BACHELOR OF SCIENCE OR ARTS IN BIOLOGY
WITH A CELL & MOLECULAR EMPHASIS
STARTING FALL 2019

IMPORTANT INFORMATION TO REMEMBER
Use this sheet and the Master List of Biology Courses with your Degree Audit to schedule your courses in a logical and functional sequence. YOU are responsible for ensuring that ALL requirements are met for the major AND that you have fulfilled ALL university requirements. Pay special attention when repeating courses and class time conflicts.

- Students must complete a minimum of 40 upper division hours (3000+)
- Students must complete a minimum of 72 Science hours
- Students must complete a minimum of 36 Biology credit hours
- Students must complete 21 Biology residency hours that must be taken at the U

REQUIRED SCIENCE CORE COURSES

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>CREDITS</th>
<th>SEMESTER</th>
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<tbody>
<tr>
<td>MATH 1170 OR MATH 1210</td>
<td>CALCULUS FOR BIOLOGISTS I OR CALCULUS I</td>
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<td>MATH 1180 OR MATH 1220</td>
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<td>CHEM 1210</td>
<td>GENERAL CHEMISTRY I</td>
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<td>GENERAL CHEMISTRY LAB I</td>
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<td>CHEM 1220</td>
<td>GENERAL CHEMISTRY II</td>
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<td>CHEM 2310</td>
<td>ORGANIC CHEMISTRY I</td>
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<td>PHYS 2010</td>
<td>GENERAL PHYSICS I</td>
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REQUIRED FUNDAMENTAL BIOLOGY COURSES

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EMPHASIS CORE COURSES

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<tr>
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<td>PRINCIPLES OF CELL BIOLOGY OR PRINCIPLES OF CELL SCIENCE (HONORS)</td>
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<td>BIOL 2030</td>
<td>PRINCIPLES OF GENETICS</td>
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<td>BIOL 3510</td>
<td>BIOLOGICAL CHEMISTRY I</td>
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COMPLETE 1 EMPHASIS SPECIFIC COURSE
COURSES CANNOT DOUBLE COUNT IN EITHER SECTION

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<th>COURSE</th>
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<tr>
<td>BIOL 3410</td>
<td>ECOLOGY &amp; EVOLUTION</td>
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<td>BIOL 5120</td>
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<td>CELL STRUCTURE AND FUNCTION</td>
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COMPLETE 2 EMPHASIS ELECTIVE COURSES
COURSES CANNOT DOUBLE COUNT IN EITHER SECTION
1 MUST BE A 5000-LEVEL COURSE

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<td>BIOL 3240</td>
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<td>BIOL 5510</td>
<td>GENES, DEVELOPMENT, AND EVOLUTION</td>
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<tr>
<td>CHEM 5810</td>
<td>NANOSCIENCE</td>
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(801) 587-0639
bioadvising@utah.edu
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**COMPLETE 1 EMPHASIS ELECTIVE COURSE**

<table>
<thead>
<tr>
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**COMPLETE 2 5000-LEVEL BIOLOGY COURSES**

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**COMPLETE AT LEAST 2 ADDITIONAL BIOLOGY LAB COURSES**
**TOTALLING 3 LAB UNITS**

<table>
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<th>COURSE</th>
<th>TITLE</th>
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**OTHER BIOLOGY COURSES NEEDED FOR THE REQUIRED 36 BIOLOGY HOURS**
**OR REQUIRED 72 SCIENCE HOURS**

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