

SECONDARY EDUCATION - CHEMISTRY

Effective Fall 2013

Students seeking Secondary Education Certification in Chemistry must declare majors in both Chemistry (BA) and Secondary Education (Chemistry) and complete the full Chemistry (BA) course sequence as well as the Secondary Education Professional Course and Certification requirements. Students must consult their advisers in both departments each semester regarding course selection and other certification requirements.

A total of 123-126 Credits are required for a Bachelor of Science in Education with a specialization in chemistry. Required courses include:

Required by Chemistry for Secondary Ed. Major (51 credits)

- CHEM.115 Chemistry for the Sciences 1
- CHEM.116 Chemistry for the Sciences 2
- CHEM.231 Organic Chemistry I
- CHEM.232 Organic Chemistry II
- CHEM.321 Analytical Chemistry I
- CHEM.341 Biochemistry
- CHEM.361 Physical Chemistry I
- CHEM.251 Inorganic Chemistry
- CHEM.475 The Chemistry Curriculum & the Teaching Lab
- EGGS.105 Environmental Issues & Choices
- EGGS.120 Physical Geology
- MATH.225 Calculus III
- PHYSICS.211 General Physics I
- PHYSICS.212 General Physics II

Required by Education (40 credits)

- COMMSTUD.103 Public Speaking or COMMSTUD.104 Interpersonal Communication
- EDFOUND.204 Educational Technology
- EDFOUND.206 Teachers, Schools & Society
- EDFOUND.251 Psychological Foundations of Ed
- EDFOUND.291 Principles of Teaching
- EDFOUND.311 Classroom Meas. & Assessment
- EDFOUND.406 Multicultural Education
- EDFOUND.427 Classroom Management & Eff Disc
- EDFOUND.497 Student Teaching: 1st Experience
- EDFOUND.498 Student Teaching: 2nd Experience
- PROFSTUD.320 PDS (replaces EDFOUND.311 & SECED.355)
- PSYCH.101 General Psychology
- SECED.453 Teaching Science in Sec School (Fall)

Required by PDE (27 credits)

- ENGLISH.101 Foundations of College Writing I
- ENGLISH ____ Literature (151, 152, 156, 226, 227, 236, 237, 246, 247, or 257)
- MATH.125 Calculus I
- MATH.126 Calculus II
- PROFSTUD.494 ELL Strategies
- PSYCH.212 Adolescent Psychology

SPECED.101 Introduction to Except Individuals
 SPECED.275 Linking Assessment
 SPECED.358 Methods of Instr Stud with Disabilities

Course Number	Course Title	GEPs
***Goal 1: Communication; minimum 7 GEPs, from minimum of 3 disciplines.		
COMMSTUD.103/104	Public Speaking or Interpersonal Communication	3
EDFOUND.291	Principles of Teaching	2
ENGLISH.101	Foundations of College Writing I	3
*Goal 2: Information Literacy; minimum 2 GEPs		
EDFOUND.204	Educational Technology	3
**Goal 3: Analysis, Quantitative Reasoning, & Problem Solving; minimum 5 GEPs, from minimum of 2 disciplines.		
CHEM.115	Chemistry for the Sciences 1	1
MATH.125	Calculus I	2
MATH.126	Calculus II	3
**Goal 4: Cultures & Diversity; minimum 5 GEPs, from minimum of 2 disciplines.		
EDFOUND.291	Principles of Teaching	1
EDFOUND.406	Multicultural Education	2
SPECED.101	Intro to Exceptional Individuals	2
**Goal 5: Natural Sciences; minimum 5 GEPs, from minimum of 2 disciplines; any 3-credit course with 3 GEPs for Goal 5 can replace CHEM.100.		
CHEM.115	Chemistry for Sciences I	3
EGGS.105	Environmental Issues & Choices	1
MATH.125	Calculus I	1
**Goal 6: Social Sciences; minimum 5 GEPs, from minimum of 2 disciplines.		
EDFOUND.206	Teachers, Schools, and Society	1
PSYCH.101	General Psychology	3
SPECED.275	Linking Assessment	1
**Goal 7: Humanities; minimum 5 GEPs, from minimum of 2 disciplines; Select MUSIC 101 or THEATRE 102 or 103 to complete this goal.		
ENGLISH ____	Literature (151, 152, 156, 226, 227, 236, 237, 246, 247, or 257)	2
MUSIC.101 or THEATRE.102/103	Music Listening or Introduction to Theatre or Theatre Appreciation	3
*Goal 8: Second Language Competency; minimum 2 GEPs; Select one of the two options.		
ASLTERP.155	American Sign Language 1	2
____ 102	Competency test or any second language 102 level	
*Goal 9: Physical Activity & Health; minimum 2 GEPs.		
*Goal 10: Responsible Citizenship; minimum 2 GEPs.		
EDFOUND.406	Multicultural Education	1
SPECED.101	Intro to Exceptional Individuals	1

*GEPs for this goal may come from just 1 discipline. **GEPs must come from at least 2 disciplines. ***GEPs must come from at least 3 disciplines.

Additional Notes on the Secondary Education Major:

Admission Packet, for Admission into the Teacher Education Program: due by 60 credits, signed by your Education advisor and submitted to Teacher Education Admission Packets Coordinator. Forms and information available from Education Studies.

- Eligible test scores:** After April 2, 2012: **PAPA (Pre-service Academic Performance Assessment)** www.pa.nesinc.com: Reading, score of 220 Writing, score of 220 Math, score of 220
or Praxis I: Academic Skills Assessment if taken on or before April 2, 2012 (and retakes until April 2, 2014):
Reading, score of 172 Writing, score of 173 Mathematics, score of 173
- Cumulative GPA of 3.0, with a C or better** in all professional education and specialization courses.
- 6 credits of college-level math** and **6 credits in English composition and literature**
- Completion of early field experience:** five days/30 hours, non-credit, w/ appropriate diversity in contexts: forms required
- Two recommendations** from Teacher Education faculty: standardized form required
- Professional liability insurance** (available through PSEA, at www.PSEA.org.)
- Tuberculosis Screening** results, from a test taken within the last two years (likely repeated before student teaching).
- A resume** that follows the sample format: format available from Education Studies
- Criminal checks:** Act 34 (Criminal Record Check) Act 151 (Child Abuse History Check)
Act 114 FBI Clearance: register at www.pa.cogentid.com; register under Department of Education; fingerprinting available at BU bookstore. Clearances are valid for 1 year for one year: will need to repeat before student teaching

Student Teaching—Placement Card and Eligibility Packet:

- Student Teaching Placement Card**—intent to student teach:
for fall student teaching, due **by February**
for spring student teaching, due **by September**
- Student Teaching Eligibility Packet:** Download checklist and forms from the Student Teaching tab under Student Resources on the College of Education homepage.
- Student Teaching Eligibility Packet is due**, signed by your Education advisor, to the Student Teaching Placement Office:
April 1 for fall student teaching
October 1 for spring student teaching