

2028 Academic Planning Form: **BIOCHEMISTRY B.S.**

5/17/2023

Example Sequence for BIOCHEMISTRY B.S. (most electives can be chosen at student's discretion.)

	Fall Semester	# of Credits	Spring Semester	# of Credits	Total Year Credits
1st Year	DWC 101 (4 credit hrs; Honors 5 credit hrs)	4	DWC 102 (4 credit hrs; Honors 5 credits hrs)	4	
	MTH 131 Calc & Analytical Geometry I (Quantitative Reasoning Core)	4	MTH 132 Calc & Analytical Geometry II	4	
	CHM 121 Intro Chemistry I w/ Lab (Natural Science Core)	4	CHM 122 Intro Chemistry II w/ Lab	4	
	BIO 103 General Biology I w/ Lab	4	BIO 104 General Biology II w/ Lab	4	
			CHM 132 Intro to Biochemistry	1	
		16		17	33
2nd Year	DWC 201 (4 credit hrs; Honors 5 credit hrs)	4	DWC 202 (4 credit hrs; Honors 5 credits hrs)	4	
	CHM 221 Organic Chemistry I w/ Lab	4	CHM 222 Organic Chemistry II w/ Lab	4	
	EPS 101 General Physics I w/ Lab	4	EPS 102 General Physics II w/ Lab	4	
	BIO 200 Cellular and Molecular Biology (Intensive Writing II Proficiency)	3	Core	3	
		15		15	
3rd Year	CHM 309 Biochemistry	3	CHM 321 Physical Chemistry I	3	
	CHM 331 Adv. Analytical Chemistry I w/ Lab	4	CHM 321L Physical Chemistry I Lab	1	
	CHM 381 Chemistry Seminar (Oral Communication Proficiency)	1	CHM 312 Biochemistry II	3	
	Core	3	CHM 382 Chemistry Seminar (Oral Communication Proficiency)	2	
	Core/Free Elective	3	Core	3	
			Core/Free Elective	3	
		14		15	
4th Year	Chemistry Elective(s)	3 or 4	CHM 310L Biochemistry Lab (Intensive Writing II Proficiency)	3	
	CHM 481 Chemistry Seminar (Oral Communication Proficiency)	2	CHM 482 Chemistry Seminar (Oral Communication Proficiency)	0	
	BIO 308 Modern Genetics w/ Lab	4	Core/Free Elective	3	
	Core	3	Core/Free Elective	3	
	Core	3	Core	3	
		16		12	28
Graduation Requirement includes a minimum of 120 credit hours			Total Program of Study Credits		120

For Study Abroad - fall of the junior year following consultation with department chair and provided one finds equivalent courses abroad.

Note: CHM 310L and CHM 312 are offered in alternate years.

Chemistry Elective may be any 300 or 400 level CHM course, student will receive ACS certification if CHM 401 is chosen.

Core requirements include a foundational component and satisfaction of all proficiencies.

Foundational Component:

- DWC - 4 semester sequence, 16-20 cr.
- Theology (200 & 300 level) - 6 cr.
- Philosophy (1 Ethics) - 6 cr.
- Natural Science - 3 cr. (**CHM 121/121L**)
- Social Science - 3 cr.
- Quantitative Reasoning - 3 cr. (**MTH 131 or MTH 132**)
- Fine Arts - 3 cr.

Proficiencies:

- Intensive Writing - I
- Intensive Writing - II (**BIO 200 and CHM 310L**)
- Diversity
- Civic Engagement
- Oral Proficiency (**CHM 381/382/481/482**)

Major Requirements (BIOCHM BS Courses):

- CHM 121-122, 221-222, 309, 310L, 321, 321L, 331, 381, 382, 481, 482
- MTH 131-132
- BIO 103-104, 200, 308
- EPS 101-102