

## Biology (grid only)

### Course Sequence:

#### Semester 1

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
<a href="#">CHEM 121 - College Chemistry I</a>	<a href="#">CHEM 110</a> or Department Head approval and FNMT 118 or MATH 118	4 credits	Scientific Reasoning
<a href="#">CIS 103 - Computer Applications &amp; Concepts</a>		3 credits	Technological Competency
<a href="#">ENGL 101 - English Composition I</a>		3 credits	Writing, Research, Info Lit 1
<a href="#">MATH 162 - Precalculus II</a>	<a href="#">MATH 161</a> with a grade of "C" or better, or placement in <a href="#">MATH 162</a> or higher	3 credits	Quantitative Reasoning
<a href="#">SOC 101 - Introduction to Sociology</a>		3 credits	Cultural Analysis & Interpretation

#### Semester 2

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
<a href="#">BIOL 123 - Principles of Biology I</a>	<a href="#">CHEM 121</a> or <a href="#">CHEM 110</a> with a grade of "C" or better and high school biology or permission of the dept. head	4 credits	
<a href="#">CHEM 122 - College Chemistry II</a>	<a href="#">CHEM 121</a> with a grade of "C" or better	4 credits	
<a href="#">ENGL 102 - The Research Paper</a>	<a href="#">ENGL 101</a> with a grade of "C" or better	3 credits	Writing, Research, Info Lit 2
<a href="#">FREN 101 - Elementary French</a> or		3 credits	

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
<a href="#">HUM 101 - Cultural Traditions: Ancient to the 13<sup>th</sup> Century</a> or <a href="#">SPAN 101 - Elementary Spanish</a>			
<a href="#">PSYC 101 - Introduction to Psychology</a>		3 credits	

Semester 3

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
<a href="#">BIOL 124 - Principles of Biology II</a>	<a href="#">BIOL 123</a> with a grade of "C" or better	4 credits	
<a href="#">CHEM 221 - Organic Chemistry I</a>	<a href="#">CHEM 122</a> with a grade of "C" or better	5 credits	
<a href="#">MATH 171 - Calculus I</a>	<a href="#">MATH 162</a> or higher with a grade of "C" or better, or placement in <a href="#">MATH 171</a> or higher	4 credits	
<a href="#">BIOL 211 - Genetics</a> or <a href="#">BIOL 225 - Ecology and Field Biology</a> or <a href="#">BIOL 241 - Principles of Microbiology</a> or <a href="#">BIOL 255 - Biotechnology I: Basic Laboratory Techniques in Biotechnology</a> or <a href="#">BIOL 256 - Fermentation, Bioprocessing and Biomanufacturing</a> or <a href="#">BIOL 281 - Biochemistry I</a> or <a href="#">BTT 101 - Biomedical</a>	For BIOL 241: <a href="#">BIOL 106</a> , <a href="#">BIOL 107</a> , <a href="#">BIOL 109</a> , or <a href="#">BIOL 123</a> with a grade of "C" or better. For BIOL 255: FNMT 118 or higher with a "C" or better, or MATH 161 placement; <a href="#">CHEM 110</a> or <a href="#">CHEM 121</a> ; <a href="#">BIOL 123</a> or <a href="#">BIOL 241</a> with a "C" or better. For BIOL 256: <a href="#">BIOL 255</a> with a grade of "C" or better. For BIOL 281: <a href="#">BIOL 123</a> with a grade of "C" or better and <a href="#">CHEM 221</a> which may be taken concurrently. For BIOL 225: <a href="#">BIOL 107</a> or <a href="#">BIOL 124</a> with a grade of	4 credits	

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
<a href="#">Technician Training Practicum</a>	"C" or better. For BTT 101: Permission of the Biomedical Technician Training Academic Coordinator and completion of the Orientation to Biomedical Technology		

Semester 4

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
<a href="#">CHEM 222 - Organic Chemistry II</a>	<a href="#">CHEM 221</a> with a grade of "C" or better	5 credits	
<a href="#">ENGL 115 - Public Speaking</a>	<a href="#">ENGL 101</a> which may be taken concurrently	3 credits	Oral Communication/Creative Expression
BIOL 211 - Genetics or BIOL 225 - Ecology and Field Biology or BIOL 241 - Principles of Microbiology or BIOL 255 - Biotechnology I: Basic Laboratory Techniques in Biotechnology or BIOL 256 - Fermentation, Bioprocessing and Biomanufacturing or BIOL 281 - Biochemistry I or BTT 101 - Biomedical Technician Training Practicum	For BIOL 241: BIOL 106, BIOL 107, BIOL 109, or BIOL 123 with a grade of "C" or better. For BIOL 255: FNMT 118 or higher with a "C" or better, or MATH 161 placement; CHEM 110 or CHEM 121; BIOL 123 or BIOL 241 with a "C" or better. For BIOL 256: BIOL 255 with a grade of "C" or better. For BIOL 281: BIOL 123 with a grade of "C" or better and CHEM 221 which may be taken concurrently. For BIOL 225: BIOL 107 or BIOL 124 with a grade of "C" or better. For BTT 101: Permission of the Biomedical Technician Training Academic Coordinator and completion	4 credits	

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
	of the Orientation to Biomedical Technology		
<a href="#">PHIL 101 - Introduction to Philosophy</a>		3 credits	

