

# Environmental Science

## LOWER DIVISION

**ENVS 110. Introduction to Environmental Science** (3). Integrated/interdisciplinary examination of how components of Earth systems are connected through movement of matter and energy through biogeochemical processes. Mechanisms of interaction and spatial and temporal timescales of interactions.

**ENVS 111. Environmental Science Seminar** (1). Introduction to the scope of the environmental sciences, current issues, guest speakers, career opportunities. [Rep 4 times. CR/NC.]

**ENVS 220. Introduction to Environmental Policy** (3). Environmental policy formulation, implementation, and analysis. Process of formulating and implementing environmental policy and the evolution of natural resource and environmental policy in the United States.

**ENVS 230. Environmental Problem Solving** (3). Intro to quantitative tools for environmental problem solving. Basic modeling skills in the context of topics related to environmental issues associated with air, water, land/earth, and energy. [Prereq: ENVS 110 and MATH 115 or equivalent. STAT 108 or STAT 109 recommended. Weekly: 2 hrs lect, 3 hrs lab.]

## UPPER DIVISION

**ENVS 301 / GEOG 301. International Environmental Issues & Globalization** (3). Cross-disciplinary examination of economic development, world regions, population trends, resource exploitation, sustainability, impact of resource extraction in key world locations, and increasing global environmental connectivity, integration, and interdependence. [GE.]

**ENVS 308. Ecotopia** (3). Interdisciplinary study of redwood ecosystem biophysical and cultural characteristics. Guest presentations, disc/activ sessions. [Prereq: area B lower division GE completed. GE.]

**ENVS 309 / EMP 309. Environmental Conflict Resolution** (3) FS. Introduction to conflict theory as applied in complex natural resource disputes. Skill development in planning culturally appropriate and inclusive public participation processes, meeting facilitation, and conflict mediation. Comparison of options for nonviolent conflict management. [GE. CWT. Weekly: 2 hrs lect, 2 hrs activ.]

**ENVS 350. Principles of Ecological Restoration** (3). Scientific basis for reconstruction of degraded ecosystems. Focus on practices designed to improve ecological structure and function, and meeting societal needs for sustainable and functional ecosystems. [Prereq: BOT 105 and SOIL 260.]

**ENVS 370. Energy, Technology & Society** (3). Interdisciplinary course in energy, the environment, and society. Focuses on energy and climate change, integrating physical science, social science, and policy dimensions. [Prereq: CHEM 107 or CHEM 109, PHYX 107 or PHYX 110, ENVS 230, ENGR 371. Must have junior standing or greater.]

**ENVS 400 / EMP 400. Inscape & Landscape** (3) FS. An evaluation of individual perception (inscape) of nature (landscape) relative to our unique individual histories. An overview of human population growth, resource consumption, and resource availability will lead to a personal evaluation of the relationship of inscape to landscape. [GE. Weekly: 2 hrs lect, 2 hrs activ.]

**ENVS 410. Environmental Science Practicum** (3). Work locally to develop creative solutions to environmental problems. Critique opportunities and obstacles to innovative decision making. [Prereq: ENVS 110, ENVS 220, ENVS 230; senior or graduate standing and IA for non-majors.]

**ENVS 411. Sustainable Campus** (3). Environmental Science majors capstone: Systematic problem solving framework applied to making the campus sustainable. [Prereq: ENVS 110, ENVS 220, ENVS 230; senior or graduate standing and IA for non-majors.]

**ENVS 412 / EMP 412 / PSCI 412. Legal Research** (4). Principles and research procedures in California/federal case law, statutory law, and codes. Computerized legal research; legal citation and writing.

**ENVS 450. Applied Ecological Restoration** (3). Restoration process, including identifying causes of degradation, devising methods and goals for restoration, developing management strategies for restored sites, monitoring changes and assessing success; focus on aquatic systems. [Prereq: ENVS 350. Weekly: 2 hrs lect, 3 hrs lab.]

**ENVS 480. Selected Topics in Environmental Sciences** (1-4). Student preparations typically required. [Rep.]

**ENVS 482. Internship** (2-3). Practical experience. Apply knowledge gained through coursework. [Prereq: ENVS 410 and IA. Rep up to 6 units.]

**ENVS 485. Seminar in Environmental Sciences** (1-3). [Prereq: upper division or grad standing. Rep.]

**ENVS 499. Directed Study in Environmental Sciences** (.5-4). Directed study in lab, field, or library under supervision of CNRS faculty member. [Prereq: upper division standing and IA.]