

**Sustainability Courses
and
Courses That Include Sustainability
at California State University Channel Islands**

SUSTAINABILITY COURSES

Course #	Title	Description
ANTH 365	Natural History & Resource Management of the California Channel Islands (New Class) (CL ESRM 365)	Examines the natural and cultural history of the California Channel Islands. Students learn to identify the current threats and future management needs to preserve the environment of the islands.
BIOL 490	Special Topic- Sustainable Agriculture	Specific focus on sustainable agriculture including techniques and implications.
CHEM 101	Chemistry and the Environment	Relates fundamentals of chemistry to contemporary environmental issues. Applies scientific principles to environmental problems concerning energy, air quality, and waste management.
CHEM 301	Environmental Chemistry- Atmosphere and Climate	The focus is the fundamental natural chemical process of the atmosphere, as well as the anthropogenic effects on this system. These include climate change and other current topics of environmental interest and the science behind the process.
CHEM 302	Environmental Chemistry- Soil and Water	Examines the environmental chemistry of the geosphere and the hydrosphere. Natural and anthropogenic effects on the environment in these systems, including effects on living organisms, hazardous waste and its disposal, and measures to alleviate and prevent environmental problems.
CHEM 344	Energy and Society	Survey of the physical, chemical, and engineering principles involved in the production of energy from current and potential sources and the economic, environmental, and political issues surrounding energy production. The course will also examine factors that influence worldwide energy policy.
COMM 443	Environmental Communication (CL ESRM 443)	Students analyze and engage in debates about local, national and global environmental disputes. Topics include analysis of risk, community dialogue and strategic environmental messages.
COMM 450	Environmental Conflict Resolution (CL ESRM 450, POLS 450)	Provides practical experience in negotiation and mediation techniques within the context of complex environmental and public policy disputes. Topics include analysis of risk, community dialogue and strategic environmental messages.
COMM 490	Special Topics	Special topics that combine communications with sustainability.
COMM 492	Internship Seminar	Internship with sustainability groups. Combines communication with sustainability.
COMM 494	Independent Study	Selected projects combine communications with environmental studies and sustainability.
COMM 496	Environmental Film and Speaker Series (CL ESRM 496)	Uses current and classic environmental films and documentaries to address current environmental issues. Brings such guest speakers as authors, professors, community activists, environmentalists, non- and for-profit business representatives, and government officials to present on specialized subjects including renewable energy, green business, environmental justice, green city planning and sustainable food systems.

COMM 499	Capstone Project	Selected topics combine communications with environmental studies and sustainability.
ENGL 338	Science and Conscience (CL PHYS 338)	This course examines various ethical issues within the sciences using case studies. The scientific, environmental, historical and social aspects of each case study will be examined from different perspectives. Students will learn scientific concepts which will facilitate an informed understanding of the ethical issues involved.
ESRM 100	Intro to Environmental Science and Resource Management	This course covers a broad spectrum of environmental science topics including: biogeochemical cycles, biological diversity, world food supply, effects of agricultural production on the environment, energy, water and air environments, and societies' impacts on the environment. Current environmental issues such as loss of biological diversity, global climate change, ozone depletion, and natural resource management will be discussed.
ESRM 205	Principles of Sustainability	Presents and analyzes the fundamental principles, methods, and procedures concerning sustainability. Topics include the history of the sustainability movement, underlying causes for the depletion of natural resources, and current thinking on the need to consider environmental sustainability in organizational strategic planning.
ESRM 329	Environmental Law and Policy	Introduces the fundamental concepts of environmental law and policy and familiarize students with the various types of legal mechanisms used to protect the environment.
ESRM 340	Politics and the Environment (CL POLS 340)	Exploration of environmental politics in both the international and domestic contexts.
ESRM 342	Environmental History (CL HIST 342)	Examines the historical interaction between humans and their environment. Special attention will be paid to the transformations of environments in the Americas and Europe.
ESRM 350	Ecological Restoration Design and Construction	Introduction to environmental engineering. Students will participate the planning and construction of ecological restoration projects in Santa Barbara, Ventura, and/or Los Angeles Counties. Particular projects will expose students to construction procedures and techniques central to the restoration of riparian, wetland, and terrestrial communities.
ESRM 352	Theory and Practice of Ecological Restoration	Introduces the theory and practice of modern ecological restoration
ESRM 365	Natural History & Resource Management of the California Channel Islands (New Class) (CL ANTH 365)	Examines the natural and cultural history of the California Channel Islands. Students learn to identify the current threats and future management needs to preserve the environment of the islands.
ESRM 410	Environmental Impact Assessment	Introduces students to methods and procedures designed to assess and minimize human impacts on natural systems.
ESRM 450	Environmental Conflict Resolution (CL COMM 450, POLS 450)	Provides practical experience in negotiation and mediation techniques within the context of complex environmental and public policy disputes.
ESRM 462	Coastal and Marine Resource Management	Provides an introduction to marine provinces, physical and biological oceanography, threats to the marine environment across various temporal and spatial scales and various policies and programs to improve resource management.
ESRM 463	Water Resource Management	Water management principles focusing on surface and ground water hydrology; water conservation, watershed development; water quality measurement and monitoring; water and wildlife/fisheries; and water conflicts.
ESRM 464	Land Use Planning and Open Space Management	Examines various approaches to land use planning at the municipal, state, national, and international level focusing on the role of land use planning in managing open space and protected area lands within and adjacent to urban areas.

