on opportunities for students in administrative agency practice, litigation, legislative drafting, and policy formulation. The Clinic has three goals: making students creative and effective environmental lawyers; making an environmental difference; and addressing environmental legal needs of underserved communities. Areas of intended focus in the near term (specific projects TBD) are: (1) Climate change mitigation (2) Toxics reduction (3) Right to water (4) Equity in access to nature (5) Green jobs for marginalized populations (e.g. homeless, prison reentry) The Clinic seeks to address major environmental crises of our time -- climate change, toxics exposure, and water scarcity -- in a way that also promotes social and economic equity. Simply put, How can we create a new green economy that is both ecologically sustainable and more just? Students interested in participating in the Environmental Clinic should go to the Clinical Program Application page for information about the application process. The Environmental Law Clinic Seminar (Law 291.A; 2 units) is a co-requisite for the Clinic.	
Edible Education: The Rise and Future of the Food Movement, (NAT RES C101)	Natural Resources	Gary Sposito	Spring 2015	Undergraduate	As a subject, food is multi-disciplinary, drawing on everything from economics and agronomy to sociology, anthropology, and the arts. Each week experts on organic agriculture, school lunch reform, food safety, animal welfare, hunger and food security, farm bill reform, farm-to-school efforts, urban agriculture, food sovereignty, local food economies, etc. will lecture on what their areas of expertise have to offer the food movement to help it define and achieve its goals. Also listed as Letters and Science C101.	108A or concurrent enrollment.
Fermentation: "Culturing" Your World	Nutritional Science and Toxicology	Kristen Rasmussen	Fall 2016	Undergraduate	This course will offer students a unique perspective to the wonderfully complex, flavorful and practical world of fermentation. From the bread and cheese at our table, the vinegar and soy sauce that flavor our condiments and even to the wine, coffee or beer that fill our glasses, fermented foods (those that have been introduced with beneficial bacteria or fungus) have become culinary staples that transcend geographical cuisines. Each lecture-based class will focus on a specific food, highlighting its history, its creation process, and its cultural impact around the world. In addition to introducing students to a new type of food that they may be unfamiliar with, this class also hopes to incorporate the impact that fermentation has had on cultures across the world, including countries in East Asia, Europe, and more. This course will be a great learning experience for those looking to explore new foods and a food concept that is not commonly discussed. We will supplement classes with demonstrations, tastings and guest speakers who are experienced in the industry. By the end of the semester, we hope that students will be equipped with the practical skills needed to ferment their own foods as well as understand how those foods fit into the overarching themes of fermented foods: flavor complexity, preservation, and nutritional benefits.	
Pesticide Chemistry and Toxicology (NUSCTX C114)	Nutritional Science and Toxicology	Staff	Spring 2017	Undergraduate	Chemical composition of pesticides and related compounds, their mode of action, resistance mechanisms, and methods of evaluating their safety and activity.	
Personal Food Security and Wellness (NUSCTX 20)	Nutritional Science and Toxicology	Mikelle McCoin	Fall 2017	Undergraduate	The course goal is to develop life-skills and decision-making processes to maintain healthy eating throughout the lifespan. The course will improve students' nutrition-related behaviors by addressing attitudes, knowledge, skills and barriers related to food selection, purchasing and preparation and how these intersect with food security. The course will provide students with the foundation of nutrition knowledge and cooking skills to be able to prepare healthful meals in consideration of limitations such as food availability, food budgeting and time management.	

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Metabolic Bases of Human Health and Diseases Graduate Level (NUSCTX 260)	Nutritional Science and Toxicology	Andreas Stahl, joseph Napoli, Ronald Krauss	Spring 2017	Undergraduate	The physiological bases of human nutrient homeostasis and common disorders resulting from over and under nutrition will be discussed with a specific focus on macronutrients. Topics related to nutrient deficiency and excess will include adaptation to starvation and the effects of caloric restriction on life-span, obesity and its complications, lipoprotein metabolism and cardiovascular disease, as well as a detailed discussion of the causes, disease mechanisms, and treatment of diabetes mellitus.	
