UC San Diego Sustainability Course Inventory 2014-2017

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Department	Course #	Units	Level	SC or IC	Course Title	Description
Anthropology	ANAR 118	4	UG	IC	Archaeology of the UCSD Campus	Our campus houses some of the earliest human settlements in North America. This course reviews the archaeology, climate, and environment of the sites and outlines research aimed at understanding the lives of these early peoples.
Anthropology	ANAR 140	4	UG	IC	The Foundation for Social Complexity in the Near East	The time period under consideration encompasses the shift from generalized hunting and gathering through complex hunter-gatherers to large-scale agricultural communities. Affects the enviornment and human interaction.
Anthropology	ANAR 153	4	UG	IC	The Mysterious Maya	The archaeology, anthropology, and history of the Maya civilization, which thrived in Mexico and Central America from 1000 BC, until the Spanish conquest. Includes how the Mayans affected the enviornment and how the enviornment affects the site today.
Anthropology	ANAR 163	4	UG	IC	Evolution of Technology	This course examines their growth across six millennia—complex, largely indeterminate, and marked by irregular spurts of acceleration.
Anthropology	ANAR 182	4	UG	IC	Origins of Agriculture and Sedentism	Varying theoretical models and available archaeological evidence are examined to illuminate the socio-evolutionary transition from nomadic hunter-gathering groups to fully sedentary agricultural societies in the Old and New World. Provides the long chronological record needed for investigating human and social evolution. The theories and methods used in this field are examined.
Anthropology	ANBI 114	4	UG	IC	Methods in Primate Conservation	Primate (and other vertebrate) conservation involves a variety of methods: field (e.g., population and habitat assessment), computer (e.g. population genetic models), and increasingly the web (e.g. interactive GIS and databases). Course takes problem-solving approach to learning some of these methods. Recommended preparation: ANBI 132/BIEB 176. Prerequisites: ANTH 42 or equivalent; upper-division standing.
Anthropology	ANBI 132 (Cross-listed as BIEB 176)	4	UG	SC	Conservation and the Human Predicament	Interdisciplinary discussion of the human predicament, biodiversity crisis, and importance of biological conservation. Examines issues from biological, cultural, historical, economic, social, political, and ethical perspectives emphasizing new approaches and new techniques for safeguarding the future of humans and other biosphere inhabitants.
Anthropology	ANBI 146	4	UG	IC	Stable Isotopes in Ecology	The stable isotopes of carbon, nitrogen, oxygen, and hydrogen in animal tissues, plant tissues, and soils indicate aspects of diet and ecology. The course will introduce students to this approach for reconstructing paleo-diet, paleo-ecology, and paleo-climate.
Anthropology	ANSC 108	4	UG	IC	Tourism and Global Culture	This course examines structures of interaction between tourists and communities they visit. Includes the effects of tourism upon the enviornment.
Anthropology	ANSC 145	4	UG	IC	Indigenous People of North America	This course addresses: 1) Diversity among traditional Native American cultures with respect to social organization, religion, environmental adaptation, subsistence, and reaction to colonial conquest and domination; and, 2) Contemporary social issues including tribal sovereignty, religious freedom, health, education, gambling, and repatriation of artifacts/remains.
Anthropology	ANSC 147	4	UG	SC	Global Health and the Enviornment	Examines interactions of culture, health, and environment.
Anthropology	ANSC 160	4	UG	SC	Nature, Culture, and Enviornmentalism	Course examines theories concerning the relation of nature and culture. Particular attention is paid to explanations of differing ways cultures conceptualize nature.
Anthropology	ANSC 160	4	UG	SC	Nature, Culture and Environmentalism	Course examines theories concerning the relation of nature and culture. Particular attention is paid to explanations of differing ways cultures conceptualize nature. Along with examples from non-western societies, the course examines the western environmental ideas embedded in contemporary environmentalism. [Formerly known as ANGN 160.] Credit not allowed for both ANGN 160 and ANSC 160. Prerequisites: upper-division standing.
Anthropology	ANSC 169	4	UG	IC	Culture and Environment: Research Seminar and Practicum	Examines the role of culture in the way people perceive and interact with the natural environment.

