# Microbial, Cellular & Molecular Biology Cell & Molecular Biology Option

## Freshman
### Fall
<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>BIOL 1020 Principles of Biology</td>
<td>3</td>
<td>BIOL 1030 Organismal Biology</td>
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<tr>
<td>BIOL 1021 Principles of Biology Laboratory</td>
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<td>BIOL 1031 Organismal Biology Laboratory</td>
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<tr>
<td>ENGL 1100 English Composition I</td>
<td>3</td>
<td>ENGL 1120 English Composition II</td>
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<tr>
<td>CHEM 1030 Fundamentals Chemistry I</td>
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<td>CHEM 1040 Fundamental Chemistry II</td>
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<tr>
<td>CHEM 1031 Fundamental Chemistry I Laboratory</td>
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<td>CHEM 1041 Fundamental Chemistry II Laboratory</td>
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<tr>
<td>MATH 1610 Calculus I</td>
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<td>MATH 1620 Calculus II</td>
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## Spring

### Hours: 15
### Total Hours: 15

## Sophomore
### Fall
<table>
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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>Core Literature</td>
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<td>Core History</td>
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<td>PHYS 1500 General Physics I</td>
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<td>PHYS 1510 General Physics II</td>
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<td>CHEM 2070 Organic Chemistry I</td>
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<td>CHEM 2080 Organic Chemistry II</td>
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<td>CHEM 2081 Organic Chemistry II Laboratory</td>
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<td>BIOL 3000 Genetics</td>
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<td>BIOL 3200 General Microbiology</td>
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### Hours: 15
### Total Hours: 15

## Junior
### Fall
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<tr>
<td>BIOL 5521 Gene Expression and Recombinant DNA Laboratory</td>
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<td>BCHE 5190 Biochemistry II</td>
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<td>MCB Elective&lt;sup&gt;4&lt;/sup&gt;</td>
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<td>BIOL 4100 Cell Biology</td>
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<td>BIOL 5220 Introductory Molecular Genetics</td>
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<td>BIOL 4101 Cell Biology Laboratory</td>
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<td>BCHE 5180 Biochemistry I</td>
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<td>Core Social Science or Humanities&lt;sup&gt;3&lt;/sup&gt;</td>
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<td>BCHE 5181 Biochemistry I Laboratory</td>
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<td>Core Fine Arts</td>
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### Hours: 15
### Total Hours: 15

## Senior
### Fall
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<tr>
<td>Evolution Elective&lt;sup&gt;4&lt;/sup&gt;</td>
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<td>Core Social Science&lt;sup&gt;2&lt;/sup&gt;</td>
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<td>Biology Elective&lt;sup&gt;4&lt;/sup&gt;</td>
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<td>Biodiversity Electives&lt;sup&gt;4&lt;/sup&gt;</td>
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<td>BIOL 4950 Senior Seminar</td>
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### Hours: 16
### Total Hours: 15

Total Hours: 122
1 Students must complete a two-course sequence in either HIST or LIT (for example, World History 1 and 2 or American Lit 1 and 2). For complete HIST and LIT sequence options, see the *Bulletin*.

2 Students who choose a HIST sequence other than HIST 1010 and HIST 1020 should talk to an advisor about CORE SOC SCI choices.

3 If a LIT sequence is chosen, this course must be a CORE SOC SCI. If a HIST sequence is chosen, this course must be a CORE HUMANITIES.

4 See advisor for list of approved electives.