Introduction and Application of Food Science, (NUSCTX 108A)	Nutritional Science and Toxicology	Staff	Fall 2017	Undergraduate	Evaluation of the chemical, physical, functional, and nutritional properities of foods. Emphasis on how these properties, and prepration, processing, and storage, influence quality characteristics of food products.	
Application of Food Science Laboratory, (NUSCTX 108B)	Nutritional Science and Toxicology	Staff	Fall 2017	Undergraduate	Experimental evaluation of the chemical, physical, functional, and nutritional properties of foods, and the changes occuring during preparation that affect quality characteristics of food products.	
Food Systems Organization and Management, (NUSCTX 135)	Nutritional Science and Toxicology	Kristen Rasmussen	Spring 2017	Undergraduate	Principles of organization and management applied to institutional food service systems: production and delivery systems, management of resources, quality assurance, equipment, layout, marketing, personnel management, fiscal management. Laboratory experiences, projects and field work in institutional situations.	10 recommended.
Human Diet, (NUSCTX C159)	Nutritional Science and Toxicology	Katharine Milton	Spring 2015	Undergraduate	Since we eat every day, wouldn't it be useful to learn more about human dietary practices? A broad overview of the complex interrelationship between humans and their foods. Topics include the human dietary niche, biological variation related to diet, diet and disease, domestication of staple crops, food processing techniques and development of regional cuisines, modern diets and their problems, food taboos, human attitudes toward foods, and dietary politics. Also listed as Environ Sci, Policy, and Management C159.	
Human Food Practices, (NUSCTX 104)	Nutritional Science and Toxicology	Kristen Rasmussen	Spring 2017	Undergraduate	Historical, geo-ecological, biological, cultural, socio-economic, political and personal determinants of human diets. Community food and nutrition problems and programs. Food safety and consumer protection. Contributes to the pursuit of multidisciplinary degrees in nutrition policy and planning.	103, or Molecular and Cell Biology 102 or equivalent.
Intro to Human Nutrition, (NUSCTX 10)	Nutritional Science and Toxicology	Gregory Aponte	Fall 2017	Undergraduate	This course provides an overview of digestion and metabolism of nutrients. Foods are discussed as a source of nutrients, and the evidence is reviewed as to the effects of nutrition on health. The emphasis of the course is on issues of current interest and on worldwide problems of food and nutrition. Students are required to record their own diet, calculate its composition, and evaluate its nutrient content in light of their particular needs.	
Metabolic Bases of Human Health and Diseases, (NUSCTX 160)	Nutritional Science and Toxicology	Stahl, Napoli, Krauss	Spring 2016	Undergraduate	The physiological bases of human nutrient homeostasis and common disorders resulting from over and under nutrition will be discussed with a specific focus on macronutrients. Topics related to nutrient deficiency and excess will include adaptation to starvation and the effects of caloric restriction on life-span, obesity and its complications, lipoprotein metabolism and cardiovascular disease, as well as a detailed discussion of the causes, disease mechanisms, and treatment of diabetes mellitus.	
Nutrient Function and Metabolism (NUSCTX 103)	Nutritional Science and Toxicology	Hei Sul, James Olzman, Peter-James Zushin	Fall 2017	Undergraduate	Delivery of nutrients from foods to mammalian cells; major metabolic pathways; function of nutrients in energy metabolism, nitrogen and lipid metabolism, structural tissues and regulation; essentiality, activation, storage, excretion, and toxicity of nutrients.	
Medical Nutrition Therapy (NUSCTX 161A)	Nutritional Science and Toxicology	Mary Lesser, Mikelle McCoin	Fall 2017	Undergraduate	This fall course serves as the first of a two part series that addresses the nutritional component of treating disease. The Nutrition Care Process of the Academy of Nutrition and Dietetics provides the framework for nutritional status assessment, diagnosis, nutrition intervention, and evaluation. Disease pathophysiology, diagnosis, medical and pharmacological treatments, and nutritional therapies for prevention and treatment are explored for conditions common throughout the lifecycle. The first part focuses on cardiovascular disease. Additional diseases are addressed in 161B in the spring semester. This course will provide an opportunity to apply knowledge of MNT through case studies and various activities.	
