

## BIOCHEMISTRY - Major Requirements for BS Degree Effective Fall 2019

Full name: Hamline ID: Phone #:

Anticipated graduation date (such as: May, 2023)

DEPT	COURSE	TITLE	GRADE	CREDITS	TERM/ YEAR	SUBSTITUTE COURSE*	BREADTH OF STUDY**
Biology (4 co	ourses):						
BIOL	1510	Integrated Concepts in Biology I		4			no
BIOL	1520	Integrated Concepts in Biology II		4			no
BIOL	3050	Principles of Genetics		4			no
BIOL	3060	Principles of Cell Biology		4			no
Two general	chemisty	courses or one advanced genera	l chemis	try course	:		1
CHEM	1130	General Chemistry I		4			no
CHEM	1140	General Chemistry II		4			no
or		,					
CHEM	1500	Advanced General Chemistry		4			no
		es from the list below:	l				
CHEM	3240	Analytical Chemistry		4			no
CHEM	3450	Organic Chemistry I		4			no
CHEM	3460			4			
CHEIN		Organic Chemistry II		4			no
CHEM	3550	Physical Chemistry I		4			no
D'	or 5700	Molecular Biophysics					
Biochemistry							
BIOC	3820	Biochemistry I		4			no
BIOC	3830	Biochemistry II		4			no
Mathematics	(3 course	s):					
MATH	1170	Calculus I		4			yes
MATH	1180	Calculus II		4			yes
MATH	1200	Statistics		4			yes
Physics (2 co	ourses):						
PHYS	1230	General Physics I		4			yes
PHYS	1240	General Physics II		4			yes
Independent	research	project, choose one of the follow	ing:				•
BIOC/BIOL/ CHEM	5970	Independent Study		4			no
BIOC/BIOL/ CHEM	4010	Collaborative Research		7			
5000-level El	lective (1 c	ourse):					
BIOL	5540	Aquatic Biology		4			no
BIOL	5550			4			
		Microbiology		4			no
BIOL	5600	Developmental Biology					no
BIOL	5650	Animal Behaviour		4			no
BIOL	5760	Immunology		4			no
BIOL	5870	Genomics and Bioinformatics		4			no
BIOL	5960	Senior Capstone		4			no
Additional El (Choose an a			e course	in biology	, math. chei	mistry, or physics at the 3000-level or higher)	
,				4	,, 5.767	,, p,	yes
Seminar (Fit)	her 4 semi	sters of biology seminar or che	mistry so				yes
BIOL	5961	Biology Seminar I		1			no
BIOL	5962	-					no
		Biology Seminar II		1			no
BIOL	5963	Biology Seminar III		1			no
BIOL	5964	Biology Seminar Presentation		1			no
011=::	5950	Chemistry Seminar A		0.5			no
CHEM			I	0.5			no
CHEM	5950	Chemistry Seminar A					
CHEM	5950	Chemistry Seminar A Chemistry Seminar A		0.5			no
CHEM		-					

<sup>\*</sup>Department approval is required for transfer courses or other substitutions. Courses used as substitutions must be initialed by Department Chair.

Student signature:	Date:
(required)	
Biochemistry advisor signature:	Date:
(required)	
Department chair/director signature:	Date:
(required for course substitutions and waivers)	

<sup>\*\*</sup>In order to graduate, you must have at least 48 Breadth of Study credits (credits outside your major department). See above for courses in your major