

MAJOR IN NATURAL SCIENCES, CHEMISTRY EDUCATION CONCENTRATION

Requirements Effective Fall 2024

Freshman

		AUCC	Credits
CHEM 120	Foundations of Modern Chemistry (GT-SC2)	3A	4
CHEM 121	Foundations of Modern Chemistry Laboratory (GT-SC1)	3A	1
CHEM 241	Foundations of Organic Chemistry		4
CHEM 242	Foundations of Organic Chemistry Laboratory		1
CO 150	College Composition (GT-CO2)	1A	3
EDUC 275	Schools, Society, and Self (GT-SS3)	3C	3
LIFE 102	Attributes of Living Systems (GT-SC1)	3A	4
Select one from the following:			4
MATH 155	Calculus for Biological Scientists I (GT-MA1)	1B	
MATH 160	Calculus for Physical Scientists I (GT-MA1)	1B	
1C (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#aucc)			3
Arts and Humanities (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)			3
Total Credits			30

Sophomore

CHEM 231	Foundations of Analytical Chemistry		3
CHEM 232	Foundations of Analytical Chemistry Lab		2
CHEM 263	Foundations of Inorganic Chemistry		4
CHEM 264	Foundations of Inorganic Chemistry Laboratory		1
EDUC 340	Literacy and the Learner		3
EDUC 350	Instruction I-Individualization/Management		3
EDUC 386	Practicum-Instruction I		1
Select one of the following:			4
MATH 161	Calculus for Physical Scientists II (GT-MA1)	1B	
MATH 271	Applied Mathematics for Chemists I		
Select one of the following:			5
PH 121	General Physics I (GT-SC1)	3A	
PH 141	Physics for Scientists and Engineers I (GT-SC1)	3A	
Arts and Humanities (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)			3
Science/Math Elective ¹			3
Total Credits			32

Junior

CHEM 321	Foundations of Chemical Biology		4
CHEM 322	Foundations of Chemical Biology Laboratory		1
CHEM 371	Fundamentals of Physical Chemistry		4
CHEM 372	Fundamentals of Physical Chemistry Lab		1
EDUC 461A	Secondary Science and Technology Education I		3

EDUC 461B	Secondary Science and Technology Education II		3
LIFE 103	Biology of Organisms-Animals and Plants (GT-SC1)	3A	4
Select one of the following:			5
PH 122	General Physics II (GT-SC1)	3A	
PH 142	Physics for Scientists and Engineers II (GT-SC1)	3A	
Advanced Writing (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#advanced-writing)		2	3
Historical Perspectives (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#historical-perspectives)		3D	3
Total Credits			31
Senior			
EDUC 450	Instruction II-Standards and Assessment		4
EDUC 486E	Practicum: Instruction II		1
EDUC 485B	Student Teaching: Secondary	4A,4B,4C	11
EDUC 493A	Seminar: Professional Relations	4C	1
STAT 301	Introduction to Applied Statistical Methods		3
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	Geology and Society (GT-SC2)	3A	
GEOL 121	Experiential Geoscience Laboratory (GT-SC1)	3A	
Science/Math Elective ¹			3
Total Credits			27
Program Total Credits:			120

¹ Select course(s) in consultation with advisor.