# ZOOLOGY: ECOLOGY AND CONSERVATION BIOLOGY, BS

## Degree Requirements

### Requirements for Students Matriculating in or before Academic Year 2023-2024

Learn more about University Academic Regulation 3.1 ([http://catalog.okstate.edu/university-academic-regulations/#matriculation](http://catalog.okstate.edu/university-academic-regulations/#matriculation)).

**Minimum Overall Grade Point Average:** 2.00

**Total Hours:** 120

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td><strong>General Education Requirements</strong></td>
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#### English Composition

See Academic Regulation 3.5 ([http://catalog.okstate.edu/university-academic-regulations/#english-composition](http://catalog.okstate.edu/university-academic-regulations/#english-composition))

- ENGL 1113  Composition I  3
- or ENGL 1313  Critical Analysis and Writing I  3

Select one of the following:

- ENGL 1213  Composition II  3
- ENGL 1413  Critical Analysis and Writing II  3
- ENGL 3323  Technical Writing  3

#### American History & Government

- HIST 1103  Survey of American History  3
- or HIST 1483  American History to 1865 (H)  3
- or HIST 1493  American History Since 1865 (DH)  3
- POLS 1113  American Government  3

#### Analytical & Quantitative Thought (A)

- MATH 1813  Preparation for Calculus (A) (or higher)  3

- STAT 4013  Statistical Methods I (A)  3
- or STAT 2013  Elementary Statistics (A)  3
- or STAT 3023  Statistical Reasoning for Medical Applications (A)  3

#### Humanities (H)

Courses designated (H)  6

- Natural Sciences (N)
  - Must include one Laboratory Science (L) course
  - PHYS 1114  College Physics I (LN)  4
  - or PHYS 2014  University Physics I (LN)  4
  - PHYS 1214  College Physics II (LN)  4
  - or PHYS 2114  University Physics II (LN)  4

#### Social & Behavioral Sciences (S)

- Course designated (S)  3

- Additional General Education
  - Courses designated (A), (H), (N), or (S)  6

### Hours Subtotal

13

**Major Requirements**

Minimum grade of "C" in each course.

#### Core Courses

- BIOL 1113 & BIOL 1111  Introductory Biology (N) and Introductory Biology Laboratory (LN)  4
- or BIOL 1114  Introductory Biology (LN)  4
- BIOL 1604  Animal Biology  4
- BIOL 3023  General Genetics  3
- BIOL 3034  General Ecology  4
- BIOL 3104  Invertebrate Zoology  4
- BIOL 3114  Vertebrate Zoology  4
- BIOL 3204  Physiology  4
- BIOL 4133  Evolution  3
- BIOL 4700  Undergraduate Research Problems (1 hour)  1
- or BIOL 4710  Internships in Integrative Biology  3
- MICR 2123  Introduction to Microbiology  3
- or MICR 3033  Cell and Molecular Biology  3

Select one of the following:

- CHEM 3013 & CHEM 3012  Survey of Organic Chemistry and Survey of Organic Chemistry Laboratory  4
- CHEM 3053 & CHEM 3112 & CHEM 3153  Organic Chemistry I and Organic Chemistry Laboratory and Organic Chemistry II  4

Select 4 additional hours upper-division BIOL courses with a laboratory in at least one course (excluding general education courses)

#### Related Courses

- BIOL 3153  Animal Behavior  3
- BIOL 3513  Principles of Conservation Biology  3
- PBIO 1404  Plant Biology (LN)  4
- or PBIO 4005  Field Botany  4

### Supplemental Courses

Select one of the following:

- ENGL 3323  Technical Writing  3
- ENTO 4223  Ecological Methodology  3
- ENVN 3113  Environmental Sampling and Analysis  3
- GEOG 3023  Climatology (N)  3
- GEOG 3153  Conservation of Natural Resources (S)  3
- GEOG 3373  Health and Maps  3
**Requirements**

**College of Arts and Sciences**

- **Other Requirements**
  
  a. Arts and Humanities are defined as any course carrying an (H) designation or courses from AMST, ART, DANC, ENGL (except ENGL 3323 Technical Writing) HIST, MUSI, PHIL (except PHIL 1313 Logic and Critical Thinking (A), PHIL 3003 Symbolic Logic (A) and PHIL 4003 Mathematical Logic and Computability), REL, TH, and foreign languages.

  b. Natural and Mathematical Sciences are defined as any course from the following prefixes: ASTR, BIOC, BIOL, CHEM, CS (except CS 4883 Social Issues in Computing), GEOL, MATH, MICR, PBIO, PHYS, and STAT; or courses from other departments that carry an (A) or (N) general education designation.

  c. Six upper-division hours are required from General Education or any CAS courses outside the student’s major department. This requirement may be satisfied by courses also used to satisfy any part of a student’s degree program (i.e., in General Education, College Departmental Requirements, Major Requirements or Electives).

  d. Non-Western Studies Requirement for B.A. and B.F.A.; One course in Non-Western Studies (N.W.). This requirement may be satisfied by courses also used to satisfy any part of a student’s degree program (i.e., in General Education, College Departmental Requirements, Major Requirements or Electives).

  e. The College of Arts & Sciences requires a minimum 2.0 GPA in all major requirements and a minimum 2.0 GPA in all major-prefix courses applied to the degree.

