

2021-2022: Total graduates- 10,252

Biology BS - 291 Graduates

Degree Learning Outcome (DLO)

DLO 6: Describe how interactions among organisms and their environment influence populations, communities, and ecosystem function

DLO 13 for Emphasis in Biodiversity and Evolution (multicomponent):

Describe a general timeline for the diversification of life on Earth

Explain the structural and reproductive features that distinguish major groups of life (e.g., Prokaryotes versus Eukaryotes; Plants vs. Animals vs. Fungi within the Eukaryotes)

Explain how mutation, migration, selection and genetic drift change allele frequencies within populations, and affect genetic divergence among populations

Explain how nonrandom mating and natural selection change genotype frequencies within populations

Explain the processes that lead to the diversification of lineages at the species level and above

Describe what a species is, and some of the complications surrounding species delimitation

Understand how phylogenetic relationships are reconstructed, and why an evolutionary perspective is important for all aspects of comparative biology

Provide an example of how evolutionary principles can be used to solve human-related problems

DLO 15 for Emphasis in Ecology (Multicomponent):

Describe models for population growth and how density-dependent processes act to regulate populations

Provide examples of how ecological processes affect community structure and biodiversity at a variety of scales

Describe ecosystems as existing of populations of organisms plus physical characteristics, nutrient cycles, energy flow and controls

Provide examples of anthropogenic factors affecting terrestrial, marine, and freshwater organisms, and potential solutions to problems created by human activities.

Environmental Sciences BS - 41 Graduates

This relatively new interdisciplinary degree is in the process of developing a robust set of DLOs that will build an understanding of sustainability from multiple perspectives.

Microbiology BS - 25 Graduates

DLO 4: 4: Explain the variety of ways that organisms interact with their environments and with each other.

Sustainability BA - 71 Graduates

Program Learning Goals (PLG)

PLG 1: Interconnectedness of ecological, economic and social systems – To provide students with a broad knowledge and understanding of a) the interconnectedness of ecological, economic, and social systems; i) environmental issues as they relate to the local, regional, and global sociopolitical and decision-making contexts; ii) how the Earth's systems-ocean, vegetation, soils, climate, water-and human activities interact.

PLG 2: Sustainability practices, policies, and definitions – To provide students with a broad knowledge and understanding of sustainability (including context-specific indicators of progress); i) strategies, practices, and policies for sustainable societies based on the results of scientific research and respect for human cultures; ii) engage students in defining sustainability in its various uses, evaluate international debates about the meaning of this term, and the goals of sustainability movements.

PLG 3: Strategies for administration and policy – To provide students with a broad knowledge and understanding of strategies for effective administration, planning, and policy-making, and collaborative decision-making and governance processes.

PLG 4: Critical thinking, written and verbal communication, analytic and problem solving about sustainability – To develop critical thinking skills, written and verbal communication skills, analytic and problem-solving skills through an interdisciplinary approach to discussing environmental issues and sustainability.

PLG 5: Ethics and moral dimensions of sustainability – To prepare students to a) develop and use ethical perspectives in which humans are seen as embedded in the fabric of an interconnected world; b) acquire the capacity to discern moral dimensions of environmental issues and the critical application of moral concepts and ethical theories to proposed policy solutions; c) develop a normative commitment to sustainability, that is, to the preservation of the health of the human-nature interface.

DLO 1: Examine an issue or topic using sustainability as a lens

DLO 2: Communicate the concept of sustainability both orally and in writing

DLO 3: Demonstrate the ability to understand, evaluate and explain an environmental problem.

DLO 4: Critically analyze a controversial environmental issue

DLO 5: Clearly differentiate between scientific statements and value judgments

DLO 6: Distinguish between sustainable and unsustainable human activities through comparison and taking into account how the earth's systems and human systems interact

DLO 7: Assess a sustainable solution in its social, economic, ethical, and environmental dimensions

DLO 8: Describe the major physical and sociopolitical processes regulating management

DLO 9: Formulate policy that could be applied to a regional or local environmental problem

DLO 10: Describe how cultural histories guide interactions between humans and nature

Urban Studies BA - 16 Graduates

PLG 2: Urban interdependencies – Understand the interrelationships and interdependencies between people and urban environments, with the goal of creating livable, sustainable and just cities

DLO 1: Data collection – Gather quantitative and qualitative data, including maps, planning documents, and other visual and textual representations, to organize information urban environments and their distinctive social, cultural, economic, political and spatial features.

