

# 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. 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)\*\*\*

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

**Total Credit Hours for Graduation = 120 Credit Hours**