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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

# 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.

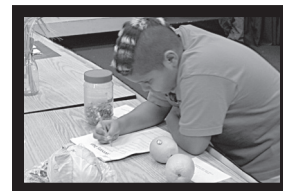
## Career Opportunities

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	Sophomore Year	credits		
General Chemistry	CH 121, 122, 123, or CH 221, 222, 223	15	General Biology	BI 101, 102, 103 or BI 211, 212, 213	12
College Algebra	MTH 111 or higher	4	Foundations Elementary Math	MTH 390	4
BC: Writing I	WR 121	3	Computer Applications	CS 101	4
BC: Fitness		3	English literature		9
General Psychology	PSY 201, 202	6	BC: Writing II and III		6
Foundations Elem. Math	MTH 211, 212	8	Field Practicum	SED 309	3
Non-western world geography		3	Education course*		3
Western world geography		3			
Science & Math Ed. Orientation	SED 407	2			

Junior and Senior Years	credits	
Field Practicum	SED 309	3
Physics or physical sciences courses		12–15
Human Development	PSY 350	3
History of the United States	HST 203	3
History of western civilization		3
BC: History of science (approved writing intensive course)		3
BC: Contemporary global issues		3
Field Practicum	SED 409	3
Education courses*		6
Upper division science (see approved list)		27
Electives		24–27

## \*Possible education courses

Technology Foundations for Teaching Math & Science	SED 412
Science Materials and Laboratories	SED 413
Mathematics Materials and Laboratories	SED 414
Purpose, Structure, & Function of Ed. in a Democracy	TCE 216
Multicultural Issues in Educational Settings	TCE 219
Foundational Perspectives in Education	TCE 516

## 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:

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<http://catalog.oregonstate.edu/Option-Detail.aspx?code=534&majorid=233>  
[http://oregonstate.edu/dept/sci\\_mth\\_education/](http://oregonstate.edu/dept/sci_mth_education/)  
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