

# ZOOLOGY, BS

## Degree Requirements

**Requirements for Students Matriculating in or before Academic Year 2025-2026.** Learn more about University Academic Regulation 3.1 (<http://catalog.okstate.edu/university-academic-regulations/#matriculation>).

**Minimum Overall Grade Point Average: 2.00**

**Total Hours: 120**

| Code                                                                                                                                                                                                                                                                         | Title                                                 | Hours     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|-----------|
| <b>General Education Requirements</b>                                                                                                                                                                                                                                        |                                                       |           |
| <i>English Composition</i>                                                                                                                                                                                                                                                   |                                                       |           |
| See Academic Regulation 3.5 ( <a href="http://catalog.okstate.edu/university-academic-regulations/#english-composition">http://catalog.okstate.edu/university-academic-regulations/#english-composition</a> )                                                                |                                                       |           |
| ENGL 1113                                                                                                                                                                                                                                                                    | Composition I                                         | 3         |
| or ENGL 1313                                                                                                                                                                                                                                                                 | Critical Analysis and Writing I                       |           |
| Select one of the following:                                                                                                                                                                                                                                                 |                                                       | 3         |
| ENGL 1213                                                                                                                                                                                                                                                                    | Composition II                                        |           |
| ENGL 1413                                                                                                                                                                                                                                                                    | Critical Analysis and Writing II                      |           |
| ENGL 3323                                                                                                                                                                                                                                                                    | Technical Writing                                     |           |
| <i>American History &amp; Government</i>                                                                                                                                                                                                                                     |                                                       |           |
| HIST 1103                                                                                                                                                                                                                                                                    | Survey of American History                            | 3         |
| or HIST 1483                                                                                                                                                                                                                                                                 | American History to 1865 (H)                          |           |
| or HIST 1493                                                                                                                                                                                                                                                                 | American History Since 1865 (DH)                      |           |
| POLS 1113                                                                                                                                                                                                                                                                    | American Government                                   | 3         |
| <i>Quantitative Thought &amp; Logical Reasoning (Q)</i>                                                                                                                                                                                                                      |                                                       |           |
| MATH 1813                                                                                                                                                                                                                                                                    | Preparation for Calculus (Q) (or higher) <sup>1</sup> | 3         |
| STAT 4013                                                                                                                                                                                                                                                                    | Statistical Methods I (Q) <sup>1</sup>                | 3         |
| or STAT 2013                                                                                                                                                                                                                                                                 | Elementary Statistics (Q)                             |           |
| or STAT 3023                                                                                                                                                                                                                                                                 | Statistical Reasoning for Medical Applications (Q)    |           |
| <i>Understanding Humanities-Human Heritage &amp; Cultures (H)</i>                                                                                                                                                                                                            |                                                       |           |
| Courses designated (H)                                                                                                                                                                                                                                                       |                                                       | 6         |
| <i>Reasoning in the Natural Sciences (N)</i>                                                                                                                                                                                                                                 |                                                       |           |
| Must include one Laboratory-Based Inquiry (L) course                                                                                                                                                                                                                         |                                                       |           |
| PHYS 1114                                                                                                                                                                                                                                                                    | College Physics I (LN) <sup>1</sup>                   | 4         |
| or PHYS 2014                                                                                                                                                                                                                                                                 | University Physics I (LN)                             |           |
| PHYS 1214                                                                                                                                                                                                                                                                    | College Physics II (LN) <sup>1</sup>                  | 4         |
| or PHYS 2114                                                                                                                                                                                                                                                                 | University Physics II (LN)                            |           |
| <i>Exploring Society &amp; Human Behavior (S)</i>                                                                                                                                                                                                                            |                                                       |           |
| Course designated (S)                                                                                                                                                                                                                                                        |                                                       | 3         |
| <i>Diversity (D)</i>                                                                                                                                                                                                                                                         |                                                       |           |
| Courses designated (D)                                                                                                                                                                                                                                                       |                                                       | 3         |
| <i>Global Cultural Competency (G)</i>                                                                                                                                                                                                                                        |                                                       |           |
| Courses designated (G)                                                                                                                                                                                                                                                       |                                                       | 3         |
| <i>Additional General Education</i>                                                                                                                                                                                                                                          |                                                       |           |
| Additional general education credit hours may be required to meet the total 40-hour minimum of general education credit if courses carry more than one general education designation and can be used to meet multiple general education designation hour requirements above. |                                                       |           |
| Courses designated (Q), (H), (N), (S), (D), (G), or (F).                                                                                                                                                                                                                     |                                                       | 0         |
| <b>Hours Subtotal</b>                                                                                                                                                                                                                                                        |                                                       | <b>41</b> |

