CHEMISTRY (SECONDARY EDUCATION) - BACHELOR OF ARTS

A Suggested Plan of Study for Students

This roadmap assumes student placement in MATH 1511G Calculus and Analytic Geometry I and ENGL 1110G Composition I. The contents and order of this roadmap may vary depending on initial student placement in mathematics and English. It is only a suggested plan of study for students and is not intended as a contract. Course availability may vary from fall to spring semester and may be subject to modification or change.

First Year		
Semester 1		**Credits**
ENGL 1110G	Composition I [1]	4
MATH 1511G	Calculus and Analytic Geometry I [1]	4
CHEM 1216	General Chemistry I Lecture and Laboratory for CHEM Majors	4
CHEM 2111	Explorations in Chemistry	1
Area IV: Social and Behavioral Science Course [2]		3
	Credits	**16**
Semester 2		
ENGL 2210G	Professional and Technical Communication Honors [1]	3
MATH 1521G	Calculus and Analytic Geometry II [1]	4
CHEM 1226	General Chemistry II Lecture and Laboratory for CHEM Majors	4
Area V: Humanities Course [2]		3
Elective Course		3
	Credits	**17**
Second Year		
Semester 1		
COMM 1115G	Introduction to Communication	3
CHEM 313	Organic Chemistry I [1]	3
CHEM 371	Analytical Chemistry [1]	4
Select one of the following:		4
PHYS 2110 & 2110L	Mechanics and Experimental Mechanics [1]	
PHYS 1230G & PHYS 1230L	Algebra-Based Physics I and Algebra-Based Physics I Lab [1]	
PHYS 2230G & PHYS 2230L	General Physics for Life Science I and Laboratory to General Physics for Life Science I	
PHYS 1310G & PHYS 1310L	Calculus -Based Physics I and Calculus -Based Physics I Lab	
SPED 3105	Introduction to Special Education in a Diverse Society	3
	Credits	**17**
Semester 2		
CHEM 314 & CHEM 315	Organic Chemistry II and Organic Chemistry Laboratory [1]	5
Select one of the following:		4
PHYS 2140 & 2140L	Electricity and Magnetism and Electricity & Magnetism Laboratory [1]	
PHYS 1240G & PHYS 1240L	Algebra-Based Physics II and Algebra-Based Physics II Lab [1]	
PHYS 2240G & PHYS 2240L	General Physics for Life Science II and Laboratory to General Physics for Life Science II [1]	
PHYS 1320G & PHYS 1320L	Calculus -Based Physics II and Calculus -Based Physics II Lab [1]	
Elective Course		3
Area VI: Creative and Fine Arts Course [2]		3
	Credits	**15**
Third Year		
Semester 1		
CHEM 430	Physical Chemistry: Thermodynamics, Kinetics, Quantum Chemistry, and Spectroscopy	3
VWW: Viewing a Wider World Course [3]		3
EDUC 3120	Multicultural Education	3
EDUC 3997	Secondary Field Experience	3
Elective Course		3
	Credits	**15**
Semester 2		
CHEM Upper-Division Elective Course [1]		3
Elective Course		12
Choose one from the following: [4]		
CHEM 456	Inorganic Structure and Bonding	
CHEM 472	Advanced Integrated Instrumental Analysis and Protein Biochemistry Laboratory	
	Credits	**15**
Fourth Year		
Semester 1		
EDUC 4410	Teaching Science at the Middle and High School Level	3
READ 4330	Content Area Literacy	3
Elective Course		3
Choose one from the following: [4]		3
CHEM 471	Advanced Integrated Inorganic and Physical Chemistry Laboratory (if CHEM 456 or CHEM 472 was not completed in the previous term)	
Elective Course (3 credits)		
	Credits	**12**
Semester 2		
CHEM 443	Senior Seminar	1
EDUC 4820	Secondary Student Teaching	9
EDUC 4821	Middle and High School Student Teaching Seminar	3
	Credits	**13**
	Total Credits	**120**

1. These courses may have prerequisites and/or co-requisites, and it is the students responsibility for checking and fulfilling all those requirements.
2. See the General Education (https://catalogs.nmsu.edu/nmsu/general-education-viewing-wider-world/) section of the catalog for a full list of courses.
3. See the Viewing a Wider World (https://catalogs.nmsu.edu/nmsu/general-education-viewing-wider-world/#viewingawiderworldtext) section of the catalog for a full list of courses.

[4] Selection course option - Departmental requirement includes a choice of one of the following: CHEM 456 Inorganic Structure and Bonding, CHEM 471 Advanced Integrated Inorganic and Physical Chemistry Laboratory, or CHEM 472 Advanced Integrated Instrumental Analysis and Protein Biochemistry Laboratory. If the student wishes to now take the CHEM offerings in the specific term they should add an elective course for 3 credits, however, the student must complete at least one of the above courses.