

B.S. - BIOLOGY / Secondary Education

Effective Fall 2018. (An overall GPA of 3.0 is required to remain in this concentration.)

GENERAL EDUCATION PROGRAM* (47 credits)

* Refer to the Undergraduate Catalog to determine the specific courses that can be counted under each section.

ALL STUDENTS are prohibited from counting more than two (2) courses from the same participating academic program toward their General Education Requirements.

FOUNDATIONS (15 credits)

- ___ First Yr. Seminar(3) UNIV 101
- ___ Academic Writing (3 cr.) ENG 114 or 115
- ___ Oral Communication (3 cr.) HCS 100
- ___ History (3 cr.) HIS 105
- ___ Quantitative (Q) (3 cr.) MAT 211 (4 cr)
(*MAT 211 - required by Biology major*)

INTERCONNECTIONS (9 credits)

At least 3 credits each must come from the Diversity (D) and from the Global Perspectives (G) categories.

- ___ Diversity (D)
- ___ Global Perspectives (G)
- ___ Foreign Language (F) **

CITIZENSHIP & RESPONSIBILITY (6 credits)

Minimum of 2 courses within C&R, with no more than 1 course attributed to the same program goal.

- ___ Citizenship (S)
- ___ Ethical Reasoning (E)
- ___ Critical Reasoning (R)

NATURAL WORLD & TECHNOLOGY (9 credits)

At least 6 credits must come from the Natural World (N) category.

- Natural World (N)
(10 cr required by Biology major)
- ___ BIO 161 (4 cr)
- ___ CHM 121 (3 cr)
- ___ PHY 121 (3 cr)
- ___ Technology (T) ***

CREATIVITY & EXPRESSION (6 credits)

3 credits must come from the Literature (L) category and the other 3 credits from either Arts (A) or Creativity (C).

- ___ Literature (L)
- ___ Arts (A)
- ___ Creative (C)

MAJOR REQUIREMENTS (47-48 cr.)

Biology Requirements (34 cr.)

Core Courses:

- ___ BIO 161 - Princ. Bio: Cell Structure & Function (4) (*see gen ed Category N*)
- ___ BIO 162 - Princ. Bio: Organismal Diversity (4)
- ___ BIO 208 - Field Biology (3)
- ___ BIO 242 - Ecology (3)
- ___ BIO 260 - Genetics (4)
- ___ BIO 385 - Cell Biology (3)
- ___ BIO 430 - Principles of Evolution (3)
- ___ BIO 499 - Capstone Seminar in Biology (1)

Physiology elective (4 cr.) choose one:

- ___ BIO 350 - Human Physiology (4) OR
- ___ BIO 351 - Animal Physiology (4)

Additional Biology Electives (9 cr.)

(Only 3 credits of internship/research may be used here.)

COGNATE COURSES REQUIRED FOR THE BIOLOGY MAJOR

Chemistry Requirements (9 cr.)

- ___ CHM 121 - Chemical Bonding (Cat. N) with CHM 125 lab IB (1)
- ___ CHM 122 - Chemical Dynamics (3) with CHM 126 lab IIB (1)
- ___ CHM 221 - Organic Chemistry I (3) with CHM 225 lab IIIIB (1)
- ___ CHM 227 - Introduction to Biochemistry* (4)
* Intro. to Biochemistry is not required but is strongly recommended.

Physics Requirements (1 cr.)

- ___ PHY 121 - Introductory Physics I (Cat. N) with PHY 123 - Physics I lab (1)
- ___ PHY 122 - Introductory Physics II (3) with PHY 125 - Physics II lab (1)**
** Physics II and lab are not required but are strongly recommended.

Math Requirements (3-4 cr.)

- ___ MAT 211 (*see Quantitative gen ed*)
- ___ MAT 117 - Applied Statistics (3)
OR MAT 217 - Statistics I (4)

Professional Education Requirements (33 cr.)

NOTE: Students must maintain a 3.0 GPA to enroll in EDU 440 AND EDU 441.

- ___ TCH 207 - Organizational & Psychological Foundations in Secondary Education (3)
- ___ EEC 273 - Intro. to Exceptionality (3)
- ___ EEC 423 - Effective Instructional Strategies (3)
- ___ EEC 483 - Assessing Students for Curriculum Decision Making (3)
- ___ EDU 440 - Teaching Science in Secondary Schools (3)
- ___ EDU 441 - Curriculum and Evaluation in the Secondary Classroom (3)
- ___ RDG 413 - Teaching Reading to ELL (3)
- ___ EDU 495 - Student Teaching and Professional Practicum (12)

** Foreign Language only required for BA majors.

*** Technology only required for certain majors.