CONSERVATION BIOLOGY, B.A.

REQUIREMENTS

UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin–Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (http://guide.wisc.edu/undergraduate/#requirementsforundergraduatestudytext) section of the Guide.

General Education
- Breadth—Humanities/Literature/Arts: 6 credits
- Breadth—Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth—Social Studies: 3 credits
- Communication Part A & Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A & Part B *

* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.

COLLEGE OF LETTERS & SCIENCE DEGREE REQUIREMENTS: BACHELOR OF ARTS (B.A.)

Students pursuing a bachelor of arts degree in the College of Letters & Science must complete all of the requirements below. The College of Letters & Science allows this major to be paired with either a bachelor of arts or a bachelor of science curriculum.

BACHELOR OF ARTS DEGREE REQUIREMENTS

Mathematics
Complete the University General Education Requirements for Quantitative Reasoning A (QR-A) and Quantitative Reasoning B (QR-B) coursework.

Foreign Language
- Complete the fourth unit of a foreign language; OR
- Complete the third unit of a foreign language and the second unit of an additional foreign language.

L&S Breadth
- 12 credits of Humanities, which must include 6 credits of literature; and
- 12 credits of Social Science; and
- 12 credits of Natural Science, which must include one 3+ credit Biological Science course and one 3+ credit Physical Science course.

Liberal Arts and Science Coursework
Complete at least 108 credits.

Depth of Intermediate/Advanced work
Complete at least 60 credits at the intermediate or advanced level.

Major
Declare and complete at least one major.

Total Credits
Complete at least 120 credits.

UW-Madison Experience
- 30 credits in residence, overall; and
- 30 credits in residence after the 86th credit.

Quality of Work
- 2.000 in all coursework at UW–Madison
- 2.000 in Intermediate/Advanced level coursework at UW–Madison

NON–L&S STUDENTS PURSUING AN L&S MAJOR

Non–L&S students who have permission from their school/college to pursue an additional major within L&S only need to fulfill the major requirements. They do not need to complete the L&S Degree Requirements above.

REQUIREMENTS FOR THE MAJOR

Conservation biology majors must take at least 50 credits in the major. When selecting courses to meet major requirements, students are encouraged to meet with their faculty advisor or student services coordinator to discuss courses that align with their areas of academic interest.

INTRODUCTORY COURSES

Complete one of the following options:

Option 1:
- BIOLOGY/ZOOLOGY 101 Animal Biology
- BIOLOGY/ZOOLOGY 102 Animal Biology Laboratory
- BIOLOGY/BOTANY 130 General Botany

Option 2:
- BIOLOGY/BOTANY/ZOOLOGY 151 Introductory Biology

Option 3:
Complete at least 10 credits from the following:
BIOCORE 381 Evolution, Ecology, and Genetics
BIOCORE 382 Evolution, Ecology, and Genetics Laboratory
BIOCORE 383 Cellular Biology
BIOCORE 384 Cellular Biology Laboratory
BIOCORE 485 Principles of Physiology
BIOCORE 486 Principles of Physiology Laboratory

Chemistry 4-5
Complete one of the following:
CHEM 103 General Chemistry I
CHEM 108 Chemistry in Our World
CHEM 109 Advanced General Chemistry (for those who might take more chemistry)

Physical Environment 3-5
Complete one of the following:
ATM OCN/GEOSCI Survey of Oceanography 105
ENVIR ST/GEOSCI Environmental Geology 106
ENVIR ST/GEOG Introduction to the Earth System 120
ENVIR ST/GEOG Physical Systems of the Environment 127
GEOSCI 100 Introductory Geology: How the Earth Works 100
GEOSCI 202 Introduction to Geologic Structures 202
GEOSCI 204 Geologic Evolution of the Earth 204

Ecology and Evolution 6-7
Complete two of the following, each from a different category (students are encouraged to take courses in all three areas):
Ecology:
BOTANY/ F&W ECOL/ ZOOLOGY General Ecology 460
Evolution:
GEOSCI 110 Evolution and Extinction 110
or ANTHRO/ BOTANY/ ZOOLOGY Evolutionary Biology 410
Extinction:
ENVIR ST/F&W ECOL/ZOOLOGY Extinction of Species 360

Statistics 3
Complete one of the following:
STAT 371 Introductory Applied Statistics for 371
the Life Sciences
STAT 301 Introduction to Statistical Methods 301
STAT/F&W ECOL/ HORT Statistical Methods for Bioscience I 571

