### B.S. BIOLOGY

#### TEACHING BIOLOGY

Use with your Degree Progress Report (DPR).

- To learn about requirements for admission to the major, please visit: [https://www.kuub.ku.edu/admission](https://www.kuub.ku.edu/admission)

#### KU CORE REQUIREMENTS
See [https://kucore.ku.edu/fulfilling-the-core](https://kucore.ku.edu/fulfilling-the-core) for approved KU Core courses and/or experiences.

<table>
<thead>
<tr>
<th>Goal</th>
<th>Critical Thinking &amp; Quantitative Literacy</th>
<th>Outcome 1 (Can be satisfied by degree reqs.)</th>
<th>Outcome 2 (Can be satisfied by degree reqs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 1</td>
<td>Communication</td>
<td>Outcome 1</td>
<td>Outcome 2</td>
</tr>
<tr>
<td>Goal 2</td>
<td>Breadth of Knowledge</td>
<td>Arts &amp; Humanities</td>
<td>Social Sciences</td>
</tr>
<tr>
<td>Goal 4</td>
<td>Culture &amp; Diversity</td>
<td>Outcome 1</td>
<td>Outcome 2</td>
</tr>
<tr>
<td>Goal 5</td>
<td>Social Responsibility &amp; Ethics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goal 6</td>
<td>Integration &amp; Creativity</td>
<td></td>
<td>(Can be satisfied by degree reqs.)</td>
</tr>
</tbody>
</table>

#### GENERAL SCIENCE REQUIREMENTS (28–31 h)

- BIOL 105 Biology Orientation Seminar (1)
- CHEM 130 Foundations of Chemistry I (5)
- CHEM 135 Foundations of Chemistry II (5)
- CHEM 310 Fund Organic Chemistry (3) **OR**
- CHEM 330 Organic Chemistry I (3)
- BIOL 413 History and Diversity of Organisms (3)
- BIOL 414 Principles of Ecology (3)
- BIOL 415 Principles of Ecology (3) **OR**
- BIOL 416/536 Cell Structure and Function (3)
- BIOL 350/360 Principles of Genetics (4)
- BIOL 598 Research Methods (3)
- BIOL 412 Evolutionary Biology (4) **OR**
- BIOL 599 Senior Seminar in Biology (1) **must be taken Sr yr**
- CHEM 331 Organic Chemistry I Lab (2)
- CHEM 332 Organic Chemistry II Lab (2)
- CHEM 333 Organic Chemistry III Lab (2)
- CHEM 334 Organic Chemistry IV Lab (2)
- CHEM 335 Organic Chemistry V Lab (2)
- PHSX 114 & 115 College Physics I & II (8)
- PHSX 211+216 College Physics I & II (8)
- MATH 115 & 116 Calculus I & II (6) **OR** MATH 121 Calculus I (5) **OR** MATH 125 Calculus I (4)
- MATH 121 Calculus I (5) **OR** MATH 125 Calculus I (4)

#### GENERAL BIOLOGY REQUIREMENTS (32–33 h)

- BIOL 150/151 Prin Molecular & Cell Biol (4)
- BIOL 152/153 Prin Organismal Biology (4)
- BIOL 350/360 Principles of Genetics (4)
- BIOL 412 Evolutionary Biology (4) **OR**
- BIOL 413 History and Diversity of Organisms (3)
- BIOL 414 Principles of Ecology (3)
- BIOL 415 Principles of Ecology (3) **OR**
- BIOL 416/536 Cell Structure and Function (3)
- BIOL 350/360 Principles of Genetics (4)
- BIOL 598 Research Methods (3)
- BIOL 412 Evolutionary Biology (4) **OR**
- BIOL 599 Senior Seminar in Biology (1) **must be taken Sr yr**
- CHEM 331 Organic Chemistry I Lab (2)
- CHEM 332 Organic Chemistry II Lab (2)
- CHEM 333 Organic Chemistry III Lab (2)
- CHEM 334 Organic Chemistry IV Lab (2)
- CHEM 335 Organic Chemistry V Lab (2)
- PHSX 114 & 115 College Physics I & II (8)
- PHSX 211+216 College Physics I & II (8)
- MATH 115 & 116 Calculus I & II (6) **OR** MATH 121 Calculus I (5) **OR** MATH 125 Calculus I (4)
- MATH 121 Calculus I (5) **OR** MATH 125 Calculus I (4)
- CHEM 331 Organic Chemistry I Lab (2)
- CHEM 332 Organic Chemistry II Lab (2)
- CHEM 333 Organic Chemistry III Lab (2)
- CHEM 334 Organic Chemistry IV Lab (2)
- CHEM 335 Organic Chemistry V Lab (2)
- PHSX 114 & 115 College Physics I & II (8)
- PHSX 211+216 College Physics I & II (8)
- MATH 115 & 116 Calculus I & II (6) **OR** MATH 121 Calculus I (5) **OR** MATH 125 Calculus I (4)
- MATH 121 Calculus I (5) **OR** MATH 125 Calculus I (4)

