

Experience.
Explore.
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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

Zoology

...the biology of animals. Zoology is the study of animal biology—from individual cells and molecules to entire ecosystems. It is basic to medicine and agriculture, to conservation and the environmental sciences. Zoologists study the structure, development, function, genetics, interrelationships, behavior, and evolution of organisms. Some are attempting to understand molecular processes basic to life through studies at the sub-cellular level. Others investigate the regulation of organ systems. A growing concern for the impacts of human beings on the environment has increased the importance of study and research in the area of ecology.

Career Opportunities

There is an increasing demand for animal biologists who can speak knowledgeably in the areas of risk assessment and regulation policy. This demand continues to grow as environmental health concerns become public issues. Zoology majors are employed in a variety of fields. With a bachelor's degree, you could proceed to a graduate or professional school, or you could work as:

Museum curator

Laboratory technician

Elementary or high school teacher

Agency representative for a laboratory supply or a pharmaceutical company

Animal keeper or research assistant in a zoo or wild animal park

Park naturalist

Biomedical illustrator

State or federal biologist

Environmental issues consultant

Scientific journalist

The Department of Zoology at Oregon State University grants undergraduate and advanced degrees. OSU is the only institution in Oregon to offer a bachelor's degree in zoology. Students select appropriate electives from a list of three areas of upper-division courses that emphasize cellular and developmental biology; organismal and physiological biology; and ecology, population biology, and behavior.

In cellular and developmental biology, research is carried out on such topics as cell communication, developmental genetics of fruit flies, and the immune systems of fishes and snails. Organism biologists in the department study the anatomy, physiology, and behavior of a variety of animals, including salamanders, frogs, and various marine organisms. In the third area, population biology, topics studied range from marine intertidal communities to sibling relationships in tadpoles to coral reef fish communities.

Students can simultaneously meet requirements for the bachelor's degree in zoology and for entry to a professional school such as medicine, dentistry, optometry, or veterinary medicine. With a bachelor's degree in zoology a student is well prepared for entry into graduate training to earn a M.S. or Ph.D. in any of the life sciences.

Zoology majors at OSU have access to controlled environment rooms, large marine and freshwater aquaria, well-equipped laboratories, the varied fauna, flora, and ecosystems of Oregon, and the Hatfield Marine Science Center in Newport. The Life Sciences Club is an active group that organizes extracurricular activities and field trips.



Zoology

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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College of Science
Oregon State University
3029 Cordley Hall
Corvallis, Oregon 97331-2914
phone: 541-737-3705
fax: 541-737-0501

email: zoology@science.oregonstate.edu
<http://zoology.science.oregonstate.edu>

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Course of Study

The zoology curriculum begins with a baccalaureate core foundation which includes a strong general education in the sciences and humanities. This is combined with a broad background in basic sciences and a set of core courses in zoology, biology, and genetics. Students may specialize in any area of interest ranging from the cell and molecular level to population and community biology.

University general baccalaureate core (BC) requirements for graduation include 48 credits 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.), and contemporary global issues/science, technology and society (6 cr.).

Sample Curriculum

An official graduation checklist may be obtained from an advisor.

Freshman Year			credits		
Principles of Biology	BI 211, 212, 213	12	General Chemistry	CH 221, 222, 223 or	15
Differential Calculus	MTH 251	4		CH 121, 122, 123	
BC: Writing I	WR 121	3	BC: Fitness		3
BC courses and electives		8			

Sophomore Year			credits		
Cell and Molecular Biology	BI 314	4	Vertebrate Biology	Z 371, 372	5
Organic Chemistry	CH 331, 332	8	Intro to Statistical Methods	ST 351	4
Integral Calculus	MTH 252	4	General Physics	PH 201, 202	10
General Ecology	BI 370	3	BC courses and electives		8

Junior and Senior Years			credits		
Biochemistry	BB 450, 451	7	Genetics	BI 311	4
Upper-division biological science courses*		18	Invertebrate Biology	Z 361, 362	5
Evolution	BI 445	3	Principles of Physiology	Z 430	4
Writing intensive course		3	BC courses and electives		46

*Choose upper division biological science courses in consultation with an advisor. These must be approved by an advisor.

Recommended courses for Pre-veterinary Students			credits		
Preveterinary Medicine	VM 110	1	Intro Animal Science	ANS 121	4
Applied Animal Nutrition	ANS 210	3			

Additional courses required for admission to OSU College of Veterinary Medicine

Principles of Animal Nutrition	ANS 311	3	Organic Chemistry Lab	CH 337	3
Internship	Z 410 or ANS 410	1–16 or relevant experience			

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