

# BIOLOGY: ALLIED HEALTH, BS

## Degree Requirements

**Requirements for Students Matriculating in or before Academic Year 2022-2023.** 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>Analytical &amp; Quantitative Thought (A)</i>		
MATH 1813	Preparation for Calculus (A) (or higher) <sup>1</sup>	3
or MATH 1613	Trigonometry (A)	
STAT 4013	Statistical Methods I (A) <sup>1</sup>	3
or STAT 2013	Elementary Statistics (A)	
<i>Humanities (H)</i>		
Courses designated (H)		6
<i>Natural Sciences (N)</i>		
Must include one Laboratory Science (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>Social &amp; Behavioral Sciences (S)</i>		
Course designated (S)		3
<i>Additional General Education</i>		
Courses designated (A), (H), (N), or (S)		6
<b>Hours Subtotal</b>		<b>41</b>
<b>Diversity (D) &amp; International Dimension (I)</b>		
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		
<b>College/Departmental Requirements</b>		
<i>First Year Seminar</i>		
(Transfer students with 15 hours exempt)		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 GPA 2.50 in Major Requirements OR 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 4133	Evolution <sup>2</sup>	3
MICR 2123	Introduction to Microbiology	3
MICR 2132	Introduction to Microbiology Laboratory	2
MICR 3033	Cell and Molecular Biology	3
PBIO 1404	Plant Biology (LN)	4
Select 6 hours upper-division coursework from: BIOL, MICR, PBIO (excluding general education courses).		6
<i>Related Courses</i>		
BIOL 3204	Physiology	4
BIOL 3214	Human Anatomy	4
CHEM 3013 & CHEM 3012	Survey of Organic Chemistry and Survey of Organic Chemistry Laboratory	5
Select two of the following from different prefixes:		6
BIOC 3653	Survey of Biochemistry	
BIOL 3233	Human Reproduction	
BIOL 4134	Embryology	
BIOL 4253	Pharmacology	
BIOL 4283	Endocrinology	
BIOL 4363	Principles of Toxicology	
BIOL 4524	Biological Laboratory Instrumentation	
HLTH 3113	Health Issues in Diverse Populations (D)	
HHP 3114	Physiology of Exercise	
HHP 4063	Neuroanatomy	
HIST 3913	History of Medicine (H)	
MICR 3223	Advanced Microbiology	
MICR 3253	Immunology	
MICR 4053	Pathogenic Microbiology	
NSCI 4123	Human Nutrition and Metabolism I	
NSCI 4143	Human Nutrition and Metabolism II	
PBIO 4013	Biological Microtechnique	
PSYC 3443	Abnormal Psychology (S)	

PSYC 4263	Affective Neuroscience	
<b>Hours Subtotal</b>		<b>55</b>
<b>Electives</b> <sup>2</sup>		
Select 11 hours		11
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 6 additional upper-division hours.		
PSYC 1113 Recommended.		
<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.

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

## Other Requirements

- See the College of Arts and Sciences Requirements.
- Minimum GPA 2.00 in all BIOL, MICR & P BIO courses.
- **Upper-Division Credit:** Total hours must include at least 44 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 (<http://catalog.okstate.edu/college-arts-sciences-major-departments/>) 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

- 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.
- 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, P BIO,

PHYS, and STAT; or courses from other departments that carry an (A) or (N) general education designation.

- 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).
  - 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).
  - 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
- 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.
  - 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.
  - 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 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.
  - 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 2028.

## Example Plan of Study

### Finish in Four Plan of Study

The plan below is an **example** of how students can successfully complete degree requirements in four years. This suggested class schedule plan may be used as a guide and can be adjusted based on individual needs. Students are required to meet with an academic advisor prior to enrollment each semester to plan their class schedule, and students are ultimately responsible for completing all degree requirements.

Course	Title	Hours
<b>Freshman</b>		
<b>Fall</b>		
ENGL 1113 or ENGL 1313	Composition I or Critical Analysis and Writing I	3
MATH 1813	Preparation for Calculus (A)	3
CHEM 1314	Chemistry I (LN)	4
General Education and College requirements		5
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ENGL 1213 or ENGL 1413	Composition II or Critical Analysis and Writing II	3
BIOL 1113 & BIOL 1111	Introductory Biology (N) and Introductory Biology Laboratory (LN)	4
CHEM 1515	Chemistry II (LN)	5
General Education courses		3
<b>Hours</b>		<b>15</b>
<b>Sophomore</b>		
<b>Fall</b>		
BIOL 1604	Animal Biology	4
CHEM 3013	Survey of Organic Chemistry	3
CHEM 3012	Survey of Organic Chemistry Laboratory	2
General Education courses		6
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
MICR 2123	Introduction to Microbiology	3
MICR 2132	Introduction to Microbiology Laboratory	2
PHYS 1114	College Physics I (LN)	4
STAT 4013 or STAT 2013	Statistical Methods I (A) or Elementary Statistics (A)	3
General Education courses		3
<b>Hours</b>		<b>15</b>
<b>Junior</b>		
<b>Fall</b>		
BIOL 3204	Physiology	4
PHYS 1214	College Physics II (LN)	4

Major and Elective courses		7
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
BIOL 3214	Human Anatomy	4
MICR 3033	Cell and Molecular Biology	3
Major and Elective courses		8
<b>Hours</b>		<b>15</b>
<b>Senior</b>		
<b>Fall</b>		
BIOL 3023	General Genetics	3
PBIO 1404	Plant Biology (LN)	4
General Education, Major, and Elective courses		8
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
BIOL 4133	Evolution	3
BIOL 3034	General Ecology	4
Major, College, and Elective courses		8
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>120</b>