

Course Name	Course Number	Current Instructor	Most Recent Semester Taught	Graduate/ Undergraduate	Course Description	Prerequisites
Production, Industrial Organization, and Regulation in Agriculture	ARESEC 201	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.
Applied Econometrics	ARESEC 213	Michael Anderson	Fall 2018	Graduate	Standard and advanced econometric techniques are applied to topics in agriculture and resource economics. Techniques include limited dependent variables, time series analysis, and nonparametric analysis. Students will use computers to conduct statistical analyses.	
Empirical International Trade and Investment	ARESEC 232	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.	
Economics and Policy of Production, Technology and Risk in Agricultural and Natural Resources	ARESEC 241	David Zilbeman, Ethan Ligon	Fall 2017	Graduate		201 and 202, or Economics 201A-201B, or consent of instructor.
Agricultural, Food, and Resource Policy Workshop	ARESEC 249	Gordon C Rausser	Fall 2018	Graduate		
Rural Economic Development Workshop	ARESEC 259	Elisabeth Sadoulet	Fall 2017	Graduate	Presentation and criticism of ongoing research by faculty, staff and students. Not necessarily offered every semester.	
Empirical Energy and Environmental Economics	ARESEC 264	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.	
International Economic Development Policy	ARESEC C253	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.	
Microeconomic Theory with Application to Natural Resources	ENVECON 100	Jeffrey M Perloff	Spring 2018	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.	
Agricultural and Environmental Policy	ENVECON 141	David Zilberman	Fall 2018	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.	

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Economics of Innovation and Intellectual Property	ENVECON 143	Brian Wright	Spring 2018	Undergraduate	This course addresses the economics of research and incentives for innovation including intellectual property rights. Topics include the standard modern economics of invention; modern intellectual property rights; innovation examples from agriculture, energy, pharmaceuticals, software, and electronics; the roles of the public and private sectors; innovation and market structure;	
Issues and Concepts in Agricultural Economics	ARESEC 202	Jeffrey M Perloff, Thibault Fally	Spring 2018	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 of Water Resources	ENVECON 162	David L Sunding	Spring 2018	Undergraduate	Urban demand for water; water supply and economic growth; water utility economics; irrigation demand; large water projects; economic impacts of surface water law and institutions; economics of salinity and drainage; economics of groundwater management.	
Introduction to Environmental Economics and Policy	ENVECON C1	Gordon C Rausser	Spring 2018	Undergraduate	Introduction to microeconomics with emphasis on resource, agricultural, and environmental issues.	
Intro to American Studies	AMERSTD 10	Kathleen Moran, Margaretta Lovell	Fall 2017	Undergraduate	<p>Special Title Food Culture in America Special Title</p> <p>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."</p> <p>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.</p>	
American Material Cultures	ANTHRO 121AC	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.	
Anthropology of Food	ANTHRO 140	Christine Hastorf	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.	
Special Topics in Archaeology: Food Studies	ANTHRO 230-001	Christine Hastorf	Fall 2017	Graduate		

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Holocene Paleoeecology: How Humans Changed the Earth	ANTHRO C129D	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.
Special Topics: Current Issues in Hunter-Gatherer Archaeology and Anthropology		Junko Habu	Fall 2017	Graduate		
Urban Farming	ARCH 202	Renee Chow	Fall 2015	Graduate		
Introduction to Asia	ASISANST 10	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	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).
Healthy Cities	CRP 256	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.	
Planning for Sustainability	CYPLAN 119	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.	
Technologies for Sustainable Societies	CIV ENG 292A	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.

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Chemistry of Soils	CIV ENG C116	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 bioavailability and pollutant detoxification. Chemical modeling of nutrient and pollutant soil chemistry. Applications to soil acidity and salinity.	
Geotechnical and Geoenvironmental Engineering	CIVENG 175	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 geosynthetics in geotechnical and geoenvironmental applications. Introduction to site investigation techniques. Laboratory testing and evaluation of soil composition and properties.	
Technologies for Sustainable Societies	CIVENG 292A	Arpad Horvath	Fall 2018	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.	
Food and Religion in Ancient Greece	CLASSIC 24	Mark Griffith	Fall 2018	Undergraduate	In this course we will look at ancient Greek eating habits, sacrificial customs, and dietary restrictions in relation to their religious and philosophical beliefs. Which animals were killed and eaten, which not--and which kinds or parts of animals were especially significant for religious purposes? What vegetables and fruits were sacred or specially valued? How were foods to be cooked, for religious or non-religious purposes?	
English Language Studies: Food Culture in the U.S.	COLWRIT 7D	Peter B Vahle	Summer 2018	Undergraduate	Many sociocultural and economic factors affect the ways individuals and groups manage food. This English as a Second Language course focuses on current food movements and trends in the US--and the many ethical, cultural, and financial aspects that both underlie and result from them. Students will examine this topic through a wide variety of sources:	
Principles of Natural Resource Management	DEVP 227	J Keith Gilliss	Spring 2018	Graduate	This course will introduce concepts in natural resource management. Segment 1 will cover basic modeling, techniques, and methodology in natural resource management 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.	
Advanced Studies in Development Studies "Development and the Environment"	DEVSTD 150-002	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.	

