**BIOCHEMISTRY B.S.**

All students must meet the University Requirements. ([http://catalogue.uvm.edu/undergraduate/academicinfo/degreerequirements/](http://catalogue.uvm.edu/undergraduate/academicinfo/degreerequirements/))

All students must meet the College Requirements. ([http://catalogue.uvm.edu/undergraduate/artsandsciences/#requirementstext](http://catalogue.uvm.edu/undergraduate/artsandsciences/#requirementstext))

**MAJOR REQUIREMENTS**

The biochemistry core requires satisfactory completion of:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCOR 011</td>
<td>Exploring Biology</td>
<td>4</td>
</tr>
<tr>
<td>BCOR 012</td>
<td>Exploring Biology</td>
<td>4</td>
</tr>
<tr>
<td>BCOR 101</td>
<td>Genetics</td>
<td>3</td>
</tr>
<tr>
<td>BCOR 103</td>
<td>Molecular and Cell Biology</td>
<td>4</td>
</tr>
<tr>
<td>MATH 021</td>
<td>QR: Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 022</td>
<td>QR: Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>STAT 141</td>
<td>QR: Basic Statistical Methods</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 051</td>
<td>Fundamentals of Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 152</td>
<td>Fundamentals of Physics II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 051</td>
<td>Exploring Chemistry I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 052</td>
<td>Exploring Chemistry II</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 047</td>
<td>Organic Chemistry for Majors 1</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 048</td>
<td>Organic Chemistry for Majors 2</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 165</td>
<td>Intro Physical Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>BIOC 205</td>
<td>Biochemistry I</td>
<td>3</td>
</tr>
<tr>
<td>BIOC 206</td>
<td>Biochemistry II</td>
<td>3</td>
</tr>
<tr>
<td>BIOC 207</td>
<td>Biochemistry Lab</td>
<td>3</td>
</tr>
<tr>
<td>12 credits of advanced biochemistry-related electives</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Choose 1 of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOC 284</td>
<td>Biochemistry Senior Seminar</td>
<td>1</td>
</tr>
<tr>
<td>HON 275 &amp; HON 276</td>
<td>Honors: Biochemistry and Honors: Biochemistry</td>
<td></td>
</tr>
</tbody>
</table>

In addition, students must select 1 course from the following group of intermediate-level laboratory electives:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 121</td>
<td>Quantitative Analysis</td>
</tr>
<tr>
<td>MMG 104</td>
<td>Intro Recombinant DNA Tech</td>
</tr>
<tr>
<td>MMG 201</td>
<td>Molecular Cloning Lab</td>
</tr>
<tr>
<td>BIOC 204</td>
<td>Adv Genetics Laboratory</td>
</tr>
<tr>
<td>BIOL 205</td>
<td>Adv Genetics &amp; Proteomics Lab</td>
</tr>
</tbody>
</table>

Students may substitute: (However, the program of study recommended above will provide a better preparation for advanced course work in biochemistry.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 001 &amp; BIOL 002</td>
<td>Principles of Biology and Principles of Biology (For BCOR 011 and BCOR 012)</td>
</tr>
<tr>
<td>PHYS 011 &amp; PHYS 012 &amp; PHYS 021 &amp; PHYS 022 (For PHYS 051 &amp; PHYS 152)</td>
<td></td>
</tr>
<tr>
<td>CHEM 031 &amp; CHEM 032 &amp; CHEM 141 &amp; CHEM 142 (For CHEM 047 &amp; CHEM 048 &amp; CHEM 051 &amp; CHEM 052 &amp; 1 upper-level elective course)</td>
<td></td>
</tr>
</tbody>
</table>

Students completing the B.S. in Biochemistry may not also receive the B.A. with any chemistry major.