DLO 2: Description – Describe historical and present-day socio-economic and political processes that shape urbanization and urbanism

DLO 3: Spatial patterns – Analyze the spatial organization and morphology of the built and social urban environment

DLO 5: Human activities and environment – Explain how human activities alter cities and the urban environment, historically and at present times

Geography BA/BS - 37 Graduates

PLG 2: Understand the interrelationships and interdependencies between people and the environment, with the goal of creating sustainable futures.

DLO 3: Analyze the spatial organization of people, places, and environments at a variety of scales

DLO 4: Examine the characteristics, distribution, and mobility patterns of human populations on the earth's surface

DLO 5: Explain how human activities have altered the natural world, particularly in terms of resource use and ecosystem health

DLO 6: Interpret the complex relationships between nature and culture/society, especially as these relate to social and environmental sustainability

American Indian Studies BA - 11 Graduates

PLG 20: Indigenous-led ecological sustainability efforts – Evaluate role of global contexts in indigenous-led ecological sustainability efforts

DLO 2: Value Indigenous knowledges and Sustainability – Students will explore and learn the value of indigenous knowledges and modes of ecological and cultural sustainability. They will also be able to compare these American Indian epistemologies with conventional Euro American values toward ecology and culture.

DLO 3: Enact preservation and promotion of cultural heritage – Students will learn skills necessary for preserving and promoting American Indian cultural heritages, languages, and other representations of culture.

DLO 5: Support processes of decolonization – Students will comprehend the various notions of decolonization in the context of American (and global) Indigenous communities both as an academic theory and a matter of socio-political praxis. They will learn the ways in which American Indian communities seek to use indigenous systems of knowledge as guiding principles to organize their communities. Our classes will teach them the models to aid in this process by teaching the best practices and more practical modes of decolonization in contemporary Indian Country so that they can support American Indian communities in this process by being mindful of how they interact with American Indian communities and how to support and value Indigenous knowledge production.

DLO 6: Comprehend global indigeneity – Students will comprehend the emergent global networks of indigenous communities worldwide particularly in the realm of indigenous rights and ecological sustainability, and the shared experiences of Settler Colonialism.

International Security and Conflict Resolution BA - 47 Graduates

DLO 11: Environment and Security Specialization – Identify major global policy developments in addressing environmental challenges (such as major treaties, global organizations); Describe a few substantive and technical themes at stake in particular global environmental concerns, like global warming

DLO 12: Justice in the Global System – Classify a range of commonly accepted international human rights, identify major historical developments, summarize the issues and conflicting worldviews at play in one or more substantive areas of global justice (e.g., economic distribution, humanitarian intervention, etc.)

Environmental Engineering - 45 Graduates

Educational Outcomes (EO)

EO 1: To provide graduates with the technical knowledge and skills required to practice environmental engineering

EO 2 : To provide graduates with an understand of ethical, social, and professional issues face in environmental engineering

Molecular biology- 11

Evolutionary Biology- 2

Systematics Evolutionary Biology 1

Biology students should be able to describe how interactions among organisms and their environment influence populations, communities, and ecosystem function.

Ecology- 11 Graduates

Working at the forefront of ecological science as an academic discipline. Combining research, classroom teaching, and mentoring to prepare our students for employment and contribution in the areas of ecology and environmental biology. Being actively involved in addressing relevant issues in ecology. Making important scientific contributions to the communities we serve.

Anthropology - 36 Graduates

DLO 1 Key Concepts

Students will be able to:

Explain and discuss basic concepts in biological anthropology, socio-cultural anthropology, archaeology, and linguistic anthropology (the four subfields of the discipline), as well as in applied/practicing anthropology.

DLO 2 Theory

Students will be able to:

Discuss contrasting theoretical approaches in biological anthropology, socio-cultural anthropology, archaeology, and linguistic anthropology. Analyze and critique relevant literature in anthropology. Use anthropological theories to critically evaluate concepts, research and social phenomena. Think critically about different ways anthropology can be applied to major issues in contemporary society and the student's own life.

DLO 3 Ethics

Students will be able to:

Describe and explain the ethics principles of anthropological professional associations as they relate to the work and engagement of anthropologists. Students' recognition of ethical responsibilities includes obligations to consultants and the people studied, respecting human diversity, and abiding by the ethical principles of the subfields of the anthropology and in their application.

DLO 4: Methods

Students will be able to:

Explain research methods used by anthropologists, including the collection and analysis of various types of data; use data to construct and communicate coherent arguments.

