### **QUEENS COLLEGE**

# Chemistry Secondary Education 7-12 BA

### FOUR-YEAR ACADEMIC PLAN

- Required Core Credits
- Flexible Core Credits
- College Option Credits
- 62+27<sub>(SEYS)</sub> Major Credits
  - Elective Credits

136 Total

This 4-year academic plan is designed to help freshmen entering Queens College in Fall 2019 plan their academic career and ensure that they complete all requirements for graduation in a timely fashion. All other students should consult their academic and department advisors to chart their own 4-year academic plans. Students should note that course pre-requisite/s and co-requisite/s are strictly enforced and they should regularly meet with their department advisors to identify their specific major/minor requirements and entrance and maintenance criteria (if applicable) for successful completion of their degree.





## **QUEENS COLLEGE**

# Chemistry Secondary Education 7-12 BA

### FOUR-YEAR ACADEMIC PLAN

### Freshman

FALL	SPRING

English Composition I (ECI)	3 credits	English Composition II (EC2)	3 credits
MATH 122 (MQR)	4 credits	MATH 151	4 credits
Precalculus		Calculus I	
CHEM 1134 & 1131 (LPS)	5 credits	CHEM 1144 & 1141 (SW)	5 credits
General Chemistry I		General Chemistry II	
World Cultures & Global Issues (WCGI)	3 credits	BIOL 105 (SCI)	4 credits
		General Biology I	
Fall total credits	15 credits		
		Spring total credits	I6 credits

# Sophomore

### FALL SPRING

CHEM 2514 & 2511 (SCI)	5 credits	CHEM 2524 & 2521	5 credits
Organic Chemistry I		Organic Chemistry II	
MATH 152	4 credits	PHYS 1464 & 1461 (LPS, SW, SCI)	5 credits
Calculus II		Principles of Physics II	
PHYS 1454 & 1451 (LPS, SW, SCI)	5 credits	U.S Experience in its Diversity (USED)	3 credits
Principles of Physics I		Individual and Society (IS)	3 credits
Creative Expression (CE)	3 credits		
		Spring total credits	16 credits
Fall total credits	17 credits		

General Education requirements may be taken in any order if the pre-requisite requirement(s) is/are satisfied.

Completion of 21 credits in major with 2.75 GPA or higher 3.0 GPA in SEYS courses required to continue in program





### **QUEENS COLLEGE**

# Chemistry Secondary Education 7-12 BA

#### FOUR-YEAR ACADEMIC PLAN

## Junior

**FALL** 

CHEM 3413 & 3411	4 credits	CHEM 371	4 credits
Instrumental Methods		Biochemistry I	
CHEM 211	4 credits	CHEM 3213	3 credits
Chemical Thermodynamics and Kinetics		Practicum in Chemical Education	
SEYS 201W (W)	3 credits	SEYS 340	3 credits
Historical, Social, and Philosophical		Language, Literacy, & Culture in	
Foundations of Education		Education	

**SPRING** 

ECPSE 350

SEYS 221 3 credits SEYS 362

Development and Learning in Middle Child and Adolescence SEYS 362

Methods in Teaching Science in Middle & High School

Spring total credits 16 credits

## Senior

FALL	SPRING

CHEM 3313 and 3311	4 credits	SEYS 372.4	3 credits
Inorganic Chemistry		Student Teaching Clinical Experience in	
SEYS 372.2	3 credits	Science for Secondary School	
Student Teaching Initial Clinical Experience		College Option Literature (LIT + W)	3 credits
in Science for Secondary School		With Writing Intensive Unit**	
SEYS 382	3 credits	CHEM 395	3 credits
Curriculum and Assessment in Teaching Science		Senior Seminar	
SEYS 350	3 credits	General electives*	6 credits
Cognition, Technology & Instruction			
For Diverse Learners		Spring total credits	15 credits
College Option Language (LANG)	4 credits		

Fall total credits 17 credits

<sup>\*\*</sup> If a Literature course is taken with a W, it will count towards Literature and one Writing Intensive Unit.





3 credits

3 credits

<sup>\*</sup>General Electives: Students may complete general electives by taking courses in (most) department/s or programs they choose; however, depending on the course/program, students may need department permission and/or prerequisite course/s. Electives may be used to supplement the chosen major (an English major may want to take a course in French or Italian literature) or to fulfill interest in a different area (a Music major may be interested in the physics of sound). Students are encouraged to use available electives to complete a dual major, minor, pre-requisites for graduate or professional school, or complete and internship, experiential learning and/or study abroad. Students are encouraged to use their available general electives wisely and focus on coursework that will assist them personally, academically and professionally.