

REMAINING ELECTIVE COURSES (5-7credits)

Electives may include CHEM 311, 322, 331 & 332, or 343 if not selected for the required upper level Chemistry coursework listed on the previous page.

SUBJECT/ COURSE	TITLE	CREDIT HOURS	SEMESTER	GRADE
CHEM 314	Biochemistry II	3		
CHEM 315	Biochemistry II Lab	1		
CHEM 324	Inorganic Laboratory	1		
CHEM 344	Physical Chemistry II	3		
CHEM 345	Physical Chemistry Lab I	1		
CHEM 346	Physical Chemistry Lab II	1		
CHEM 347	Chemical Modeling Laboratory	1		
CHEM 348	Advanced Spectroscopy Laboratory	1		
CHEM 421	Structure, Dynamics and Synthesis I	3		
CHEM 422	Structure, Dynamics and Synthesis II	3		
CHEM 490	Research in Chemistry	1-3		
CHEM 499	Internship in Chemistry	1-2		
GEMS 160	The Chemistry of Our Environment	4		

Required cognate courses:

MATH COURSES (8 credits, cognate)

SUBJECT/ COURSE	TITLE	CREDIT HOURS	SEMESTER	GRADE
MATH 126 OR MATH 131	Calculus with Review II	4		
MATH 132	Calculus I	4		
	Calculus II	4		

PHYSICS COURSES (8 credits, cognate)

SUBJECT/ COURSE	TITLE	CREDIT HOURS	SEMESTER	GRADE
PHYS 121	General Physics I	3		
PHYS 141	Physics Lab I	1		
PHYS 122	General Physics II	3		
PHYS 142	Physics Lab II	1		

*** College Physics 105, 106, 107, 108 may be appropriate for the BA degree in some programs of study. Any substitution of these Physics courses must be approved by the Chemistry chairperson.*

_____ **GPA in Chemistry courses (2.5 is required to qualify for student teaching)**

A SCIENCE METHODS COURSE - REQUIRED (3 credits)

(The Science methods course is considered pedagogy and will be counted with your education courses for certification.)

SUBJECT/ COURSE	TITLE	CREDIT HOURS	SEMESTER	GRADE
EDUC 331	Teaching of Science in the Secondary School (offered only Fall semester)	3		

This MUST be completed prior to the student teaching semester!