Nutrition in the Community, (NUSCTX 166)	Nutritional Science and Toxicology	Henderson, M N	Fall 2017	Undergraduate	This course addresses basic nutrition in the context of the community. It explores nutrition programs that serve various segments of the population and the relationships of these programs to nutrition policy at the local, national, and international levels. Community assessment is used as the basis for program planning, implementation, and evaluation. The specific needs of population groups (infants, children, women, and the elderly) are considered and questions of food security are investigated.	

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Introduction to Toxicology (NUSCTX 11)	Nutritional Science and Toxicology	C. Wang, Nomura, J. Wang	Spring 2017	Undergraduate	Discussion of principles for the evaluation of toxic hazard of natural and man-made substances present in the environment, the workplace, food, drink, and drugs. The bases for species selectivity, individual variations in sensitivity and resistance, and the combined effects of toxic agents will be addressed. Issues related to the impact of toxic agents in modern society will be emphasized.	
Toxicology, (NUSCTX 110)	Nutritional Science and Toxicology	Daniel Nomura, Jen Chywan Wang	Fall 2017	Undergraduate	A comprehensive survey of the principles of modern toxicology and their applications in evaluating the safety of foods, additives and environmental contaminates. Mechanisms of metabolic activation, detoxification, gene regulation, and selective toxicity are emphasized.	
Fungi, History, and Society (PLANTBI 11)	Plant and Microbrial Biology	Bruns	Spring 2015	Undergraduate	Fungi have interacted with humans in both positive and negative ways throughout history. These interactions have included production of foods, medicines, fuels, plant and animal diseases, decay, allergies, and mind-altering drugs.'	Must be taken on a passed/not passed basis.
Genetic Revolution, (PLANTBI 13)	Plant and Microbrial Biology	Freeling	Spring 2014	Undergraduate	Genetic discoveries have changed our lives. All are controversial. Especially changed are human physical and mental health, agriculture, social systems, and worldviews. Having many DNA-sequenced genomes, including human, accelerates discovery. This course will study the science, history, and philosophical implications behind past discoveries and will contemplate future genetic revolutions.	
Freshman Seminar (PLANTBI 24)	Plant and Microbrial Biology	Lewis Feldman	Fall 2017	Undergraduate	Reading and discussion with Plant and Microbial Biology faculty on current research and topics in plant and microbial biology. Topics which may be discussed include microbial biology, plant genetics, plant development, plant pathology, agricultural biotechnology, and genetic engineering. Ideal for students who are considering a major in the Department of Plant and Microbial Biology. Enrollment is limited to 20 freshmen.	
Introduction to the Plant Sciences at Berkeley, (PLANTBI 20)	Plant and Microbrial Biology	Sung	Fall 2016	Undergraduate	This course will include discussions on the academic path (courses) needed for the Genetics and Plant Biology major; an introduction to resources and facilities for studies of the plant sciences at Berkeley, such as the University Herbarium and the Botanical Garden; an exploration of plant science related careers, including presentations from guest speakers who work in organic farming, government, and Cooperative Extension; talks by faculty about their current research, and information about how to do research in a lab.	Biology 1A-1B.
Encounters with Plants: First-hand Experiences with the Culture, Lore, and History of Plants (PLANTBI 24)	Plant and Microbrial Biology	Feldman	Fall 2016	Undergraduate	Freshman Seminar: Reading and discussion with Plant and Microbial Biology faculty on current research and topics in plant and microbial biology. Topics which may be discussed include microbial biology, plant genetics, plant development, plant pathology, agricultural biotechnology, and genetic engineering. Ideal for students who are considering a major in the Department of Plant and Microbial Biology. Enrollment is limited to 20 freshmen.	
Molecular Approaches to Environmental Problem Solving (PLANTBI C192)	Plant and Microbrial Biology	Steven Lindow	Fall 2017	Undergraduate	Seminar in which students consider how modern biotechnological approaches, including recombinant DNA methods, can be used to recognize and solve problems in the area of conservation, habitat and endangered species preservation, agriculture and environmental pollution. Students will also develop and present case studies of environmental problems solving using modern molecular methods.	
