

Biology Degree Planning Guide



Students must complete a minimum of 42 credits under the BIOL or SUST prefix to earn a degree. Students must complete all core classes (22-27 credits) and six courses from at least **three** of the upper level baskets (3 must be 300 level or higher with a minimum of 18 credits): Students choosing an emphasis shall select **4 courses from one basket and 2 courses from at least two** of the other baskets.

In order to graduate 128 credit hours must be completed. Last 30 credit hours must be completed in residency.

This is an unofficial degree planning sheet. It is subject to change. 6/21

BIOL 117 General Biology I (4)
 BIOL 118 General Biology II (4)
 BIOL 260 General Genetics (4) @
 SCI 498-Advanced Topics (2) S or BIOL 401 Research 1 (3) @ or SUST
 499 (3) for Sustainability conc. or BIOL 499 (3) for Applied Microbiology
 conc. or MLS conc.

BIOL 115 - Intro to Human Anatomy and Physiology (4) **OR**
 BIOL 101 **and** BIOL 102 (8) - Anatomy and Physiology 1 and
 2 (101) and S (102)
 BIOL 270 Evolution (4) #

UPPER LEVEL BASKETS: MINIMUM 18 CREDITS

Sustainability & Environmental Stewardship

SUST 101: Intro to Sustainability (3)
 SUST 150: Sustainability Exploration Seminar (3) S
 SUST 201: Environmental Science and Health (3)
 SUST 310: Climate Science (3)
 SUST 350: Sustainability Expedition S
 SUST 375: Strategies in Sustainability (3) F

Ecology

BIOL 216 Plants & People (4) S *
 BIOL 231 Conservation Biology (3)F*@
 BIOL 314 Botany (4) S* ^
 BIOL 352 General Ecology (4) F* \$ or ^
 BIOL 381 Ornithology (4) S* ^
 BIOL 304 Zoology (3) F* #

Molecular & Microbiology

BIOL 316 General Microbiology (4) #
 BIOL 351 Cell Biology (4) #
 BIOL 390 Biotechnology (4) F #
 BIOL 391 Molecular Genetics (4) S* \$
 BIOL 416 Microbial Genetics (4) F*&
 BIOL 418 Applied Microbiology (4) S*&

Anatomy & Physiology

BIOL 220 Exercise Science (3) @*
 BIOL 303 Comparative Vertebrate Anatomy (4) F* ^
 BIOL 350 Intro to Human Anatomy (4) S* (*) or >
 BIOL 354 Immunology (3) *&
 BIOL 394 Advanced Physiology (3) F @ or >
 BIOL 395 Pathophysiology (3) S !*

NON-BIOLOGY SCIENCE AND MATH REQUIREMENTS: MINIMUM 30 CREDITS

MATH 151 Calculus I (4) F (recommended) OR MATH 125 College Algebra &
 Trigonometry (3) F/S

CHEM 103 General Chemistry I (4)
 CHEM 104 General Chemistry II (4)
 CHEM 203 Organic Chemistry I (4)
 CHEM 204 Organic Chemistry II (4)

MATH 141 Elementary Stats (3) F/S OR BIOL/MATH 420 (3)
 Experimental Design for Life Science OR PSYC 341 Understanding
 Statistical Inference

PHYS 153 Calculus-Based Physics I (4) F (recommended) OR PHYS 103
 Gen. Physics I (4) F
 PHYS 154 Calculus-Based Physics II (4) S (recommended) OR PHYS
 104 Gen. Physics II (4) S

GENERAL EDUCATION: 33 CREDITS

I. Skills/Processes for Literacy (3 courses)

A. INTD 101 University Seminar
 B. ENGL 101 Composition: Theme Writing
 C. ENGL 104 Composition: The Essay

II. Humanities (5 courses)

A. Fine Arts (1 course): Art Music, Performance
 B. Literature/Language (1 course): ENGL or
 Foreign Language
 C. Philosophy (1 course)
 D. Humanities Electives (2 courses)
 1. HUM 101/301 or HIST 131
 2. One additional elective from ENGL, The
 Arts/Aesthetics, Foreign Language, HUM,
 PHIL, REL

III. Social Science (3 courses)

A. American History or Government
 B. Social Science Electives (2 courses from
 ECON, HIST, PSCI, PSYC, SOC)

IV. Natural Science/Quantitative Reasoning (met through major)

V. General Education Electives (2 courses): From the College of Arts and Sciences

ALTERNATE COURSE OFFERINGS

Fall Even Years: Conservation Biology,
 Comparative Vertebrate Anatomy

Fall Odd Years: Ecology, Zoology, Physical
 Chemistry 1, Microbial Genetics

Spring Even Years: Pathophys, Ex Science,
 Plants and People, Ornithology, Physical Chemistry
 2, Inorganic Chemistry, Applied Microbiology

Spring Odd Years: Intro to Gross, Molecular
 Genetics, Botany

TIMING -* denotes that the course is offered
 every other year

PREREQUISITES F=Fall S=Spring
 @=117/118, # =260 > = 101/102
 & = 316 \$ = 270 != 394 (*) = 115

COREQUISITES
 ^ = 270 a = 394