

# Microbial, Cellular & Molecular Biology — Microbiology Option

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## Freshman

Fall	Hours	Spring	Hours
ENGL 1100 English Composition I		3 ENGL 1120 English Composition II	3
CHEM 1030 Fundamentals Chemistry I		3 CORE SOCIAL SCIENCE	3
CORE HISTORY		3 CHEM 1040 Fundamental Chemistry II	3
CHEM 1031 Fundamental Chemistry I Laboratory		1 CHEM 1041 Fundamental Chemistry II Laboratory	1
BIOL 1020 Principles of Biology		3 BIOL 1030 Organismal Biology	3
BIOL 1021 Principles of Biology Laboratory		1 BIOL 1031 Organismal Biology Laboratory	1
BIOL 2100 Professional Development		1	
		<b>15</b>	<b>14</b>

## Sophomore

Fall	Hours	Spring	Hours
CHEM 2070 Organic Chemistry I		3 CHEM 2080 Organic Chemistry II	3
CHEM 2071 Organic Chemistry I Laboratory		1 CHEM 2081 Organic Chemistry II Laboratory	1
PHYS 1500 General Physics I		4 PHYS 1510 General Physics II	4
BIOL 3000 Genetics		3 <b>BIOL 3200 General Microbiology</b>	<b>3</b>
BIOL 3001 Genetics Laboratory		1 BIOL 3201 General Microbiology Laboratory	1
CORE LITERATURE		3 CORE HISTORY or LIT <sup>1</sup>	3
		<b>15</b>	<b>15</b>

## Junior

Fall	Hours	Spring	Hours
<b>BCHE 5180 Biochemistry I</b>		<b>3 BCHE 5190 Biochemistry II</b>	<b>3</b>
<b>BCHE 5181 Biochemistry I Laboratory</b>		<b>1 MMCB Elective</b>	<b>2 or 3</b>
<b>BIOL 5200 Clinical Microbiology</b>		<b>5 BIOL 4100 Cell Biology</b>	<b>3</b>
BIOL 5250 Microbial Evolution and Diversity		4 CORE FINE ARTS	3
MATH 1610 Calculus I		4 MATH 1620 Calculus II <b>or</b> 2510 Statistics for Biological and Health Sciences <sup>3</sup>	4 or 3
		<b>17</b>	<b>15</b>

## Senior

Fall	Hours	Spring	Hours
<b>BIOL 5260 Prokaryotic Molecular Genetics</b>		<b>3 BIOL 5210 Microbial Physiology</b>	<b>3</b>
<b>BIOL 5521 Gene Expression and Recombinant DNA Laboratory</b>		<b>2 MMCB Elective</b>	<b>4</b>
<b>Biology Elective</b>		<b>3 Biology Electives</b>	<b>4</b>
CORE SOC SCI or HUM <sup>2</sup>		3 Core Social Science	3
Free Elective		2 <b>BIOL 4950 Senior Seminar</b>	<b>1</b>
CORE HUMANITIES		3 UNIV 4AA0 Creed to Succeed	0

BIOL 4AA0 Professional Development II	0	
	<b>16</b>	<b>15</b>

**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 If a HIST sequence is chosen, this course must be a CORE HUMANITIES.
- 3 If STAT 2510 is chosen, an extra hour of MMCB Elective must be completed.