ESRM 483	Issues in Global Resource Management	Selected issues in global resource management. Topics may include climate change, ocean management, desertification, air pollution, ozone depletion, patterns of consumption, water pollution, water allocation, international policy or legislative instruments, or other topics as appropriate.
ESRM 484	Climate Change and Adaptation Planning	Explores climate change science and its criticisms, climate change scenarios, attribution debate, expected natural and human impacts and vulnerabilities, mitigation, adaption, and geoengineering. Focuses on adaption planning and practice for governments and organizations.
ESRM 490	Special Topics	In-depth analysis of current topics in environmental science and resource management. Selected topics can be focused on various aspects of sustainability.
ESRM 491	Capstone Preparation	Research and develop a proposal for an ESRM project. Selected topics can be focused on various aspects of sustainability.
ESRM 492	Service Learning/Internship	Individual internship through service learning. Internships and projects include activities with sustainability focused organizations or engagement in environmental /sustainability projects.
ESRM 494	Independent Research	Selected topic can be focused on various aspects of sustainability.
ESRM 496	Environmental Film and Speaker Series (CL COMM 496)	Uses current and classic environmental films and documentaries to address current environmental issues. Brings such guest speakers as authors, professors, community activists, environmentalists, non- and for-profit business representatives, and government officials to present on specialized subjects including renewable energy, green business, environmental justice, green city planning and sustainable food systems.
ESRM 499	Capstone	This course consists of an interdisciplinary evaluation of the physical, biological, social, economic, and legal dimensions of environmental decision-making. The instructor will select from Southern California ecosystems - and decisions with associated environmental impacts – for evaluation and analysis. Topics include decisions to reduce, control, or treat surface water run-off, establishing or changing the management of marine protected areas, dredging in harbors, and permits for coastal development. Students will provide results to appropriate national, state, or local agencies for consideration and deliberation in administrative decisions.
FJS 340	Exploring Freedom and Justice	Starting from philosophical understandings of identity, community, and democracy the course focuses on themes such as slavery and emancipation; environmental justice; migration, exile, and diaspora; violence and reconciliation. Using an interdisciplinary lens that engages fields as wide-ranging as economics and literature, students will engage in trans-historical, cross-cultural exploration of freedom and justice and the various ways different peoples have attempted to put them into practice. Students will engage tools to analyze the relationship between these concepts and the structure of identity and its material effects.
HIST 342	Environmental History (CL ESRM 342)	Examines the historical interaction between humans and their environment. Special attention will be paid to the transformations of environments in the Americas and Europe.

PHYS 338	Science and Conscience (CL ENGL 338)	This course examines various ethical issues within the sciences using case studies. The scientific, environmental, historical and social aspects of each case study will be examined from different perspectives. Students will learn scientific concepts which will facilitate an informed understanding of the ethical issues involved.
PHYS 344	Energy and Society (CL CHEM 344)	Survey of the physical, chemical, and engineering principles involved in the production of energy from current and potential sources and the economic, environmental, and political issues surrounding energy production. The course will also examine factors that influence worldwide energy policy.
POLS 340	Politics and the Environment (CL ESRM 340)	Exploration of environmental politics in both the international and domestic contexts
POLS 345	Science and Public Policy (CL BIOL 345)	Examines the relationship between science, politics, and public policy and prepares students to make informed decisions concerning the societal implications of many rapidly advancing avenues of scientific research.
POLS 450	Environmental Conflict Resolution (CL COMM 450, ESRM 450)	Provides practical experience in negotiation and mediation techniques within the context of complex environmental and public policy disputes.
UNIV 250	Learn & Serve: Sustainability	Examining ideas and perspectives in a complex world, this sophomore seminar highlights interdisciplinary connections in scholarship and ways of knowing and fosters in students their development as self-reflective, culturally aware, and responsive community participants. Students gain hands-on experience, knowledge, and skills about local communities and community organizations and learn how different academic disciplines apply to real world problems. Requires community service work, in addition to class time, during the semester. Specific sustainability content and community-based projects will vary from semester to semester.

COURSES THAT INCLUDE SUSTAINABILITY

ANTH 105	Intro to Archaeology	A survey of the history and goals of archaeology, with an emphasis on methods of data collection, dating, and interpretation. Data can be sustainability related.
ANTH 310	World Prehistory	Traces the relationship between the physical geography and the development of ancient civilizations in Pre-Columbian America, Africa, Asia, and Europe, beginning with the post-glacial period and ending with the rise of feudalism in Europe and Japan and including change from hunting and gathering groups to sedentary agriculturalists and pastoralists giving rise to later complex social organizations.
ANTH 323	Native Californians	Examines the development of Native American peoples and cultures in California as they adapted to diverse environments. The environmental history of the last glacial and postglacial periods will be examined to provide a backdrop for human history. Using archaeological, historical, and ethnographic sources, the culture history of California's Native Americans will be traced from antiquity to the 1850's. The impact of Spanish exploration, colonization, and the mission system will be traced from the perspectives of both the Native Americans and their colonizers.
ANTH 332	Human Ecology (CL ESRM 332)	This human ecology course places humans into the environment in historical and global contexts. Discusses systems theory as it applies to human adaptation to the environment. Studies the relations among political power, ideology, and resources, integrating concepts from ecology with those from social sciences. Theories and forecasts of human population growth and migration among regions and cultures. Social and environmental impacts of population and age distribution. Natural resource constraints on growth. Topics from land development, resource planning, environmental quality, politics, economic growth, conflicts and wars.
ANTH 445	The Seacoast through Time	Places the coastal experience in a broad temporal perspective, envisioning the seacoast as a dynamic interface between the marine and terrestrial environments that have provided humans access to a variety of opportunities related to: resource exploitation, transportation, colonization, cultural interaction, trade, conflict, and inspiration. The course examines the multidirectional ways that humans and the ocean interact.
ART 101	What is Art?	Introductory art appreciation course that examines art and its meanings and values. Students learn to analyze and interpret art from diverse cultures and artistic traditions. Selected topics include various aspects of sustainability.
ART 102	Multicultural Children's Art	Hands-on creation of artistic projects emphasize the importance of art in the child's development and the understanding of multicultural art traditions in subject matter, materials and processes. Historical contexts and indigenous aesthetics are investigated as they relate to the development of primary skills and appreciation for art and the creative process. Selected topics include various aspects of sustainability
ART 311	Three-Dimensional Art: Sculpture Media and Techniques	Studio projects explore media and methodologies in sculpture, ceramics and other three-dimensional art forms. Assignments emphasize the integration of traditional art materials and techniques with related digital art technologies in the creation of three-dimensional art projects. Includes examination of sustainable materials and methods.