SPECIES & FIELD BIOLOGY

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>AGRNOMY/ BOTANY/ SOIL SCI 370</td>
<td>Grassland Ecology</td>
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<td>ENTOM/ ZOOLOGY 371</td>
<td>Medical Entomology</td>
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<td>AN SCI/ F&amp;W ECOL/ ZOOLOGY 520</td>
<td>Ornithology</td>
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<td>AN SCI/ F&amp;W ECOL/ ZOOLOGY 521</td>
<td>Birds of Southern Wisconsin</td>
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<td>ANTHRO 391</td>
<td>Bones for the Archaeologist</td>
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<td>ANTHRO 420</td>
<td>Introduction to Primatological Research</td>
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<td>ANTHRO 458</td>
<td>Primate Behavioral Ecology</td>
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<td>ANTHRO 668</td>
<td>Primate Conservation</td>
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<td>BOTANY 330</td>
<td>Algae</td>
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<td>BOTANY/ PL PATH 332</td>
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<td>BOTANY 400</td>
<td>Plant Systematics</td>
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<td>BOTANY 401</td>
<td>Vascular Flora of Wisconsin</td>
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<td>BOTANY/ F&amp;W ECOL 402</td>
<td>Dendrology</td>
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<td>BOTANY 403</td>
<td>Field Collections and Identification</td>
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<td>BOTANY 422</td>
<td>Plant Geography</td>
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<td>BOTANY/ F&amp;W ECOL 455</td>
<td>The Vegetation of Wisconsin</td>
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<td>BOTANY/ENTOM/ ZOOLOGY 473</td>
<td>Plant-Insect Interactions</td>
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<td>ENTOM/ ZOOLOGY 302</td>
<td>Introduction to Entomology</td>
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<td>ENTOM 331</td>
<td>Taxonomy of Mature Insects</td>
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<td>ENTOM 432</td>
<td>Taxonomy and Bionomics of Immature Insects</td>
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<td>ENTOM 468</td>
<td>Studies in Field Entomology</td>
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<tr>
<td>ENVIR ST/ ZOOLOGY 315</td>
<td>Limnology-Conservation of Aquatic Resources</td>
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<td>ENVIR ST 375</td>
<td>Field Ecology Workshop</td>
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<td>ENVIR ST/ ZOOLOGY 510</td>
<td>Ecology of Fishes</td>
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<td>ENVIR ST/ ZOOLOGY 511</td>
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<td>F&amp;W ECOL 306</td>
<td>Terrestrial Vertebrates: Life History and Ecology</td>
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<td>F&amp;W ECOL 401</td>
<td>Physiological Animal Ecology</td>
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<td>F&amp;W ECOL/ SURG SCI 548</td>
<td>Diseases of Wildlife</td>
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<td>F&amp;W ECOL 655</td>
<td>Animal Population Dynamics</td>
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<td>GEOSCI 333</td>
<td>The Age of Dinosaurs</td>
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<td>GEOSCI/ ZOOLOGY 542</td>
<td>Invertebrate Paleontology</td>
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<td>LAND ARC/ ENVIR ST 361</td>
<td>Wetlands Ecology</td>
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<td>LAND ARC 375</td>
<td>Special Topics (Ecological Series: Prescribed Fire)</td>
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<td>MICROBIO 303</td>
<td>Biology of Microorganisms</td>
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<td>M M &amp; I/ENTOM/ PATH-BIO/ ZOOLOGY 350</td>
<td>Parasitology</td>
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| PSYCH 449            | Animal Behavior 
 or ZOOLOGY 425 Behavioral Ecology                       |         |
| PSYCH 450            | Primates and Us: Insights into Human Biology and Behavior             |         |
| ZOOLOGY 304          | Marine Biology                                                        |         |
| ZOOLOGY/ ENVIR ST 315 | Limnology-Conservation of Aquatic Resources                          |         |
| ZOOLOGY 316          | Laboratory for Limnology-Conservation of Aquatic Resources           |         |
| ZOOLOGY 430          | Comparative Anatomy of Vertebrates                                   |         |

**Electives**

**Social Science Electives**

Complete at least one 3 credit course from Social Science elective list:

- A A E 215: Introduction to Agricultural and Applied Economics
- A A E/ ENVIR ST 244: The Environment and the Global Economy
- BOTANY/ AMER IND/ ANTHRO 474: Ethnobotany
- C&E SOC/ SOC 140: Introduction to Community and Environmental Sociology
- C&E SOC/ F&W ECOL/ SOC 248: Environment, Natural Resources, and Society
- ECON 101: Principles of Microeconomics
- ECON/ENVIR ST/ POLI SCI/ URB R PL 449: Government and Natural Resources
- ENVIR ST/ GEOG 139: Global Environmental Issues
- ENVIR ST/ AMER IND 306: Indigenous Peoples and the Environment
- ENVIR ST/ GEOG 339: Environmental Conservation
- ENVIR ST/ PL PATH 368: Environmental Law, Toxic Substances, and Conservation
- ENVIR ST/ PHILOS 441: Environmental Ethics
- ENVIR ST/ GEOG/ HISTORY 460: American Environmental History
- ENVIR ST/ GEOG/ HISTORY 469: The Making of the American Landscape
- GEOG 344: Changing Landscapes of the American West
- GEOG 359: Australia: Environment and Society
- GEOG 538: The Humid Tropics: Ecology, Subsistence, and Development

**Electives to attain 50 credits in the major**

- AGRONOMY/ ENTOM/ F&W ECOL/ M&ENVTOX 632: Ecotoxicology: The Chemical Players
- AGRONOMY/ ENTOM/ F&W ECOL/ M&ENVTOX 633: Ecotoxicology: Impacts on Individuals
- AGRONOMY/ ENTOM/ F&W ECOL/ M&ENVTOX 634: Ecotoxicology: Impacts on Populations, Communities and Ecosystems
- ATM OCN 100: Weather and Climate
- ATM OCN 101: Weather and Climate
- ATM OCN/ ENVIR ST 171: Global Change: Atmospheric Issues and Problems
- BOTANY/ PL PATH 123: Plants, Parasites, and People
- BOTANY/ ENVIR ST/ ZOOLOGY 260: Introductory Ecology
- BOTANY 300: Plant Anatomy
- BOTANY 305: Plant Morphology and Evolution
- BOTANY/ ZOOLOGY 450: Midwestern Ecological Issues: A Case Study Approach
- BOTANY/ ENTOM/ PL PATH 505: Plant-Microbe Interactions: Molecular and Ecological Aspects
- BOTANY/ ENVIR ST/ F&W ECOL/ ZOOLOGY 651: Conservation Biology
- C&E SOC/ ENVIR ST/ GEOG 434: People, Wildlife and Landscapes
- ENTOM/ ENVIR ST 201: Insects and Human Culture-a Survey Course in Entomology
- ENTOM/ ZOOLOGY 540: Theoretical Ecology
- ENTOM 699: Special Problems
- ENVIR ST/ ILS 126 Principles of Environmental Science
- ENVIR ST/ GEOG/ SOIL SCI 230: Soil: Ecosystem and Resource
- ENVIR ST 307: Literature of the Environment: Speaking for Nature
- ENVIR ST/ SOIL SCI 324: Soils and Environmental Quality
HONORS IN THE MAJOR

Students may declare Honors in the Conservation Biology Major in consultation with the Conservation Biology undergraduate advisor.

HONORS IN THE CONSERVATION BIOLOGY MAJOR REQUIREMENTS

To earn Honors in the Major in Conservation Biology, students must satisfy both the requirements for the major (above) and the following additional requirements:

- Earn a 3.300 overall university GPA
- Complete at least 16 credits, taken for Honors, with a grade of B or better, in the conservation biology major, to include a two-semester Senior Honors Thesis in an appropriate department.

FOOTNOTES

1. Students may NOT apply both ZOOLOGY 425 Behavioral Ecology and PSYCH 449 Animal Behavior in the conservation biology program.
2. Courses in the major numbered 300 through 699 are considered upper level.
3. Examples include Botany, Zoology, Environmental Studies; see the Conservation Biology advisor to verify that your thesis department will be acceptable.

UNIVERSITY DEGREE REQUIREMENTS

Total Degree

To receive a bachelor’s degree from UW–Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.

Residency

Degree candidates are required to earn a minimum of 30 credits in residence at UW–Madison. "In residence" means on the UW–Madison campus with an undergraduate degree classification. "In residence" credit also includes UW–Madison courses offered in distance or online formats and credits earned in UW–Madison Study Abroad/Study Away programs.

Quality of Work

Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.