

Environmental Sciences Major Snapshot

Department of Environmental Science, Policy, and Management

The Environmental Sciences (ES) major is designed for students interested in studying environmental problems from a scientific perspective. The ES major prepares students to deal with issues arising from the impact of human interaction on natural systems. To address these problems, all ES students acquire strong backgrounds in math, biological sciences, and physical sciences. Students may choose to specialize further in a biological or physical science field such as ecology, conservation biology, toxicology, geology, hydrology, meteorology, engineering, or a social science field such as planning, policy analysis, economics, environmental justice, education. Each ES student completes a year-long senior research project with the support of a mentor in a biological, physical, or interdisciplinary research area.

Advising for the major is available in the CNR Office of Instruction & Student Affairs in 260 Mulford Hall. Students may drop in or schedule an appointment during advising hours: M, Tu, Th, F 9am-12pm and M-F 1-4pm. Visit the ES major website for more detailed information: <http://nature.berkeley.edu/advising/majors/environmental-sciences>

Research Opportunities ♦ College Honors Program ♦ Environmental & Other Careers

Students with a GPA of 3.6 or higher may enroll in the College of Natural Resources Honors Program (H196) once they have reached upper division standing. To fulfill the program requirements, students design, conduct, and report on an individual research project working with a faculty sponsor. For more information, visit <http://nature.berkeley.edu/advising/honors-program>.

In addition to the Berkeley's Undergraduate Research Apprenticeship Program (URAP), CNR students can also apply for faculty research projects through the CNR Sponsored Projects for Undergraduate Research (SPUR). Visit <http://nature.berkeley.edu/undergraduate-research/spur> for details.

Graduates are well-prepared for careers in fields such as environmental consulting, education, health, or law; community, urban, or regional planning; and other related areas of environmentalism in public agencies, non-profit conservation organizations, and private companies. Graduates are well-qualified for a variety of graduate programs, including law school.

Getting a Degree

To earn a Bachelor of Science from U.C. Berkeley in Environmental Sciences, students must fulfill unit and GPA requirements, university and campus requirements, college requirements, and major requirements. Please see the major advisor for more details about the major requirements.

Unit and GPA Requirements

All students must complete a minimum of 120 units to graduate; 36 of these must be upper division, 30 of the upper division units must be Environmental Sciences units, 15 of the upper division units must be from CNR. Students must maintain a 2.0 cumulative GPA, a 2.0 GPA in their ES major requirements, and not receive a grade below C- in their major requirements (lower and upper division courses).

University and Campus Requirements

- Entry Level Writing
- American History & Institutions
- American Cultures (if taken for a letter grade, this course may overlap with a breadth requirement)

College Requirements

- Two courses in Reading & Composition (8 units): R1A and R1B
- 15 upper division units must be completed in the College of Natural Resources (EEP, ERG, ES, ESPM, NST, PMB)