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Natural Resource Economics	ECON C102	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	Peter Berck	Fall 2017	Undergraduate	Introduction to microeconomics with emphasis on resource, agricultural, and environmental issues.	
Introduction to Oceans	EPS N82	Jennifer L Murphy	Summer 2018	Undergraduate	The geology, physics, chemistry, and biology of the world oceans. The application of oceanographic sciences to human problems will be explored through special topics such as energy from the sea, marine pollution, food from the sea, and climate change.	
Prose Nonfiction Prose Nonfiction - Food Writing	ENGLISH 143	Georgina Kleege	Spring 2018	Undergraduate	This is a creative nonfiction writing workshop focused on the topic of food. Food writing encompasses more than snooty restaurant reviews or poetic descriptions of the taste of wine, coffee, and chocolate. Food writing can include memoir, cultural critique, and scientific explication. Topics writers might pursue include but are not limited to: food traditions, food taboos, food trends, fast food, slow food, junk food, fad diets, eating	
The Feeling of Labor	ENGLISH R1B		Fall 2018	Undergraduate	This course will take up the changing ways in which work and labor have been depicted in literature and other arts as conditions and conceptions of labor have transformed over time, from subsistence labor to post-industrial production. How have the many modes of work -- agricultural, reproductive, domestic, factory-floor	
Special Topics: Arts of Writing: Academic Writing, Grant Writing, Food Writing		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.	
Urban Garden Ecosystems	ESPM 117	Miguel Altieri	Fall 2018	Undergraduate	An ecosystem approach to the study of urban gardens with an organic perspective. Topics include fundamentals of horticulture, soil properties and fertility, pest and disease management, and food preservation. Laboratories include methods in garden design, plant propagation, compost technique, soil preparation, irrigation systems, pest management, individual or group projects, demonstrations, and discussions.	

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Soil Characteristics	ESPM 120	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.	
Special Topics in ESPM: "Sustainable Water and Food Security"	ESPM 150	Staff	Spring 2017	Undergraduate	Sustainable water and food security	
Sociology and Political Ecology of Agro-Food Systems	ESPM 155AC	Kathryn De Master	Fall 2018	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).	
Sustainable Water and Food Security	ESPM 177	Paolo D'odorico	Spring 2018	Undergraduate	In this class we will study basic principles of environmental sustainability from the perspective of water and food security, and apply them to human use of land and land based resources. An analysis of major mechanisms of land degradation and of the major technological advances that are expected to burst food production worldwide will be used as the basis for a discussion on the extent to which the Earth can sustainably feed humanity.	
Community Engagement in Food Systems	ESPM 197	Paul Roge	Fall 2016	Undergraduate	<p>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.</p> <p>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.</p>	
The Biosphere	ESPM 2	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.	
Interdisciplinary Food and Agriculture Studies	ESPM 226	Alastair T Iles	Spring 2018	Graduate	A graduate seminar exploring the ecological, social, and economic risks inherent in different forms of agriculture, from highly diversified, agroecological farming systems to industrialized agriculture. We will examine how different farm management techniques, government policies, supply chains, R&D, technology, and science may influence various risks and uncertainties, including climate change, agrobiodiversity, farmer	

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Sociology of Agriculture	ESPM 230		Fall 2018	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.	
Race, Science, and Resource Policy	ESPM 258	Jeffrey Romm	Fall 2017	Graduate	This course addresses explanation 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	James Bartolome	Fall 2016	Graduate	A seminar course dealing with selected current topics in range ecosystem planning and policy.	
Biodiversity and Human Health	ESPM 290	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.	
From Farm to Table: Food Systems in a Changing World	ESPM 5	Ana C. Galvis-Martinez	Summer 2018	Undergraduate	This course explores the long journey of food from farm to family table in the United States. We will consider the ecology, management, and politics of farming under a global environmental change scenario, the treatment of diverse food workers, the impact of our changing patterns of demand on food processing and retail, the opportunities and cos	
Environmental Policy, Administration, and Law	ESPM 60	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	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).	

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Americans and the Global Forest	ESPM C11	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.	
Fish Ecology	ESPM C115C	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.	
Economics of Race, Agriculture, and the Environment	ENVECON 140AC	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.
Industrial Organization with Applications to Agriculture and Natural Resources	ENVECON 142	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.	
Natural Resource Economics	ENVECON C102	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.	
Modeling and Management of Biological Resources	ENVECON C115	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.	
Agriculture Ecology	ESPM 118	Timothy M. Bowles	Fall 2018	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.	

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International Rural Development Policy	ESPM 165	Claudia Carr	Spring 2018	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.	
Inside and Beyond Walls: Migra, Masses and the Carceral State	ETHSTD 190AC	Victoria Ellen Robinson	Spring 2018	Undergraduate	To understand the strategies and struggles against inequality and powerlessness brought by state violence. How are the social immobilizations of low income and communities of color challenged by movements seeking to ensure communities true security through basic necessities such as food, shelter and freedom? This course meets the American Cultures (AC) requirement through its integration of research and analysis of the comparative racial dimensions of incarceration and immigration criminalization.	
Prehistoric Agriculture	GEOG 109	Roger Byrne	Fall 2014	Undergraduate	Agricultural origins and dispersals in the light of recent biological and archaeological evidence.	
Food and Environment	GEOG 130	James Gabriel Eckhouse	Summer 2018	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, hunger and obesity, and poverty.	
Global Environmental Politics	GEOG 138	Ann Laudati	Fall 2018	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	
Special Topics: The Political Ecology of Land Grabs: Food, Resources, Environment, and Development	GEOG 170	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.	
Global Ecology and Development	GEOG 35	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	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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Food Venture Lab		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	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.	
Slavery, Agricultural Labor, and the Economy in the later Roman Empire	HISTORY 280A	Susanna Elm	Fall 2018	Graduate	Beginning with a discussion of the principal historiographic works and hence the central areas of scholarly controversy regarding slavery and other forms of agricultural labor and the late Roman economy	
Social Challenge Lab: Disaster and Recovery in Puerto Rico	INDENG 185	Rachel S Powers	Spring 2018	Undergraduate	In this course, you will learn how to apply the Berkeley Method of Entrepreneurship (BMoE) to build novel solutions and social enterprises that will help deliver the next generation of solutions to aide and recovery of natural disasters. Given the shifting global climate, disaster and recovery is an emerging need and growth area worldwide. The climate crisis is no longer an abstract issue and	
Ethnobiology, Nutrition, and Global Food Systems	INTEGBI 24	Thomas J Carlson	Fall 2018	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,	
Holocene Paleoecology: How Humans Changed the Earth	INTEGBI C155	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.