ART 321	Three-Dimensional Art: Sculpture Theory and Process	Studio topics explore theoretical approaches in the development of visual continuity and technical competency working in sculpture, ceramics and related art processes. At this phase of study, projects focus on the integration of artistic concept, technique and proficiency in the use of three-dimensional media in the creation of individual works of art. Includes examination of sustainable materials and methods.
ART 330	Critical Thinking in a Visual World	A critical look at subjective responses and objective reasoning in relation to works of art, architecture, and visual and material culture. Explores the rhetorical power of objects, sites, and images in the structuring of historical and contemporary life. Comparative studies address such topics as religious and cultural symbolism, logos and branding, the creation of private and civic spaces, and intersections of art and science, historically and in the contemporary world. Selected topics include various aspects of sustainability.
ART 331	Art, Society, and Mass Media (CL COMM 331)	The study of synergetic relationships between visual art and human communication dating back to the roots of civilization. Comparative studies in art and communication link ancient traditions to the development of contemporary mass media including print, photography, film, television and the internet. Selected topics include various aspects of sustainability.
ART 382	Art for Social Media	A studio activities class involving the production of artwork for social media and evolving digital formats. Concept development, visual design, and motion graphics will be investigated in the production of artwork expressly for applications involving online networks and mobile communication devices. Selected topics include various aspects of sustainability.
ART 390	Screen Printing	Explores the materials, methods, and history of screen printing and serigraphy. Projects may address poster design, fashion and apparel, environmental signage, and a full range of printing surfaces. Emphasis is placed on both traditional and digital techniques, as well as applications in graphic design and fine art settings. Includes examination of sustainable materials and methods.
ART 451	Diversity in the Visual Arts	This course will explore the meaning of diversity in the visual arts. The cross-cultural and chronological examples will address stylistic and conceptual changes within the specificity of various traditions as well as in connection with the global artistic arena. Selected topics include various aspects of sustainability.
ART 489	Art Seminar	Students interact with guest speakers, visiting artists, and industry professionals in a seminar environment. This course also affords students the opportunity to assess their training and summarize artistic achievements through group and individual projects that help prepare them for a variety of careers in the arts. Selected topics can include various aspects of sustainability.
ART 490	Special Topics in Art	Special topics explore a variety of themes investigating the relationships of art and artists to aspects of social commentary, multiculturalism, experimental genres, commerce, first amendment rights and the role of art in a global society. Selected topics can include various aspects of sustainability.
ART 499	Art Capstone Project	A culminating interdisciplinary experience in which students from various Art disciplines work in groups with fellow artists, non-art majors and community members on projects specifically designed to meet a common goal. Activities supervised by sponsoring faculty are executed on campus and/or on-site in conjunction with community organizations or businesses. Selected topics can include various aspects of sustainability.

BIOL 301	Microbiology	An introduction to the structure, function and diversity of microorganisms. Explores topics including microbial identification, diversity, metabolism, pathology, microbial ecology, and the role of microbes in human society.
BIOL 303	Evolutionary Biology	This course will examine principles of biological evolution. Topics include evolutionary genetics, adaptation and natural selection, the fossil record, speciation and macroevolution.
BIOL 312	Marine Biology	Overview of the complexity of marine life including marine plants and animals and the processes that underlie their distribution and abundance in open oceans, coastal regions, estuaries and wetlands. Topics included diverse interactions of organisms in the intertidal zone, over the continental shelves and in the open oceans. Field trips to local marine environments will be taken.
BIOL 313	Conservation Biology (CL ESRM 313)	This course explores issues surrounding the conservation of biodiversity. Topics to be covered include: species-, population-, and ecosystem-level issues, biodiversity, extinction, sustained yield, exotic species, and reserve design. Management implications and the ecology of issues are integrated throughout the course.
BIOL 326	Scientific and Professional Ethics (CL MGT 326)	Discussion of ethical issues and societal challenges derived from scientific research and professional activities. Examines the sources, fundamental principles, and applications of ethical behavior; the relationship between personal ethics and social responsibility of organizations; and the stakeholder management concept. Applies ethical principles to different types of organizations: business, non-profits, government, health care, science/technology, and other professional groups.
BIOL 335	The Biosphere	The biosphere, the region of the planet where life exists, extends up into the atmosphere as well as down into the deepest ocean trenches. This course will examine the origin, workings, and human influence on earth's biosphere. Topics include evolution of life on earth, atmosphere and climate changes, earth's resources and human impacts.
BIOL 435	Ethnobotany	Ethnobotany is an interdisciplinary area that allows students to integrate science and culture as a way of understanding human reliance on plants and the environment. The course combines the study of the interaction of people and plants with a broad survey of the diversity of plants described both scientifically and culturally.
BIOL 342	The Zoo: Conservation, Education and Recreation (CL ECON 342, EDUC 342)	An interdisciplinary study of zoos and zoological gardens from scientific, managerial, business, recreational and educational perspectives. Analyzes how these perspectives are linked within zoo practices. The course will include an in-depth case study of a local zoo and the role of zoos in conserving species.
BIOL 345	Science and Public Policy (CL POLS 345)	Examines the relationship between science, politics, and public policy and prepares students to make informed decisions concerning the societal implications of many rapidly advancing avenues of scientific research.
BIOL 432	Principles of Epidemiology and Environmental Health	Distribution and dynamics of human health problems and principles and procedures used to determine circumstances under which disease occurs or health prevails and to aid in managing and planning health and environmental systems. The broadened scope of epidemiology is examined through case studies and community and environmental health approach.
BIOL 433	Ecology and the Environment	Ecological characteristics of natural ecosystems and basic effects of human society upon those systems. Plant and animal distribution patterns in relation to past and present physical and biotic factors. Issues of resource management, population, food production, global environmental problems will also be emphasized to explore future directions. Field trips to local ecosystems will be taken.