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Anthropology	ANSC 169	4	UG	IC	Culture and Environment: Research Seminar and Practicum	Examines the role of culture in the way people perceive and interact with the natural environment. Combines reading of select anthropological studies with training in ethnographic research methods. Students develop a research project and analyze data. Limit: fifteen students. Prerequisites: upper-division standing or consent of instructor.
Anthropology	ANTH 101	4	UG	IC	Foundations of Social Complexity	Course examines archaeological evidence for three key “tipping points” in the human career: (1) the origins of modern human social behaviors, (2) the beginnings of agriculture and village life, and (3) the emergence of cities and states. Includes the beginning to human interaction with the enviornment.
Anthropology	ANTH 185	4	UG	SC	Middle East Desert Ecology	Examines how cultural systems interact with deserts by examining technology, economic organization, kinship and religion in relation to environmental variables through time.
Anthropology	ANTH 21	4	UG	IC	Race and Racisms	Insights that examine how notions of race and ethnicity structure contemporary societies.
Anthropology	ANTH 23	4	UG	IC	Debating Multiculturalism: Race, Ethnicity, and Class in American Societies	This course focuses on the debate about multiculturalism in American society. It examines the interaction of race, ethnicity, and class, historically and comparatively, and considers the problem of citizenship in relation to the growing polarization of multiple social identities.
Anthropology	ANTH 252	4	G	SC	The Ethnography of Modernity	This seminar focuses on ethnographic representations of modernity, exploring such topics as globalization, mass media, consumerism, gender and modernity, modern religious movements, and theories of modernity. Includes modernity of sustainability and eco-friendliness.
Anthropology	ANTH 87	4	UG	IC	Freshman Seminar	This course explores an intellectual topic with faculty, which can often be the interaction between people and their enviornment.
Bioengineering	BENG 1	1	UG	IC	Introduction to Bioengineering	An introduction to the central topics of bioengineering in a seminar format. The principles of problem definition, team design, engineering inventiveness, information access, engineering standards, communication, ethics, and social responsibility will be emphasized. P/NP grading only.
Bioengineering	BENG 247C (Cross-listed with ECE 247C)	4	G	IC	Bionanotechnology	Topics include: nanosensors and nanodevices for both clinical diagnostics and biowarfare (bioterror) agent detection; nanostructures for drug delivery; nanoarrays and nanodevices; use of nanoanalytical devices and systems; methods and techniques for modification or functionalization of nanoparticles and nanostructures with biological molecules; nanostructural aspects of fuel cells and biofuel cells; potential use of DNA and other biomolecules for computing and ultra-high-density data storage.
Biology	BIBC 140	4	UG	IC	Introduction to Biofuels	Course will provide an overview of the growing field of biofuels by introducing the basics of renewable biofuel production, including the chemistry of biofuels, the biology of important feedstocks, and the biochemical advances for the next generation of biofuels
Biology	BGGN 204	3	G	IC	Topics in Community and Population Ecology	This course teaches a different topic each quarter on the theoretical or conceptual side of community and population ecology. Students will read materials in depth, attend weekly discussions, and explore theories and models with statistical, analytical, and algorithmic tools of the trade. Prerequisite: graduate standing or consent of instructor. (S/U grades only) (Quarter offered varies and course is not offered every year.)
Biology	BGGN 205	2	G	IC	Communicating Science to the Public	Learn effective ways of communicating science to nonscientists. Develop an understanding of how people’s views of science and background knowledge can influence their learning, and develop methods to tailor communication for different audiences. May include communicating about current sustainability efforts and the energy crisis.
Biology	BGGN 213	3	G	IC	Topics in Conservation Biology	Provides in depth coverage of topics in population genetics and ecology, community ecology, biogeography, human ecology, and ecosystem management relevant to conservation biology. Topics vary from year to year and have included pedigree analysis, inbreeding depression, minimum viable population size, problems of overabundance, fragmented populations, key-stone species, in-situ and ex-situ conservation techniques. One two-hour meeting weekly. Prerequisite: graduate standing or consent of instructor.

