



# NORTHEASTERN STATE UNIVERSITY

*College of Science & Health Professions*

## 2020 – 2021 Chemistry – Biochemistry

### First Year – Freshman

Fall Semester	Spring Semester
ENGL 1113* Freshman Comp I	ENGL 1213* Freshman Comp II
BIOL 1013* Introductory Biology I	CHEM 1123* General Chemistry I
BIOL 1011 Introductory Biology I Lab	CHEM 1131* General Chemistry I Lab
HIST 1483 or 1493* American History	Communications, 3 hours*
MATH 1714* Precalculus	POLS 1113* American Federal Government
UNIV 1003* University Strategies	Life Skills, 3 hours*
<b>Total Hours 17</b>	<b>Total Hours 16</b>

### Second Year – Sophomore

Fall Semester	Spring Semester
CHEM 1223 General Chemistry II	CHEM 3123 Organic Chemistry I
CHEM 1231 General Chemistry II Lab	CHEM 3131 Organic Chemistry I Lab
MATH 3513 Statistical Methods	BIOL 3124 Cell Biology
Social Sciences, 3 hours*	Humanities elective, 3 hours*
Humanities elective, 3 hours*	Global Perspectives Elective, 3 hours*
Life Skills Elective, 3 hours*	
<b>Total Hours 16</b>	<b>Total Hours 14</b>

### Third Year – Junior

Fall Semester	Spring Semester
CHEM 3223 Organic Chemistry II	CHEM 4214 Biochemistry
CHEM 3231 Organic Chemistry II Lab	CHEM 4221 Biochemistry Lab
CHEM 3315 Quantitative Analysis	PHYS 2115 Engineering Physics I
MATH 2614 Calculus I	CHEM-Biochemistry Elective, 3 hours
Free Elective, 3 hours	MATH 2624 Calculus II
<b>Total Hours 16</b>	<b>Total Hours 17</b>

### Fourth Year – Senior

Fall Semester	Spring Semester
CHEM 4524 Physical Chemistry I or CHEM 4313 Biophysical Chemistry, 3-4 hrs	CHEM-Biochemistry Elective, 3 hrs (General Physics II or Engineering Physics II in fall required for ACS certification)
CHEM 4412 Research in Chemistry I	CHEM 4911 Chemistry Seminar I
CHEM 4723 Advanced Biochemistry	Free Electives, 9 hours
CHEM-Biochemistry electives, 6 hours (Inorganic Chemistry required for ACS certification)	
<b>Total Hours 15</b>	<b>Total Hours 13</b>

**Total Degree Plan Hours 124**

\*General Education Requirement. \*\*See current catalog "General Requirements" for selection.

04/16/2020