

ENVIRONMENTAL SCIENCES

Environmental sciences consists of curricula that foster interdisciplinary education for students seeking to better understand earth systems. The undergraduate curriculum leads to the BS degree in Environmental Sciences and requires students to complete courses that develop a broad base of knowledge in basic science disciplines, social sciences, and an area of specialization. A minor in environmental sciences is also available for those undergraduate students completing their degrees in other fields. The theme of the Environmental Sciences Program is central to the mission of OSU and reflects the strengths of OSU and other agencies and institutions in Corvallis and throughout the state of Oregon. The BS degree in Environmental Sciences provides excellent training for careers with agencies responsible for environmental protection and natural resource use, consulting firms, and those seeking opportunities for graduate studies.

Graduate Programs

Major

- Environmental Sciences (<http://catalog.oregonstate.edu/college-departments/graduate-school/environmental-sciences/environmental-sciences-ma-ms-phd-psm/>)

Minor

- Environmental Sciences (<http://catalog.oregonstate.edu/college-departments/graduate-school/environmental-sciences/environmental-sciences-graduate-minor/>)

Carolyn Fonyo Boggess, *Interim Program Director*

Environmental Sciences Graduate Program

104 Wilkinson Hall

Oregon State University

Corvallis, OR 97331

Phone: 541-737-5095

Website: <http://envsci.science.oregonstate.edu/>

ENSC 003, UNDERGRADUATE RESEARCH, 0 Credits

Engage in research activities appropriate to the discipline; and through the research experience, acquire skills, techniques, and knowledge relevant to the field of study. In consultation with a faculty mentor, engage in research activity, and make and execute a plan for a project.

ENSC 004, INTERNSHIP, 0 Credits

Provides basic personal and professional skills that can be used within and outside of a work setting. Through practice, this experience guides students in building and maintaining positive professional relationships, networking/mentoring relationships, and enhances students' understanding of the connection between theory and practice in their respective disciplines.

ENSC 101, ENVIRONMENTAL SCIENCES ORIENTATION, 1 Credit

Introduction to the Environmental Sciences Program and related professional and educational opportunities. Recommended for all freshman and first-year transfer environmental sciences majors, but open to all students interested in learning about career options in the environmental sciences. Graded P/N.

ENSC 399, SPECIAL TOPICS, 1-16 Credits

Equivalent to: ENSC 399H

This course is repeatable for 16 credits.

ENSC 401, RESEARCH AND SCHOLARSHIP, 1-16 Credits

This course is repeatable for 24 credits.

Available via Ecampus

ENSC 402, INDEPENDENT STUDIES, 1-16 Credits

This course is repeatable for 24 credits.

ENSC 403, THESIS, 1-16 Credits

This course is repeatable for 24 credits.

ENSC 405, READING AND CONFERENCE, 1-12 Credits

Equivalent to: ENSC 405H

This course is repeatable for 16 credits.

ENSC 406, PROJECTS, 1-16 Credits

This course is repeatable for 24 credits.

ENSC 407, SEMINAR, 1-16 Credits

Equivalent to: ENSC 407H

This course is repeatable for 12 credits.

ENSC 407H, SEMINAR, 1-16 Credits

Attributes: HNRS – Honors Course Designator

Equivalent to: ENSC 407

This course is repeatable for 12 credits.

Available via Ecampus

ENSC 408, WORKSHOP, 1-16 Credits

This course is repeatable for 12 credits.

ENSC 410, ENVIRONMENTAL SCIENCE INTERNSHIP, 1-12 Credits

Supervised practical experience working with professionals at selected cooperating institutions, agencies, laboratories, or companies. Graded P/N.

This course is repeatable for 48 credits.

Available via Ecampus

ENSC 452, ENVIRONMENTAL ASSESSMENT, 3 Credits

Environmental site assessment is a primary tool for environmental science professionals. Apply environmental science concepts to evaluate features of a specific natural area and conduct a land suitability analysis. Create a conceptual site design and management plan that complies with federal, state, and local regulations and environmental laws.

CROSSLISTED as ENSC 452/GEOG 452 and GEOG 552.