#### GENERAL EDUCATIONAL REQUIREMENTS

- BIOL 350/360 Principles of Genetics (4)
- BIOL 412 Evolutionary Biology (4) **OR**
- BIOL 598 Research Methods (3)
- BIOL 412 Evolutionary Biology (4) **OR**
- BIOL 599 Senior Seminar in Biology (1) **must be taken Sr yr**
- CHEM 331 Organic Chemistry I Lab (2)
- CHEM 332 Organic Chemistry II Lab (2)
- CHEM 333 Organic Chemistry III Lab (2)
- CHEM 334 Organic Chemistry IV Lab (2)
- CHEM 335 Organic Chemistry V Lab (2)
- PHSX 114 & 115 College Physics I & II (8)
- PHSX 211+216 College Physics I & II (8)
- MATH 115 & 116 Calculus I & II (6) **OR** MATH 121 Calculus I (5) **OR** MATH 125 Calculus I (4)
- MATH 121 Calculus I (5) **OR** MATH 125 Calculus I (4)
- CHEM 331 Organic Chemistry I Lab (2)
- CHEM 332 Organic Chemistry II Lab (2)
- CHEM 333 Organic Chemistry III Lab (2)
- CHEM 334 Organic Chemistry IV Lab (2)
- CHEM 335 Organic Chemistry V Lab (2)
- PHSX 114 & 115 College Physics I & II (8)
- PHSX 211+216 College Physics I & II (8)
- MATH 115 & 116 Calculus I & II (6) **OR** MATH 121 Calculus I (5) **OR** MATH 125 Calculus I (4)
- MATH 121 Calculus I (5) **OR** MATH 125 Calculus I (4)

#### Teaching Biology Elective and Laboratory Requirements (7 h): BIOL courses numbered 400 or higher, including ≥ 4 h of lab credit.

Courses listed above that have not been used to fulfill the above requirements may be used as electives. No more than 3 h of BIOL 423 Non-Lab Independent Study and/or BIOL 424 Independent Study (combined) can be applied towards the elective requirement, with no more than 2 h of BIOL 424 being applied towards the laboratory requirement.

- BIOL _______ ( __ h)
- BIOL _______ ( __ lab h)
- BIOL _______ ( __ lab h)

#### Education Requirements (21 h)

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA&amp;S 290</td>
<td>Approaches to Teaching Science and Math I (1)</td>
</tr>
<tr>
<td>LA&amp;S 291</td>
<td>Approaches to Teaching Science and Math II (1)</td>
</tr>
<tr>
<td>C&amp;T 360</td>
<td>Knowing &amp; Learning in Math &amp; Science (3)</td>
</tr>
<tr>
<td>C&amp;T 460</td>
<td>Project-based Instruction in Math &amp; Science (3)</td>
</tr>
<tr>
<td>C&amp;T 366</td>
<td>Classroom Interactions in Math &amp; Science (3)</td>
</tr>
<tr>
<td>C&amp;T 500</td>
<td>Student Teaching (6)</td>
</tr>
<tr>
<td>C&amp;T 448</td>
<td>Reading Across the Curriculum (3)</td>
</tr>
<tr>
<td>C&amp;T 598</td>
<td>Special Topics Seminar (1)</td>
</tr>
</tbody>
</table>

### Outcome Requirements

- Complete the min. Gen. Science, major, and School of Education reqs. set forth above results in 87 overall h and 54 Jr/Sr h. Double majors must complete ≥ 15 h in the major (i.e., not in Core/Gen Ed Reqs or Gen Science Reqs) that are unique to that major. **87 h** **54 Jr/Sr h**
- At least 120 h (of which 45 must be Jr/Sr h)—courses numbered 300 or above must be completed for graduation. **120 h** **45 Jr/Sr h**

5/7/2015