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Critical Issues in Global Studies "Food, Drink, Culture, Politics"	GLOBAL 10B	Darren C Zook	Fall 2018	Undergraduate	Few things are more important to the existence of humanity than food and drink. Aside from making human life possible, food and drink have generated multiple waves of cultural and political activity throughout human history, some of it celebratory, some of it contentious, and all of it infinitely interesting. This course will explore the many ways that food and drink are intertwined with culture and politics, in the past and in the	
Perspectives For Sustainable Rural Development	GLOBAL 123L	Clara Nicholis	Fall 2018	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	
Political Economy of Food	POLECON 150	Tiffany L. Page	Spring 2018	Undergraduate	Food is critical to our survival. Yet, there are people throughout the world who do not have access to sufficient and/or healthy food. A number of social movements focused on food-related issues have sprouted up in both the Global North and the Global South in recent decades. In this course, we will examine the national and international political and economic dynamics that shape production, distribution and access to healthy food, as	
The Economics of Climate Change	IAS C175	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.	
Advanced Grammar, Reading, and Composition	ITALIAN 101B	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.	

Course Name	Course Number	Current Instructor	Most Recent Semester Taught	Graduate/ Undergraduate	Course Description	Prerequisites
Reading Italian Literature	ITALIAN 104	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
Topics in Italian Studies Italy and Food: A Cultural History	ITALIAN 120	Danielle Callegari	Fall 2018	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 "Italianness"? 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.	
Directed Group Study "Jewish Food Journey"	JEWISH 198	Francesco Spagnolo	Spring 2018	Undergraduate	"Jewish Food Journey: the old, the new, and everything in-between"	
Science Reporting--How to Read, Make Sense of, and Write about Emerging Research in Food and Nutrition	JOURN 219	Marion Nestle	Spring 2015	Graduate		
Master's Project Seminar (Following the Foodchain)	JOURN 294	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	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	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	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.	

Course Name	Course Number	Current Instructor	Most Recent Semester Taught	Graduate/ Undergraduate	Course Description	Prerequisites
Environmental Science for Sustainable Development	LD ARCH 12	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	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	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.	
Environmental Science for Sustainable Development	LDARCH 12	G. Mathias Kondolf	Fall 2018	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, opportunities to increase sustainability of processes/practices. Discussion/lab section involves field data collection/analysis	
Advanced Studies in Latin American Studies: Perspectives for Sustainable Rural Development in Latin America	LATAMST150	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.	

Course Name	Course Number	Current Instructor	Most Recent Semester Taught	Graduate/ Undergraduate	Course Description	Prerequisites
Public Law and Policy Workshop: Advanced Constitutional and Administrative Law Topics	Law 220.G	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.	
Food Law and Policy	Law 220F	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.	
Policy Change and the Role of Lawyers	Law 226.7	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

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Environmental Law Clinic ()	Law 2295.5E	Polsky, Vohryzek	Fall 2017	Graduate	<p>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.</p> <p>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)</p> <p>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?</p> <p>Students interested in participating in the Environmental Clinic should go to the Clinical Program Application page for information about the application process.</p> <p>The Environmental Law Clinic Seminar (Law 291.A; 2 units) is a co-requisite for the Clinic.</p>	
Protecting Products of Place	Law 276.69	Richard Mendelson	Spring 2017	Graduate	<p>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.</p>	
Wine Law	Law 278.8	Bonnington	Fall 2017	Graduate	<p>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.</p>	

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Leveraging Technology for Systems Redesign: Transforming Food Systems	MECENG 292	Sara L Beckman, Andy An-Si Dong	Spring 2018	Graduate	This series covers current topics of research interest in design. The course content may vary semester to semester. Check with the department for current term topics.	
	Law 2295.5E	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.
Intro to Human Nutrition	NUSCTX 10	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.	
Nutrient Function and Metabolism	NUSCTX 103	James Olzmann, Hei Sook Sul	Fall 2018	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.	
Food, Culture, and the Environment	NUSCTX 104	Kristen Rasmussen	Summer 2018	Undergraduate	This course will broadly address the historical, ecological, socioeconomic, biological, political, and cultural environments impacting the human diet in addition to nutrition problems, programs, and consumer protection. It is a nutrition course with an anthropological slant that examines why we eat what we eat and contributes to the pursuit of multidisciplinary	
Introduction and Application of Food Science	NUSCTX 108A	Staff	Fall 2017	Undergraduate	Evaluation of the chemical, physical, functional, and nutritional properties of foods. Emphasis on how these properties, and preparation, processing, and storage, influence quality characteristics of food products.	
Introduction and Application of Food Science	NUSCTX 108B	Kathleen L. Deegan	Fall 2018	Undergraduate	Evaluation of the chemical, physical, functional, and nutritional properties of foods. Emphasis on how these properties, and preparation, processing, and storage, influence quality characteristics of food products.	
Introduction to Toxicology	NUSCTX 11	Daniel K. Nomura, Jen Chywan Wang, Sona Kang	Spring 2018	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	Daniel Nomura, Martyn T Smith	Fall 2018	Undergraduate	A comprehensive survey of the principles of modern toxicology and their applications in evaluating the safety of foods, additives and environmental contaminants. Mechanisms of metabolic activation, detoxification, gene regulation, and selective toxicity are emphasized.	
Food Systems Organization and Management	NUSCTX 135	Patricia A. Booth	Spring 2018	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.	