BIOL 453	Methods in Population and Community Ecology	Discusses the mechanisms governing population dynamics and community structure. Mathematical models for population growth, predator-prey interactions, competition, island biogeography, and food webs will be explored. Computer labs will emphasize the analysis of ecological datasets.
BIOL 492	Internship	Supervised work and study in work situations involving biological research and technical skills. May involve service learning. All students are required to attend the Biology Program Senior Capstone Colloquium to present their projects. Selected topics include various aspects of sustainability.
BIOL 494	Independent Research	Laboratory and/or library research that may involve service learning in selected areas of biology conducted under the direction of a faculty member. All students are required to attend the Biology Program Senior Capstone Colloquium to present their projects. Selected topics include various aspects of sustainability.
BIOL 497	Directed Study	Reading and library research that may involve service learning in selected areas of biology conducted under the direction of a faculty member. All students are required to attend the Biology Program Senior Capstone Colloquium to present their projects. Selected topics include various aspects of sustainability.
BIOL 499	Senior Capstone in Biology	Integration of previous coursework, knowledge and skills as they apply to specific topics in Biology and the impact of biological science on society. Emphasis will be placed on analysis of scientific literature, problem solving and oral and written communication skills. Selected topics include various aspects of sustainability.
BUS 203	Into to Social Business (CL ECON 203, SOC 203)	Interdisciplinary overview of Social Business models and their application to social, economic, technological, cultural, political and environmental issues both locally and globally. Introduction to the finance and planning of Social Businesses, as well as comparisons to traditional and other alternative business models
BUS 301	Social Business Planning (CL ECON 301, SOC 301)	Addresses the major issues confronted when planning a social business: identification, diagnosis and measurement of social problem, elements of a social business plan including all types of resource flows, plausible forecasting about them, tax issues, and legal issues. Students will interact with an existing social business and research its business plan.
BUS 336	Social Entrepreneurship (CL SOC 336)	Social entrepreneurship is about creating and leading organizations that strive to advance social change. Draws from both theory and practice to explore important trends in the private and social sectors, which are creating space for innovation and opportunities for individuals with business skills to drive positive change. Incorporates case studies, exercises, field trips, group presentations, and a semester-long service project.
BUS 339	Business in China: Heritage and Change (CL HIST 339)	Examines from a broad historical perspective a variety of institutions and modernization processes of the Chinese financial market, economic environment, and business practices.
BUS 342	The Zoo: Conservation, Education and Recreation (CL BIOL 342, ECON 342, EDUC 342)	An interdisciplinary study of zoos and zoological gardens from scientific, managerial, business, recreational and educational perspectives. Analyzes how these perspectives are linked within zoo practices. The course will include an in-depth case study of a local zoo and the role of zoos in conserving species.
BUS 448	Globalization and Development (CL ECON 448, SOC 448)	Examines empirical and theoretical issues of globalization from a sociological perspective, to understanding how the forces of globalization affect economic, political and cultural systems of both developed and developing nations.

CHEM 100	Chemistry and Society	An introduction to the basic principles of chemistry and a consideration of the benefits and problems arising from applications of chemistry. Discussions of foods and food additives, drugs, plastics and other materials of everyday life, fuel sources, the atmosphere, and fresh water.
CHEM 250/251	Quantitative Analysis	An examination of analytical chemistry theory and techniques involved in the quantification of inorganic, organic, and biological species from samples. Emphasis on gravimetric, volumetric, and separation techniques, as well as data analysis and statistics. Examine environmental, biological, and medical applications of the analysis techniques.
CHEM 494	Independent Research	Provides student credit for independent laboratory research. Selected topics include various aspects of sustainability.
COMM 331	Art, Society, and Mass Media (CL ART 331)	The study of synergistic relationships between visual art and human communication dating back to the roots of civilization. Comparative studies in art and communication link ancient traditions to the development of contemporary mass media including print, photography, film, television and the internet. Selected topics include various aspects of sustainability.
COMM 343	Health Issues in the Latino/a Community (CL CHS 343, NRS 343)	Examines the health issues affecting the Latina/o community and considers interventions, public health policies, and health promotion programs, used to improve the health status of the Latina/o community. Includes a focus on environmental health issues.
COMM 441	Health Communication (NRS 441)	Explores the evolution of health as a major topic in communication studies. Focuses on conversations between health practitioners and patients as well as public health campaigns, including environmental health issues.
COMM 443	Environmental Communication (CL ESRM 443)	Students will analyze and engage in debates about local, national and global environmental disputes. Topics include analysis of risk, community dialogue and strategic environmental messages.
COMP 447	Societal Issues in Computing	Surveys the role of the digital computer in modern society. Topics include: dangers of the misuse of computers, privacy, copyright, computer crime, legal and social issues, as well as the ethical and appropriate use of computers. Selected topics include various aspects of sustainability.
CHS 331	Transborder Perspectives in Chicana/o Studies	Focuses on the major theoretical concepts in transborder studies as they apply to Chicana/o studies in the areas of culture and cultural production, economics, gender issues, health, history, and migration. Selected topics include various aspects of sustainability including environment health and justice.
CHS 343	Health Issues in the Latino/a Community (CL NRS 343, COMM 343)	Examines the health issues affecting the Latina/o community and considers interventions, public health policies, and health promotion programs, used to improve the health status of the Latina/o community. Includes a focus on environmental health issues.
CHS 353	Chicana/o Latina/o Literature (CL ENGL 353)	Study of the literature written by Chicana/o and Latina/o authors in relation to relevant cultural, aesthetic, historical and sociopolitical contexts. Selected topics include various aspects of sustainability.
CHS 425	Contemporary Immigration Issues (CL SOC 425)	Cross disciplinary examination of contemporary immigration and citizenship in the United States in comparison with other countries. Topics include various aspects of environmental health and justice.
ECON 203	Intro to Social Business (CL BUS 203, SOC 203)	Interdisciplinary overview of Social Business models and their application to social, economic, technological, cultural, political and environmental issues both locally and globally. Introduction to the finance and planning of Social Businesses, as well as comparisons to traditional and other alternative business models.