Equivalent to: GEOG 452

Available via Ecampus

ENSC 479, *^ENVIRONMENTAL CASE STUDIES, 3 Credits

Improves students' ability to ask questions, gather and synthesize information, and communicate ideas on environmental topics. Instruction and information necessary for the course is entirely Web based. (Bacc Core Course) (Writing Intensive Course)

Attributes: CSST – Core, Synthesis, Science/Technology/Society; CWIC – Core, Skills, WIC

Equivalent to: BOT 479

Recommended: One year of college biology or chemistry
Available via Ecampus

ENSC 499, SPECIAL TOPICS, 1-16 Credits

This course is repeatable for 16 credits.

ENSC 501, RESEARCH AND SCHOLARSHIP, 1-16 Credits

This course is repeatable for 16 credits.

ENSC 503, THESIS, 1-16 Credits

PREREQ: Departmental approval required.

This course is repeatable for 999 credits.

Available via Ecampus

ENSC 505, READING AND CONFERENCE, 1-16 Credits

This course is repeatable for 16 credits.

Available via Ecampus

ENSC 506, PROJECTS, 1-16 Credits

This course is repeatable for 16 credits.

Available via Ecampus

ENSC 507, SEMINAR, 1-16 Credits

This course is repeatable for 16 credits.

ENSC 508, WORKSHOP, 1-16 Credits

PREREQ: Departmental approval required.

This course is repeatable for 16 credits.

Available via Ecampus

ENSC 510, INTERNSHIP, 1-12 Credits

This course is repeatable for 12 credits.

Available via Ecampus

ENSC 515, ENVIRONMENTAL PERSPECTIVES AND METHODS, 3 Credits

Unique perspective or method each quarter. Possibilities include: remote sensing, modeling over a range of scales in time, space, and levels of system organization; and risk analysis.

Available via Ecampus

ENSC 516, USING BEST PRACTICES IN ENVIRONMENTAL PROJECT MANAGEMENT, 4 Credits

Explore foundational project management concepts using a real world case-study to practice both soft and hard skills through individual and group assignments, discussions and presentations. Apply best practices, methodologies and tools using a global standards framework to achieve successful outcomes in environmental project management work. Active learning and networking are incorporated throughout the course to provide a full perspective on project management.

Available via Ecampus

ENSC 520, ENVIRONMENTAL ANALYSIS, 3 Credits

Develop analytical thinking, explore analytical approaches, enhance writing skills, and gain experience in oral communication about environmental issues.

Available via Ecampus

ENSC 540, ENVIRONMENTAL SCIENCE PERSPECTIVES ON THE FUTURE OF FOOD, 4 Credits

Examines the newest developments in environmental science research and on-the-ground best management practices for achieving food security and sustainability for growing U.S. and global populations in a dynamic environment and climate.

Available via Ecampus

ENSC 541, ENVIRONMENTAL SCIENCE, SCIENTISTS, AND SOUND DECISIONS, 4 Credits

Focusing on analyzing the role of environmental science and scientists in decision-making in a variety of professional contexts at various scales (local through global) using a case-study approach and proposing a draft model process.

Available via Ecampus

ENSC 542, MANAGEMENT OPPORTUNITIES IN THE NITROGEN CASCADE, 4 Credits

Analyzes the environmental science behind reducing excess reactive nitrogen entering the environment through our provision of food, power, and transportation for future populations. Identifies emerging complementary suites of interventions and legislation innovating management practices at local, regional, national and international scales.

Available via Ecampus

ENSC 543, EXCELLING IN AN INTERDISCIPLINARY TEAM, 4 Credits

Identifying, examining and practicing the top skills, attributes and leadership dynamics involved in working in interdisciplinary environmental science teams in industry, government, and research organizations, informed by experienced experts across these areas.

Available via Ecampus

ENSC 599, SELECTED TOPICS, 1-16 Credits

This course is repeatable for 16 credits.

ENSC 601, RESEARCH AND SCHOLARSHIP, 1-16 Credits

This course is repeatable for 16 credits.

ENSC 603, THESIS, 1-16 Credits

This course is repeatable for 999 credits.

ENSC 605, READING AND CONFERENCE, 1-16 Credits

This course is repeatable for 16 credits.

ENSC 606, PROJECTS, 1-16 Credits

This course is repeatable for 16 credits.

ENSC 607, SEMINAR, 1-16 Credits

This course is repeatable for 16 credits.

ENSC 699, SELECTED TOPICS, 1-16 Credits

This course is repeatable for 16 credits.