PHYSIOLOGY: PRE-MEDICAL SCIENCES, BS

Requirements for Students Matriculating in or before Academic Year 2019-2020. Learn more about University Academic Regulation 3.1 (http://catalog.okstate.edu/university-academic-regulations/#matriculation).

Minimum Overall Grade Point Average: 2.50
Total Hours: 120

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1113</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 1313</td>
<td>Critical Analysis and Writing I</td>
<td></td>
</tr>
<tr>
<td>ENGL 1213</td>
<td>Composition II</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1413</td>
<td>Critical Analysis and Writing II</td>
<td></td>
</tr>
<tr>
<td>ENGL 3323</td>
<td>Technical Writing</td>
<td></td>
</tr>
</tbody>
</table>

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 2144  Calculus I (A) | 1
or STAT 2013  Elementary Statistics (A) | 1

Humanities (H)
Courses designated (H) | 6

Natural Sciences (N)
Must include one Laboratory Science (L) course

Physics Courses
PHYS 1114  College Physics I (LN) | 1
or PHYS 2014  University Physics I (LN) | 1
PHYS 1214  College Physics II (LN) | 1
or PHYS 2114  University Physics II (LN) | 1

Social & Behavioral Sciences (S)
Course designated (S) | 3

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

Hours Subtotal 42

Diversity (D) & International Dimension (I)
May be completed in any part of the degree plan
Select at least one Diversity (D) course
Select 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 Language
See note 3
0-6 hours

Upper-Division General Education
Select 6 hours outside major department
See note 2.c.

Hours Subtotal 13

Major Requirements ^
Minimum GPA 2.50 in Major Requirements with a minimum grade of “C” in each course.

Core Courses
Biol 1114  Introductory Biology (LN) | 4
Biol 1604  Animal Biology | 4
Biol 3023  General Genetics | 2
Biol 3034  General Ecology | 4
Biol 3114  Vertebrate Zoology | 4
or Biol 3214  Human Anatomy | 3
Biol 3204  Physiology | 4
Biol 4133  Evolution | 3
Biol 4215  Mammalian Physiology | 5
Biol 4223  Mammalian Physiology Laboratory | 3
Biol 3653  Survey of Biochemistry | 3
Biol 3053  Organic Chemistry I | 3
Biol 3112  Organic Chemistry Laboratory | 2
Biol 3153  Organic Chemistry II | 3
Micr 2123  Introduction to Microbiology | 3
Micr 2132  Introduction to Microbiology Laboratory | 2
Micr 3033  Cell and Molecular Biology | 3

Related Courses
Biol 4134  Embryology | 3
or Biol 4253  Pharmacology | 3

Select one of the following: 3
Biol 4024  Histology | 1
Biol 4104  General Parasitology | 1
Biol 4134  Embryology | 1
Biol 4253  Pharmacology | 1
Biol 4273  Environmental Physiology | 1
Biol 4283  Endocrinology | 1
Biol 4293  Behavioral Neuroendocrinology | 1
Biol 4363  Principles of Toxicology | 1
Micr 3223  Advanced Microbiology | 3
Micr 3253  Immunology | 3
Micr 4423  Antibiotics and Antibiotic Resistance | 3

Hours Subtotal 59

Electives ~
Select 6 hours | 6
May need to include 6 hours of a foreign language. See note 3

---

Note 2.a.

Note 2.b.

Note 3.
May need to include 6 hours upper-division general education outside major department (see note 2.c.) and 2 additional upper-division hours

Recommended courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Subject</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 1113</td>
<td>Introductory Psychology (S)</td>
<td></td>
</tr>
<tr>
<td>SOC 1113</td>
<td>Introductory Sociology (S)</td>
<td></td>
</tr>
</tbody>
</table>

**Hours Subtotal** 6

**Total Hours** 120

1. College and Departmental Requirements that may be used to meet Gen Ed 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.

Additional requirements for professional school admission exist. View Admission Requirement Sheets at prehealth.okstate.edu (http://prehealth.okstate.edu).

**Other Requirements**

- See the College of Arts and Sciences Requirements.
- **Upper-Division Credit:** Total hours must include at least 48 hours in courses numbered 3000 or above.
- **Hours in One Department:** For B.A. and B.S. degrees, no more than 54 hours in one department may be applied to degree requirements.

**College of Arts and Sciences Requirements**

1. **General Education Requirements**

   No more than two courses (or eight hours) from the major department may be used to meet General Education and College and Departmental Requirements. The General Education required English Composition, required U.S. History, required American Government, one required MATH or STAT course, and required foreign language for B.A. degrees do not count against the two-course maximum.

2. **A&S College/Departmental 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, 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. The required six hours of upper-division General Education may not include courses from 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 3-hour 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.

4. **Exclusions**

   a. 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 allowed from one department.

   b. Courses with ATHL or LEIS prefixes and leisure activity courses may not be used for degree credit.

5. **Teacher Certification**

   Students can satisfy the requirements for secondary schools teaching certification while earning a B.A. or B.S. in the College of Arts & Sciences. Those interested should see their Arts and Sciences advisor and the OSU Professional Education Unit in room 325 Willard.

**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 2025.