ECON 301	Social Business Planning (CL BUS 301, SOC 301)	Addresses the major issues confronted when planning a social business: identification, diagnosis and measurement of social problem, elements of a social business plan including all types of resource flows, plausible forecasting about them, tax issues, and legal issues. Students will interact with an existing social business and research its business plan.
ECON 342	The Zoo: Conservation, Education and Recreation (CL BIOL342, BUS 342, EDUC 342)	An interdisciplinary study of zoos and zoological gardens from scientific, managerial, business, recreational and educational perspectives. Analyzes how these perspectives are linked within zoo practices. The course will include an in-depth case study of a local zoo and the role of zoos in conserving species.
ECON 362	Environmental Economics	Economic analysis of environmental problems and policy. Private (market) and public (government) solutions to the environmental problems are examined.
ECON 448	Globalization and Development (CL SOC 448, BUS 448)	Examines empirical and theoretical issues of globalization from a sociological perspective, to understanding how the forces of globalization affect economic, political and cultural systems of both developed and developing nations.
EDMS 529 *	EDMS 529 – Science, Health and Phys Ed	Study of the application of recommended methods for teaching physical, life and earth science, health and physical education to students (K-8) based on research and theory. Students reflect upon their personal development and abilities to integrate theory and practice in science, health and physical education with other subject areas. Needs of English Language Learners and exceptional children, technology for teaching and learning are integrated.
EDSS 532 *	Teaching Science in Middle School	A study of content, methodology, materials and current research in middle school science teaching. Focuses on developing science process skills in middle school students. Emphasizes reflective practice based on California Teacher Performance Expectations and the use and alignment of curricula to the Academic Content Standards for California Public Schools. Includes an emphasis on teaching in multicultural, multilingual and inclusive classrooms.
EDSS 542 *	Teaching Science in High School	A study of the content, methodology, materials and current research in teaching high school science courses. Focuses on methods, curriculum design, literacy and technology use specific to teaching science courses in grades 9-12. Emphasizes reflective practice based on California teacher performance expectations and the use and alignment of curricula to the Academic Content Standards for California Public Schools and the next generation science standards. Emphasizes teaching in multicultural, multilingual and inclusive classrooms.
EDUC 342	The Zoo: Conservation, Education and Recreation (CL BIOL 342, BUS 342, ECON 342)	An interdisciplinary study of zoos and zoological gardens from scientific, managerial, business, recreational and educational perspectives. Analyzes how these perspectives are linked within zoo practices. The course will include an in-depth case study of a local zoo and the role of zoos in conserving species.
ENGL 105	Composition and Rhetoric I	Instruction and practice in writing university-level expository and persuasive prose. The subject matter of the course will be thematic and variable. The focus of the course is the development of proficiency in conceptualizing, analyzing and writing academic papers. Substantial writing is required. This course may be linked with another lower division course, in which case the student will enroll in both courses. Topics can be sustainability related. Selected topics include various aspects of sustainability.