### College/Departmental Requirements

|                                                                                                                            |                                                                               |           |
|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-----------|
| UNIV 1111                                                                                                                  | First Year Seminar (or other approved first year seminar course)              | 1         |
| <i>Arts &amp; Humanities</i>                                                                                               |                                                                               |           |
| See note 2.a.                                                                                                              |                                                                               | 3         |
| <i>Natural &amp; Mathematical Sciences</i>                                                                                 |                                                                               |           |
| CHEM 1314                                                                                                                  | Chemistry I (LN)                                                              | 4         |
| CHEM 1515                                                                                                                  | Chemistry II (LN)                                                             | 5         |
| <i>Foreign Language</i>                                                                                                    |                                                                               |           |
| See note 3                                                                                                                 |                                                                               |           |
| 0-6 hours                                                                                                                  |                                                                               |           |
| <i>Upper-Division General Education</i>                                                                                    |                                                                               |           |
| Select 6 hours outside major department                                                                                    |                                                                               |           |
| See note 2.c.                                                                                                              |                                                                               |           |
| <b>Hours Subtotal</b>                                                                                                      |                                                                               | <b>13</b> |
| <b>Major Requirements <sup>2</sup></b>                                                                                     |                                                                               |           |
| Minimum grade of "C" in each course.                                                                                       |                                                                               |           |
| <i>Core Courses</i>                                                                                                        |                                                                               |           |
| BIOL 1113 & BIOL 1111                                                                                                      | Introductory Biology (N) and Introductory Biology Laboratory (LN)             | 4         |
| or BIOL 1114                                                                                                               | Introductory Biology (LN)                                                     |           |
| BIOL 1604                                                                                                                  | Animal Biology                                                                | 4         |
| BIOL 3023                                                                                                                  | General Genetics <sup>2</sup>                                                 | 3         |
| BIOL 3034                                                                                                                  | General Ecology                                                               | 4         |
| BIOL 3104                                                                                                                  | Invertebrate Zoology                                                          | 4         |
| BIOL 3114                                                                                                                  | Vertebrate Zoology                                                            | 4         |
| BIOL 3204                                                                                                                  | Physiology                                                                    | 4         |
| BIOL 4133                                                                                                                  | Evolution <sup>2</sup>                                                        | 3         |
| BIOL 4700                                                                                                                  | Undergraduate Research Problems (1 hour)                                      | 1         |
| or BIOL 4710                                                                                                               | Internships in Integrative Biology                                            |           |
| or BIOL 4730                                                                                                               | Collaborative Research in Integrative Biology                                 |           |
| MICR 2123                                                                                                                  | Introduction to Microbiology                                                  | 3         |
| or MICR 3033                                                                                                               | Cell and Molecular Biology                                                    |           |
| Select 10 hours upper-division BIOL courses with a laboratory in at least one course (excluding general education courses) |                                                                               | 10        |
| Organic Chemistry, choose from:                                                                                            |                                                                               | 5         |
| CHEM 3013 & CHEM 3012                                                                                                      | Survey of Organic Chemistry and Survey of Organic Chemistry Laboratory        |           |
| CHEM 3053 & CHEM 3112 & CHEM 3153                                                                                          | Organic Chemistry I and Organic Chemistry Laboratory and Organic Chemistry II |           |
| <i>Supplemental Courses</i>                                                                                                |                                                                               |           |
| Select 2 of the following from different prefixes:                                                                         |                                                                               | 6         |
| ANSI 3444                                                                                                                  | Animal Reproduction                                                           |           |
| BIOC 3653                                                                                                                  | Survey of Biochemistry                                                        |           |
| CHEM 4313                                                                                                                  | Medicinal Organic Chemistry                                                   |           |
| ENGL 3323                                                                                                                  | Technical Writing                                                             |           |
| ENTO 4223                                                                                                                  | Ecological Methodology                                                        |           |
| ENTO 4484                                                                                                                  | Aquatic Entomology                                                            |           |
| ENVR 3113                                                                                                                  | Environmental Sampling and Analysis                                           |           |
| ENVR 4033                                                                                                                  | Ecology of Invasive Species                                                   |           |
| GEOG 3023                                                                                                                  | Climatology (N)                                                               |           |

