

# Biochemistry and Molecular Biology

## Department Information

- **Department Web Site:**  
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: A Sample Program Guide provides an unofficial guide of program requirements and should be used by prospective students who are considering attending NDSU in the future. It is NOT an official curriculum and should NOT be used by current NDSU students for official degree planning purposes. Note that the official curriculum used by current NDSU students can vary from the Sample Program Guide due to a variety of factors such as, but not limited to, start year, education goals, transfer credit, and course availability.

To ensure proper program 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 their academic advisor to ensure 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>

**Total Credits: 121**

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.

2

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.