**Minimum Credits Needed to Graduate: 65**

**Courses and Completion Sequence:**

Semester 1

Course Number and Name	Credits	Advisory Notes
<a href="#">CHEM 121 - College Chemistry I</a>	4 credits	Fulfills major prerequisite; Must earn a grade of "C" or better to take CHEM 122. Within the major, this must be taken during the first 20 credits. <b>Scientific Reasoning</b>
<a href="#">CIS 103 - Computer Applications &amp; Concepts</a>	3 credits	<b>Technological Competency</b>
<a href="#">ENGL 101 - English Composition I</a>	3 credits	<b>Writing, Research, Info Lit 1</b>
<a href="#">MATH 162 - Precalculus II</a>	3 credits	Within the major, this course must be taken within the first 20 credits <b>Quantitative Reasoning</b>
<a href="#">SOC 101 - Introduction to Sociology</a>	3 credits	<b>Cultural Analysis &amp; Interpretation</b>

Semester 2

Course Number and Name	Credits	Advisory Notes
<a href="#">BIOL 123 - Principles of Biology I</a>	4 credits	Fulfills major prerequisite. Must earn a grade of "C" or better to take BIOL 124. If you do not pass BIOL 123 within two

Course Number and Name	Credits	Advisory Notes
		semesters you are not progressing in the major.
<a href="#">CHEM 122 - College Chemistry II</a>	4 credits	Must earn a grade of "C" or better or get permission of Chemistry department head to take CHEM 221
<a href="#">ENGL 102 - The Research Paper</a>	3 credits	Writing, Research, Info Lit 2
<a href="#">FREN 101 - Elementary French</a> or <a href="#">HUM 101 - Cultural Traditions: Ancient to the 13<sup>th</sup> Century</a> or <a href="#">SPAN 101 - Elementary Spanish</a>	3 credits	
<a href="#">PSYC 101 - Introduction to Psychology</a>	3 credits	

### Semester 3

Course Number and Name	Credits	Advisory Notes
<a href="#">BIOL 124 - Principles of Biology II</a>	4 credits	Must earn a grade of "C" or better
<a href="#">CHEM 221 - Organic Chemistry I</a>	5 credits	Must earn a grade of "C" or better or get permission of Chemistry department head to take CHEM 222
<a href="#">MATH 171 - Calculus I</a>	4 credits	
<a href="#">BIOL 211 - Genetics</a> or <a href="#">BIOL 225 - Ecology and Field Biology</a> or <a href="#">BIOL 241 - Principles of Microbiology</a> or <a href="#">BIOL 255 - Biotechnology I: Basic Laboratory Techniques in Biotechnology</a> or	4 credits	Must earn a grade of "C" or better  Prerequisite for BIOL 211: BIOL 106 or BIOL 108 or BIOL 109 or BIOL 123 with a "C" or better or permission of the department head

Course Number and Name	Credits	Advisory Notes
<a href="#">BIOL 256 - Fermentation, Bioprocessing and Biomanufacturing</a> or <a href="#">BIOL 281 - Biochemistry</a> I or <a href="#">BTT 101 - Biomedical Technician Training Practicum</a>		<p>Prerequisite for BIOL 241: BIOL 106, BIOL 107, BIOL 109, or BIOL 123 with a grade of "C" or better</p> <p>Prerequisite for BIOL 225: BIOL 107 or BIOL 124 with a grade of "C" or better</p> <p>Prerequisite for BIOL 255: FNMT 118 or higher with a "C" or better, or MATH 161 placement; CHEM 110 or CHEM 121; BIOL 123 or BIOL 241 with a "C" or better</p> <p>Prerequisite for BIOL 256: BIOL 255 with a grade of "C" or better</p> <p>BTT 101 requires permission of the Biomedical Technician Training Academic Coordinator and completion of the Orientation to Biomedical Technology</p>

Semester 4

Course Number and Name	Credits	Advisory Notes
<a href="#">CHEM 222 - Organic Chemistry II</a>	5 credits	
<a href="#">ENGL 115 - Public Speaking</a>	3 credits	<b>Oral Communication/Creative Expression</b>
<a href="#">BIOL 211 - Genetics</a> or <a href="#">BIOL 225 - Ecology and Field Biology</a> or <a href="#">BIOL 241 - Principles of Microbiology</a> or <a href="#">BIOL 255 - Biotechnology I: Basic Laboratory Techniques in Biotechnology</a> or <a href="#">BIOL 256 - Fermentation, Bioprocessing and</a>	4 credits	<p>Must earn a grade of "C" or better</p> <p>Prerequisite for BIOL 211: BIOL 106 or BIOL 108 or BIOL 109 or BIOL 123 with a "C" or better or permission of the department head</p> <p>Prerequisite for BIOL 241: BIOL 106, BIOL 107, BIOL 109, or BIOL</p>

Course Number and Name	Credits	Advisory Notes
<a href="#">Biomanufacturing</a> or <a href="#">BIOL 281 - Biochemistry I</a> or <a href="#">BTT 101 - Biomedical Technician Training Practicum</a>		<p>123 with a grade of "C" or better</p> <p>Prerequisite for BIOL 225: BIOL 107 or BIOL 124 with a grade of "C" or better</p> <p>Prerequisite for BIOL 255: FNMT 118 or higher with a "C" or better, or MATH 161 placement; CHEM 110 or CHEM 121; BIOL 123 or BIOL 241 with a "C" or better</p> <p>Prerequisite for BIOL 256: BIOL 255 with a grade of "C" or better</p> <p>BTT 101 requires permission of the Biomedical Technician Training Academic Coordinator and completion of the Orientation to Biomedical Technology</p>
<a href="#">PHIL 101 - Introduction to Philosophy</a>	3 credits	