# BIOCHEMISTRY - SECONDARY MAJOR

## Requirements for Secondary Major in Biochemistry

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Thirty-seven semester hours including the following:</td>
<td></td>
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<tr>
<td><strong>Required Courses</strong></td>
<td></td>
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<tr>
<td>CHE 1301 &amp; CHE 1101</td>
<td>Basic Principles of Modern Chemistry I and General Chemistry Laboratory I</td>
<td>4</td>
</tr>
<tr>
<td>CHE 1302 &amp; CHE 1102</td>
<td>Basic Principles of Modern Chemistry II and General Chemistry Laboratory II</td>
<td>4</td>
</tr>
<tr>
<td>CHE 2416</td>
<td>Laboratory Measurements and Techniques</td>
<td>4</td>
</tr>
<tr>
<td>CHE 3331</td>
<td>Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHE 3332</td>
<td>Organic Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHE 3238</td>
<td>Organic Chemistry Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>CHE 4001</td>
<td>Exit Examination</td>
<td>0</td>
</tr>
<tr>
<td>CHE 4141</td>
<td>Modern Biochemistry Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHE 4142</td>
<td>Advanced Biochemistry Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHE 4151</td>
<td>Undergraduate Seminar I</td>
<td>1</td>
</tr>
<tr>
<td>CHE 4225</td>
<td>Biophysical Chemistry Laboratory</td>
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<tr>
<td>CHE 4327</td>
<td>Physical Chemistry for the Life Sciences</td>
<td>3</td>
</tr>
<tr>
<td>CHE 4341</td>
<td>General Biochemistry</td>
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</tr>
<tr>
<td>CHE 4342</td>
<td>Topics in Human Biochemistry</td>
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</tr>
<tr>
<td></td>
<td>Three semester hours of 4000-level CHE</td>
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</tr>
<tr>
<td><strong>Subtotal</strong></td>
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<td>37</td>
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<tr>
<td><strong>Required Courses in Other Fields</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIO 1305 &amp; BIO 1105</td>
<td>Modern Concepts of Bioscience and Modern Concepts of Bioscience Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>or BIO 1405</td>
<td>Investigations of Modern Biology Concepts I</td>
<td></td>
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<tr>
<td>BIO 1306 &amp; BIO 1106</td>
<td>Modern Concepts of Bioscience, continued and Modern Concepts of Bioscience Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>or BIO 1406</td>
<td>Investigations of Modern Biology Concepts II</td>
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<tr>
<td>Two 2000-4000 level, 3-4 hr BIO courses</td>
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<td>6</td>
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<tr>
<td>MTH 1321</td>
<td>Calculus I</td>
<td>3</td>
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<tr>
<td>MTH 1322</td>
<td>Calculus II</td>
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<tr>
<td>PHY 1408</td>
<td>General Physics for Natural and Behavioral Sciences I</td>
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<tr>
<td>or PHY 1420</td>
<td>General Physics I</td>
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<tr>
<td>PHY 1409</td>
<td>General Physics for Natural and Behavioral Sciences II</td>
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<tr>
<td>or PHY 1430</td>
<td>General Physics II</td>
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<tr>
<td><strong>Total Hours</strong></td>
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<td>65</td>
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1. A maximum of three semester hours of CHE 4V98 Senior Research Problems may count toward this requirement.
2. BIO 2401 Human Anatomy and Physiology of Motion and Innervation and BIO 2402 Human Anatomy and Physiology of Metabolism and Processing cannot be used to complete this requirement.