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Metabolic Bases of Human Health and Diseases	NUSCTX 160	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.	
Medical Nutrition Therapy	NUSCTX 161A	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	Mary Nicole Lesser	Fall 2018	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	
Personal Food Security and Wellness	NUSCTX 20	Jazmin Rodriguez-Jordan	Fall 2018	Undergraduate	Food insecurity is broadly defined as having unreliable access to adequate foods resulting in disrupted eating patterns or reduced food intake due to a lack of money and other resources for food. NST 20 will improve nutrition-related behaviors and support students in need of improving their food security status. Students whom have limited cooking and food preparation experience will acquire foundational nutrition knowledge and basic cooking skills to be able to prepare healthful and affordable meals in consideration of existing factors, such as: food availability; food budgeting; and time management.	
Metabolic Bases of Human Health and Diseases Graduate Level	NUSCTX 260	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.	
Professional Preparation: Supervised Teaching Experience in Nutrition	NUSCTX 302	Kathleen L. Deegan	Fall 2018	PhD	Practical supervised experience in teaching nutrition and food science at the university level; planning, presentation, and evaluation of instructional units.	
Pesticide Chemistry and Toxicology	NUSCTX C114	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.	

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Human Diet	NUSCTX C159	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.	
Molecular Approaches to Environmental Problem Solving	ESPM C192	Neil Tsutsui	Spring 2018	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	
Plants, Agriculture, and Society	PLANTBI 10	Staskawicz, David Zilberman	Fall 2018	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.	
Fungi, History, and Society	PLANTBI 11	John W Taylor, Thomas Dickinson Bruns	Spring 2018	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.	
Genetic Revolution	PLANTBI 13	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.	
Modern Applications of Plant Biotechnology	PLANTBI 170	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.	
Introduction to the Plant Sciences at Berkeley	PLANTBI 20	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	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.	

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The (Secret) Life of Plants	PLANTBI 40	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.	
Molecular Approaches to Environmental Problem Solving	PLANTBI C192	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.	
Health Implications of Climate Change	ESPM C282	Rupa Basu	Spring 2018	Graduate	This course explores the Public Health effects of global climate change: physical basis of climate change, including causes & projections; burden of disease stemming from global climate change, emphasis on impacts in the developing world, global & local equity issues, interaction between climate change mitigation/adaptation activities & existing global health initiatives;	
A Sustainable World: Challenges and Opportunities	PBHLTH 101	David Malcolm Potts	Spring 2018	Undergraduate	Human activity and human numbers threaten the possibility of irreversible damage to the fragile biosphere on which all life depends. The current generation of students is the first one to face this existential problem and it may be the last one that can solve it. The goal of this course is for faculty with expertise in the many variables involved-energy consumption, food security, population growth and family planning, climate change, governance, migration, resource consumption, etc.-to give one-hour presentations on their specific topic.	
Global Health: Multidisciplinary Examination	PBHLTH 112	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.	
Nutrition in Developing Countries	PBHLTH 118	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.	
Drinking Water and Health	PBHLTH 170C	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 is included.	

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Environmental Health Science Breadth Course	PBHLTH 200K	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.	
Advanced Alcohol Research Seminar	PBHLTH 202G	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.	
Nutrition Status, Physical Activity, and Chronic Conditions	PBHLTH 206A	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.	
Nutritional Epidemiology	PBHLTH 206C	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.	
Food and Nutrition Programs and Policies in Developing Countries	PBHLTH 206D	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.	
Public Health Aspects of Maternal and Child Nutrition	PBHLTH 207A	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, psychological, 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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Expanded Foundations of Global Health	PBHLTH 212D	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 Policy	PBHLTH 220E	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.	
Health Care Technology Policy	PBHLTH 222A	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.	
U.S. Food and Drug Administration, Drug Development, and Public Health	PBHLTH 236	Veronica Miller	Spring 2018	Graduate	The process and principles of drug development will be discussed in the context of the FDA's mandate and reach (basic science, pre-clinical and clinical research, policy, law, and public health), emphasizing the impact of public health emergencies such as HIV on evolution of regulatory policies.	

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Foodborne Disease	PBHLTH 266A	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 gastroenteritis viruses. We will also study non-pathogen agents such as heavy metal, pesticide, and toxic chemicals. Furthermore, 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.	
Transforming the Food System: From Agroecology to Population Health	PBHLTH 290	Kristine Ann Madsen	Fall 2018	Graduate	This course takes a solutions-oriented approach to pressing problems in current food systems. We explore strategies used by the disciplines of agroecology, policy, law, public health, and business to improve food systems and apply their varied approaches to real-world case studies.	
Health Issues Seminars: Designing Innovative Solutions to Public Health	PBHLTH 290	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.	
Environmental Health and Development	PBHLTH C160	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.	
Global Health: A Multidisciplinary Examination	PBHLTH N112	Arthur L. Reingold	Summer 2018	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	
Maternal and Child Health Nutrition	PBHLTH W206	Cindy Leung	Summer 2018	Graduate	Nutrition plays a vital role in human reproduction, child growth/development. Course provides an overview of the major nutritional issues for infants, children, adolescents, and reproductive age women in the United States. One module on malnutrition offers global content. Reviews programs, interventions aimed at improving MCH nutrition	

Course Name	Course Number	Current Instructor	Most Recent Semester Taught	Graduate/ Undergraduate	Course Description	Prerequisites
Introduction to Community Health and Human Development	PBLTH 150E	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.	
Eat.Think.Design		Kristine Ann Madsen, Jaspal Singh Sandhu	Spring 2018	Graduate	This course is a team-oriented, project-based course designed around the case-based and learning-by-doing models. The critical elements of the human-centered design process – discovering, ideating, and prototyping – are learned through didactic sessions and an 8-week project students work on in teams. Working with community partners on a public health issue related to food, the student teams apply human-centered design skills to the problem, and design and pilot (when possible) a solution with and for their community partner.	
Climate, Energy, and Development	PUB POL C221	Kammen	Fall 2017	Graduate	Graduate seminar examining the role of energy science, technology, and policy in international development. The course will look at how changes in the theory and practice of 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 energy choices. We will explore the frequently divergent ideas about energy and development that have emerged from civil society, academia, multinational development agencies, and the private and industrial sector. Also listed as Development Practice C221 and Energy and Resources Group C221.	
International Economic Development Policy	PUB POL C253	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: The Fight for Food Justice: Mass Movement or Consumer Culture?	PUBPOL 190	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.	

