Have a passion for working with young people learning about the environment? The Environmental Science Education option in the Environmental Sciences BS program provides a pathway for OSU students to bring the science and social issues related to today's environmental challenges into secondary and elementary school classrooms.

The Education option in Environmental Sciences prepares students for entry into OSU's Education Double Degree Program or the MS Professional Teacher Education Program. The 27-credit curriculum includes education courses required for state teacher certification. In addition, this option provides additional science coursework to prepare students for the Integrated Science and Biology teaching endorsements—a pathway to teaching science at the secondary school level, including Environmental Science, Earth Science, or Biology.

At both elementary and secondary school levels, high demand for teachers in the Science, Technology, Engineering, and Mathematics (STEM) fields contributes to a bright job outlook for students pursuing this option. Environmental Sciences is included as a “STEM” discipline; schools looking for STEM teachers view favorably Oregon State's Bachelor of Science in particular with its substantial coursework in biology, chemistry, physics, statistics, and calculus.

In secondary schools, Environmental Sciences classes are often popular among students taking science because of the applied nature of the field. Asked why they chose Environmental Sciences as a major in college, many students cite a positive experience with a course in high school where they learned science concepts and applied them in fieldwork. Advanced Placement Environmental Sciences classes in high school motivate students to excel in their pursuit of scientific knowledge applied to understanding and resolving environmental problems. Opportunities abound for new teachers to inspire the next generation of environmental problem-solvers!

Designed to combine with OSU's Education Double-Degree Program, students find a variety of ways to complete the experiential learning component of the Environmental Sciences BS while working in schools as part of their student teaching. For example, a student in this option who was training as a teacher at North Albany Elementary School coached a Lego Robotics Club that fulfilled her experiential learning requirement in the Environmental Sciences program.

Those interested in free choice learning may want to inquire about the Free-Choice Learning Professional Certificate through the College of Education’s Professional and Continuing Education (PACE) program.
The Environmental Science Education option in Environmental Sciences prepares students for entry into OSU’s Education Double Degree Program or the MS Professional Teacher Education Program. Environmental Sciences students preparing to teach in secondary school can choose either to pursue a state endorsement in Integrated Science (to teach any middle school science class or high school environmental science, earth science, or other courses that are not biology, chemistry, or physics) or Biology, for all secondary biology classes. Students should consult the Content Mastery Sheets for these subjects that are provided by the OSU College of Education. The courses required are subject to change.

Classes used to fulfill requirements in the specialization cannot double count with ENSC Core. All courses must be taken for a letter grade, no S/U grades. Students must earn at least a C- in upper division (300 or higher) major/option courses.

NOTE: This worksheet may not match the catalog or MyDegrees due to updates in progress.

ENVIRONMENTAL SCIENCE EDUCATION CORE: 12-13 credits from the three categories below.

PRACTICUM EXPERIENCE: Take a minimum of three credits from the courses below.

On Campus | Ecampus
--- | ---
SED 406 Projects (1-16) or ED 309 Field Practicum (3-6) [+]
or ED 409 Practicum/Clinical Experience (1-16)

EDUCATION COURSES: Take a minimum of six credits from the courses below.

On Campus | Ecampus
--- | ---
ED 216 Purpose, Structure, and Function of Education in a Democracy[pro] (3)
ED 219 Civil Rights and Multicultural Issues in Education (3)
SED 412 Technology Foundations for Teaching Math and Science (3)
SED 413 Inquiry in Science and Science Education (3)

HUMAN DEVELOPMENT COURSES: Take 3-4 credits from the courses below.

On Campus | Ecampus
--- | ---
ED 253 Learning Across the Lifespan (3)
ED 512 Psychology of the Adolescent (3)
HDFS 313 Adolescent Development (4) [+]

SPECIAL COURSE REQUIREMENTS BY PROGRAM
- Required for students in the Double Degree Program: ED 216, ED 219, ED 253
- Required for students in the Pre-MS Professional Teacher Education Program: SED 412, SED 413
- Students preparing for the MS Professional Teacher Education Program must take either HDFS 313 or ED 512

UPPER-DIVISION SCIENCE (14-15 credits)

In consultation with your advisor, select additional upper-division science courses from Atmospheric Sciences (ATS), Biochemistry and Biophysics (BB), Botany (BOT), Geology (GEO), Geography (GEOG), History of Science (HSTS), Microbiology (MB), Oceanography (OC), or Zoology (Z).

BI 311 Genetics (4) [+ and BI 445 Evolution (3) [+ are recommended but not required.

ENVIRONMENTAL SCIENCES STUDENTS SEEKING AN ENDORSEMENT IN INTEGRATED SCIENCE MUST TAKE:

On Campus | Ecampus
--- | ---
ATS 210 Introduction to the Atmospheric Sciences (3) [+]
or GEOG 323 Climatology[wc] [+]
GEO 202 Earth Systems Science (4)
GEO 203 Evolution of Planet Earth (4)
or GEO 308 Global Change and Earth Sciences[6] (3)
OC 201 Oceanography (4)
ENVIRONMENTAL SCIENCES STUDENTS SEEKING AN ENDORSEMENT IN BIOLOGY MUST TAKE:

<table>
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|           |         | CH 231 General Chemistry (4) [+]
|           |         | CH 232 General Chemistry (4) [+]
|           |         | CH 233 General Chemistry (4) [+]

Total Credits: 27