Geological Sciences - 26

The BA in Geological Sciences degree is designed for students who seek a degree based in the foundational principles of geological and earth sciences. The degree focuses on the application of foundational aspects of geological and earth systems science toward a

variety of disciplines and leverages the socially relevant aspects of the science. The degree includes a broad spectrum of courses that integrates information about the earth and how society makes decisions that affect or are affected by earth systems.

International business - 96

International business draws on courses offered by faculty in the following areas: Accountancy, Africana Studies, **American Indian Studies**, **Anthropology**, Arabic, Art, Asian Studies, Chicana and Chicano Studies, Chinese, Communication, Comparative Literature, Economics, English, European Studies, Finance, French, **Geography**, German, History, Humanities, Italian, Japanese, Korean, Latin American Studies, Linguistics, Management, Management Information Systems, Marketing, **Philosophy**, **Political Science**, Portuguese, Religious Studies, Rhetoric and Writing Studies, Russian, **Sociology**, Spanish, and **Women's Studies**.

Women's Studies -14

Required Major Preparation Course: WMNST 103 - Gendered injustices and resistance from a global perspective. Colonization, environmental justice, gendered violence, migration, militarization, poverty, and travel and tourism. Structural inequalities in consumption, food production, and labor through a feminist lens. Activism and formation of social movements.

Social work - 210

Competency 3: Advance Human Rights and Social, Economic, and Environmental Justice

Social science - 46

The general social science major is a multidisciplinary program, encompassing courses in 12 departments: Africana Studies, American Indian Studies, Anthropology, Chicana and Chicano Studies, Economics, Geography, History, Political Science, Psychology, Religious Studies, Sociology, and Women's Studies. Social Science students learn to analyze and critically examine social, political, cultural, and economic phenomenon by studying human behavior and social processes.

Required courses from Geography Department:

GEOG 101 - Earth's Physical Environment: Earth systems and the global environment to include weather and climate, water, landforms, soils, and ecosystems. Distribution of physical features on Earth's surface and interactions between humans and environment, especially those involving global change.

GEOG 102 - People, Places, and Environments: Introduction to human geography. Global and local issues to include culture, development, migration, urbanization, population

growth, identity, globalization, geopolitics, and environmental change. Field trips may be arranged.

Students choose a specialization from one of the following departments: Anthropology, Economics, Chicano/Chicana Studies, Geography, History, Political Science and Sociology. This major aims to provide students with a broad understanding of Social Science and an appreciation of the interrelatedness of its disciplines

Sociology - 113

Required Preparation for Major Course: SOC 102 Introduction to Social Problems- Contemporary social problems. Topics may include poverty, inequality, unemployment, crime and deviance, population and ecological problems, health, family issues, and the role of ideology and interest groups in the definition of social problems.

Recreation administration- 19

A minimum of 45 upper division units to include

RTM 301 - Service Leadership Development Units: 3

RTM 304 - Leisure and Tourism Units: 3

RTM 404 - Cross-Cultural Perspectives of Tourism Units: 3

RTM 470 - Global Sustainable Tourism Management Units: 3

RTM 477 - Sustainable Tourism Planning Units: 3

RTM 487 - Environmental and Cultural Interpretation Units: 3

RTM 498 - Internship in Recreation and Tourism Management Units: 6 or 12 (12 units)

Health Behavioral Science - 1

The MPH program in Health Promotion and Behavioral Science provides pre- and post-doctoral instruction in behavioral and social sciences. The curriculum examines **socio-ecological** factors responsible for health-related behaviors that lead to morbidity, premature mortality and health disparities. Research and evaluation techniques appropriate for health behavior and community health research are taught. Graduates will be able to design, manage, and evaluate health promotion programs in a variety of settings, including schools, work sites, health care facilities, and community organizations. Emphasis is placed on the study of disease prevention and health promotion in both large populations and small groups. Extensive faculty/student collaboration is employed so that students can apply health behavior change principles in research and practice

Hospitality tourism management - 83

1. Apply theory to explain and articulate the regional national and global systemic frameworks and their impact on the hospitality, recreation and tourism industry.

2. Evaluate information sources to make informed decisions and draw insightful conclusions for hospitality, recreation and tourism organizations.
3. In the context of recreation and tourism, explicate the interconnectivity between humans and their environments.
4. Create new ideas, practices and programs to address the delivery of technical and functional operations to meet organizational goals.
5. Effectively communicate ideas with a focus on context, language, supporting data, and delivery to diverse stakeholders.
6. Analyze the impact of recreation and tourism activities on enhancing individual and community well-being, cultural diversity, and contributing to sustainable development.
7. Practice self-assessment and self-development as a part of lifelong learning.
8. Analyze scientific, political, technical, legal, and ethical dimensions of environmental protection and visitor management.