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Environment and Technology from the Policy and Business Perspective	PUBPOL 282	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.	
Special Topics in Public Policy: The Fight for Food Justice: Mass Movement or Consumer Culture?	PUBPOL 290	Saru Jayaraman	Fall 2015	Graduate		
Energy and Society	PUBPOL C284	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.
ICT for Social Enterprise	INFO 287	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	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	Hardy	Fall 2014	Graduate		1, 3, 3AC, or consent of instructor.
Food and Nutrition Policies and Programs	PBHLTH 206B	Wendi A Gosliner	Spring 2018	Graduate	This course is a team-oriented, project-based course designed around the case-based and learning-by-doing models. The critical elements of the human-centered design process – discovering, ideating, and prototyping – are learned through didactic sessions and an 8-week project students work on in teams. Working with community partners on a public health issue related to food, the student teams apply human-centered design skills to the problem, and design and pilot (when possible) a solution with and for their community partner.	
Global Health and Social Justice	SOCIOL 115G	Laura Nathan	Fall 2017	Undergraduate	This course examines the social forces that promote and sustain illness throughout the globe and contribute to illness outbreaks becoming epidemics and pandemics. Emphasizing the central roles of poverty and politics in shaping health risks, disparities within and across nations are explored. With the understanding that health is, at core, a social justice issue, this course reviews policies and programs that attempt to address health problems, some of which have helped to alleviate suffering and some of which have caused additional harm.	

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Chemistry	Intro to Chemisry of Cooking		Facilitator: Lara Bideyan Sponsor Faculty: Matt Francis	Fall 2014	Undergraduate	This is a course on the basic science behind food and cooking. We will study food and cooking related processes from the molecular scale up through the eyes of a scientist. However, all necessary technical background will be introduced in the course, so all majors are welcome.	
Chemistry	The Wonders of Desserts		Facilitators: Nerissa Ignacio, Karen Yi Sponsor Faculty: Marcin Majda	Spring 2014	Undergraduate	Explore the “wonders” of desserts and the chemistry behind them. We will look into basic ingredients of baking, unique desserts from around the world, and the mechanisms and assortment of processes involved in creating the perfect dessert. Each lecture will consist on topics of the chemical, biological, and physical concepts of how the desserts were produced and manufactured. An assignment regarding the learned topic will be assigned that week for supplementary learning. There will be one midterm and one group final presentation. There will also be a guest speaker and a field trip during the instructional days. This decal is constructed for students to find or enhance their love for desserts by looking at them from a whole new perspective.	
Civil Engineering	Cal Environmental Team		Facilitator: Elly Lin Sponsor Faculty: Khalid Kadir	Fall 2014	Undergraduate	This fall, on top of teaching the fundamentals of water treatment and water quality, this class will help you develop your design and presentation skills. You'll engage in lectures, build sessions, and lab testing. Towards the end of the semester, we'll host a mini water filter design and build competition where you'll apply everything you've learned. There won't be any papers nor exams but there will be a few short quizzes and a presentation to prepare for.	

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Education	Leadership and Justice: The Knowledge for Human Rights!		Facilitators: Universal Love an Peace Members	Fall 2017	Undergraduate	for Human Rights! Decal is a community-organizing and human rights course in which students learn the rhetoric and current debates about many social justice issues: human trafficking, immigration, income inequality, LGBTQ+ rights, feminism, international human rights, education policy, factory food farming, Islamophobia, and much more. Our DeCal facilitators employ a student-focused pedagogy and incorporate multiple modes of instruction like lectures, videos, role-playing, singing and drawing in order to maximize learning. In class, students will be able to participate in group activities including grassroots community activism, publications, music videos, and event organizing. More importantly, students will have the opportunity to learn about popular community organizing strategies so they can take meaningful action in their communities to address social justice and human rights issues. Past students have created awesome and impactful projects including Humanitarian Mapping, Operation Christmas Child, Project Unity, and Faces of Berkeley, among several. This course has been taught and refined many times and has received average ratings of 7/7 from previous	

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Energy and Resource Group	Sustainable Energy for a Greener Tomorrow		Facilitator: Kean Wyatt Amidi-Abraham Sponsor Faculty: Daniel Kammen	Fall 2017	Undergraduate	<p>This course will give an introduction to energy topics and explore the social, environmental and economic consequences of our carbon-based economy. We depend on energy to fuel our cars and airplanes, grow and transport our food, light our cities, warm our homes, cook our food, and power our machinery, appliances, and electronics. As we continue to deplete our resources (and pollute our air and water in the process), the challenge to satisfy our energy needs continues to mount. How will our generation respond? We will use guest speakers, article presentations, fun projects, involved discussions, and films to explore the energy cycle – tracing its origins, distribution, consumption, and waste. We'll also calculate our personal carbon footprint as well as learn about the many opportunities available to become more energy efficient. Check out the syllabus for a more detailed breakdown of the class.</p>	

