

**3+1 Program**  
**Cell and Molecular Biology**  
**Northeastern State University**  
 First Year – Freshman

<b>Fall Semester</b>	<b>Spring Semester</b>
MATH 1513* College Algebra	CHEM 1123* General Chemistry 1
UNIV 1002* University Strategies	CHEM 1131* General Chemistry 1 Lab
ENGL 1003* Freshman Comp 1	BIOL 1013 Intro Biology 1
Fine Arts Appreciation, 3 hours*	BIOL 1011 Intro Biology 1 Lab
Life Skills, 3 hours*	ENGL 1213 Freshman Comp 2
Culture and Ideas, 3 hours*	Communications, 3 hours*
	POLS 1113* American Federal Government
<b>Total Hours 17</b>	<b>Total Hours 17</b>

First Year – Summer Semester

CHEM 1223 General Chemistry 2
CHEM 1231 General Chemistry 2 Lab
HIST 1483 or 1493* American History
<b>Total Hours 7</b>

Second Year – Sophomore

<b>Fall Semester</b>	<b>Spring Semester</b>
BIOL 1023 Intro Biology 2	BIOL 3124 Cell Biology
BIOL 1021 Intro Biology 2 Lab	BIOL 3224 Microbiology
BIOL 3114 Genetics	CHEM 3223 Organic Chemistry 2
CHEM 3123 Organic Chemistry 1	CHEM 3232 Organic Chemistry 2 Lab
CHEM 3132 Organic Chemistry 1 Lab	HFS 1653* Basic Nutrition
A course in statistics (MATH 3513 recommended)	
<b>Total Hours 16</b>	<b>Total Hours 16</b>

Third Year – Junior

<b>Fall Semester</b>	<b>Spring Semester</b>
BIOL 4543 Molecular Biology	BIOL 4242 Trends and Issues in Molecular Biology
PHYS 1115 General Physics 1	PHYS 1215 General Physics 2
CHEM 4214 Biochemistry	Biology Research, 2 hours (ED or RB)
Social Science, 3 hours*	Global Perspective, 3 hours*
Global Perspective, 3 hours*	BIOL 4232 Cell/Molecular Lab
<b>Total Hours 18</b>	<b>Total Hours 14</b>

\* indicates General Education requirement.