BIOLOGY: SECONDARY TEACHER CERTIFICATION, BS

Requirements for Students Matriculating in or before Academic Year 2018-2019. 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></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**General Education Requirements**

**English Composition**

See Academic Regulation 3.5 (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
- POLS 1113  American Government  3

**Analytical & Quantitative Thought (A)**

- MATH 1613  Trigonometry (A) (or higher)  3
- or STAT 4013  Statistical Methods I (A)  3

**Humanities (H)**

- PHIL 3743  Patterns in Science: Historical and Value Dimensions of Western Science (H)  3
- PHIL 3933  Creation and Evolution (H)  3

**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
- BIOL 1114  Introductory Biology (LN)  4
- PBIO 1404  Plant Biology (LN)  4

**Social & Behavioral Sciences (S)**

- Course designated (S)  3
- Additional General Education  1

**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**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1314</td>
<td>Chemistry I (LN)</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1515</td>
<td>Chemistry II (LN)</td>
<td>5</td>
</tr>
</tbody>
</table>

**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**

**Biology Core:**

Minimum GPA 2.50 and minimum grade of "C" or "P" for courses in Biology Core and those denoted with 3

- BIOL 1604  Animal Biology  4
- BIOL 3023  General Genetics  3
- BIOL 3034  General Ecology  4
- BIOL 3204  Physiology  4
- BIOL 4133  Evolution  3
- CHEM 3013  Survey of Organic Chemistry  3
- MICR 2123  Introduction to Microbiology  3
- MICR 2132  Introduction to Microbiology Laboratory  2
- MICR 3033  Cell and Molecular Biology  3

Select one of the following:

- PBIO 3024  Plant Diversity  3
- PBIO 3114  Plant Taxonomy  3
- PBIO 4233  Plant Anatomy  3
- PBIO 4463  Plant Physiology  3

**Secondary Education Professional Core:**

Minimum GPA 2.50 and minimum grade of "C" or "P" in each course

- SMED 1011  Inquiry Approaches to Teaching - Step 1  1
- SMED 2011  Inquiry-Based Lesson Design-Step 2  1
- SMED 3013  Knowing and Learning in Mathematics and Science  3
- SMED 4013  Classroom Interactions  3
- SMED 4023  Problem-Based Learning in Mathematics and Science  3
- SMED 4611  Authentic Research in the Science Classroom  1
- SMED 4613  Teaching the Nature of Science Through an Inquiry Approach  3
- SMED 4713  Teaching and Learning Science in the Secondary School  3
- SMED 4723  Senior Seminar in Secondary Mathematics and Science Education  3
- SPED 3202  Educating Exceptional Learners (D)  2
- CIED 4720  Internship in the Secondary Classroom  6

**Hours Subtotal**  61

**Electives**

Select 6 hours

May need to include 6 hours of a foreign language (see note 3)
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 adviser 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 2024.