

# Biochemistry and Molecular Biology

## Department Information

- **Department Location:**  
Ladd Hall
- **Department Phone:**  
701-231-8694
- **Department Email:**  
ndsu.chemistry@ndsu.edu
- **Department Web Site:**  
[www.ndsu.edu/chemistry/](http://www.ndsu.edu/chemistry/) (<http://www.ndsu.edu/chemistry/>)
- **Credential Offered:**  
B.S.; B.A.
- **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

Please note this is a sample program guide and not an official curriculum. Actual student schedules for each semester will vary depending on start year, education goals, applicable transfer credit, and course availability. Once admitted, students are encouraged to work with their assigned academic advisor on a regular basis to review degree progress.

Freshman			
Fall	Credits	Spring	Credits
BIOL 150 & 150L		4 MATH 166	4
CHEM 150 or 121		3 CHEM 151 or 122	3
CHEM 160 or 121L		1 CHEM 161 or 122L	1
ENGL 110 (Communication Gen Ed)		3 ENGL 120 (Communication Gen Ed)	3
MATH 165 (Quant. Reasoning Gen Ed)		4 Humanities/Fine Arts Gen Ed	3
		Social & Behavioral Sci Gen Ed	3
		<b>15</b>	<b>17</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

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<b>Senior</b>			
<b>Fall</b>	<b>Credits</b>	<b>Spring</b>	<b>Credits</b>
BIOC 473		3 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>	3
		Wellness Gen Ed	2
		<b>13</b>	<b>13</b>

**Total Credits: 120**

<sup>1</sup> 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.

<sup>2</sup> 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.