# Master of Science in Biology with Specialization in Computational Genomics

**Required Courses**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 501</td>
<td>Graduate Laboratory Techniques</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 504</td>
<td>Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 515</td>
<td>Molecular Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 533</td>
<td>Adv Graduate Lab Techniques</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 544</td>
<td>Molecular Biology of Cells</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 595</td>
<td>Biology Colloquium</td>
<td>1</td>
</tr>
</tbody>
</table>

**Specialization Courses**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 521</td>
<td>Population Genetics</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 550</td>
<td>Bioinformatics</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 551</td>
<td>Microbial Genomics</td>
<td>3</td>
</tr>
</tbody>
</table>

**Research Course Requirements**

Select one of the following options:  

**Option 1**

- BIOL 581 | Capstone | 3
- Select one additional elective | 3

**Option 2**


**Option 3**

- BIOL 591 | Research and Thesis M.S. | 6

**Elective Courses**

Select three credit hours from the following:

- Any 500-level biology course | 3
- BIOL 410 | Medical Microbiology | 3
- BIOL 415 | Advanced Human Genetics | 3
- BIOL 426 | Concepts of Cancer Biology | 3
- BIOL 430 | Human Physiology | 3
- BIOL 440 | Neurobiology | 3
- BIOL 597 | Special Problems | 1-3

**Total Credit Hours**

33

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1 Student may be approved for special problems as appropriate.