**3. Foreign Language Proficiency**

a. The foreign language requirement for the B.A. may be satisfied by 9 hours college credit in the same language, which must include 3 hours at the 2000-level, or equivalent proficiency (e.g., passing an advanced standing examination; TOEFL exam; presenting a high school transcript which demonstrates the high school was primarily conducted in a language other than English; etc.). Computer Science courses may not be used to satisfy this requirement. Currently Arabic and Mvskoke are not offered at the 2000-level at OSU.

b. The foreign language requirement for the B.S., B.M. and B.F.A. may be satisfied by presenting a high school transcript which demonstrates two years of study of a single foreign language (passing grades at second-year level of study). It may also be satisfied by 6 hours college credit in the same language, which must include language courses 1713 and 1813, or equivalent proficiency (e.g., passing an advanced standing examination; TOEFL exam; presenting a high school transcript which demonstrates the high school was primarily conducted in a language other than English; etc.). Computer Science courses may not be used to satisfy this requirement.

c. In addition to a. and b., students pursuing teacher certification must meet novice-high foreign language proficiency by presenting a high school transcript which demonstrates two years of study of a single foreign language with no grade below B. Or, students may complete 3 hours college credit in a single language with no grade below C (or pass an advanced standing examination, College Level Examination Program (CLEP) exam, or Oral Proficiency Interview developed by the American Council on the Teaching of Foreign Languages, equivalent to 3 hours of college credit.) Or, students may meet the requirement by transfer of documentation of meeting the foreign language competency from one of the teacher education programs in the State of Oklahoma approved by the Oklahoma State Regents for Higher Education.

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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>GEOG 4053</td>
<td>Biogeography</td>
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<tr>
<td>GEOG 4073</td>
<td>Climate Change: Past, Present, and Future</td>
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<tr>
<td>GEOG 4203</td>
<td>Fundamentals of Geographic Information Systems</td>
</tr>
<tr>
<td>GEOG 4333</td>
<td>Remote Sensing</td>
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<tr>
<td>GEOL 3503</td>
<td>Environmental Geology (N)</td>
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<tr>
<td>GEOL 4453</td>
<td>Hydrogeology</td>
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<tr>
<td>GEOL 4503</td>
<td>Introduction to Oceanography (N)</td>
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<tr>
<td>NREM 3503</td>
<td>Principles of Wildlife Ecology and Management</td>
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<tr>
<td>NREM 3523</td>
<td>Fish and Wildlife Population Biology</td>
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<tr>
<td>NREM 4023</td>
<td>Restoration Ecology</td>
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<tr>
<td>NREM 4033</td>
<td>Ecology Of Invasive Species</td>
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<tr>
<td>NREM 4043</td>
<td>Natural Resource Administration and Policy</td>
</tr>
<tr>
<td>NREM 4443</td>
<td>Watershed Hydrology and Water Quality</td>
</tr>
<tr>
<td>NREM 4523</td>
<td>Wildlife Management Techniques</td>
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<tr>
<td>SOC 4433</td>
<td>Environmental Sociology (S)</td>
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**Electives**

Select 10 hours

MATH 1513 required for students who do not place directly into MATH 1813 (or MATH 1613).

May need to include 6 hours of a foreign language. (see note 3)

May need to include 6 hours upper-division general education outside major department (see note 2.c.) and 7 additional upper-division hours

PSYC 1113 and SOC 1113 recommended.

**College of Arts and Sciences Requirements**

1. **Hours in One Department:** For B.A. and B.S. degrees, no more than 54 hours in one department may be required to meet degree requirements. Courses used to satisfy the General Education English Composition, U.S. History, American Government, and Mathematics or Statistics requirements will not count toward the 54-hour maximum required from one department.

2. **A&S College/Departmental Requirements**
4. **Exclusions.** Courses with ATHL or LEIS prefixes and leisure activity courses may not be used for degree credit.

**Additional State/OSU Requirements**

- At least: 60 hours at a four-year institution; 30 hours completed at OSU; 15 of the final 30 or 50% of the upper-division hours in the major field completed at OSU.

- Limit of: one-half of major course requirements as transfer work; one-fourth of hours earned by correspondence; 8 transfer correspondence hours.

- Students will be held responsible for degree requirements in effect at the time of matriculation and any changes that are made, so long as these changes do not result in semester credit hours being added or do not delay graduation.

- Degrees that follow this plan must be completed by the end of Summer 2029.