

# Biochemistry and Molecular Biology

## Department Information

- **Department Web Site:**  
[www.ndsu.edu/chemistry/](http://www.ndsu.edu/chemistry/) (<http://www.ndsu.edu/chemistry/>)
- **Credential Offered:**  
B.S.; B.A.; Minor
- **Official Program Curriculum:**  
[catalog.ndsu.edu/undergraduate/program-curriculum/biochemistry-molecular-biology/](http://catalog.ndsu.edu/undergraduate/program-curriculum/biochemistry-molecular-biology/) (<http://catalog.ndsu.edu/undergraduate/program-curriculum/biochemistry-molecular-biology/>)

## Sample Program Guide

**IMPORTANT DISCLAIMER:** This guide is not an official curriculum. This guide is a sample four-year degree plan of how students might plan this major with other degree requirements to complete their education in four years. Student plans will vary from this sample due to a variety of factors, such as, but not limited to, start year, education goals, transfer credit, and course availability. To ensure proper degree completion, enrolled students should utilize Degree Map (<https://www.ndsu.edu/registrar/degreemap/>) and Schedule Planner (<https://www.ndsu.edu/onestop/degree-map-and-planning/>) in Campus Connection and consult regularly with academic advisors to ensure graduation requirements are being met.

Freshman			
Fall	Credits	Spring	Credits
BIOL 150 & 150L		4 MATH 166	4
CHEM 121 & CHEM 160		4 ENGL 120 (Communication Gen Ed)	3
ENGL 110 (Communication Gen Ed)		3 CHEM 122 & CHEM 161	4
MATH 165 (Quant. Reasoning Gen Ed)		4 BIOL 151	3
		<b>15</b>	<b>14</b>
Sophomore			
Fall	Credits	Spring	Credits
COMM 110 (Communication Gen Ed)		3 PHYS 252 & 252L (Science & Tech Gen Ed)	5
CHEM 341		3 CHEM 342	3
CHEM 353		1 CHEM 354	2
BIOL 315		3 Humanities/Fine Arts and Global Perspectives Gen Ed	3
PHYS 251 & 251L (Science & Tech Gen Ed)		5 Social & Beh Sci and Cultural Diversity Gen Ed	3
		<b>15</b>	<b>16</b>
Junior			
Fall	Credits	Spring	Credits
BIOC 460		3 CHEM 380	1
BIOC 460L		1 BIOC 461	3
CHEM 431		3 BIOC 474	3
MICR 350 & 350L		5 STAT 330	3
ENGL 321 or 324 (Communication Gen Ed)		3 300-400 Level Science Elective <sup>1</sup>	3

300-400 Level Science Elective <sup>1</sup>			3
<b>15</b>			<b>16</b>
<b>Senior</b>			
<b>Fall</b>	<b>Credits</b>	<b>Spring</b>	<b>Credits</b>
BIOC 473		4 BIOC 487	3
BIOC 483		3 CHEM 491	2
CHEM 465		4 300-400 Level Science Electives <sup>1</sup>	3
Humanities or Social Science College Requirement <sup>2</sup>		3 Humanities or Social Science College Requirement <sup>2</sup>	6
		Wellness Gen Ed	2
<b>14</b>			<b>16</b>
<b>Total Credits: 121</b>			

1

Courses in BIOL, BOT, ZOO, CHEM, CSCI, MICR, PSCI, PHYS, PPTH, or STAT. No more than 6 credits from one prefix may apply. Research credits (CHEM 494/BIOC 494) may count towards 3 of these credits.

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Humanities and Social Sciences may be fulfilled by any course having the following prefix: ADHM, ANTH, ARCH, ART, CJ, CLAS, COMM, ECON, ENGL, FREN, GEOG, GERM, HDFS, LA, LANG, MUSC, PHIL, POLS, PSYC, RELS, SOC, SPAN, THEA, WGS, or any course from the approved list of general education in the humanities & fine arts and the social & behavioral sciences categories (A & B). These credits must come from outside the department of the student's major.