

B.S. IN BIOLOGY



GENERAL EDUCATION- UK CORE REQUIREMENTS

- 1 Intellectual Inquiry in Arts and Creativity Course - 3 Credit Hours
- 1 Intellectual Inquiry in the Humanities Course - 3 Credit Hours
- 1 Intellectual Inquiry in the Social Sciences Course - 3 Credit Hours
- 1 Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences Course (*satisfied by major*)
- 1 Composition and Communication I Course - 3 Credit Hours
- 1 Composition and Communication II Course - 3 Credit Hours
- 1 Quantitative Foundations Course - satisfied by major
- 1 Statistical Inferential Reasoning Course - satisfied by major
- 1 Community, Culture, and Citizenship in the USA Course - 3 Credit Hours
- 1 Global Dynamics Course - 3 Credit Hours

Total: 21 Credit Hours

GRADUATION COMPOSITION AND COMMUNICATION REQUIREMENT (GCCR)

*Oral Component - BIO 425 (*satisfied by major*)

*Written Component (choose one):

- BIO 398: Research and Writing in Biology - 1-3 Credit Hours
- BIO 404: Advanced Genetics - 3 Credit Hours
- BIO 405: Human Genetics - 3 Credit Hours
- BIO 418: Ecological Genetics - 3 Credit Hours
- BIO 430G: Plant Physiology - 4 Credit Hours
- BIO 445: The Biology of Sex - 3 Credit Hours
- WRD 305: Writing Public Science - 3 Credit Hours
- WRD 310: Writing in the Natural Sciences - 3 Credit Hours

Total: 1-4 Credit Hours

COLLEGE REQUIREMENTS

- 2 A&S Natural Sciences Courses (*satisfied by major*)
- 2 A&S Social Sciences Courses - 6 Credit Hours (2x3 hours)
- 2 A&S Humanities Courses - 6 Credit Hours (2x3 hours)
- 1 A&S Lab Course (*satisfied by major*)
- 2 A&S Electives - 6 Credit Hours (2x3 hours)
- Foreign Language: Complete 202 course of one language OR 2 semesters of one language and 3 semesters of a different language - 0-15 Credit Hours

Total: 18 Credit Hours + Foreign Language Hours

PRE-MAJOR REQUIREMENTS

- BIO 148: Introductory Biology I - 3 Credit Hours
- BIO 152: Principles of Biology II - 3 Credit Hours
- BIO 155: Introductory Biology Lab I OR BIO 198: Scholars Biology Research - 1-2 Credit Hours
- CHE 105: General College Chemistry I AND CHE 111: General Chemistry Lab I - 5 Credit Hours (4+1 hours)
- CHE 107: General College Chemistry II AND CHE 113: General Chemistry Lab II - 5 Credit Hours (3+2 hours)



MA 137: Calculus I OR MA 113: Calculus I OR MA 123: Elem Calculus and its Applications - 4 Credit Hours

*The CHE 105 requirement can be satisfied with CHE 109 and CHE 110 (8 Credit Hours).

Total: 21-26 Credit Hours

MAJOR REQUIREMENTS

Minimum major requirement for graduation is 54 credit hours in courses as detailed below. The overall GPA and Major GPA must be at least 2.0

1st Tier Core

BIO 303: Intro to Evolution - 4 Credit Hours

BIO 304: Principles of Genetics - 4 Credit Hours

2nd Tier Core (To be taken after completion of 1st Tier Core)

BIO 315: Intro to Cell Biology - 4 Credit Hours

BIO 325: Ecology - 4 Credit Hours

BIO 350: Animal Physiology OR BIO 430G: Plant Physiology - 4 Credit Hours

All are 4 credit hour courses with an embedded laboratory component

STA 296: Statistical Methods and Motivations - 3 Credit Hours

BIO 425: Biology Seminar - 1 Credit Hour

Core Total: 24 Credit Hours

COURSES OUTSIDE THE MAJOR

CHE 230: Organic Chemistry I - 3 Credit Hours

CHE 231: Organic Chemistry I Lab - 1 Credit Hour

CHE 232: Organic Chemistry II - 3 Credit Hours

PHY 211: General Physics I - 5 Credit Hours

PHY 213: General Physics II - 5 Credit Hours

Outside Major Total: 17 Credit Hours

BIOLOGY ELECTIVES 15 HOURS

15 hours to be chosen from 300+ level BIO courses or the full list of acceptable electives. Two courses must have labs, ONE of which may be BIO 395. A maximum of only six credits of BIO 395 may be used as electives in this section. A total of six hours of Independent Research (395) from biological sciences departments may be counted within the 15 hour requirement; however, only BIO 395 is accepted for Honors in Biology. Note: ANA 209, BIO 208, BIO 209, and PGY 206 CANNOT be used for this requirement.

For the B.S. degree, a minimum of 9 of the 15 upper-level electives must be BIO courses (i.e. must have a BIO prefix)

Total Credit Hours for Major (excluding pre-major hours) = 56 Credit Hours

Total Credit Hours for Graduation = 120 Credit Hours