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Enviromental Design and Landscape Architecture	Garden Leadership and Management		Matt Kondolf	Fall 2016	Undergraduate	<p>The Student Organic Garden is an incubator for horticultural knowledge, community building and outreach, skill sharing, social improvement and meaningful discussion. Students passionate about sustainable agriculture and landscapes, food sovereignty, community collaborations, food justice and more can find a creative outlet through this class. This DeCal offers a space for experiential learning- a individual-powered learning style that has students play on their strength to find their place in the global food movement. Us facilitators help guide the students along the way with knowledge regarding garden management, organizatization, project management, the campus, resource acquisition and networking- but the students define the class!</p> <p>This course will teach students how to run a thriving, community garden - nurturing skills such as crop planning, community outreach, volunteer coordination, project management, and more.</p>	
Enviromental Science, Policy, and Management	Berkeley in the Global Food System		Facilitator: Lara Nelson Sponsor Faculty: Alastair Iles	Fall 2014	Undergraduate	<p>A weekly gathering to explore and analyze the sociopolitical, economic, environmental implications of our current food system and Berkeley's role in creating an alternative food system. We will be visiting local farms and learning hands-on skills to be a strong voice in the food movement!</p>	

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Environmental Science, Policy, and Management	Intro to Sustainability and Environmentalism at UC Berkeley		Facilitator: Jeff Noven Sponsor Faculty: Gordon Frankie	Fall 2014	Undergraduate	The Student Environmental Resource Center, a joint student-organization and administrative office, is intended to combat these problems within the environmentalist community at Berkeley. This class is intended for both incoming and veteran students who wish to navigate the dense landscape of student and administrative environmentalism at Cal. We'll be exploring the huge expanse of activity by interacting directly with those actually working on environmental issues at Berkeley and trying to understand their successes and failures in the bureaucratic jungle to the ends of understanding how we ourselves can model the best behaviors for our own aspirations' ends.	
Environmental Science, Policy, and Management	The Zero Waste Movement		Facilitator: Brian Gialketsis Sponsor Faculty: Kate O'Neill	Fall 2014	Undergraduate	Ground your understanding of "waste" systems and infrastructure by learning about limitations with recycling and composting, the magnitude of the international plastic dilemma and the Zero Waste movement striving to debunk "greenwashing" in the industry. This class aims to inspire students to take action on environmental, social and economic challenges related to waste, recycling and resource recovery. By utilizing an interdisciplinary approach, this DeCal will provide both a local and international perspective on sustainable waste management practices.	
Environmental Science, Policy, and Management	Creating a Sustainable Landscape: On-Campus Gardening (ESPM 98/198)		Miguel Altieri	Fall 2015	Undergraduate	Directed group study in ESPM	
Environmental Science, Policy, and Management	Garden Leadership and Management (ESPM 98/198)		Pallud	Fall 2015	Undergraduate	Directed group study in ESPM	
Environmental Science, Policy, and Management	Strawberry Creek Restoration DeCal		Facilitator: Kimberlie Le Sponsor Faculty: Tina Mendez	Fall 2016	Undergraduate	This class is a primarily field trip and field work based class. We will learn about the many restoration happenings as well as about river ecosystems. We will do a large range of activities such as planting, labwork, class outings etc.	

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Environmental Science, Policy, and Management	Berkeley Urban Garden Internship (BUGI)		Kathryn De Master	Fall 2016	Undergraduate	<p>will take an interdisciplinary look at the food system, using urban agriculture as a starting point. We will use various approaches to examine the numerous elements and dynamics of food systems, and we will focus on the role that urban agriculture can play in improving or supplementing this system. Because this course is in the Environmental Science, Policy and Management department, we will often invoke an environmental lens to explore how the process of growing, harvesting, delivering, preparing, eating, and disposing of food interacts with people and the environment.</p> <p>The class meets once a week on Mondays from 2-4pm. Class will consist of guest lectures and discussions, hands-on gardening lessons, and field trips. The class will also include opportunities for student presentations, seed-to-table food shares, or facilitator-led mini-lessons. Class will be held in the Student Organic Garden on Virginia and Walnut St. unless there is bad weather or a need for the projector screen. There is also a required 2 hour volunteer commitment per week, which the student will schedule for outside of class.</p>	
Environmental Science, Policy, and Management	Berkeley Urban Gardening Internship (ESPM 198)		Kathryn De Master	Fall 2016	Undergraduate	Directed group study in ESPM	
Environmental Science, Policy, and Management	Student Environmental Activism		Facilitator: Magnolia Barrett Sponser Faculty: Gordon Frankie	Spring 2014	Undergraduate	This decal seeks to introduce students to environmental activism, to inspire involvement within the campus environmental community and the greater campus community, to build relationships, and to give students the tools and resources to create tangible change. This class will provide students who are already involved in the environmental community a chance to learn from one another, share resources, collaborate, and to inspire and empower each other to remain active in creating solutions to the environmental problems we learn about every day in our classes.	

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Enviromental Science, Policy, and Management	Human and Ecosystem Health		Facilitator: Kathryn Fiorella Sponsor Faculty: Justin Brashares	Spring 2014	Undergraduate	Links between human health and ecosystem health are widespread. Malaria becomes more common in deforested regions. Wildlife hunting exposes people to zoonotic diseases, provides nutritious foods, and may harm wildlife sustainability. People rely on ecosystem services to provide food, clean air, and clean water. The interlinks of environmental and human health are not new, but we increasingly approach them from interdisciplinary perspectives that allows us to better understand the complex ways human and environmental health interact.	
Enviromental Science, Policy, and Management	Organic Gardening and Food Justice		Kathryn De Master	Spring 2014	Undergraduate	The Student Organic Garden was established in 1971 by students, and continues to be fully operated and managed by undergraduates. Today the garden gives students a space for experiential learning and helps individuals find a place in the global food movement. The SOGA Interns & Facilitators DeCal will create a collaborative and supportive atmosphere for active student involvement in the garden. Class time will be devoted to working on projects (interns) or learning and improving the weekly lesson plans for the Organic Gardening and Food Justice DeCal (facilitators). This course is designed to both introduce new gardeners to the basic theories and methods of organic gardening, as well as provide an opportunity for more experienced gardeners to practice their skills and grow organic food. Above all, in our class we hope to inspire students to become intimately engaged with what they eat, through hands on experience in horticulture, compost, garden design, seasonal planning, and exposure to the local food justice movement.	
Geography	TeaCal		Facilitator: Dylan Paddock Sponsor Faculty: Michael Watts	Spring 2014	Undergraduate	At its most basic level, the course is about the tea leaf. Yet to better understand and better appreciate this ancient drink, the class will explore its mythical origins and more concrete history. We will learn of the different tea rituals and cultures of the early Chinese dynasties and trace their influences in Japan, India, and England. At the end of the course, we will look at the Tea Renaissance taking place today in	