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Biology	BGRD 220-	1	G	IC	Research Discussion in Advanced Evolutionary Biology	Presentations of new research results and discussions of closely related published reports. All students are expected to report on their own research findings each quarter. Prerequisite: none for graduate students. Undergraduates must be seniors or enrolled in BISP 199.
Biology	BGRD 221	1	G	IC	Research Discussion in Behavioral Ecology	Presentations of new research results and discussions of closely related published reports. All students are expected to report on their own research findings each quarter. Prerequisite: none for graduate students. Undergraduates must be seniors or enrolled in BISP 199.
Biology	BGRD 223	1	G	IC	Research Discussion in Ecology	Presentations of new research results and discussions of closely related published reports. All students are expected to report on their own research findings each quarter. Prerequisite: none for graduate students. Undergraduates must be seniors or enrolled in BISP 199.
Biology	BGRD 224	1	G	IC	Research Discussion in Plant Population Biology	Presentations of new research results and discussions of closely related published reports. All students are expected to report on their own research findings each quarter. Prerequisite: none for graduate students. Undergraduates must be seniors or enrolled in BISP 199.
Biology	BGRD 226	1	G	IC	Research Discussion in Conservation	Presentations of new research results and discussions of closely related published reports. All students are expected to report on their own research findings each quarter. Prerequisite: none for graduate students. Undergraduates must be seniors or enrolled in BISP 199.
Biology	BGSE 200	1	G	IC	Seminar in Biology	Invited speakers from the U.S. and abroad, who are leaders in various aspects of biological research, describe their current research. May include research of the biology of the environment.
Biology	BGSE 203	1	G	IC	Seminar in Population Biology	Invited speakers from the U.S. and abroad, who are leaders in various aspects of biological research, describe their current research. May include research of the biology of the environment.
Biology	BIBC 130	4	UG	IC	Marine Biochemistry	Biochemical mechanisms of adaptation in organisms to the marine environment. Special emphasis will be on the effects of pressure, temperature, salinity, oxygen, and light on the physiology and biochemistry. Prerequisite: BIBC 102 or consent of instructor.
Biology	BICD 120	4	UG	IC	Fundamentals of Plant Biology	An introduction to the biology of plants. Basic principles of plant anatomy, physiology, development, and diversity are covered as well as specialized topics, including plant genetic engineering, plant disease and stress, medicinal plants, plants and the environment, and sustainable agriculture. Prerequisites: BILD 1 and 2.
Biology	BIEB 102	4	UG	IC	Introductory Ecology - Organisms and Habitat	This course emphasizes principles shaping organisms, habitats, and ecosystems. Topics covered include population regulation, physiological ecology, competition, predation, and human exploitation. This will be an empirical look at general principles in ecology and conservation with emphasis on the unique organisms and habitats of California. Prerequisite: BILD 3 or equivalent.
Biology	BIEB 130	4	UG	IC	Marine Conservation Biology	Course integrates principles of ecology and marine biology to examine marine biodiversity loss resulting from over-exploitation, habitat loss, invasion, climate change, and pollution. Course examines consequences of biodiversity loss to marine ecosystems and discusses the efficacy of various management regimes. Conservation problems facing the world's oceans with an emphasis on issues important for coastal California will be discussed.
Biology	BIEB 132	4	UG	IC	Introduction to Marine Biology	Overview of marine organisms and their adaptations to sea life. Selected examples of physiological, behavioral, and evolutionary adaptations in response to the unique challenges of a maritime environment. Prerequisite: BILD 3.
Biology	BIEB 134	4	UG	IC	Introduction to Biological Oceanography	Basis for understanding the ecology of marine communities. The approach is process-oriented, focusing on major functional groups of organisms, their food-web interactions and community responses to environmental forcing, and contemporary issues in human and climate influences. Prerequisite: upper-division standing; BILD 3 is recommended.

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Biology	BIEB 140	4	UG	IC	Biodiversity	An introduction to the patterns of geographic distribution and natural history of plants and animals living in terrestrial and marine ecosystems. We will explore: ecological and evolutionary processes responsible for generating and maintaining biological diversity; and the nature of extinction both in past and present ecosystem. Prerequisite: BILD 3.
Biology	BIEB 143	4	UG	IC	Computer Modeling in Evolution and Ecology	An introduction to computer modeling in evolution and ecology. Includes observation of the enviornment and modelling.

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