Modern Applications of Plant Biotechnology, (PLANTBI 170)	Plant and Microbrial Biology	Baker, Somerville	Before Spring 2013	Undergraduate	This course is designed to introduce students to the principles and applications of modern plant biotechnology. Basic concepts of modern agriculture will be reviewed in light of emerging biotechnology applications. Emphasis will be placed on understanding the tools and strategies involved in optimizing plant productivity.	
Plants, Agriculture, and Society (PLANTBI 10)	Plant and Microbrial Biology	Staskawicz, David Zilberman	Fall 2017	Undergraduate	Changing patterns of agriculture in relation to population growth, the biology and social impact of plant disease, genetic engineering of plants: a thousand years of crop improvement and modern biotechnology, interactions between plants and the environment, and effects of human industrial and agricultural activity on plant ecosystems. Knowledge of the physical sciences is neither required nor assumed.	
The (Secret) Life of Plants, (PLANTBI 40)	Plant and Microbrial Biology	Zambryski	Spring 2017	Undergraduate	Covers contemporary topics in plant biology. Examines how plants grow, reproduce, and respond to the environment (e.g., to light) in ways distinct from animals. Presents basic principles of genetics, cell, and molecular biology. Basics of genetic engineering and biotechnology reveal how they are used to modify plants, and these socially relevant issues are assessed. Includes visit to modern plant biology research laboratory, and aspects of plant disease and diversity. Knowledge of the physical sciences neither required nor assumed.	

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Environmental Health and Development, (PB HLTH C160)	Public Health	Staff	Spring 2017	Undergraduate	The health effects of environmental alterations caused by development programs and other human activities in both developing and developed areas. Case studies will contextualize methodological information and incorporate a global perspective on environmentally mediated diseases in diverse populations. Topics include water management; population change; toxics; energy development; air pollution; climate change; chemical use, etc. Also listed as Environ Sci, Policy, and Management C167.	
Drinking Wanter and Health (PBHLTH 170C)	Public Health	Charlotte Smith	Spring 2017	Undergraduate	The course covers monitoring, control and regulatory policy of microbial, chemical and radiological drinking water contaminants. Additional subjects include history and iconography of safe water, communicating risks to water consumers and a bottled water versus tap water taste test as part of the discussion on aesthetic water quality parameters. A field trip to a local water treatment plant in included.	
Nutrition in Developing Countries (PBHLTH 118)	Public Health	Lia Fernald	Fall 2017	Undergraduate	We will focus on low- and middle-income countries because they experience the greatest burden of malnutrition, and because they face a unique context of limited financial and government resources. In this course, we will discuss the effects of nutrition throughout the lifecycle in pregnancy, infancy, childhood, and adulthood. We will focus on nutrition broadly including issues of undernutrition, micronutrient deficiencies, and obesity. We will also analyze and evaluate actions taken to ameliorate the major nutritional problems facing vulnerable populations in low- and middle-income countries.	
Environmental Health Science Breadth Course (PBHLTH 200K)	Public Health	Kirk Smith	Spring 2017	Graduate	This course will give an introduction to the major human and natural activities that lead to release of hazardous materials into the environment as well as the causal links between chemical, physical, and biological hazards in the environment and their impact on human health, including those related to climate change. The basic principles of toxicology, exposure assessment, risk assessment, risk perception, and environmental health policy will be presented. The overall role of environmental risks in the pattern of human disease, both nationally and internationally, will be covered.	
Food and Nutrition Policies and Programs, (PB HLTH 206B)	Public Health	Barbara Laraia	Spring 2017	Graduate	This course examines the historical origins of food and nutrition improvement programs in the United States, including the political and administrative conditions that led to the development of these programs. It also examines the goals, design, operations, and effectiveness of some of these programs: Food Stamp Program, the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), the National School Lunch Program, the School Breakfast Program, Head Start, the Child Care Food Program, and the Elderly Nutrition Program.	
Food and Nutrition Programs and Policies in Developing Countries, (PB HLTH 206D)	Public Health	Lia Fernald	Fall 2017	Graduate	This course will use a case-based approach to examine the ways in which governments in developing countries design and implement policies and programs that affect food production and access to safe, affordable, and nutritionally adequate diets. In the course we will analyze, assess and evaluate ways to take action to ameliorate the major nutritional problems facing vulnerable populations in developing countries.	