ENGL 107	Advanced Composition and Rhetoric	An intensive, one-semester writing course that emphasizes research as a heuristic for learning, writing as an intellectual dialogue with the authorities represented in the evidence found, and which engages students in judging the merit and appropriateness of discovered evidence. A substantial amount of writing is required. Selected topics include various aspects of sustainability.
ENGL 210	Themes and theories in World Literature	A survey of world literature and theoretical perspectives, focusing largely on texts by non-western authors, organized around one or more themes. Texts studied are primarily written by authors from the following areas: Asia, South Asia, the Middle East, Africa, and Latin America. Selected topics include various aspects of sustainability and the environment.
ENGL 325	Major Non-Western Writers	A concentrated study of selected non- Western authors. Authors selected change from term to term; therefore, students may take the course for credit more than once. Selected topics include various aspects of sustainability and the environment.
ENGL 333	Multicultural drama and Theatre (CL PATH 332)	In this course we will read plays written by Native Americans, Hispanic Americans, Asian Americans, African Americans and others. This course is regional in organization rather than chronological, and is organized around one or more themes. Selected topics include various aspects of sustainability and the environment.
ENGL 337	Literature of the Environment	Involves the student in many forms of dialogue on issues pertinent to humanity's relationship with Earth. By reading works by writers from diverse fields and by writing in response, the student will gain a better understanding of our planet and its needs. Emphasis will be placed on writing in modes appropriate to the interdisciplinary field of Environmental Science and Resource Management.
ENGL 353	Chicano/a Literature (CL CHS 353)	Study of the literature written by Chicana/o and Latina/o authors in relation to relevant cultural, aesthetic, historical and sociopolitical contexts.
ENGL 430	Traditions and Transformations (CL HIST 430)	Bringing literature and history together, this course exposes students to a diverse range of work in art, literature, films, and history. It cultivates the students' intellectual understanding of the topic from both a cross-disciplinary and a cross-cultural perspective. It emphasizes reading, writing, analytical skills, and communication skills. Selected topics include various aspects of sustainability.
ENGL 433	Intro to LGBT Studies (CL GEND 433)	Introduction to the field of gay/lesbian/ bisexual/transgender studies through the reading of literature and theory.
ENGL 490	Special Topics	Concentrated study of selected authors or topics. Authors and/or topics change from term to term; therefore, students may take the course for credit more than once. Selected topics include various aspects of sustainability.
ENGL 494	Independent Study/Senior Research	Students may do an independent study to further coursework begun in other courses, obtain an internship which utilizes knowledge gained thus far, or do research in preparation for the senior project. Selected topics include various aspects of sustainability.
ESRM 105	Environmental Issues in Geography (CL GEOG 105)	Introduction to basic concepts in geography and related environmental issues. Examines environmental impact on human affairs and human impact on the environment. Spatial awareness including cartographic knowledge, skills with global positioning systems (GPS) as well as hands-on experience using Geographic Information Systems (GIS) is emphasized
ESRM 200	Principles of Resource Management, Conservation and Stewardship	Students will work with the National Park Service, U.S. Geological Survey or other agencies on related resource projects.

ESRM 313	Conservation Biology (CL BIOL 313)	This course explores issues surrounding the conservation of biodiversity. Topics to be covered include: species-, population-, and ecosystem-level issues, biodiversity, extinction, sustained yield, exotic species, and reserve design. Management implications and the ecology of issues are integrated throughout the course.
ESRM 328	Intro to Geographic Information Systems	Introduction to fundamental concepts and techniques of geographic information systems, including the collection, manipulation, analysis, interpretation, display, and communication of spatial information for environmental decision making.
ESRM 332	Human Ecology (CL ANTH 332)	This human ecology course places humans into the environment in historical and global contexts. Discusses systems theory as it applies to human adaptation to the environment. Studies the relations among political power, ideology, and resources, integrating concepts from ecology with those from social sciences. Theories and forecasts of human population growth and migration among regions and cultures. Social and environmental impacts of population and age distribution. Natural resource constraints on growth. Topics from land development, resource planning, environmental quality, politics, economic growth, conflicts and wars.
ESRM 341	The National Park (POLS 341)	An interdisciplinary, in-depth study of one or more units of the National Park Service from a variety of perspectives including Political Science, Public Administration, and Environmental Science and Resource Management. The course analyzes how conservation issues and practices, administrative and policy processes and interpretive (educational) programs work within the context of a national public resources agency. Each term this course will focus on one or more park unit in the region.
ESRM 351	Field Methods: Monitoring and Assessment	An interdisciplinary, in-depth study of one or more units of the National Park Service from a variety of perspectives including Political Science, Public Administration, and Environmental Science and Resource Management. The course analyzes how conservation issues and practices, administrative and policy processes and interpretive (educational) programs work within the context of a national public resources agency. Each term this course will focus on one or more park unit in the region.
ESRM 370	Fundamentals of Remotely Piloted Systems	Explores the basics of Unmanned Aerial Vehicles and Remotely Operated Vehicles from a range of perspectives including aero-/hydrodynamics, data collection, legal, cultural, basic programming, and public safety. Students will be exposed to control systems, various vehicle designs, and routine equipment maintenance. Selected topics include various aspects of sustainability and environmental monitoring.
ESRM 371	ESRM 371 - Coastal Monitoring with RPS	Develops student skills in vehicle maneuvering, control systems, safe operations, and effective planning and budgeting. Students will focus on data collection built around data collection activity labs. Classes will typically focus on either aerial or aquatic systems. Selected topics include various aspects of sustainability and environmental monitoring.
ESRM 428	Intermediate Geographic Information Systems	Study of concepts and techniques of geographic systems, with special emphasis on the environmental issues at multiple spatial scales.
ESRM 440	Population Studies (CL SOC 440)	This course focuses on the basic concepts, skills and issues in demography and population studies. It will apply concepts to contemporary population issues such as family demography, urban transition, environmental degradation, and economic development.
ESRM 443	Environmental Communication (CL COMM 443)	Students will analyze and engage in debates about local, national and global environmental disputes. Topics include analysis of risk, community dialogue and strategic environmental messages.

