

# Suggested Four-Year Plan of Study BIOLOGY/CHEMISTRY



## Secondary Education — Chemistry (B.S.)

### FRESHMAN YEAR

<b>Fall Semester</b>		<b>15 Credits</b>
ENGL 1100	Writing I.....(3)	
CHEM 1300	General Chemistry I*.....(4)	
MATH 1300	Precalculus.....(4)	
BIOL 1800	General Biology I.....(4)	

\* 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 Biology major, students must earn a grade of 2.0 or higher in General Biology I and General Chemistry I.

<b>Spring Semester</b>		<b>14 Credits</b>
ENGL 1200	Writing II.....(3)	
CHEM 1400	General Chemistry II.....(4)	
MATH 2300	Calculus I.....(4)	
	LA&S Elective.....(3)	

### JUNIOR YEAR

<b>Fall Semester</b>		<b>16 Credits</b>
CHEM 3600 OR	Descriptive Inorganic Chemistry OR	
CHEM 3030	Biochemistry I.....(3)	
PHYS 2700 OR	Calculus-Based Physics II OR	
PHYS 2400	General Physics II.....(4)	
CHEM 3015	Methods of Teaching Biology (8-12) I.....(3)	
	LA&S Elective.....(3)	
	Free Elective.....(3)	

<b>Spring Semester</b>		<b>15 Credits</b>
CHEM 4750	Chemistry Seminar.....(3)	
CHEM 3200	Physical Chemistry I.....(4)	
ENGL 4700	Teaching Reading and Writing Across the Content Area.....(3)	
	LA&S Elective.....(3)	
	Free Elective.....(3)	

#### LA&S Elective List

- 1 AOM attribute (Art or Music)
- 1 ART attribute (the Arts)
- 1 CTW attribute (Citizenship & The World)
- 3 credits HAF attribute (Health/Fitness)
- 1 HIST subject (History)
- 1 HMN attribute (Human Behavior)
- 1 LIT attribute (Literature)

#### Advanced LA&S Options Area

Review the three options with your advisor and submit your decision to the Registrar's Office by completion of 60 credits.

#### Free Electives

It is recommended that students consider their career goals in selecting their free electives by seeking advice from their academic advisor and/or the pre-health advisor. Examples of recommended electives are courses in biology, mathematics, physics, geophysical sciences, computer science and/or industrial technology.

#### Global Diversity Area

Two courses must meet the Global Diversity (GD) requirement. The GD courses may also satisfy other LAS requirements at the same time.

Chemistry Seminar fulfills the Capstone requirement for this major.

### SOPHOMORE YEAR

<b>Fall Semester</b>		<b>14 Credits</b>
CHEM 2000	Organic Chemistry I.....(4)	
CHEM 1860	Introduction to Education (5-12).....(3)	
MATH 2400	Calculus II.....(4)	
	LA&S Elective.....(3)	

<b>Spring Semester</b>		<b>15 Credits</b>
CHEM 2400	General Analytical Chemistry.....(4)	
CHEM 2100	Organic Chemistry II.....(4)	
SPED 3800	Inclusive Instruction (5-12)**.....(3)	
PHYS 2600 OR	Calculus-Based Physics I OR	
PHYS 2300	General Physics I.....(4)	

\*\*This course requires completion of CHEM 1860 and successful passage of Stage One Review of Education Unit.

### SENIOR YEAR

<b>Fall Semester</b>		<b>15 Credits</b>
CHEM 3600 OR	Descriptive Inorganic Chemistry OR	
CHEM 3030	Biochemistry I.....(3)	
CHEM 4850	Methods in Teaching Chemistry (8-12) II.....(3)	
EDUC 3122	Sheltered English Immersion.....(3)	
	Free Elective.....(3)	
	Free Elective.....(3)	

<b>Spring Semester</b>		<b>12 Credits</b>
CHEM 4860	Chemistry Practicum in a Secondary School I.....(4.5)	
CHEM 4870	Chemistry Practicum in a Secondary School II.....(4.5)	
CHEM 4012	Practicum Seminar (5-12).....(3)	

Completion of 120 credits required for graduation.

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