Advanced Alcohol Research Seminar (PBHLTH 202G-001)	Public Health	Sarah Zemore	Fall 2017	Graduate	This course is an advanced alcohol research seminar in which presentations are made by alcohol research scientists nationally and internationally, as well as pre- and post-doctoral fellows, and focus on special topical areas related to psychosocial research in the field each semester. Areas covered include the epidemiology of drinking patterns and alcohol-related problems, issues related to treatment of alcohol-related problems, and health services research. Guest presentations are also provided (related to topics outside psychosocial research) to provide a breadth of understanding in the field. The seminar also includes sessions focused on methodological issues in alcohol-related research and grant writing, and has a research ethics component covering a number of sessions.	
Public Health Aspecs of Maternal and Child Nutrition (PBHLTH 207A)	Public Health	Barbara Laraia	Fall 2017	Graduate	Nutrition plays a vital role in human reproduction and child growth and development. This course provides an overview of the major nutritional issues faced by women of childbearing age, infants, children, and adolescents in the United States and around the world, with selected topics explored in greater depth. Nutritional problems are multi-factorial and occur at multiple levels and we will study them from a variety of viewpoints (biological, pyschological, socio-cultural, economic, political, and behavioral) as well as from individual and population perspectives. Participants in the course will become acquainted with nutritional research, policies, and interventions designed to enhance reproduction, growth, and development. This course will also explore health disparities in maternal and child nutrition in both a domestic and international context.	

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Foodborne Disease, (PB HLTH 266A)	Public Health	Lu	Fall 2016	Graduate	This course will cover public health, microbiological, social, and economical issues related to foodborne diseases. Three areas will be explored: 1) categories, clinical manifestations, and disease processes of foodborne illnesses; 2) etiological agents causing foodborne illnesses; 3) investigation and prevention of foodborne illness. The course will discuss different types of foodborne diseases, clinical manifestations, and the interactions between etiological agents (pathogens and non-pathogens) and human hosts. We will cover pathogens that are the most frequently associated with foodborne illness including bacterial and viral pathogens such as Salmonella, E coli, hepatitis viruses and Norwalk-like gastroenteritus viruses. We will also study non-pathogen agents such as heavy metal, pesticide, and toxic chemicals. Futhermore, the course will discuss how to identify the etiological agents in outbreaks and possible measures that can be taken to minimize the risk to the public including vaccines and education. Finally, we will explore the social and economic issues involved in the food production, distribution, and consumption that contribute to foodborne diseases.	
Global Health Policy, (PB HLTH 220E)	Public Health	Keller	Before Fall 2013	Graduate	This course will provide an intensive introduction to current topics in international health policy. Students in the course will become familiar with the major actors, institutions, and regimes that shape international health policy. The course will also introduce students to theories of governance as they apply to international settings and evaluate the relative roles of state actors, NGOs, and international regimes in producing key health policy outcomes. The course will cover several current issues in international health and will require students to critically assess the state of policy with respect to these issues. Using Bardach's method for policy analysis, students will analyze current policies and propose policy alternatives with an assessment of the tradeoffs implied in choosing a given policy option over its competitors.	
Expanded Foundations of Global Health (PB HLTH 212D)	Public Health	Anke Hemmerling, Phuoc Le	Spring 2017	Graduate	This is one of the two sequential graduate level core courses of the Global Health specialty area, designed to deepen students' understanding of the complexities of global health issues. It will build on the principles discussed in the fall semester in Foundations of Global Health (PH C253/DEVP C232). The course will discuss current interventions and possible approaches for the future, complex ethical and political issues, and will prepare students to become part of the future global health work force and leadership. The course will be taught using a mix of teaching styles including case-based learning, trans-disciplinary approaches, and guest lecturers. It will integrate new technology and web-based class reflections.	
Global Health: Multidisciplinary Examination, (PB HLTH 112)	Public Health	Arthur L. Reingold	Spring 2015	Undergraduate	This course examines health at the individual and community/global level by examining the interplay of many factors, including the legal, social, political, and physical environments; economic forces; access to food, safe water, sanitation, and affordable preventive/medical care; nutrition; cultural beliefs and human behaviors; and religion; among others. Students will be expected to read, understand, and use advanced materials from diverse disciplines. Class accompanied by case-based discussions.	
