

BIOCHEMISTRY MAJOR (2020 Catalog)  
Bachelor of Arts Degree – Biochemistry  
 120 Semester Hours Minimum

Name \_\_\_\_\_

Campus Address \_\_\_\_\_ Phone \_\_\_\_\_

Second Major \_\_\_\_\_ Minor 1 \_\_\_\_\_ Minor 2 \_\_\_\_\_

Transferred \_\_\_\_\_ credits from \_\_\_\_\_ Advisor \_\_\_\_\_

**Chemistry Courses**

CHEM 1110	General Chemistry I	4	_____
CHEM 1120	General Chemistry II	4	_____
	OR		
CHEM 1130	Gen. Chemistry I-II	5	_____
CHEM 2110	Descriptive Inorg Chem	4	_____
	OR		
CHEM 2310	Chromatog. and Quant.	4	_____
CHEM 2010	Chemical Safety	1	_____
CHEM 2210	Organic Chemistry I	3	_____
CHEM 2220	Organic Chemistry II	3	_____
CHEM 2230	Organic Chem. Lab	2	_____
CHEM 4420	Physical Chemistry I	3	_____
CHEM 4510	Biochemistry I	3	_____
CHEM 4520	Biochemistry II	3	_____
CHEM 4530	Biochemistry Lab	2	_____

**Elective**

3000 or 4000 level BIOL or CHEM course 3 \_\_\_\_\_

**Biology Courses**

BIOL 2052	General Biology: Cell Structure and Function	4	_____
BIOL 3140	Genetics	4	_____

**Math and Physics Courses**

MATH 1420	Calculus I	4	_____
PHYSICS 1701	Physics I	4	_____
PHYSICS 1702	Physics II	4	_____
	OR		
PHYSICS 1511	General Physics I	4	_____
PHYSICS 1512	General Physics II	4	_____

**Liberal Arts Core**

***Category I: Core Competencies (12 hrs)***

_____	A. Reading and Writing	3 hrs
_____	B. Speaking and Listening	3 hrs
<u>  x  </u>	C. Quantitative Techniques	3 hrs
	Satisfied by MATH 1420 4 hrs	
_____	D. Dimensions of Wellbeing	2 hrs

***Category 2: Civilizations and Cultures (9 hrs)***

_____	A. Humanities (take 2 of I, II, and III)	3 hrs
	_____	3 hrs
_____	B. Non-Western Cultures	3 hrs

***Category 3: Fine Arts, Literature, Philosophy and Religion (6 hrs)***

_____	A. Fine Arts	3 hrs
_____	B. Lit, Philosophy, or Religion	3 hrs

***Category 4: Natural Science and Technology (7 hrs)***

<u>  x  </u>	A. Life Sciences	3 hrs
	Satisfied by BIOL 2052	
<u>  x  </u>	B. Physical Sciences	4 hrs
	Satisfied by CHEM 1110 or CHEM 1130	

***Category 5: Social Science (9 hrs)***

_____	A. Soc. & Historical Perspectives	3 hrs
_____	B. Individual & Institutional Perspectives	3 hrs
_____	C. Diversity & Global Issues	3 hrs

***Category 6: Capstone (2 hrs)***

\_\_\_\_\_ Capstone

**Total: 52-55 hours**

**10 hours satisfied  
34 hours needed**

SAMPLE PLAN OF STUDY FOR THE MAJOR IN BIOCHEMISTRY – B.A.

An average of 15 credits per semester is needed to graduate in 8 semesters.

FRESHMAN YEAR

FALL		SPRING			
MATH 1140	Precalculus	4	CHEM 1120	General Chemistry II	4
BIOL 2052	Gen Bio: Cell Struct. and Func.	4	MATH 1420	Calculus I	4
CHEM 1110	General Chemistry I	4		Liberal Arts	<u>6</u>
	Liberal Arts	<u>3</u>			14
		15			

SOPHOMORE YEAR

FALL		SPRING				
{	CHEM 2110	Descriptive Inorganic Chem.	4	CHEM 2220	Organic Chemistry II	3
		OR		CHEM 2230	Organic Chemistry Laboratory	2
	CHEM 2310	Chromatog. and Quant.	4	CHEM 2010	Chemical Safety	1
	CHEM 2210	Organic Chemistry I	3	PHYSICS 1512	General Physics II	4
	PHYSICS 1511	General Physics I	4	BIOL 3140	Genetics	4
	Liberal Arts	<u>3</u>		Liberal Arts/Electives	<u>3</u>	
		14			17	

JUNIOR YEAR

FALL		SPRING			
CHEM 4420	Physical Chemistry I	3	CHEM 4520	Biochemistry II	3
CHEM 4510	Biochemistry I	3	CHEM 4530	Biochemistry Lab	2
	Liberal Arts/Electives	<u>9</u>	Liberal Arts/Electives		<u>10</u>
		15			15

SENIOR YEAR

FALL		SPRING		
3000/4000 level	BIOL or CHEM Elective	3	Electives	<u>15</u>
	Liberal Arts/Electives	<u>12</u>		15
		15		

Total Hours

Major Courses	52-55 hours
Liberal Arts Core Courses	34 hours
University Electives	<u>31-34 hours</u>
	120 hours minimum

ADVISING NOTE: The above program represents one example of a variety of alternative schedules for completing the Chemistry B.A. Major in Biochemistry. Requirements are subject to change.