

# Environmental Sciences

Departments  
and Programs  
in the College  
of Science

Biochemistry &  
Biophysics

Biology

Botany & Plant  
Pathology

Chemistry

Environmental  
Sciences

Geosciences

Mathematics

Microbiology

Molecular &  
Cellular Biology\*

Physics

Pre-professional  
Programs in the  
Health Sciences

Professional  
Science Masters\*

Science &  
Mathematics  
Education\*

Statistics\*

Zoology

\*graduate program only

...an interdisciplinary approach to environmental problem-solving. Air and water pollution, acid rain, depletion of ozone in the stratosphere, buildup of greenhouse gases in the atmosphere, nuclear waste, and oil spills in our seas are among the pressing problems that endanger our environment. The best minds in the country must be trained to examine and understand complex environmental issues, to predict environmental change, and to participate in responsible management of the environment.

## Career Opportunities

Career opportunities for students graduating with a B.S. degree in environmental sciences are expanding.

Federal agencies, such as the U.S. Environmental Protection Agency, the Department of Energy, and the U.S. Forest Service, hire qualified graduates, as do private companies, consulting firms, and universities.

Many students continue their environmental studies in graduate degree programs, or combine their undergraduate B.S. degree with graduate programs in other fields. For example, a degree in environmental sciences can lead students to a career in elementary or secondary education.

Research and instruction on environmental problems and issues have been strong areas of emphasis at OSU for many years. A program leading to the B.S. degree in environmental sciences offers undergraduates an interdisciplinary curriculum that includes specializations in several fields, such as conservation biology, aquatic ecology, environmental policy, ocean-atmosphere-land sciences, terrestrial ecosystem ecology, environmental health, and environmental toxicology.

The curriculum is specifically designed to give students a rigorous science education and prepare them to become problem-solvers who can apply scientific methods to interdisciplinary questions and communicate effectively. Experts from different departments join forces to train undergraduates in a wide range of environmental issues.

Qualified environmental sciences graduates may enter OSU's year-long Professional Teacher Education program (Master of Science in Education) to become certified to teach in the areas of science and environmental education. Students can combine their scientific background with a degree in law to pursue careers in environmental law. A degree in environmental sciences combined with an M.B.A. degree or the Professional Sciences Master's degree would qualify students to assume leadership positions in the environmental divisions of large corporations.



# Environmental Sciences

## What to know about Oregon State University

Head Advisor

College of Science  
128 Kidder Hall  
541-737-4811

OSU Admissions  
104 Kerr Administration  
541-737-4411  
800-291-4192

OSU Financial Aid  
Student Employment  
Loans & Scholarships  
College Work Study  
218 Kerr Administration  
541-737-2241

OSU Registrar  
102 Kerr Administration  
541-737-4331

OSU Housing  
102 Buxton Hall  
541-737-4771

OSU Website  
<http://oregonstate.edu>

## For more information, please contact:

Environmental Sciences  
Undergraduate Program  
College of Science  
Oregon State University  
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Corvallis, Oregon 97331-2904  
phone: 541-737-2404  
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<http://envsci.science.oregonstate.edu>

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## Course of Study

The curriculum begins with a strong general education requirement and foundation in the sciences and humanities. OSU's baccalaureate core (BC) requirements consist of 48 credits and a writing intensive course (WIC). Many BC requirements can be simultaneously satisfied by courses for the environmental sciences major, such as physical science, biological science, math, and social processes. Basic science and math requirements constitute 53–55 credits for the major as well as 28–33 credits of environmental sciences and humanities courses. Environmental sciences majors must complete a minimum of 27 credits in a specialization area, as well as a minimum of 3 credits of observational experience\*. Approved WIC courses are designated for each specialization area for the major. University and college requirements include 180 total credits, 60 upper-division credits with 45 of the last 75 credits at OSU and 24 upper-division credits from the College of Science.

\*Internships, research, and courses give students real-world, hands-on experience in their chosen field of study. Information on different types of opportunities to satisfy the observational experience requirement is available from the environmental science advisors and the program director.

## Sample Curriculum (B.S.\* degree)

An official graduation checklist may be obtained from an advisor.

Freshman Year		credits
Environmental Science Orientation	ENSC 101	1
General Chemistry	CH 121, 122, 123 or CH 221, 222, 223	15
General Biology	BI 211, 212, 213	12
Calculus	MTH 251, 252	8
BC: Writing I	WR 121	3
Earth Systems Science or Environmental Geology or Principles of Soil Science	GEO 202, GEO 221 CSS 305	3–5
BC and electives		1–3
Sophomore Year		credits
Physics	PH 201, 202, 203 or PH 211, 212, 213	15
Principles of Economics	ECON 201 or AREC 250	3–4
BC: Writing II and III		6
Environmental law and management (choose two)	AREC 253, PH 313, FW 435 or 453 or 458 RNG 355 or 421 or 490	6–8
Intro to Atmospheric Sciences	ATS 210	3
BC and electives		9–12
Junior and Senior Years		credits
Principles of Statistics	ST 351, 352	8
Ecology	BI 370	3
Intro to Oceanography	OC 331 or other hydrosphere course	3
Environmental ethics and policy (choose one)	PHL 440, PHL 443, ANTH 481, AREC 351 or 434, PS 474, PS 475	3–4
The human environment (choose one)	BI 301, BI 306H, FW 325, H 344, or Z 348	3
BC: Contemporary global issues		3
BC: Writing intensive course		3
Observational Experience		3
Specialization courses (minimum)		27
BC and electives		30

† Students work with advisors to choose an approved specialization to develop an area of academic strength and a focal point for career development or future graduate study. The specialization area builds on the foundation provided by the basic sciences, humanities, skills, and environmental sciences. Curricula for approved specializations are available on the web at <http://envsci.science.oregonstate.edu/>.

Experience.  
Explore.  
Discover  
Achieve.

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Oregon State  
UNIVERSITY