Health Care Technology Policy (PB HLTH 222A)	Public Health	Robinson	Spring 2017	Graduate	The course examines the public policy institutions and processes influencing innovation, regulation, and payment for biotechnology, pharmaceuticals, and medical devices. Topics include technology transfer and patent law, the Food and Drug Administration (FDA) review for safety and efficacy, insurance coverage policy at the Center for Medicare and Medicaid Services (CMS), coverage, payment, and benefit by private insurers for new technology, and cost-effectiveness analysis. Special topics vary from year to year. Examples and case studies are drawn from all three of the technology sectors.	
Introduction to Community Health and Human Development, (PB HLTH 150E)	Public Health	Jason Corburn	Spring 2017	Undergraduate	This course will consist of a survey of the major social, cultural, and bio-behavioral patterns of health and well-being among individuals, families, neighborhoods, and communities. The course also will address the design, implementation, and evaluation of leading social and behavioral interventions and social policies designed to improve community and population health. This course will satisfy one of the core requirements for the undergraduate major in public health.	
Nutrition Status, Physical Activity, and Chronic Conditions (PH 206A)	Public Health	Laraia	Fall 2015	Graduate	Concepts, methods, and limitations in the determination of nutritional status; application of methodologies for determining and interpreting data; technical, social, and political implications of nutritional assessments and related community needs.	

Course	Department	Instructor (most recent)	Semester (most recent)	Graduate/ Undergraduate	Course Description	Prerequisites
Nutritional Epidemiology, (PH 206C)	Public Health	Barbara Laraia	Fall 2017	Graduate	This course develops the ability to read published nutritional epidemiology research critically. Basic research methods in nutritional epidemiology will be reviewed, and issues in design, analysis, and interpretation unique to nutritional epidemiology will be addressed. This will be accomplished by readings and study questions, lecture/discussions, and problem sets.	
Public Health Aspects of Maternal and Child Nutrition (PBHLTH 207A)	Public Health	Fernald	Fall 2017	Graduate	Nutrition plays a vital role in human reproduction and child growth and development. This course provides an overview of the major nutritional issues faced by women of childbearing age, infants, children, and adolescents in the United States and around the world, with selected topics explored in greater depth. Nutritional problems are multi-factorial and occur at multiple levels and we will study them from a variety of viewpoints (biological, pyschological, socio-cultural, economic, political, and behavioral) as well as from individual and population perspectives. Participants in the course will become acquainted with nutritional research, policies, and interventions designed to enhance reproduction, growth, and development. This course will also explore health disparities in maternal and child nutrition in both a domestic and international context.	
Health Issues Seminars: Designing Innovative Solutions to Public Health, (PB HLTH 290 002 SEM)	Public Health	Jaspal	Fall 2015	Graduate	Working in teams, students will innovate for public health impact, creating targeted solutions in collaborative projects with a range of real, organizational clients. Students will learn and apply systematic strategies for innovation, borrowing from fields such as design thinking, ethnography, systems thinking, creativity. In Spring 2014 only, the focus will be on reshaping the global and domestic food environment and food systems.	
Climate, Energy, and Development (PUB POL C221)	Public Policy	Kammen	Fall 2017	Graduate	Graduate seminar examining the role of energy science, technology, and policy ininternational development. The course will look at how changes in the theory and practiceof energy systems and of international development have co-evolved over the past half-century, and what opportunities exist going forward.A focus will be on rural and decentralized energy use, and the issues of technology, culture,and politics that are raised by both current trajectories, and potential alternative energychoices. We will explore the frequently divergent ideas about energy and development thathave emerged from civil society, academia, multinational development agencies, and theprivate and industrial sector. Also listed as Development Practice C221 and Energy and Resources Group C221.	
Energy and Society (PUB POL C284)	Public Policy	Kammen	Fall 2017	Graduate	Energy sources, uses, and impacts; an introduction to the technology, politics, economics, and environmental effects of energy in contemporary society. Energy and well-being; energy international perspective, origins, and character of energy crisis. Also listed as Energy and Resources Group C200.	Minimum one semester of graduate-level microeconomics and statistics or consent of instructor.
