

Bachelor of Science Biochemistry with a Major in Secondary Chemistry Education (6-12) (BS)

Degree Program Guide

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 163	Precalculus II	3
CHEM 121N and CHEM 122N		4
BIOL 121N and BIOL 122N		4
STEM 101	Step 1 – Inquiry Approaches to Teaching STEM	1
CHEM 160G	Introduction to Chemistry and Biochemistry Research and Careers	3
Credit Hours		18
Spring		
Select one of the following:		
ENGL 211C	Writing, Rhetoric, and Research	3
ENGL 231C	Writing, Rhetoric, and Research: Special Topics	3
MATH 211	Calculus I	4
CHEM 123N and CHEM 124N or CHEM 125		4
BIOL 123N and BIOL 124N		4
STEM 102	Step 2 - Inquiry Based STEM Lesson Design	1
Credit Hours		16
Sophomore		
Fall		
CHEM 211 and CHEM 212		5
MATH 212	Calculus II	4
COMM 101R	Public Speaking	3
STEM 201	Knowing and Learning in STEM Education	3
Human Creativity		3
Credit Hours		18
Spring		
CHEM 213 AND CHEM 214 or CHEM 216		5
STEM 202	Classroom Interactions in STEM Education	3
Literature		3
Philosophy and Ethics		3
Credit Hours		14

Junior

Fall

CHEM 321 and CHEM 322		5
PHYS 231N	University Physics I	4
BIOL 293	Cell Biology	3
STEM 401	Project Based Instruction in STEM Education	3
Interpreting the Past		3

Credit Hours 18

Spring

CHEM 441	Biochemistry Lecture	3
PHYS 232N	University Physics II	4
CHEM 442W	Biochemistry Laboratory (C or better required)	4
Human Behavior: GEOG 101S		3
STEM 402	Perspectives on STEM	3

Credit Hours 17

Senior

Fall

CHEM 331	Physical Chemistry Lecture I	3
CHEM 443	Intermediate Biochemistry	3
BIOL 294	Genetics	3
CHEM 468	Research Methods in Mathematics and Science	3
Impact of Technology		3

Credit Hours 15

Spring

CHEM 485	Chemistry and Biochemistry Seminar	1
CHEM 333	Physical Chemistry Lecture II	3
STEM 485	Apprentice Teaching	9

Credit Hours 13

Total Credit Hours 129

Language and Culture I & II may be met in high school and are not included in this 4-year plan. Please see requirement details.