ESRM 482	Issues in Environmental Planning and Resource Management	Selected issues in resource development derived from current resource policy changes, or other emerging topics of interest.
FJS 210	Ethics for a Free World (CL PHIL 210)	Students will explore concepts and practices of ethics, freedom, and justice by comparing how these have been theorized and practiced in relationship to each other across at least two times periods and cultures. Starting from a foundation in philosophy and developing an interdisciplinary lens, this class examines these foundational concepts and practices especially as engaged across the fields of identity and civil rights-based studies (including religious, ethnic, women's, gender, sexuality, and disability studies, etc.). Selected topics include various aspects of sustainability and the environment.
FJS 498	Enacting Freedom and Justice	Engages students in work that reflects upon and extends what they have studied to serve community needs. Produce original intellectual and/or creative work in the service of a designated community on issues related to faculty research or service that enables greater freedom and justice for all.
GEND 433	Intro to LGBT Studies (CL ENGL 433)	Introduction to the field of gay/lesbian/ bisexual/transgender studies through the reading of literature and theory.
GEOG 105	Environmental Issues in Geography (CL ESRM 105)	Introduction to basic concepts in geography and related environmental issues. Examines environmental impact on human affairs and human impact on the environment. Spatial awareness including cartographic knowledge, skills with global positioning systems (GPS) as well as hands-on experience using Geographic Information Systems (GIS) is emphasized
GEOG 201	Cultural and Historical Geography of the World	A geographic study of the world and the basic relationship between the Physical environment including topography, climate, natural vegetation, soils, and drainage patterns etc. and including the cultural aspects (political, social, economic, urban, and rural life etc.) within the major realms or regions of the world, with a detailed study of some selected regions.
GEOL 321	Environmental Geology	Interrelationships between human and natural geologic hazards: tsunami, earthquakes, landslides, subsidence, volcanoes. Explores environmental impact of resource extraction and usage, the importance of understanding the geologic processes and landscape in land use planning, and the means of using geology to minimize conflicts in resource management and disaster preparation.
GLST 200	Intro to Global Studies	An introduction to globalization and its effect on governance, economic success, culture, the environment, and other global issues of human concern.
GLST 435	Global Cities	Introduces students to interdisciplinary issues faced by global cities. Offers a range of transnational topics, including but not limited to historic and contemporary issues of migration, racism and xenophobia, environmental degradation, global culture, movement of capital, and national identity. Specific global cities and related content to be designed by the instructor(s).
HIST 366	Oceans of World History	Discusses the main approaches to world history through the lens of the Earth's three major oceans: Atlantic, Indian, and Pacific. Selected topics include various events, trends and ideas related to the environment.
HIST 430	Tradition and Transformation (CL ENGL 430)	Bringing literature and history together, this course exposes students to a diverse range of work in art, literature, films, and history. It cultivates the students' intellectual understanding of the topic from both a cross-disciplinary and a cross-cultural perspective. It emphasizes reading, writing, analytical skills, and communication skills. Topics and themes may vary under the same title. Selected topics include various aspects of sustainability and the environment.

HLTH 101	Overview of Health Care Industry and Its Delivery	Covers the conceptual basis for the health care industry, the structure of the US health service systems and their functions, operations and service deliveries to populations and individuals. Discusses the issues with the US health care system and other countries' health care systems and the efforts in health care reform.
HLTH 102	Community Health Organizations and Their Functions	Applies a holistic wellness perspective to community health and focuses on community strengths and resilience rather than risks and disease. Topics include community health organizations, models, administration, and their services as well as instruction on the basic principles and practical design and management elements that are needed to create effective community-based health organizations through effective coalitions and partnerships for the purposes of community wellness.
HLTH 300	Nutrition, Exercise and Wellness	Covers fundamental principles of nutrition, human metabolism and exercise physiology and discusses relationship between the necessity and quality of nutrition, muscle movement, exercise, and overall wellness.
HLTH 301	Introduction to Public Health Administration	Examines public health as an organized system, integrating the different areas of study, fields or work, and governmental agencies that facilitate the delivery of public health services on a daily basis. Discusses the essential public health principles in the context of identifying and controlling community health problems, as well as the evaluation of programs; including planning, management, evaluation, and behavior of public and private health care organizations at the local, state, and national levels.
HLTH 304	Aging Policy and Politics (CL POLS 304)	Examines the role of political institutions in policy making related to issues of aging, the political factors that shape policy formulation and implementation, the values and assumptions of different types of policies, and the links between policy and implementation. Analyzes current and pending policies' effects on older adults as well as businesses and institutions that serve them to illustrate how aging policy reflects American politics.
HLTH 322	Health Issues in Education	Survey of school health programs with in-depth study of selected health education curricula and topic areas, including alcohol, environmental influences, tobacco, drugs, communicable diseases and nutrition. Development of strategies and methods for teaching controversial areas.
MATH 202	Biostatistics (CL PSY 202)	Critical reasoning using a quantitative and statistical problem-solving approach to solve real-world problems. Uses probability and statistics to describe and analyze biological data collected from laboratory or field experiments. Course will cover descriptions of sample data, probability and empirical data distributions, sampling techniques, estimation and hypothesis testing, ANOVA, and correlation and regression analysis. Problems analyzed include various aspects of sustainability and environmental issues.
MGT 326	Business and Professional Ethics (CL BIOL 326)	Discussion of ethical issues and societal challenges derived from scientific research and professional activities. Examines the sources, fundamental principles, and applications of ethical behavior; the relationship between personal ethics and social responsibility of organizations; and the stakeholder management concept. Applies ethical principles to different types of organizations: business, non-profits, government, health care, science/ technology, and other professional groups.
NRS 343	Health Issues in the Latino/a Community (CL CHS 343, COMM 343)	Examines the health issues affecting the Latina/o community and considers interventions, public health policies, and health promotion programs, used to improve the health status of the Latina/o community. Includes a focus on environmental health issues.

