

# Biology (Pre-Physician Assist. Concentration) 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. 2/21*

## SUGGESTED COURSES FOR PRE-PHYSICIAN ASSISTANT CONCENTRATION

BIOL 101/102 OR 115, BIOL 351, CHEM 320, SOC 101, PSYC 101, some programs require two semesters of calculus.

Some programs like to see microbiology, immunology, and pathophysiology.

Biochemistry 2 is recommended for students taking the MCAT.

Some medical schools may require 2 semesters of Anatomy. If this is the case BIOL 303 or 350 are possible selections.

## 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**

## BIOLOGY CORE REQUIREMENTS: 22 - 27 CREDITS

BIOL 117 General Biology I (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 118 General Biology II (4)  
 BIOL 270 Evolution (4) #  
 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)

## UPPER LEVEL BASKETS: MINIMUM 18 CREDITS

Sustainability & Environmental Stewardship	Molecular & Microbiology
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	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*&
Ecology	Anatomy & Physiology
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* #	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 !*

## 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

## 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 MATH 420 (3) Statistics for Sci Research 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

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

**COREQUISITES**  
 ^ = 270 a = 394