|                                                                                                                                             |                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| GEOG 3153                                                                                                                                   | Conservation of Natural Resources (S)                       |
| GEOG 3373                                                                                                                                   | Health and Maps                                             |
| GEOG 4053                                                                                                                                   | Biogeography, Biodiversity, and Humankind                   |
| GEOG 4073                                                                                                                                   | Climate Change: Past, Present, and Future                   |
| GEOG 4083                                                                                                                                   | Grasslands and Savannas: Evolution and Environmental Issues |
| GEOG 4203                                                                                                                                   | Fundamentals of Geographic Information Systems              |
| GEOG 4333                                                                                                                                   | Remote Sensing                                              |
| GEOL 3503                                                                                                                                   | Environmental Geology (N)                                   |
| GEOL 4453                                                                                                                                   | Hydrogeology                                                |
| GEOL 4503                                                                                                                                   | Introduction to Oceanography (N)                            |
| GEOL 4513                                                                                                                                   | Marine Geology                                              |
| HLTH 3113                                                                                                                                   | Health Issues in Diverse Populations (D)                    |
| HLTH 3603                                                                                                                                   | Understanding HIV (DS)                                      |
| HIST 3913                                                                                                                                   | History of Medicine (H)                                     |
| HIST 4523                                                                                                                                   | American Environmental History (H)                          |
| MICR 3253                                                                                                                                   | Immunology                                                  |
| MICR 3553                                                                                                                                   | Foundations of Cancer                                       |
| NREM 3143                                                                                                                                   | Forest Biology                                              |
| NREM 3153                                                                                                                                   | Forest Health and Disturbance Ecology                       |
| NREM 3503                                                                                                                                   | Principles of Wildlife Ecology and Management               |
| NREM 3523                                                                                                                                   | Fish and Wildlife Population Biology                        |
| NREM 4023                                                                                                                                   | Restoration Ecology                                         |
| NREM 4033                                                                                                                                   | Ecology Of Invasive Species                                 |
| NREM 4043                                                                                                                                   | Natural Resource Administration and Policy                  |
| NREM 4443                                                                                                                                   | Watershed Hydrology and Water Quality                       |
| NREM 4523                                                                                                                                   | Wildlife Management Techniques                              |
| NREM 4543                                                                                                                                   | Wildlife Management for Biodiversity                        |
| PHIL 3703                                                                                                                                   | Ethics & Animals (H)                                        |
| PHIL 3733                                                                                                                                   | Environmental Ethics (H)                                    |
| PHIL 3833                                                                                                                                   | Biomedical Ethics (H)                                       |
| PHIL 4713                                                                                                                                   | Philosophy of Science (H)                                   |
| PHIL 4733                                                                                                                                   | Philosophy of Biology (H)                                   |
| POLS 4363                                                                                                                                   | Environmental Law And Policy                                |
| PSYC 3113                                                                                                                                   | Comparative Psychology (N)                                  |
| PSYC 3443                                                                                                                                   | Psychopathology (S)                                         |
| SOC 4153                                                                                                                                    | Sociology of Health and Illness                             |
| SOC 4433                                                                                                                                    | Environmental Sociology (S)                                 |
| SOC 4453                                                                                                                                    | Environmental Inequality (S)                                |
| <b>Hours Subtotal</b>                                                                                                                       | <b>55</b>                                                   |
| <b>Electives <sup>2</sup></b>                                                                                                               |                                                             |
| Select 11 hours                                                                                                                             | 11                                                          |
| May need to include 6 hours of a foreign language. See note 3                                                                               |                                                             |
| MATH 1513 required for students who do not place directly into MATH 1813.                                                                   |                                                             |
| PSYC 1113 and SOC 1113 recommended.                                                                                                         |                                                             |
| May need to include 6 hours upper-division general education outside major department (see note 2.c.) and 4 additional upper-division hours |                                                             |

|                       |            |
|-----------------------|------------|
| <b>Hours Subtotal</b> | <b>11</b>  |
| <b>Total Hours</b>    | <b>120</b> |

1

College and Departmental Requirements that may be used to meet General Education Requirements.

2

With approval from the advisor and department head and a minimum GPA of 3.0, a maximum of 30 hours from an accredited doctoral health program may be substituted for electives or major requirements other than BIOL 3023 General Genetics and BIOL 4133 Evolution.

## Other Requirements

- See the College of Arts and Sciences Requirements.
- Minimum 2.0 GPA in all BIOL courses.
- **Upper-Division Credit:** Total hours must include at least 40 hours in courses numbered 3000 or above.

## College of Arts and Sciences Requirements

- 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.
- A&S College/Departmental Requirements**
  - 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 (Q), PHIL 3003 Symbolic Logic (Q) and PHIL 4003 Mathematical Logic and Computability), REL, TH, and foreign languages.
  - 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.
  - Six upper-division hours are required from General Education or any CAS courses outside the student's major department (<http://catalog.okstate.edu/college-arts-sciences-major-departments/>). 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).
  - 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).
  - 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.
- Foreign Language Proficiency**
  - 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.

- 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 and 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 2031.