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History	Know Your Beans: The History, Politics, and Culture of Coffee		Kerwin L. Klein	Fall 2016	Undergraduate	Coffee is one of the most valuable traded commodity's in the world. So what made this hot and delectable drink so popular? In this course we aim to answer the question of where the roots of the coffee bean lay. In doing so, more complex questions and themes will arise. The discussion of coffee will allow us to view history through a multidisciplinary lens. We will endeavor to separate myth from history throughout the course. A discussion of the history of trade and the people that facilitate in	
International and Area Studies	Thirst: Global Discourses on Water and Human Rights		Facilitator: Megan Maurino Sponsor Faculty: Khalid Kadir	Fall 2014	Undergraduate	solution oriented, multi-disciplinary approach to human rights and water. We will explore the realms of law, public policy, anthropology, gender, governance, sociology, environmental science, economics, history, and philosophy and their relationship to these topics. We will use case studies of both international and local water issues to illustrate the most pressing water and human rights topics of this century. The course hopes to build off of the interests of students and integrate the knowledge that each student brings related to the topic. Goals for the course include building a foundational knowledge of human rights, integrating different themes of water and human rights discourse, participating in informed discussion of human rights topics and water issues, and	
Linguistics	Cooking 101		Facilitator: Catherine Tralka Sponsor Faculty: Keith Johnson	Spring 2014	Undergraduate	The class will consist of one two hour class meeting per week. Each class meeting will focus on a particular dish and use the cooking of that dish as a launching point to explain relevant techniques and methods. The first half hour will be spent on a brief lecture introducing the days topic, a quick demonstration of the recipe techniques, a short nutritional summary, meal planning information, and the history of the chosen dish. The next hour and a half will be spent cooking the dish demonstrated in the	

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Molecular and Cell Biology	Drugs and Alcohol 101 ;)		Facilitator: Dhruv Puri	Fall 2017	Undergraduate	<p>This course aims to provide out students with an objective look at drugs and alcohol. The goal is to provide a liberal, college-student-friendly education without the stigmas and bullcrap involved. We'll go over everything from how the drug works from dose to symptoms to what to do when things go awry.</p> <p>We will go through a list of the most common drugs in America; one each lecture. First, there will be a lecture on the drug. Then we will open the class up to a discussion and Q/A section, where we'll discuss it in a liberal context drawing from the facilitator's experiences as EMTs.</p>	
Molecular and Cell Biology	Traditional Chinese Medicine 101: Know About Your Body and Yourself		Facilitators: Dawei Liu, Lili Huang	Fall 2017	Undergraduate	<p>This course is an introduction to Traditional Chinese Medicine (TCM), including its theories, diagnostic methods, and its relation to our diet, emotions and science. Students will be introduced to the basic theories in TCM such as Yin and Yang, the Five Elements, Jing, Qi and Shen, as well as how our common illnesses such as flu, nausea, stomachache, amnesia, etc are explained and treated in TCM. Also, we will talk about how to apply TCM to decide on diet and manage emotions to achieve a healthier lifestyle. Throughout the course, students will be exposed to demonstrations of different TCM techniques such as acupuncture, Tui Na (massage), Qi Gong, and moxibustion.</p>	
Molecular and Cell Biology	The Gluten Epidemic: An Introduction to Celiac Disease		Facilitators: Justin Inman, Kevin Youssefzadeh Sponsor Faculty: Russell Vance	Spring 2014	Undergraduate	<p>We will be discussing the causes, mechanisms, and symptoms of the increasingly important Celiac Disease. Celiac is an autoimmune condition caused by extreme gluten sensitivity. If you or someone you know may be affected by gluten sensitivity or Celiac disease, this might be the class for you!</p>	
MSE	Materials Science Through Food		Facilitator: Qian Zhang Sponsor Faculty: Mark Asta	Fall 2014	Undergraduate	<p>The materials science through food DeCal was created to introduce the field of materials science and engineering (MSE) to students of various backgrounds. MSE is an incredibly important and widespread field, but few have a basic understanding of what it encompasses. Our hope is that through taking this course, students will gain a good understanding of</p>	

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N/A	Jewish Food (Jewish 198)		N/A	Fall 2017	Undergraduate	N/A	
Nutritional Science and Toxicology	Fruitful Minds		Facilitator: Victoria Brodsky Sponsor Faculty: Mikelle McCoin	Fall 2014	Undergraduate	Ambassadors for Fruitful Minds, a nutrition education program aimed at local urban youth, ages 9 to 14, to address childhood obesity. Students will prepare for and teach a nutrition education class series to area youth at a site and time to be determined by the needs of the Fruitful Minds program. The course time commitment will include a one and a half hour weekly review and preparation session to be held on campus and a one hour fieldwork session at a local school or after school program. Fieldwork sites will most likely be located in Oakland and/or Berkeley. Topics to be covered include a review of the Fruitful Minds curriculum as well as teaching strategies, program evaluation tools, and youth engagement. Additional assignments will enhance student contributions to weekly	
Nutritional Science and Toxicology	Environmental, Nutritional & Social Aspects Influencing our Food System		Kristen Rasmussen	Fall 2015	Undergraduate	This DeCal class will teach students about the current environmental, nutritional and social influences on innovation in the food industry. In Part I, students will explore the history of and current issues in agribusiness and food distribution. In Part II, students will better understand today's typical perspective on nutrition, gathering knowledge from the food system, the changing food trends, media, policy and more. In addition, students will learn about the steps being taken to make nutritious food available for all. Finally, in Part III, students will explore the topics within the issue of labor in the food industry: breaking into food business as a low income entrepreneur, cultivating relationships between workers and their product and addressing issues such as income inequality through food businesses. The course will consist of lectures, discussions and guest speakers from the food industry itself.	

