

Experience.
Explore.
Discover.
Achieve.

Departments
and Programs
in the College
of Science

Biochemistry &
Biophysics

Biology

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

Pre-education

... a pre-professional option within a General Science bachelor's degree. Teaching elementary or middle school is well suited for the person with a special interest in science and mathematics. This major provides a broad, general education in the sciences with elective space for substantial exposure to the humanities and social sciences. It is especially suitable for preparing students to enter a teacher licensure program and become an upper elementary or middle school teacher (grades 3–10). Students wishing to become secondary school science or math teachers (grades 5–12) should major in an academic discipline such as biology, chemistry, physics, mathematics or environmental science.

Career Opportunities

Good teachers are in short supply, particularly those with expertise in science and math. With thousands of teachers becoming eligible for retirement, the United States must hire 2 million new teachers in the next ten years. Educational reform and the growth of technology are also affecting the demand for new teachers.

The general science/pre-education major is designed to prepare students to enter a fifth-year master's degree program or to complete OSU's concurrent double bachelor's degree program, both of which license students to become elementary/middle school teachers. You may choose to become an elementary/middle school teacher in a self-contained classroom or a science/math specialist at elementary or middle school.

Entry requirements for the professional teacher education programs at OSU include a 3.0 GPA, competence in the subject area as demonstrated by coursework, verified successful experience working with children or school-aged youth in an educational or social agency, and appropriate answers to "good character" questions required by the Oregon Teacher Standards and Practices Commission. Licensure as a teacher in Oregon requires passing scores on several standardized tests.

The major in general science, pre-education option, consists of common pre-professional core courses developed in cooperation with OSU's College of Liberal Arts and College of Health and Human Sciences. These colleges also offer pre-education degrees with an emphasis on language arts and social sciences, or early childhood education, respectively.



General Science/Pre-education

Course of Study

The pre-professional core emphasizes writing, mathematics, history, geography, English literature, psychology, cultural diversity, education, and human development. General science, pre-education majors take one year each of biology, chemistry, math, physics or physical science, and 27 credits of upper division science. These requirements include the baccalaureate core (BC), consisting of writing/speech (9 cr.), mathematics (3 cr.), fitness (3 cr.), physical and biological sciences (12 cr.), western culture/cultural diversity/literature & arts/social processes/difference, power, and discrimination (15 cr.), contemporary global issues/science, technology and society (6 cr.) and a writing intensive course (3 cr.). Experience in an educational setting is required and students have many opportunities to engage in field experiences in schools, community agencies, camps, and international programs.

Sample Curriculum

An official graduation checklist may be obtained from an advisor.

Freshman Year		credits
General Chemistry	CH 121, 122, 123, or CH 221, 222, 223	15
College Algebra	MTH 111 or higher	4
BC: Writing I	WR 121	3
BC: Fitness		3
General Psychology	PSY 201, 202	6
Foundations Elem. Math	MTH 211, 212	8
Non-western world geography		3
Western civilization	HST 101, 102, 103	3
Science & Math Ed. Orientation	SED 407	2
Sophomore Year		credits
General Biology	BI 101, 102, 103 or BI 211, 212, 213	12
Foundations Elementary Math	MTH 390	4
Literature and Arts		3
BC: Writing II and III		6
Field Practicum	TCE 309	3
Education course*		3
Earth Science		8
Junior and Senior Years		credits
Field Practicum	TCE 309	3
Physics or physical sciences courses		11–15
Human Development		3
History of the United States	HST 201, 202, 203	3
BC: History of science (approved writing intensive course)		4
BC: Contemporary global issues		3
Education courses*		6
Upper division science (see approved list)		27
Electives		24–27
*Possible education courses		credits
Technology Foundations for Teaching Math & Science	SED 412	3
Science Materials and Laboratories	SED 413	3
Mathematics Materials and Laboratories	SED 414	3
Purpose, Structure, & Function of Ed. in a Democracy	TCE 216	3
Multicultural Issues in Educational Settings	TCE 219	3

What to know about Oregon State University

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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>

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http://oregonstate.edu/dept/sci_mth_education/
<http://oregonstate.edu/education/>

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