Public health - 273

1. Demonstrate knowledge of the history and basic competencies in six major domains of public health
2. Specialize in at least one of the public health domains listed above, so that they are marketable for their future careers and educational opportunities;
3. Understand and apply the basic concepts, methods and tools of evidence public health (quantitative and qualitative data: collection, use, and analysis);
4. Understand and apply the basic population health concepts, processes, approaches and interventions to address population-level health concerns;
5. Have a basic working knowledge of the biological influences on health across the life course;
6. Understand the complex interplay between society, behavior, biology and the environment in creating and addressing health disparities;
7. Demonstrate cultural competency and sensitivity in working with any population;
8. Be competent in planning, implementing, assessing and evaluating public health programs;
9. Describe health systems and organizational structures with in the US and be able to make comparisons with health systems across the globe;
10. Describe and understand the basic legal, ethical, economic and regulatory dimensions of health care and health policy;
11. Communicate and appropriate tailor public health messages effectively and efficiently through the use of technical and professional writing, mass media, and both written and oral presentation to diverse audiences;

12. Work efficiently to ethically address public health problems and community needs both independently and in group settings;
13. Work with public health organizations, researchers, and/or communities to achieve public health goals

Interdisciplinary Studies - 355 Graduates

Note that in addition to the 3D courses, there will be additional courses required for graduation, for a total of 18 courses in the entire program. The additional courses are:

1. California Government
2. RWS 280 Academics Reading and Writing
3. RWS 305W Writing in Various Settings
4. Oceans 320 Pacific Oceanography
5. Anthro 349 Roots of Civilisation
6. GS 420 Disability in Society

Kinesiology- Graduates 406

Foods and nutrition- Graduates 125

Athletic training - Graduates 27

Exercise physiology - Graduates 2

Nutritional sciences- Graduates 7

Physical therapy - Graduates 38

School of Exercise and Nutritional Sciences

1. Use biological, behavioral, psychosocial, and ecological theory-based perspectives to design and evaluate behavior change interventions in exercise, nutrition, and rehabilitation sciences.

Aerospace engineering - 78

2. An ability to apply the engineering design process to an aerospace system, component, or procedure to produce solutions that meet specified needs of performance, safety, environmental, economic, and other factors as appropriate to the discipline.

5. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments which consider the impact of engineering solutions in global, economic, environmental, and societal contexts.

7. An ability to function effectively as a member or leader of a team that establishes goals, plans tasks, meets deadlines, and creates a collaborative and inclusive environment.

Electrical engineering - 125

An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.

An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.

Civil engineering - 240

Construction- 39

The mission of the Department of Civil, Construction, and Environmental Engineering is to ensure student success by providing a high-quality education through focused instruction, research, and continuing professional development for the benefit of the engineering profession, the environment, and society.

mechanical engineering- 264

An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.

An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal context.

City planning -18

C P 630 - Seminar in Urban Planning Foundations Units: 3

C P 640 - Seminar in Planning Theory and History Units: 3

C P 660 - City Planning and Geographic Information Systems Applications Units: 3

C P 675 - Seminar in Land Use and Environmental Law Units: 3

C P 690 - Seminar in Land Use Planning Principles and Techniques Units: 3

C P 695 - Introductory Urban Design Studio Units: 3

C P 700 - Urban Design and Land Use Planning Studio Units: 3

P A 604 - Methods of Analysis in Public and Urban Affairs Units: 3

P A 606 - Seminar in Quantitative Approaches to Public Administration Units: 3

Meeting and Event Management - 24

Identify and explain the best ways to create legitimately green initiatives and a culture of sustainability within a hospitality, recreation, or tourism organization.

Political science - 29

Major preparation requirement: Global Politics POL S 104: Basic concepts, terms, and institutions of global politics. Explores power and inequality in the global system in a variety of issue areas, such as war and diplomacy, human rights, migration, the global economy, development, and the environment.

Major Requirement- Field II. American Politics: Politics of the Environment POL S/SUSTN 334: Environmental politics and policy in historical and comparative non-dominant perspective. Alternative environmental world views, cases/materials on sustainability, climate change, social and racial justice, globalization and developing nations.

Philosophy- 32

Apply philosophical theories to social, political, global, environmental, ecological, scientific, or other real-world contexts.