2018-2019 B.S. Biology – General Biology Concentration

UNIVERSITY CORE

A. Core Foundations

CORE 101 _____ **3**

CORE 102 _____ **3**

HNRS 103* _____ **3**

CORE 201 _____ **3**
PHIL 111: 213

CORE 202 _____ **3**
PHIL 112

NOTE: Courses listed in multiple areas can only be used to fulfill a single area requirement.

***Honors students take HNRS103 in place of CORE101 & 102.**

B. Core Skills & Knowledge**

MATHEMATICAL SCIENCES (3-4 SH)
MATH 119, 138, 168, 171 _____

NATURAL SCIENCES (4 SH)
CHEM 101 _____

HUMANITIES (3 SH) _____
PHIL112 recommended
One of the following: **CLSS**110 **CCST**110 **ENGL**200 **HIST**101, 102 **PHIL**111, 112, 200 **POSC**110 **RELN**111, 112, 203, 206

VISUAL/PERFORMING ARTS (3 SH) _____
One of the following: **ART**100, 215, 216 **CVPA**266 **DNCE**111 **MUSC**100, 121, 123 **THEA**100, 180

SOCIAL/BEHAV. SCIENCES (3 SH) _____
SOCY110/121 or PSYC121 recommended
One of the following: **ANSC**101 **APST**200 **ECON**205, 206 **GEOG**101, 102, 103 **HIST**111, 112 **POSC**120 **PSYC**121 **RELN**205 **SOCY**110, 121

COLLEGE CORE

A. National & International Perspectives**

U. S. PERSPECTIVES (3 SH) _____
ECON205/206 or SOCY110 recommended
One of the following: **APST**200 **ECON**101, 205, 206 **ENGL**203 **GEOG**201, 202, 203 **HIST**111, 112 **POSC**120, **SOCY**110

GLOBAL PERSPECTIVES (3SH) _____
GEOG140 or SOCY121 recommended
One of the following: **CVPA**266, **ENGL**201, 202 **FORL**103 **GEOG**101, 102, 140, 280 **HIST**101, 102 **INST**101 **ITEC**112 **PEAC**200 **RELN**112, 205 **SOCY**121 **THEA**180 **WMST**200

****US and Global Perspectives must come from different disciplines**

B. Supporting Skills & Knowledge

NATURAL SCIENCES OR MATH (3-4 SH)
STAT 219 _____

HUMANITIES, VISUAL/PERFORMING ARTS, OR FOREIGN LANGUAGES (3-4 SH) _____
One of the following: **CLSS**110 **CCST** 110 **ENGL**200 **HIST**101, 102 **PHIL**111, 112, 200 **POSC**110 **RELN**111, 112, 203, 206 **CVPA**266 **ART**100, 215, 216 **DNCE**111, **MUSC**100, 121, 123 **THEA**100, 180 **CHNS**101, 102, 201, 202 **ARAB**101, 102, 201, 202 **FORL**100, 109, 200, 210, 209, 309, 409 **FREN**100, 200, 210, 300, 320 **GRMN**100, 200, 210, 300 **LATN**101 102, 201, 350 **RUSS**101, 102, 200, 210, 300 **SPAN**101, 102, 105, 201, 202

SOCIAL/ BEHAV. SCI. OR HEALTH & WELLNESS (3SH) _____
SOCY110/121, NUTR214, or HLTH200 recommended
One of the following: **ANSC**101 **APST**200 **ECON**205, 206 **GEOG**101, 102, 103 **HIST**111, 112 **POSC**120 **PSYC**121 **RELN**205 **SOCY**110, 121 **HLTH** 111, 200 **NURS**111 **NUTR**214 **RCPT**200

Biology Major - General Biology Concentration

Course # & Name	Credits	When offered	Prerequisites
BIOL160: Introductory Seminar*	2	Fall/Spring	First-year status
BIOL131: Ecology & Adaptation	4	Fall/Spring	
BIOL132: Cells & Microorganisms	4	Fall/Spring	
BIOL231: Genetics, Evolution, & Development	4	Fall/Spring	C or better in BIOL132
BIOL232: Organismal Biology	4	Fall/Spring	C or better in BIOL131
BIOL460: Advanced Seminar	2	Fall/Spring/Summer	BIOL131, 132, 231, 232 (231 or 232 may be concurrent)
CHEM101: General Chemistry I	4	Fall/Summer	
CHEM102: General Chemistry II	4	Spring/Summer	CHEM101
CHEM301: Organic Chemistry I	4	Fall/Summer	CHEM102
CHEM302: Organic Chemistry II	4	Spring/Summer	CHEM301
STAT219: Statistics for Biology	3	Fall/Spring/Summer	
MATH119 or 138 or 151 or 168:169 or 171	3-6	Fall/Spring/Summer	

*Students who do not take BIOL160 must take two BIOL460 seminars.

Concentration elective hours (26-30 credits): Students must select one of the following options:

- 26 credits of Biology elective courses numbered 200 or higher (except 310, 311, 322, 334)
- 22 credits of Biology elective courses as above *and* 6-9 hours of the following approved non-biology courses. Others may count by petition.
  - PHYS111:112: General Physics (4:4) ***or*** PHYS221:222: Physics (4:4)
  - CHEM215: Environmental Chemistry (3)
  - CHEM478: Medicinal Chemistry (3)
  - GEOS250: Introduction to GIS (3)*
  - GEOL408: Spatial Data Applications in Geology (4)*
  - ONE of the following:
    - ECON375: Environmental Economics (3)*
    - GEOS241: Environmental Regulation (3)*
    - SOCY370: Environmental Sociology (3)*

*these courses have prerequisites that do not count toward the biology major, but may satisfy Core elective requirements

Students with particular interests are strongly encouraged to include the following courses in consultation with their faculty advisor.

Environmental Fields		Pre-Medicine, Dentistry, Physical Therapy, Veterinary	Graduate work in Molecular Biology
BIOL390: Conservation Biology		PHYS111:112 General Physics ***or***	BIOL337: Immunology
GEOS250		PHYS221:222 Physics	BIOL408: Microbiology
BIOL392	CHEM215	BIOL410:411: Human A&P	BIOL450: Molecular Biology
BIOL333	BIOL476	BIOL/CHEM471: Biochemistry I	BIOL/CHEM471: Biochemistry I
GEOS241 or ECON375 or SOCY370		MATH 151 or 168:169 or 171	

Graduation Requirements: 120 total credits and an overall GPA ≥ 2.0 are required for graduation. To graduate with a major in biology a student must attain an overall major grade point average of 2.0 or higher. Major GPA is calculated by using BIOL 131, BIOL 132, BIOL 160, all biology courses 200-level or higher, all courses outside of biology used as electives (including PHYS/CHEM/GEOS/ECON/SOCY used as an elective), and any course used as an elective by academic petition. Courses transferred in do not contribute to the RU GPA calculation.