MAJOR IN NATURAL SCIENCES, BIOLOGY EDUCATION CONCENTRATION

All Biology Education majors must maintain a 2.75 GPA and receive a C or better in all content and education courses for licensure. All course work must be completed prior to Student Teaching (AUCC 4A/4B/4C requirement). Admission into the teacher licensure program is required for phase II education courses and above.

Major Completion Map

Distinctive Requirements for Degree Program:

Freshman

Semester 1		Critical	Recommended	AUCC	Credits
CHEM 111	General Chemistry I (GT-SC2)		X	3A	4
CHEM 112	General Chemistry Lab I (GT-SC1)		X	3A	1
CO 150	College Composition (GT-CO2)			1A	3
LIFE 102	Attributes of Living Systems (GT-SC1)		X	3A	4
Arts and Humanities (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)				3B	3
MATH 117, MATH 118 may be necessary for some students to fulfill pre-calculus requirements.		X			
	Total Credits				**15**

Semester 2		Critical	Recommended	AUCC	Credits
CHEM 113	General Chemistry II		X		3
CHEM 114	General Chemistry Lab II		X		1
LIFE 103	Biology of Organisms-Animals and Plants (GT-SC1)		X	3A	4
Select one group from the following:					4
Group A:					
AA 100	Introduction to Astronomy (GT-SC2)			3A	
AA 101	Astronomy Laboratory (GT-SC1)			3A	
Group B:					
GEOL 120	Exploring Earth - Physical Geology (GT-SC2)			3A	
GEOL 121	Introductory Geology Laboratory (GT-SC1)			3A	
Select one course from the following:					4
MATH 155	Calculus for Biological Scientists I (GT-MA1)		X	1B	
MATH 160	Calculus for Physical Scientists I (GT-MA1)		X	1B	
LIFE 102 must be completed by the end of Semester 2.		X			
MATH 124, MATH 125, MATH 126 may be necessary for some students to fulfill pre-calculus requirements.		X			
	Total Credits				**16**

Sophomore

Semester 3		Critical	Recommended	AUCC	Credits
BZ 220	Introduction to Evolution				3
STAT 301	Introduction to Applied Statistical Methods				3
Select one course from the following:					5
PH 121	General Physics I (GT-SC1)		X	3A	
PH 141	Physics for Scientists and Engineers I (GT-SC1)		X	3A	
Arts and Humanities (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)				3B	3
Diversity, Equity, and Inclusion (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#diversity-equity-inclusion)				1C	3
CHEM 111 and CHEM 112 must be completed by the end of Semester 3.		X			
	Total Credits				**17**

Semester 4		Critical	Recommended	AUCC	Credits
BZ 310	Cell Biology		X		4
EDUC 275	Schooling in the United States (GT-SS3)	X		3C	3
EDUC 340	Literacy and the Learner	X			3
Select one course from the following:					5
PH 122	General Physics II (GT-SC1)		X	3A	
PH 142	Physics for Scientists and Engineers II (GT-SC1)		X	3A	
CO 150 and MATH 155 or MATH 160 must be completed by the end of Semester 4.		X			
CHEM 113 and CHEM 114 must be completed by the end of Semester 4.		X			
	Total Credits				**15**

Junior

Semester 5		Critical	Recommended	AUCC	Credits
CHEM 245	Fundamentals of Organic Chemistry				4
CHEM 246	Fundamentals of Organic Chemistry Laboratory				1
EDUC 350	Instruction I-Individualization/Management	X			3
EDUC 386	Practicum-Instruction I	X			1
EDUC 461A	Secondary Science and Technology Education I	X			3
Advanced Writing (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#advanced-writing)				2	3
BZ 310 must be completed by the end of Semester 5.		X			
	Total Credits				**15**

Semester 6		Critical	Recommended	AUCC	Credits
BMS 300	Principles of Human Physiology				4
Select one course from the following:					3-4
BZ 350	Molecular and General Genetics				
LIFE 201B	Introductory Genetics: Molecular/Immunological/ Developmental (GT-SC2)			3A	
SOCR 330	Principles of Genetics				
EDUC 461B	Secondary Science and Technology Education II	X			3
Historical Perspectives (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#historical-perspectives)				3D	3
Science Elective					3
	Total Credits				**16-17**

Senior

Semester 7		Critical	Recommended	AUCC	Credits
EDUC 450	Instruction II-Standards and Assessment	X			4
EDUC 486E	Practicum: Instruction II	X			1
LIFE 205	Microbial Biology				3
LIFE 206	Microbial Biology Laboratory				2
LIFE 320	Ecology				3
	Total Credits				**13**

Semester 8		Critical	Recommended	AUCC	Credits
EDUC 485B	Student Teaching: Secondary	X		4A,4B,4C	11
EDUC 493A	Seminar: Professional Relations	X		4C	1
Science Elective					3
The benchmark courses for the 8th semester are the remaining courses in the entire program of study.		X			
	Total Credits				**15**
	Program Total Credits:				**122-123**