

B.S. in Fisheries and Wildlife Biology

Program Description

The Bachelor of Science in Fisheries and Wildlife Biology degree explores various techniques and philosophies of fisheries and wildlife management. The program emphasizes the management of North American species, with a focus on those found within Pennsylvania. Students learn about natural resources, conservation and current issues in the discipline.

Delivery Mode

Traditional (on campus)

Curriculum

The curriculum includes those courses identified by the Wildlife Society and the American Fisheries Society as critical for the graduate. Students have a chance to become certified by either society upon graduation. This program also incorporates many unique experiences that help students network with future employers and develop professional contacts.

Course	Credits
General Education Courses	40 or 42
<i>Building a Sense of Community</i> UNI 100 First-Year Seminar	1
<i>Composition</i> ENG 101 English Composition I	3
<i>Public Speaking</i> Any Oral Communication Course	3
<i>Mathematics and Quantitative Literacy</i> MAT 181 College Algebra OR MAT 273 Applied Calculus OR MAT 281 Calculus I	3
<i>Health and Wellness</i> Any Health and Wellness Course	3
<i>Technological Literacy</i> GIS 311 Geographic Information Systems	3
<i>Humanities</i> Any Humanities Course	3
<i>Fine Arts</i> Any Fine Arts Course	3
<i>Natural Sciences</i> GLG 150 Introduction to Geology OR GLG 303 Hydrology OR PHY 121 General Physics I	3 or 4
<i>Social Sciences</i> Any Social Science Course	3
<i>General Education Options</i>	13

Department of Biology, Geology and Environmental Sciences

Course	Credits
<ul style="list-style-type: none"> • Any Ethics and Multicultural Awareness Emphasis Course • ENG 102 Composition II • PHS 137 Introduction to Environmental Chemistry OR CHE 102 General Chemistry II (3 or 4 credits) • Any General Education Course 	
Required Major Courses	49
BIO 120 General Zoology	4
BIO 125 General Botany	4
BIO 215 Cellular and Molecular Biology	4
BIO 218 Genetics	4
BIO 248 General Ecology	4
BIO/ENS 300- or 400-level Botany Course	4
ENS 423 Wildlife Management Techniques OR ENS 424 Fisheries Management	4
ENS 492 Animal Population Dynamics	4
ENS 495 Design and Analysis	4
CHE 101 General Chemistry I	4
MAT 215 Statistics	3
Select two of the following: <ul style="list-style-type: none"> • ENS 399 Conservation Biology • ENS 420 Principles of Wildlife Management • ENS 425 Principles of Aquaculture 	6
Related Electives	11
Select two of the following: <ul style="list-style-type: none"> • BIO 337 Ornithology • BIO 400 Mammalogy • BIO 407 Mycology • BIO 433 Herpetology • BIO 435 Ichthyology • BIO 441 Ethology • BIO 445 Entomology • BIO 446 Freshwater Invertebrate Zoology • BIO 488 Water Pollution Biology 	8
Select one of the following:	3

Department of Biology, Geology and Environmental Sciences

Course	Credits
<ul style="list-style-type: none">• ENS 435 Natural Resource Law and Policy• GIS 413 Environmental Applications in GIS• REC 362 Recreation Site Design and Management• REC 365 Recreation Resource Management	
Free Electives	18 or 20
Total	120

Additional requirements, not counted toward the General Education requirements, include:

- **Special Experience Course (1 course required):** Any Special Experience Course
- **Writing-Intensive Component Courses (2 courses required):** Any two BIO or ENS Upper-Division Writing Component Courses
- **Laboratory Course (1 course required):** BIO 215 Cellular and Molecular Biology

Program Note: See adviser for information regarding certification by the American Fisheries Society and the Wildlife Society.

Program Webpage

<https://www.calu.edu/academics/undergraduate/bachelors/environmental-studies/fisheries-wildlife.aspx>