

QUEENS COLLEGE

Biology Secondary Education

7-12 BA

FOUR YEAR ACADEMIC PLAN

12 Required Core Credits

18 Flexible Core Credits

12 College Option Credits

55+27 (SEYS) Major Credits

0 Elective Credits

This 4-year academic plan is for freshmen entering Queens College in Fall 2021. Our 4-year academic plans are illustrative examples of integrated degree requirements and course sequencing for each of the College's programs of study which are designed to ensure degree completion in a timely manner. Students are advised to meet with professional and faculty advisors to tailor their degree maps to their individual interests (academic and career goals), as well as other considerations including course offerings and the incorporation of winter and summer sessions. Course pre-requisite/s and co-requisite/s are strictly enforced, as are entrance and maintenance criteria (if applicable) for the successful completion of the

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Freshman

FALL

English Composition I (EC1)	3 credits
MATH 151 † (MQR)	4 credits
Calculus/Differentiation & Integration	
BIOL 105# (SW)	4 credits
General Biology I	
World Cultures & Global Issues (WCGI)	3 credits
US Experience in Its Diversity (USED)	3 credits

Fall total credits **17 credits**

SPRING

English Composition II (EC2)	3 credits
(BIOL 13 recommended)	
BIOL 106# (SCI)	4 credits
General Biology II	
CHEM 1134+1131 (LPS)	5 credits
General Chemistry I	
Creative Expression (CE)	3 credits

Spring total credits **15 credits**

Sophomore

FALL

Individual & Society (IS)	3 credits
College Option Literature (LIT+W)	3 credits
With Writing Intensive Unit**	
CHEM 1144 +1141 (SW)	5 credits
General Chemistry II	
College Option Language (LANG)	4 credits

Fall total credits **15 credits**

SPRING

BIOL 286	3/4 credits
Principles of Cell Biology	
OR BIOL 287 Principles of Evol. Biology	
Biology Electives*	4 credits
Laboratory course or Lecture course	
(BILO 220*/230 recommended)	
Biology Electives*	4 credits
Laboratory course or Lecture course	
(BIOL 226*/310* recommended)	
BIOL 285	4 credits
Principles of Genetics	

Spring total credits **15 credits**

† Please speak to the math department or a biology advisor if you are not eligible to take Math151 in your first semester.

* **16 Biology credits** of which at least 2 must be 300 level courses, and 3 must be laboratory courses. It is recommended that these be chosen so that one or more courses are taken in the following 4 categories: **Botany, Zoology, Community & Ecosystem Biology, Cell & Developmental Biology**. BIOL 230 not open to students who have successfully completed any one of the following courses (or their equivalents): ECON 249; MATH 14; MATH 241; PSYCH 107; SOC 205, 306

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

BIOL 105 and BIOL 106 can be taken out of sequence. Students can be registered into BIOL 106 by the department if they cannot get BIOL 105 first.

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Junior

FALL

Biology Electives*	4 credits
Laboratory course or Lecture course (BIOL 385/386/315*/325/365*/373 recommended)	
CHEM 2514 + 2511 (SCI)	5 credits
Organic Chemistry I OR CHEM 1023+1021	
SEYS 201W (W)	3 credits
Historical, Social & Philosophical Foundation of Education (approval of SEYS faculty required)	
SEYS 221	3 credits
Development and Learning in Middle Childhood & Adolescence	
Fall total credits	15 credits

SPRING

Biology Electives*	4 credits
Laboratory course or Lecture course (BIOL 201*/326*/340/345/350 recommended)	
SEYS 340	3 credits
Language, Literacy, & Culture in Education	
SEYS 362	3 credits
Methods in Teaching Science in Middle & High School	
ECPSE 350	3 credits
Foundations of Special Education Major or non-major Electives***	3/4 credits
Spring total credits	16 credits

Senior

FALL

Biology Electives*	3 credits
Laboratory course or Lecture course (BIOL 363*/366/245 recommended)	
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	
Major or non-major Electives***	3/4 credits
Fall total credits	16 credits

SPRING

Major or non-major Electives*** (BIOL 362*/367 recommended)	3/4 credits
BIOL 381	1 credits
Colloquium in Biology	
SEYS 372.4	3 credits
Student Teaching Clinical Experience in Science for Secondary School	
Major or non-major Electives***	3/4 credits
Major or non-major Electives***	3/4 credits
Spring total credits	13 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.