Environmental Sciences Major Requirements

All courses for the major, including breadth requirements, must be taken for a letter grade.		
Lower Division Math & Science Requirements (7-8 courses):		
Environmental Sciences majors must choose one of three concentrations: Biological, Physical, or Social Sciences. Students should choose a concentration based on their interests and/or intended research area.		
Physical Science	Biological Science	Social Science
<input type="checkbox"/> Math 1A <input type="checkbox"/> Math 1B	<input type="checkbox"/> Math 16A or Math 1A <input type="checkbox"/> Math 16B or Math 1B	<input type="checkbox"/> Math 16A or Math 1A <input type="checkbox"/> Math 16B or Math 1B
<input type="checkbox"/> Chem 1A and 1AL <input type="checkbox"/> Chem 3A and 3AL	<input type="checkbox"/> Chem 1A and 1AL <input type="checkbox"/> Chem 3A and 3AL	<input type="checkbox"/> Chem 1A and 1AL <input type="checkbox"/> Chem 3A and 3AL OR Chem 1B
<input type="checkbox"/> Biology 1A and 1AL <input type="checkbox"/> Biology 1B <p style="text-align: center;">OR</p> <input type="checkbox"/> Biology 11 and 11L <input type="checkbox"/> 1 course from: IB 153, 154; ESPM 102A, 111, 113, 114, 115B, 116B	<input type="checkbox"/> Biology 1A and 1AL <input type="checkbox"/> Biology 1B	<input type="checkbox"/> Biology 1A and 1AL <input type="checkbox"/> Biology 1B <p style="text-align: center;">OR</p> <input type="checkbox"/> Biology 11 and 11L <input type="checkbox"/> 1 course from: IB 153, 154; ESPM 102A, 111, 113, 114, 115B, 116B
<input type="checkbox"/> Physics 7A <input type="checkbox"/> Physics 7B (Math 53 recommended)	<input type="checkbox"/> Physics 8A	<input type="checkbox"/> Physics 8A
Breadth Requirements (5 courses):		
<input type="checkbox"/> ESPM Environmental Science Core	ESPM 2, ESPM 6, ESPM C10/L&S C30V, ESPM 15, or ESPM C46/L&S C46	
<input type="checkbox"/> ESPM Social Science Core	ESPM C11/L&S C30U, ESPM C12/English C77, ESPM 50AC, or ESPM 60	
<input type="checkbox"/> Environmental Economics	Environmental Economics & Policy (EEP) C1 / Economics C3	
<input type="checkbox"/> 1 course (3-4 units) in Arts & Literature, Historical Studies, or Philosophy & Values	Select courses from the "7 Course Breadth" listing: http://ls-advise.berkeley.edu/requirement/7breadth.html	
<input type="checkbox"/> 1 course (3-4 units) in Social & Behavioral Sciences or Int'l Studies	Please note: Breadth courses may not be double counted for another major requirement except for American Cultures.	

Upper Division Requirements (8 courses, 30 units minimum):	
The ES major requires completion of a year-long senior research project. The four courses below must be taken in this sequence beginning fall of junior year. Students who plan to study abroad or otherwise not continuously enroll at Berkeley for their junior and senior years should meet with the ES advisor.	
<input type="checkbox"/> Statistics	Statistics 131A (fall/spring), Public Health 141 (summer), Public Health 142 (fall/spring), or ESPM 173 (fall) <i>[This requirement must be completed before spring of junior year]</i>
<input type="checkbox"/> Intro to Methods of Environmental Science	ESPM 100ES <i>[Must be taken spring of junior year]</i>
<input type="checkbox"/> Senior Research Seminar (1 st half)	ESPM 175A and 175L <i>[Must be taken fall of senior year]</i>
<input type="checkbox"/> Senior Research Seminar (2 nd half)	ESPM 175B and 175L <i>[Must be taken spring of senior year]</i>
<input type="checkbox"/> Environmental Modeling*	ERG 102 (spring), ESPM C104/EEP C115 (fall), or ESPM 102C (spring)
<input type="checkbox"/> Human Environment Interactions	ESPM 102D, ESPM 151, ESPM 155, ESPM 160AC/History 120AC, ESPM 161, ESPM 162, ESPM 163AC/Sociology 137AC, ESPM 166, ESPM C167/Public Health C160, ESPM 168, ESPM 169, ESPM 186, EEP C101/Econ C125, EEP 131, EEP 140AC, EEP 153, EEP 162, EEP C180/ERG C180, ERG 170, ERG 175, Geography 130, Geography 138, or Anthropology 137
<input type="checkbox"/> Elective in Area of Concentration (3-4 units)	See list of approved courses: http://goo.gl/Q22dY5
<input type="checkbox"/> Additional ES Elective (2-4 units)	May be selected from any area of concentration: http://goo.gl/Q22dY5
*ESPM 102C satisfies the modeling requirement if taken Spring 2016 or later. ESPM C183/EEP C183 satisfies the modeling requirement only if taken Spring 2015 or earlier.	