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Nutritional Science and Toxicology	Dulce(Diabetes Awareness Decal		Gregory Aponte	Fall 2016	Undergraduate	D.U.L.C.E. is a diabetes awareness and prevention program established in 2001 by Chicanos/Latinos in Health Education (CHE) of UC Berkeley. Through the decal, students will gain the knowledge on how diabetes impairs the body and how one can avoid or cope with the complications that arise from this chronic disease. As a means of raising the importance of diabetes prevention, the students will explore personal health and establish goals for improvement in the areas of nutrition and exercise. In order for the students to feel comfortable conveying the knowledge to their friends, family and community there will be a Health Education Activity and a presentation on Community Health and Development as it relates to diabetes. By the end of the semester, students will have the vital knowledge and skills necessary to convey the information in community health events.	
Nutritional Science and Toxicology	FoodInno: Designing the Future of Food		Agnes Zhu	Fall 2016	Undergraduate	This course will offer students a unique, interdisciplinary and immersive opportunity to re-think food system issues while meeting local food entrepreneurs, developing food business skills, and working closely with their peers. This decal will introduce students to the multitude of issues that different food innovators face in their work, as well as offer students a fast-paced outlet to convene and ideate. Through collaboration in small teams, students will gain applicable real-life entrepreneurial skills of prototyping, teamwork, and leadership. While 'hacking' with their fellow students, students will work closely with food professionals in concentrated skill-based sessions focused on subjects such as branding, marketing, pitching, and more. In addition, students will be mentored by the decal facilitators throughout their hacking process. Finally, each student group will get the chance to present their projects to a panel of judges and compete for prizes! While most of the class will be in the format of collaborative learning, interspersed between hackathon sessions will be fun field trips and speakers designed to engage and open the minds of everyone in the class!	

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Nutritional Science and Toxicology	Fermentation: "Culturing" Your World		Kristen Rasmussen	Fall 2016	Undergraduate	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	
Nutritional Science and Toxicology	Life Skills: Intro to Baking		Kristen Rasmussen	Fall 2017	Undergraduate	This class is for all of you who have little or no baking skill and want to learn how to make delicious cakes, pastries, breads (& more!) without setting you and your roommates on fire! In this DeCal, we'll teach you how to make a wide variety of baked goods, assuming little or no previous experience. You'll be taught the various techniques to make different baked goods, as well as the importance of essential ingredients and what they do in the recipe.	

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Nutritional Science and Toxicology	Coffee Break DeCal (NUSCTX 98/198)		Facilitators: Christine Benik, Ava Asgari	Spring 2014	Undergraduate	We start by going over coffee cultures in cafes and how coffee is served differently all around the world. We continue by discussing the plant and its different forms in various regions and how it transforms to a delicious cup of joe. There will be a field trip to a local roaster to view the process of how the berry becomes a bean. All the different ways of brewing coffee will be discussed. Students will get to vote on the best coffees by having having a sampling taste test. The nutritional science of coffee will also be covered and the myths behind caffeine revealed. Coffee will also be discussed outside the cafes as we uncover the human rights surrounding coffee farms. There are many uses for coffee outside drinking it and we will share our tricks of the trade. Lastly we will look at coffee in a global context as we try to grasp its play in the world as a whole by looking at monopoly corporations in relation to Ma and Pa coffee shops.	
Nutritional Science and Toxicology	Cooking Healthy on a Budget (NuScTX 198)			Spring 2016	Undergraduate	NuScTx 198: Cooking Health on a Budget will teach students like yourself how to prepare and cook healthy foods while on a tight budget	
Plant and Microbial Biology	Exploring the UC Botanical Garden		Facilitator: Hannah Miller Sponsor Faculty: Chelsea Specht	Spring 2014	Undergraduate	The goal of this course is not to grill you on your understanding of course materials or the regurgitation of facts; rather, this course aims to combine all aspects of participation to lead you to a more fulfilling relationship with the UC Botanical Garden (UCBG) and all that it has to offer. At the end of this course, you will be able to confidently lead someone on a tour around the garden, learn of all the ways you can utilize the garden, be more familiar with California native plants, and be able to recognize the costs and benefits of having such a resource at Cal. All activities and projects are equally important to the overall experience, and we guarantee that you will enjoy doing them!	

DeCal Courses

Department	Course Name	Course Number	Current Instructor	Most Recent Semester Taught	Graduate/ Undergraduate	Course Description	Prerequisites
Public Health	Health Advocacy DeCal		John Balmes	Fall 2016	Undergraduate	<p>assisting low-income populations navigate through various social services including public benefits, employment, housing, legal aid, and food access through Help Desks in hospitals and clinics around the Bay Area. The course will be comprised of students and guest speaker facilitated lectures, discussions, documentaries and activities to reinforce course content. The first half of the class will be a lecture regarding the week's topic, ranging from food access, public benefits, housing and more. The second half of the class will teach how to specifically assist a patient with these issues. We will go into depth on how to navigate community resources and how to accurately convey that information to patients, while becoming educated about various public benefits applications. A final evaluation will be held at the end of the class that will challenge students' real-life motivation counseling skills and bedside manner in a simulation of what volunteers may encounter at Highland Hospital, Fairmont Hospital, or Hayward Wellness Center. During the DeCal, students will have the option to apply to be a Health Advocate of Alameda Health System at a much higher baseline of knowledge. Students who</p>	