Environment and Technology from the Policy and Business Perspective, (PUB POL 282)	Public Policy	Taylor	Before Fall 2013	Graduate	Most environmental issues involve technology, either in the role of "villain" or "hero." This course uses the lens of specific technologies to survey environmental policy and management, with an emphasis on the complexities of policy-making with diverse interest groups. The class includes case studies, guest practitioners, and a group project in which students employ a range of analytic tools and frameworks in order to develop creative, effective, and actionable environmental solutions.	
International Economic Development Policy, (PUB POL C253)	Public Policy	DeJanvry, A	Fall 2017	Graduate	This course emphasizes the development and application of policy solutions to developing-world problems related to poverty, macroeconomic policy, and environmental sustainability. Methods of statistical, economic, and policy analysis are applied to a series of case studies. The course is designed to develop practical professional skills for application in the international arena. Also listed as Agricultural and Resource Economics C253.	
Special Topics in Public Policy: The Fight for Food Justice: Mass Movement or Consumer Culture? (PUB POL 290)	Public Policy	Saru Jayaraman	Fall 2015	Graduate		

Course	Department	Instructor (most recent)	Semester (most recent)	Graduate/ Undergraduate	Course Description	Prerequisites
Special Topics: Economic Development and Public Policy (PUBPOL 290)	Public Policy	Staff	Fall 2017	Graduate	Topic: Economic development and public policy: many fierce debates Economic development ideas are most often applied to foreign aid policies-- Does aid work to help victims of extreme poverty, malaria, AIDS, famine, illiteracy, and war? If not, how can policymakers make it work better? Development ideas also apply to a much broader set of public policy debates: is migration from poor to rich countries a powerful vehicle for ending world poverty, or is it a threat to rich countries? Is free trade and liberalization of markets an engine of development or are such policies a neoliberal disaster? Does aid support for dictators help reduce poverty, or does it harm the human rights of poor people? Do the aid publicity efforts about "failed states," war, and terrorism help raise funding for helping victims, or do they fuel xenophobic stereotypes? None of these questions have universal or automatic answers. This course will review the modern academic literature on economic development, as well as historical perspectives from previous generations of thinkers, to give tools, concepts, and lessons to equip students to participate in the fiercest debates shaping policies of today and tomorrow.	
Special Topics: The Fight for Food Justice: Mass ovement or Consumer Culture? (PP 190)	Public Policy	Saru Jayaraman	Fall 2016	Undergraduate	This course will discuss a wide range of current social justice campaigns and policy debates relating to the food system, including: corporate consolidation of farmland and meat, poultry, and dairy processing; labor conditions in the food system; food insecurity and access to healthy food in low-income communities; and transparency with regard to food labeling. The course will in particular examine: corporate consolidation throughout the food system has impacted each of these issues and many more; activists' varied responses to these trends; and how policy instruments and regulatory levers can be used to change the way the U.S. food system operates. Students will be exposed to current local, state, and federal policy campaigns and to real-world activists, organizers, and policy experts engaged in these campaigns. In every class, we will examine not only the issues involved but current efforts to address the issues.	
ICT for Social Enterprise (INFO 287)	School of Information	Parikh	Before Fall 2013	Graduate	This class is focused on the creation of sustainable enterprises based on ICT (Information and Communications Technologies) innovations supporting international development. We take a broad view of entrepreneurship--including starting new businesses, non-profit initiatives, and/or public sector projects. We will take a highly iterative, design-oriented, feedback-driven approach to developing and refining business plans for social enterprises.	
Information and Communications Technology For Development, (INFO 290)	School of Information	Burrell	Spring 2015	Graduate	This seminar reviews current literature and debates regarding Information and Communication Technologies and Development (ICTD). This is an interdisciplinary and practice-oriented field that draws on insights from economics, sociology, engineering, computer science, management, public health, etc.	Sociology 1, 3, 3AC, or consent of instructor.
Information Technology and Identity: The Future of Storytelling (INFO 290A)	School of Information	Hardy	Fall 2014	Graduate		1, 3, 3AC, or consent of instructor.