# Teaching Specialty - Chemistry

## **Major Requirements**

**Major: Chemistry Education** 

Degree Type: B.A. or B.S.

Required Degree Credits to Graduate: 136

#### **General Education Requirements**

#### First Year Experience (F):

HD&E 189 Skills for Academic Success (Students transferring 1 in 24 or more credits do not need to take HD&E 189.)

#### Communication (C)

Communication	(C):			
ENGL 110	College Composition I	3		
ENGL 120	College Composition II	3		
ENGL 324	Writing in the Sciences	3		
COMM 110	Fundamentals of Public Speaking	3		
Quantitative Reasoning (R):				
STAT 330	Introductory Statistics	3		
Science & Technology (S):				
BIOL 124	Environmental Science	4		
& 124L	and Environmental Science Laboratory			
GEOL 105	Physical Geology	3		
GEOL 106	The Earth Through Time	3		
Humanities & Fine Arts (A): Select from current general education list				
Social & Behavioral Sciences (B): Select from current general education list				
Wellness (W): Se	elect from current general education list	2		
<b>Cultural Diversit</b>	y (D): Select from current general education list			
Global Perspecti	ives (G):			
GEOL 105	Physical Geology	3		
Total Credits		40		

### **Major Requirements**

General Education Requirements				
Departmental Requirements				
GEOL 105L	Physical Geology Lab	1		
GEOL 106L	The Earth Through Time Lab	1		
Teaching Specialty Requirements				
Select one of the following:				
BIOL 150 & 150L	General Biology I and General Biology I Laboratory			
BIOL 151 & 151L	General Biology II and General Biology II Laboratory			
BIOC 460	Foundations of Biochemistry and Molecular Biology I	3		
CHEM 341 & 341L	Organic Chemistry I and Organic Chemistry I Laboratory	4		
CHEM 342 & 342L	Organic Chemistry II and Organic Chemistry II Laboratory	4		

Cŀ	HEM 364	Physical Chemistry I	3	
Cl	HEM 365	Physical Chemistry II	3	
CH	HEM 425	Inorganic Chemistry I	3	
Cŀ	HEM 431	Analytical Chemistry I	5	
&	431L	and Analytical Chemistry I Laboratory		
CH	HEM 491	Seminar (Senior Capstone)	2	
Pŀ	HYS 251	University Physics I	5	
&	251L	and University Physics I Laboratory		
	HYS 252	University Physics II	5	
& :	252L	and University Physics II Laboratory		
M	ATH 165	Calculus I	4	
M	ATH 166	Calculus II	4	
M	ATH 259	Multivariate Calculus	3-4	
or	MATH 265	Calculus III		
M	ATH 266	Introduction to Differential Equations	3	
Se	elect sequence	A or sequence B:	8	
	Sequence A:			
	CHEM 121	General Chemistry I		
	& 121L	and General Chemistry I Laboratory		
	CHEM 122	General Chemistry II		
	& 122L	and General Chemistry II Laboratory		
	Sequence B:			
	CHEM 150	Principles of Chemistry I		
	& CHEM 160	and Principles of Chemistry Laboratory I		
	CHEM 151	Principles of Chemistry II		
	& CHEM 161	and Principles of Chemistry Laboratory II		
Professional Education Requirements				
Εľ	DUC 321	Introduction to Teaching	3	
Εľ	DUC 322	Educational Psychology	3	
Εľ	DUC 451	Instructional Planning, Methods and Assessment	3	
Εľ	DUC 481	Classroom Practice Methods of Teaching I: (Science)	3	
Εľ	DUC 485	Student Teaching Seminar	1	
Εľ	DUC 486	Classroom Management for Diverse Learners	3	
Εľ	DUC 487	Student Teaching	9	
Εľ	DUC 488	Applied Student Teaching	3	
ΕĽ	DUC 489	Teaching Students of Diverse Backgrounds	3	

#### **Degree Requirements and Notes**

**Total Credits** 

- Courses taken P/F may not be used to satisfy any requirements.
- GPA of 2.75 or better in the teaching specialty is required for placement in student teaching and exit from the program.
- A grade of 'C' or better is required in all Professional Education Requirement courses.
- A GPA of 2.75 or better in professional education as well as passing the appropriate Praxis II exam are required to exit the program.
- · See School of Education for admission requirements.