

BACHELOR OF SCIENCE IN BIOLOGY 2018-2019 DEGREE REQUIREMENTS

FIRST YEAR-FALL	HOURS
GT 1000 FRESHMAN SEMINAR*	1
ENGL 1101 ENGLISH COMPOSITION I	3
MATH 1551 DIFFERENTIAL CALCULUS	2
BIOL 1511 (OR 1510) BIOLOGICAL PRINCIPLES	4
CHEM 1211K CHEMICAL PRINCIPLES I	4
TOTAL SEMESTER HOURS	14

SECOND YEAR-FALL	HOURS
BIOL 2335 ECOL, BIOL 2344 GENETICS, OR BIOL 2354 HONS. GENETICS ²	3
BIOL 2336 ECOL LAB, BIOL 2345 GEN LAB, OR BIOL 2355 HONS. GEN LAB ²	1
CHEM 2311 ORGANIC CHEMISTRY I	3
MATH 1553 LINEAR ALGEBRA	2
COMPUTING REQUIREMENT OR HUM OR SS ELECTIVE	3
CONSTITUTION/HISTORY REQUIREMENT ³	3
TOTAL SEMESTER HOURS	14 or 15

THIRD YEAR-FALL	HOURS
PHYS 2211 INTRODUCTORY PHYSICS I FOR LIFE SCIENCES	4
BIOL 3450 CELL & MOLECULAR BIOLOGY OR BIOL 3600 EVOLUTION ⁵	3
BIOLOGY ELECTIVE	3
QUANTITATIVE BIOLOGY REQUIREMENT ⁴ OR HUM OR SS ELECTIVE	3
FREE ELECTIVE	3
TOTAL SEMESTER HOURS	16

FOURTH YEAR-FALL	HOURS
BIOLOGY ELECTIVES	6
FREE ELECTIVE	3
HUM OR SS ELECTIVE	3
SENIOR RESEARCH EXPERIENCE ⁶	3
BIOL 4460 COMMUNICATING BIOLOGICAL RESEARCH	1
TOTAL SEMESTER HOURS	16

FIRST YEAR-SPRING	HOURS
ENGL 1102 ENGLISH COMPOSITION II	3
MATH 1555 CALCULUS FOR LIFE SCIENCES (OR MATH 1552 INTEGRAL CALCULUS)	4
BIOL 1521 (OR 1520) INTRODUCTION TO ORGANISMAL BIOLOGY ¹	4
CHEM 1212K CHEMICAL PRINCIPLES II	4
TOTAL SEMESTER HOURS	15

SECOND YEAR-SPRING	HOURS
BIOL 2344 GENETICS, BIOL 2335 OR BIOL 2337 HONORS ECOLOGY ²	3
BIOL 2345 GENETICS LAB, BIOL 2336, OR BIOL 2338 HONS. ECOLOGY LAB ²	1
CHEM 2313 BIO-ORGANIC CHEMISTRY	3
CHEM 2380 SYNTHESIS LAB	2
QUANTITATIVE BIOLOGY REQUIREMENT ⁴ or COMPUTING REQUIREMENT	3
HUM OR SS ELECTIVE	3
TOTAL SEMESTER HOURS	14 or 15

THIRD YEAR-SPRING	HOURS
PHYS 2212 INTRODUCTORY PHYSICS II FOR LIFE SCIENCES	4
BIOL 3450 CELL & MOLECULAR BIOLOGY OR BIOL 3600 EVOLUTION ⁵	3
BIOL 3451 CELL & MOLECULAR BIOL LAB ²	1
BIOLOGY ELECTIVE	3
WELLNESS	2
HUM or SS ELECTIVE	3
TOTAL SEMESTER HOURS	15 or 16

FOURTH YEAR-SPRING	HOURS
BIOLOGY ELECTIVE	9
FREE ELECTIVE	5
HUM OR SS ELECTIVES	3
TOTAL SEMESTER HOURS	17

TOTAL DEGREE REQUIREMENT HOURS 122⁷

See important notes on next page

*Not required for graduation, another free elective may be substituted

Important notes regarding degree requirements

¹Four credit hours of Biology elective may be substituted for BIOL 1521 if a score of 5 was achieved on the AP Biology test. A maximum of 1 of these credits may be BIOL 4697 or BIOL 4699. Please discuss this option with your advisor. It is important to note that substituting for BIOL 1520/1521 often results in a student needing to take more than a single Biology elective class, because most Biology electives are only 3 credit hours.

²Biology lab courses: Ecology, Genetics, and Cell & Molecular Biology each have an associated laboratory course. You must take two of these three labs, each of which must be taken concurrently with the corresponding lecture course: Ecology Lab (BIOL 2336/2338), Genetics Lab (BIOL 2345/2355), or Cell and Molecular Biology Lab (Biol 3451). Be aware that 3451 is typically only offered in the Spring semester; students who take 3450 in the Fall are eligible to take 3451 the following spring.

³The Constitution Requirement is fulfilled by HIST 2111 or 1212 or POL 1101 or PUBP 3000 or INTA 1200.

⁴The following courses meet the Quantitative Biology Course requirement (Note that MATH 1551 and MATH 1553 are pre-requisites for most of the Quantitative Requirement courses): BIOL 2400 Mathematical Models in Biology, BIOL 4150 Genomics, BIOL 4401 Experimental Design & Biostatistics (meets MCAT statistics requirement).

⁵The prerequisites for BIOL 3600 is either BIOL 2335, BIOL 2337, BIOL 2344, or BIOL 2454.

⁶The Senior Research Experience can be met with any of the following during the fourth year fall or spring semesters: BIOL 4590 Research Project Lab, BIOL 4690 Independent Research Project (requires at least one previous semester of BIOL 4699/2699), BIOL 4910 Honors Research Thesis (requires at least one previous semester of BIOL 4699/2699).

⁷A minimum of 39 hours of upper division coursework (3000-level or higher) is required for all Georgia Tech undergraduate degrees. The 39 hours of upper division coursework can fulfill any category of degree requirements, including free electives and "fall-through" courses.