

# Suggested Four-Year Plan of Study

## BIOLOGY AND CHEMISTRY



### Chemistry B.S. with Initial Licensure in Secondary Education (with Minor in Middle School and Secondary Education)

#### FRESHMAN YEAR

##### Fall Semester 14 Credits

CHEM 1300	General Chemistry I*	4
ENGL 1100	Writing I	3
MATH 1300	Precalculus	4
FYE 1015	First Year Experience	3

\* General Chemistry requires a 'passing' score on Advanced Algebra and Functions Accuplacer placement exam OR successful completion of MATH 0500. (Algebraic Preparation) prior to enrollment. To continue as a Chemistry major, students must earn a grade of 2.0 or higher in General Chemistry I and II.

##### Spring Semester 17 Credits

CHEM 1400	General Chemistry II*	4
ENGL 1200	Writing II	3
MATH 2300	Calculus I (QR)	4
CHEM 1860	Introduction to Education (5-12)**	3
	Gen Ed/WS	3

#### JUNIOR YEAR

##### Fall Semester 16 Credits

CHEM 3030	Biochemistry I	3
PHYS 2300	General Physics I (PL)	4
CHEM 3600	Descriptive Inorganic Chemistry	3
SPED 3800	Inclusive Instruction (5-12)**	3
	Gen Ed/Exploration	3

##### Spring Semester 17 Credits

CHEM 3200	Physical Chemistry I	4
CHEM 4750	Chemistry Seminar	3
PHYS 2400	General Physics II	4
CHEM 3015	Methods of Teaching Chemistry I**	3
	Gen Ed/Exploration	3

#### General Education: Foundation

- 3 credits Reading and Information Literacy (R and IL): First Year Experience
- 3 credits Writing (W): Writing I
- 3 credits Writing and Information Literacy (W and IL): Writing II
- 3 credits Quantitative Reasoning (QR) (MATH)
- 3 credits World Languages, Speaking and Listening (WS)

#### General Education: Exploration

- 3 credits Civic Learning (CV)
- 3 credits Diverse Perspectives (DP)
- 3 credits Ethical Reasoning (ER)
- 3 credits Fine Arts Expression and Analysis (FA)
- 3 credits Historical Inquiry and Analysis (HI)
- 3 credits Literary Inquiry and Analysis (LI)
- 3 credits Personal Wellness (PW)
- 3 credits Procedural and Logical Thinking (PL)
- 3 credits Scientific Inquiry and Analysis (SI)

#### SOPHMORE YEAR

##### Fall Semester 15 Credits

CHEM 2000	Organic Chemistry I	4
BIOL 1800	General Biology I (SI)	4
MATH 2400	Calculus II	4
EDUC 2011	Diversity in Education (5-12)**	3

##### Spring Semester 14 Credits

CHEM 2100	Organic Chemistry II	4
CHEM 2400	General Analytical Chemistry	4
EDUC 2012	Teaching the Adolescent Learner (5-12)**	3
	Gen Ed/Exploration	3

\*\* These courses are required for completion of the minor in Middle School and Secondary Education. Students must complete this minor for the Initial Licensure in Secondary Education. The minor fulfills the Integration requirement for the Chemistry major.

#### SENIOR YEAR

##### Fall Semester 15 Credits

CHEM 4850	Methods of Teaching Chemistry II**	3
EDUC 3122	Sheltered English Immersion	3
	Gen Ed/Exploration	3
	Gen Ed/Exploration	3
	Gen Ed/Exploration	3

##### Spring Semester 12 Credits

CHEM 4012	Practicum Seminar	3
CHEM 4860	Practicum in a Secondary School I	4.5
CHEM 4870	Practicum in a Secondary School II	4.5

#### General Education: Integration

- 9 credits AIA (3 of which must be Integrative High Impact Practice - IHIP)
- OR
- Minor (professional majors completing a minor or second major must include at least 9 credits in LA&S disciplines for that minor)

#### General Education: MAJ

There may be major courses that have been approved to fulfill up to 3 General Education requirements (at least 9 credits). Varies by major and concentration.

Suggested 4-year plan of study. Completion of 120 credits required for graduation.