COLLEGE OF LETTERS, ARTS AND SCIENCES
METROPOLITAN STATE UNIVERSITY OF DENVER

Catalog Year: *2021-2022*

This is a degree plan for completing a BS in Biochemistry in eight semesters. ***This document is meant to be used as a guide for planning purposes only and is intended for use in consultation with a Professional Academic or Faculty advisor.***

Year One

Semester 1	Fall	Credits
CHE 1800	General Chemistry I*	4
CHE 1801	General Chemistry I Lab	1
ENG1010	Composing Arguments	3
BIO 1080	General Biology I	3
BIO 1090	General Biology Laboratory I	1
	Oral Communication	3
	Elective	1
	Semester 1 Total	***16***

Semester 2	Spring	Credits
CHE 1810	General Chemistry II	4
CHE 1811	General Chemistry II Lab	1
MTH 1410	Calculus I*	4
ENG 1020	Research and Argument Writing	3
BIO 1081	General Biology II	3
BIO 1091	General Biology Laboratory II	1
	Semester 2 Total	***16***

Year Two

Semester 3	Fall	Credits
CHE 3000	Analytical Chemistry	3
CHE 3010	Analytical Chemistry Lab	2
MTH 2410	Calculus II	4
--	General Studies	3
	Free Elective	3
	Semester 3 Total	***15***

Semester 4	Spring	Credits
CHE 3100	Organic Chemistry I	4
CHE 3120	Organic Chemistry I Lab	1
BIO 3600	General Genetics	4
--	General Studies	6
	Semester 4 Total	***15***

Year Three

Semester 5	Fall	Credits
CHE 3110	Organic Chemistry II	3
CHE 3130	Organic Chemistry II Lab	2
PHY 2311	General Physics I and	4
PHY 2321	General Physics I Lab	1
	OR	
PHY 2010	College Physics 1 and	4
PHY 2030	College Physics 1 Lab	1
--	CHE Electives	3
	Semester 5 Total	***13***

Semester 6	Spring	Credits
CHE 4310	Biochemistry I	4
--	General Studies	6
PHY 2331	General Physics II and	4
PHY 2341	General Physics II Lab	1
	OR	
PHY 2020	College Physics II and	4
PHY 2040	College Physics II Lab	1
	Semester 6 Total	***15***

Year Four

Semester 7	Fall	Credits
BIO 3050	Cell Biology	4
CHE 4320	Biochemistry II	4
CHE 4350	Biochemistry Laboratory	2
--	General Studies	3
--	Free Elective	3
	Semester 7 Total	***16***

Semester 8	Spring	Credits
CHE 3190	Survey of Physical Chemistry	4
CHE 3200	Survey of Phy Chem Lab	1
--	CHE Senior Experience	3
--	General Studies and Electives	6
	Semester 8 Total	***14***

**This plan assumes math prerequisites have been met.*

PROGRAM TOTAL
120

Advisor Contact Information	
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Phone	
Office Hours/How to Schedule an Appointment	

Catalog Information
This four-year degree plan for completing a BS in Biochemistry in eight semesters is for the Catalog Year 2021-2022. **Students are responsible for consulting advisors and the MSU Denver catalog for degree requirements.**
View the MSU Denver Catalog

Course Listing

Core Requirements

CHE 1800	General Chemistry I	4
CHE 1801	General Chemistry I Laboratory	1
CHE 1810	General Chemistry II	4
CHE 1811	General Chemistry II Laboratory	1
CHE 3000	Analytical Chemistry	3
CHE 3010	Analytical Chemistry Laboratory	2
CHE 3100	Organic Chemistry I	4
CHE 3110	Organic Chemistry II	3
CHE 3120	Organic Chemistry I Laboratory	1
CHE 3130	Organic Chemistry II Laboratory	2
CHE 3190	Survey of Physical Chemistry	4
CHE 3200	Survey of Physical Chemistry Lab	1
CHE 4310	Biochemistry I	4
CHE 4320	Biochemistry II	4
CHE 4350	Biochemistry Laboratory	2
	Core Requirements Total	**40**

Electives, Ancillary, & Additional Courses**

BIO 1080	General Biology I	3
BIO 1090	General Biology Laboratory I	1
BIO 1081	General Biology II	3
BIO 1091	General Biology Laboratory II	1
BIO 3600	General Genetics	4
BIO 3050	Cell Biology	4
MTH 1410	Calculus I	4
MTH 2410	Calculus II	4
--	CHE senior experience course	3
PHY 2010	College Physics I	4
PHY 2020	College Physics II	4
PHY 2030	College Physics I Laboratory	1
PHY 2040	College Physics II Laboratory	1
	OR	
PHY 2311	General Physics I	4
PHY 2321	General Physics I Laboratory	1
PHY 2331	General Physics II	4
PHY 2341	General Physics II Laboratory	1
	Electives and Ancillary Total	**37**

Other Information

**MTH 1410 counts as a Quantitative Literacy General Studies course

**Biology and Physics courses count as Natural and Physical Science General Studies courses.

Program Totals

General Studies Requirements**	33
Core Requirements	40
Electives and Ancillary**	27
General Electives as Needed	20
Total to Graduate	**120**

Students must complete all courses with a grade of C- or better. This degree is an extended major and does not require a minor.

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