QUEENS COLLEGE Chemistry Secondary Education 7-12 BA FOUR-YEAR ACADEMIC PLAN

2 Required Core Credits 8 Flexible Core Credits 2 College Option Credits 62+27<sub>(SEYS)</sub> Major Credits **Elective Credits** 20 Total

This 4-year academic plan is designed to help freshmen entering Queens College in Fall 2018 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         | l 6 credits |

## Sophomore

#### FALL

| 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                   | l 6 credits |
| Fall total credits              | 17 credits |  |             |

**SPRING** 

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                        |           |
| SEYS 221                                 | 3 credits  | SEYS 362                         | 3 credits |
| Development and Learning in Middle Child |            | Methods in Teaching Science in   |           |
| and Adolescence                          |            | Middle & High School             |           |
|  |            | ECPSE 350                        | 3 credits |
| Fall total credits                       | 14 credits | Foundations of Special Education |           |

Spring total credits

16 credits

## Senior

#### FALL

| CHEM 3313 and 3311                            | 4 credits |
|---|-----------|
| Inorganic Chemistry                           |           |
| SEYS 372.2                                    | 3 credits |
| Student Teaching Initial Clinical Experience  |           |
| in Science for Secondary School               |           |
| SEYS 382                                      | 3 credits |
| Curriculum and Assessment in Teaching Science |           |
| SEYS 350                                      | 3 credits |
| Cognition, Technology & Instruction           |           |
| For Diverse Learners                          |           |
| College Option Language (LANG)                | 4 credits |

#### SPRING

SPRING

| SEYS 372.4                              | 3 credits  |
|---|------------|
| Student Teaching Clinical Experience in |            |
| Science for Secondary School            |            |
| College Option Literature (LIT + W)     | 3 credits  |
| With Writing Intensive Unit**           |            |
| CHEM 395                                | 3 credits  |
| Senior Seminar                          |            |
| General electives*                      | 6 credits  |
|   |            |
| Spring total credits                    | 15 credits |
|   |            |

#### Fall total credits

17 credits

\*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.

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