NRS 348	Healthy Aging (CL PSY 348, SOC 348)	Explores physical, cultural and psychosocial factors influencing health issues during the elderly years of life. Topics include aging stereotypes, cultural and family influences on the elderly, physiology of aging, lifestyles choices associated with healthy aging, and end of life care.
NRS 354	Cultural Competence in Health Care	The study of culturally competent care for students who will work with health care consumers. Assists the student to utilize an inter-cultural competency model (e.g. Campinha-Bacote model) to work with diverse populations with health care needs.
NRS 356	Vulnerable Populations	Assists the learner to evaluate multicultural and psychosocial factors that create vulnerable populations and understand health care issues resulting from vulnerability. Presents concepts of vulnerable populations: health indicators, health determinants, and health disparities. Explores vulnerable populations from global, national, and local perspectives. Implications for research, practice and policy are examined.
NRS 441	Health Communication (CL COMM 441)	Explores the evolution of health as a major topic in communication studies. Focuses on conversations between health practitioners and patients as well as public health campaigns, including environmental health issues.
PATH 333	Multicultural Drama and Theatre (CL ENGL 333)	In this course we will read plays written by Native Americans, Hispanic Americans, Asian Americans, African Americans and others. This course is regional in organization rather than chronological, and is organized around one or more themes. Selected topics include various aspects of sustainability, environment and man's relationship to the natural world.
PHED 208	Intro to Kinesiology	Examines the field of human movement, introduces biomechanics, anatomy, exercise physiology, and motor learning. Basic anatomy, function of the musculoskeletal system, laws of motion, principles of force, equilibrium concepts, and laws governing projectiles will be introduced and applied to various sports activities. The student will develop the ability to analyze skill movements in specific sport activities.
PHYS 103	How Things Work	Introduces the concepts behind everyday objects and experiences. Concentrates on ideas and on familiar scenarios. Designed to excite students' interests in science while conveying a substantial understanding of our everyday world. Selected topics include various aspects of sustainability.
PHYS 106	Applied Physics and Modern Society *	The course provides an introduction to current topics in applied physics in the fields of solid state physics, semiconductors, superconductors and nano-structures. It shows how scientific knowledge, imagination and ingenuity can combine to offer technological solutions to a variety of topical problems. Selected topics include various aspects of sustainability.
POLS 304	Aging Policy and Politics (CL HLTH 304)	Examines the role of political institutions in policy making related to issues of aging, the political factors that shape policy formulation and implementation, the values and assumptions of different types of policies, and the links between policy and implementation. Analyzes current and pending policies' effects on older adults as well as businesses and institutions that serve them to illustrate how aging policy reflects American politics. Selected topics include various aspects of public health, and environmental health
POLS 305	Gender and Politics	Examines the role of women as political actors in the United States. Also explores the impact of public policies on women in America. Selected topics include various aspects of sustainability, including environmental health and justice.
POLS 306	The Politics of Race and Ethnicity	Examines the politics and policy consequences of racial and ethnic identity in the United States. Special attention will be paid to issues of race and politics in contemporary southern California. Selected topics include various aspects of environmental health and justice.

POLS 341	The National Park (CL ESRM 341)	An interdisciplinary, in-depth study of one or more units of the National Park Service from a variety of perspectives including Political Science, Public Administration, and Environmental Science and Resource Management. The course analyzes how conservation issues and practices, administrative and policy processes and interpretive (educational) programs work within the context of a national public resources agency. Each term this course will focus on one or more park unit in the region.
PSY 202	Biostatistics (CL MATH 202)	Critical reasoning using a quantitative and statistical problem-solving approach to solve real-world problems. Uses probability and statistics to describe and analyze biological data collected from laboratory or field experiments. Course will cover descriptions of sample data, probability and empirical data distributions, sampling techniques, estimation and hypothesis testing, ANOVA, and correlation and regression analysis. Problems analyzed include various aspects of sustainability and environmental issues.
PSY 312	Social Psychology	This course is an in-depth survey of the major areas of social psychology. Emphasizes an understanding of the important methods, terms, theories, and findings in the field of social psychology. Selected topics include various aspects of sustainability.
SOC 203	Introduction to Social Business (CL ECON 203, BUS 203)	Interdisciplinary overview of Social Business models and their application to social, economic, technological, cultural, political and environmental issues both locally and globally. Introduction to the finance and planning of Social Businesses, as well as comparisons to traditional and other alternative business models.
SOC 301	Social Business Planning (CL ECON 301, BUS 301)	Addresses the major issues confronted when planning a social business: identification, diagnosis and measurement of social problem, elements of a social business plan including all types of resource flows, plausible forecasting about them, tax issues, and legal issues. Students will interact with an existing social business and research its business plan.
SOC 336	Social Entrepreneurship (CL BUS 336)	Social entrepreneurship is about creating and leading organizations that strive to advance social change. Draws from both theory and practice to explore important trends in the private and social sectors, which are creating space for innovation and opportunities for individuals with business skills to drive positive change. Incorporates case studies, exercises, field trips, group presentations, and a semester-long service project.
SOC 425	Contemporary Immigration Issues (CL CHS 425)	Cross disciplinary examination of contemporary immigration and citizenship in the United States in comparison with other countries. Selected topics include various aspects of environmental health and justice.
SOC 429	Social Change in Spain (CL SPAN 429)	Addresses two aspects of Spanish culture, the tremendous social change during the period known as the transition from the dictatorship of Franco to a modern democratic state, as well as how social change is expressed in a variety of social institutions. Taught in Spanish. Selected topics include various aspects of sustainability and the environment.
SOC 440	Population Studies (CL ESRM 440)	This course focuses on the basic concepts, skills and issues in demography and population studies. It will apply concepts to contemporary population issues such as family demography, urban transition, environmental degradation, and economic development.
SOC 448	Globalization and Development (CL ECON 448, BUS 448)	Examines empirical and theoretical issues of globalization from a sociological perspective, to understanding how the forces of globalization affect economic, political and cultural systems of both developed and developing nations.

SPAN 429	Social Change in Spain (CL SOC 429)	Addresses two aspects of Spanish culture, the tremendous social change during the period known as the transition from the dictatorship of Franco to a modern democratic state, as well as how social change is expressed in a variety of social institutions. Taught in Spanish. Selected topics include various aspects of sustainability and the environment.
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*Indicates Graduate course