

Chemistry with Secondary Teaching Certification
(Department of Chemistry and Biochemistry)
Major Requirements

<u>Major Courses</u>	<u>Credits</u>	<u>Semester Completed</u>
[CHEM 105] General Chemistry I	4	_____
[CHEM 106] General Chemistry II	4	_____
[CHEM 221] Chemical Analysis I	4	_____
[CHEM 309] Organic Chemistry I	4	_____
[CHEM 310] Organic Chemistry II	4	_____
[CHEM 321] Chemical Analysis II	4	_____
[CHEM 337] Physical Chemistry I	3	_____
<i>One of the following:</i>	2-4	_____
[CHEM 338] Physical Chemistry II (4)		
[CHEM 342] Advanced Synthesis Lab (2)		
[CHEM 361] Inorganic Chemistry	4	_____
[CHEM 390] Junior Chemistry Seminar	1	_____
[CHEM 490] Senior Chemistry Seminar	1	_____
Three to Four credits CHEM electives	3-4	_____
[CHEM 495] Capstone: Natural Sciences	3	_____
[MATH 111] Calculus I	4	_____
<i>One of the following:</i>	3	_____
[PHIL 101] Problems in Philosophy (3)		
[PHIL 102] History of Philosophy (3)		
[PHYS 211] General Physics I	4	_____
[PHYS 212] General Physics II	4	_____
<i>One of the following:</i>	3-4	_____
[COSC 171] Problem Solving with Computers (3)		
[COSC 181] Computer Programming I (3)		
[MATH 112] Calculus II (4)		
[STAT 269] Introductory Statistics (3)		
ENGL xxx American or British Literature	3	_____
[EDUC 120] The Teaching Profession	1	_____
[EDUC 201] Education and American Society	3	_____
[EDUC 203] Educational Psychology	3	_____
[EDUC 318] Secondary Learning Environments	1	_____
[EDUC 331] Instructional Design & Assessment for Secondary Ed.	3	_____
[ESS 201] Earth and Space Science	3	_____
Professional Semester:		
[CHEM 407] Secondary Science Curriculum & Instruction	2	_____
[PSYC 311] Adolescent Development	3	_____
[EDUC 420] Professional Issues in Education	2	_____
[EDUC 435] Student Teaching: Secondary	9	_____

All of the courses in this major are vital to our program. If you plan to study abroad, attend the Philadelphia campus, or graduate early, you must talk to your advisor early and make plans to take the required courses when they are offered. Directed study will not be offered for any lab courses, and will only be granted in extreme circumstances for non-lab courses.

General Education requirements on reverse side

Revised June 2007

Chemistry with Secondary Teaching Certification
(Department of Chemistry and Biochemistry)

General Education Requirements

<u>Courses</u>	<u>Credits</u>	<u>Semester Completed</u>
First Year Seminar	3	_____
Oral Communications	3	_____
Created and Called for Community	3	_____
Mathematical Sciences ([MATH 111])	3 or 4	<u>met by major</u>
Laboratory Science ([CHEM 105])	3 or 4	<u>met by major</u>
Science, Technology & the World		<u>waived</u>
Two of the following:	6	
Social Science (3 credits – [EDUC 203])		<u>met by major</u>
European History (3 credits)		_____
United States History (3 credits)		_____
Literature (American or British literature only)	3	<u>met by major</u>
Philosophy and Religion ([PHIL 101] or [PHIL 102])	3	<u>met by major</u>
Arts	3	_____
Language/Cross Cultural		
First Semester of Language	3	_____
Second Semester of Language	3	_____
Third Semester of Language or Cross Cultural	3	_____
Non-Western Studies	2 or 3	<u>waived</u>
Bible	3	_____
Christian Beliefs ([THEO 223])	3	_____
Health and Physical Fitness		
Introduction to Wellness	2	_____
Activity Course	1	_____
One of the following:	3	
Ethics (3 credits)		_____
World Views (3 credits)		_____
Pluralism in Contemporary Society (3 credits)		_____
Writing Enriched Course		_____

SUMMARY OF DEGREE REQUIREMENTS:

General Education	36
Major Requirements	92-96
Total	128-132

Major requirements on reverse side