CELL AND MOLECULAR BIOLOGY MINOR

Coordinator: Lisa Morey, PhD

The Cell and Molecular minor is open to students majoring in biology or chemistry. For students seeking employment at the BS level, a Departmental “Letter of Proficiency in Laboratory Skills” may be requested upon completion of the minor. This letter requires enrollment in either BIO 300 or BIO 301.

Students must select six courses from the list below. At least three of the six courses must be taken with a laboratory. Please note that a student may choose to take 3 semesters of BIO 301 in lieu of one of the three required labs.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 courses with labs ¹</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>3 additional courses (with or without labs)</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>21</td>
</tr>
</tbody>
</table>

¹ A student may choose to use 3 semesters of BIO 301 in lieu of one of the 3 required labs. In this case, the student would still need to take two courses with labs, 4 courses without labs, and 3 semesters of BIO 301 (for a total of 23 credits).

Cell and Molecular Elective Courses with Laboratories

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIO 404 &amp; 404L</td>
<td>Genetics and Genetics Laboratory (lab optional)</td>
<td>4</td>
</tr>
<tr>
<td>BIO 408 &amp; 408L</td>
<td>Biotechnology, Theory in Practice and Biotechnology Lab</td>
<td>4</td>
</tr>
<tr>
<td>BIO 414 &amp; 414L</td>
<td>Enzymes and Proteins and Enzymes and Proteins Laboratory (lab optional)</td>
<td>4</td>
</tr>
<tr>
<td>BIO 418 &amp; 418L</td>
<td>Endocrinology and Endocrinology Laboratory (lab optional)</td>
<td>4</td>
</tr>
<tr>
<td>BIO 419 &amp; 419L</td>
<td>Cell Biology and Cell Biology Laboratory (lab optional)</td>
<td>4</td>
</tr>
<tr>
<td>BIO 425 &amp; 425L</td>
<td>Cellular Neurobiology and Cellular Neurobiology Laboratory (lab optional)</td>
<td>4</td>
</tr>
<tr>
<td>BIO 426 &amp; 426L</td>
<td>Immunochemistry and Immunochemistry Laboratory (lab optional)</td>
<td>4</td>
</tr>
<tr>
<td>BIO 432 &amp; 432L</td>
<td>Developmental Biology and Developmental Biology Laboratory (lab optional)</td>
<td>4</td>
</tr>
<tr>
<td>BIO 435 &amp; 435L</td>
<td>Developmental Neurobiology and Develop Neurobiology Laboratory (lab optional)</td>
<td>4</td>
</tr>
<tr>
<td>BIO 450 &amp; 450L</td>
<td>Molecular Biology and Molecular Biology Laboratory (lab optional)</td>
<td>4</td>
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</tbody>
</table>

Cell and Molecular Elective Courses without Labs

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 424</td>
<td>Epigenetics and Disease</td>
<td>3</td>
</tr>
<tr>
<td>BIO 444</td>
<td>Cancer Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIO 441</td>
<td>Neurobiology of Nervous System Disorders</td>
<td>3</td>
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