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.

The academic advisor is available to answer questions about this major in the Rausser College of Natural Resources Office of Instruction & Student Affairs in 260 Mulford Hall. Visit the ES major website for more detailed information: http://nature.berkeley.edu/advising/majors/environmental-sciences

Research Opportunities ♦ College Honors Program ♦ Careers & Graduate Programs

In addition to Berkeley’s Undergraduate Research Apprenticeship Program (URAP), Rausser College students can also apply for faculty research projects through Sponsoring Projects for Undergraduate Research (SPUR). Visit http://nature.berkeley.edu/undergraduate-research/spur for details.

Students with a GPA of 3.6 or higher may participate in the Rausser College Honors Program while completing their senior thesis. For more information, visit http://nature.berkeley.edu/advising/honors-program.

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.

Declaring the Major, Transfer Credit & Completing a Degree

To declare the Environmental Sciences Major, please meet with the ES advisor and review the minimum requirements for declaring the major: https://nature.berkeley.edu/advising/choosing-major

To see transfer course equivalency, please reference the AP & IB Exam Equivalency Chart or use assist.org for agreements between UC Berkeley and California community colleges and state schools. To apply as a transfer student, please review the admission guidelines here: https://nature.berkeley.edu/advising/transfer-applicants

To earn a Bachelor of Science from U.C. Berkeley in Environmental Sciences, students must fulfill university and campus requirements, college requirements, unit and GPA requirements, and major requirements.

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

- Reading & Composition (2 courses, 8 units): R1A and R1B
- GPA Requirements: 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)
- Unit Requirements: All students must complete a minimum of 120 units to graduate including at least 36 units of upper division coursework, 30 units of upper division coursework within the Environmental Sciences major, and 15 units of upper division coursework completed in any department of Rausser College

For further details and updates, please see: https://nature.berkeley.edu/advising/undergraduate-requirements

Revised 10/7/2020
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.

<table>
<thead>
<tr>
<th>Physical Science</th>
<th>Biological Science</th>
<th>Social Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Math 1A</td>
<td>□ Math 16A or Math 1A</td>
<td>□ Math 16A or Math 1A</td>
</tr>
<tr>
<td>□ Math 1B</td>
<td>□ Math 16B or Math 1B</td>
<td>□ Math 16B or Math 1B</td>
</tr>
<tr>
<td>□ Chem 1A and 1AL</td>
<td>□ Chem 1A and 1AL</td>
<td>□ Chem 1A and 1AL</td>
</tr>
<tr>
<td>□ Chem 3A and 3AL</td>
<td>□ Chem 3A and 3AL</td>
<td>□ Chem 3A and 3AL</td>
</tr>
<tr>
<td>□ Biology 1A and 1AL</td>
<td>□ Biology 1A and 1AL</td>
<td>□ Biology 1A and 1AL</td>
</tr>
<tr>
<td>□ Biology 1B</td>
<td>□ Biology 1B</td>
<td>□ Biology 1B</td>
</tr>
<tr>
<td>□ Bio 1B or Biology 11 and 11L</td>
<td>□ Biology 1A and 1AL</td>
<td>□ Bio 1B or Biology 11 and 11L</td>
</tr>
<tr>
<td>□ Physics 7A</td>
<td>□ Physics 8A</td>
<td>□ Physics 8A</td>
</tr>
<tr>
<td>□ Physics 7B (Math 53 recommended)</td>
<td>□ Physics 8A</td>
<td>□ Physics 8A</td>
</tr>
</tbody>
</table>

**Breadth Requirements (5 courses):**

- **ESPM Environmental Science Core**
  - ESPM 2, ESPM 6, ESPM C10/L&S C30V, ESPM 15, or ESPM C46/L&S C46
- **ESPM Social Science Core**
  - ESPM 5, ESPM C11/L&S C30U, ESPM C12/English C77, ESPM C22AC/ANTHRO C12AC, ESPM 50AC, or ESPM 60
- **Environmental Economics**
  - Environmental Economics & Policy (EEP) C1 / Economics C3
- **1 course (3-4 units) in Arts & Literature, Historical Studies, or Philosophy & Values**
  - Select courses from the "Breadth Requirements" listing on [https://classes.berkeley.edu/](https://classes.berkeley.edu/)
- **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. 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.

- **Statistics**
  - Statistics 131A (fall/spring), Public Health 141 (summer), Public Health 142 (fall/spring), or ESPM 173 (fall)
  - [This requirement must be completed before spring of junior year]
- **Intro to Methods of Environmental Science**
  - ESPM 100ES [Must be taken spring of junior year]
- **Senior Research Seminar (1st half)**
  - ESPM 175A and 175L [Must be taken fall of senior year]
- **Senior Research Seminar (2nd half)**
  - ESPM 175B and 175L [Must be taken spring of senior year]
- **Environmental Modeling**
  - ERG 102 (spring), ERG 131, ESPM 102C (spring), ESPM C104/EEP C115 (fall), or ESPM 157(fall)
- **Human Environment Interactions**
  - ESPM 102D, ESPM 151, ESPM 155AC, ESPM 160AC/History 120AC, ESPM 161, ESPM 162, ESPM 162A, 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/ERM C180, ERG 160, ERG 170, ERG 175, Geography 130, Geography 138, or Anthropology 137
- **Elective in Area of Concentration (3-4 units)**
  - See list of approved courses: [https://nature.berkeley.edu/advising/majors/environmental-sciences](https://nature.berkeley.edu/advising/majors/environmental-sciences)
- **Additional ES Elective (2-4 units)**
  - May be selected from any area of concentration.

*ESP 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.

Note: In the Academic Guide EEP courses will be listed with the code ENVECON, ERG courses will be listed as ENERES.

Revised 10/7/20