**BIOLOGY: PRE-MEDICAL SCIENCES, BS**

### Degree Requirements

Requirements for Students Matriculating in or before Academic Year 2020-2021. 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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ENGL</td>
<td>Composition I</td>
<td>3</td>
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<tr>
<td>or ENGL 1313</td>
<td>Critical Analysis and Writing I</td>
<td></td>
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<tr>
<td>ENGL 1213</td>
<td>Composition II</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 1413</td>
<td>Critical Analysis and Writing II</td>
<td></td>
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<tr>
<td>or ENGL 3323</td>
<td>Technical Writing</td>
<td></td>
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<tr>
<td>HIST</td>
<td>Survey of American History</td>
<td>3</td>
</tr>
<tr>
<td>or HIST 1483</td>
<td>American History to 1865 (H)</td>
<td></td>
</tr>
<tr>
<td>or HIST 1493</td>
<td>American History Since 1865 (DH)</td>
<td></td>
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<tr>
<td>POLS 1113</td>
<td>American Government</td>
<td>3</td>
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<tr>
<td>MATH</td>
<td>Trigonometry (A) (or higher)</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 2014</td>
<td>University Physics I (LN)</td>
<td></td>
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<tr>
<td>STAT</td>
<td>Statistical Methods I (A)</td>
<td>3</td>
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<tr>
<td>or STAT 2013</td>
<td>Elementary Statistics (A)</td>
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### General Education Requirements

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

**American History & Government**

- 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

**Analytical & Quantitative Thought (A)**

- MATH 1613 Trigonometry (A) (or higher) 3
- or MATH 2014 University Physics I (LN)

**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)
- PHYS 1214 College Physics II (LN) 4
- or PHYS 2114 University Physics II (LN)

**Social & Behavioral Sciences (S)**

- Course designated (S) 3

**Additional General Education**

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

**Hours Subtotal** 41

### Diversity (D) & International Dimension (I)

- May be completed in any part of the degree plan.
- At least one Diversity (D) course
- At least one International Dimension (I) course

### College/Departmental Requirements

**First Year Seminar**

(Transfer students with 15 hours exempt) 1

**Arts & Humanities**

(See note 2.a.)

**Natural & Mathematical Sciences**

- CHEM 1314 Chemistry I (LN) 4
- CHEM 1515 Chemistry II (LN) 5

**Foreign Languages**

(See note 3.)

- 0-6 hours

**Upper-Division General Education**

- 6 hours outside major department

(See note 2.c.)

**Hours Subtotal** 13

### Major Requirements

- Minimum GPA 2.50 in Major Requirements OR minimum grade of "C" in each course.

**Core Courses:**

- BIOL 1114 Introductory Biology (LN) 4
- BIOL 1604 Animal Biology 4
- BIOL 3023 General Genetics 3
- BIOL 3034 General Ecology 4
- BIOL 4133 Evolution 3
- MICR 2123 Introduction to Microbiology 3
- MICR 2132 Introduction to Microbiology Laboratory 2
- MICR 3033 Cell and Molecular Biology 3
- PBIOL 1404 Plant Biology (LN) 4
- 6 hours upper-division coursework from BIOL, MICR, PBIO (excluding general education courses) 6

**Related Courses:**

- BIOL 3204 Physiology 4
- CHEM 3053 Organic Chemistry I 3
- CHEM 3112 Organic Chemistry Laboratory 2
- CHEM 3153 Organic Chemistry II 3

- Choose two of the following: 6
  - BIOC 3653 Survey of Biochemistry
  - BIOL 3323 Human Reproduction
  - BIOL 4024 Histology
  - BIOL 4104 General Parasitology
  - BIOL 4134 Embryology
  - BIOL 4253 Pharmacology
  - BIOL 4283 Endocrinology
  - BIOL 4363 Principles of Toxicology
  - MICR 3223 Advanced Microbiology
  - MICR 3253 Immunology
  - MICR 4423 Antibiotics and Antibiotic Resistance

**Supplemental Courses:**

- 3 hours upper-division coursework from the following (no more than 3 hours of general education in the natural sciences): 3
  - ENGL 3323 Technical Writing
  - PHIL 3833 Biomedical Ethics (H)
  - PSYC 3443 Abnormal Psychology (S)
  - PSYC 3073 Neurobiological Psychology (N)
  - PSYC 4263 Affective Neuroscience
  - SOC 4153 Sociology of Health and Illness
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 2026.