

BS in Biological Sciences
General Biology Concentration
 (Effective Fall 2019)

| Freshman Fall Semester | | | | Freshman Spring Semester | | | |
|----------------------------|-----------------------------|----|-------|---------------------------|--|----|-------|
| Course | Course Name | Cr | Grade | Course | Course Name | Cr | Grade |
| BIOL-101 | General Biology I | 4 | | BIOL-102 | General Biology II | 4 | |
| CHEM-101 | General Chemistry I | 4 | | CHEM-102 | General Chemistry II | 4 | |
| ENGL-101 | English Composition I | 3 | | ENGL-102 | English Composition II | 3 | |
| | Social Science | 3 | | MTSC-122 | Trigonometry | 3 | |
| BIOL-191 | University Seminar I | 1 | | BIOL-192 | University Seminar II | 1 | |
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| | | | | | | | |
| | Total Credits | 15 | | | Total Credits | 16 | |
| Sophomore Fall Semester | | | | Sophomore Spring Semester | | | |
| Course | Course Name | Cr | Grade | Course | Course Name | Cr | Grade |
| BIOL-215 | Cell Biology | 4 | | BIOL-210 | Genetics* | 4 | |
| CHEM-301 | Organic Chemistry I | 4 | | CHEM-302 | Organic Chemistry II | 4 | |
| MVSC-101 | Fitness and Wellness | 2 | | | Literature# | 3 | |
| BIOL 321 | Biostatistics | 3 | | | History# | 3 | |
| ENGL-200 | Speech | 3 | | BIOL-299 | Applied Scientific Writing | 1 | |
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| | | | | | | | |
| | Total Credits | 16 | | | Total Credits | 15 | |
| Junior Fall Semester | | | | Junior Spring Semester | | | |
| Course | Course Name | Cr | Grade | Course | Course Name | Cr | Grade |
| BIOL-310 | Molecular Biology* | 4 | | CHEM-403 | Biochemistry OR | -- | |
| BIOL-xxx | Biology Elective | 4 | | BIOL-422 | Biochemical Mechanisms | 4 | |
| BIOL-xxx | Biology Elective | 4 | | GLOB-395 | Global Societies | 3 | |
| PHYS-111 | Introduction to Physics I | 4 | | PHYS-112 | Introduction to Physics II | 4 | |
| | | | | BIOL-xxx | Biology Elective | 4 | |
| | | | | BIOL-451 | Capstone I (research/internship)** | 2 | |
| | | | | | | | |
| | Total Credits | 16 | | | Total Credits | 16 | |
| Summer Research Internship | | | | | | | |
| Senior Fall Semester | | | | Senior Spring Semester | | | |
| Course | Course Name | Cr | Grade | Course | Course Name | Cr | Grade |
| | Arts and Humanities# | 3 | | | Arts and Humanities# | 3 | |
| BIOL-xxx | Biology Elective | 4 | | BIOL-xxx | Biology Elective | 4 | |
| BIOL-xxx | Biology Elective | 4 | | | Open Elective | 4 | |
| | Open Elective | 3 | | BIOL-499 | Senior Seminar (Capstone II) [§] | 1 | |
| | | | | | | | |
| | | | | | | | |
| | Total Credits | 14 | | | Total Credits | 12 | |

Total Credits: 122

** Pre-requisite (not co-requisite) for BIOL 499.

* Writing Intensive Course(s)

One of these courses must be used to meet the African American Experience requirement and at least one of the others must meet the Multicultural Experience requirement

§ Registration for BIOL 499 requires approval of Chair of the Undergraduate Academics Committee, Department Chair, and Instructor.

BIOLOGY ELECTIVES: Students must not take less than 18 credits of Biology courses from the course elective list below. These are the only ones that can satisfy the Biology elective requirement for this concentration. Substitutions can be requested, under special circumstances, but written approval of advisor and Chair is needed in advance.

REQUIREMENTS: Students must take each of the five biology core courses (201, 202, 215, 210 and 310) in order and earn a “C” or higher in each before being able to progress to the next in the sequence or to take any 300 or 400 level Biology Department course. These grade requirements take precedence over, and supersede any lesser specific prerequisites of all 300 or 400 level Biology electives.

SPECIAL NOTES: For all programs and concentrations, a grade of “C” or better is required for all Biology and other CAST courses (not bolded).

All Biology majors must complete an independent research project or internship. Those who have completed a research project with a faculty member (e.g. BIOL-301 for credit, or via a paid stipend) prior to the beginning of their senior year can be exempted from the required Senior Capstone I course. If the project was an internship at another institution, this must be approved by the advisor/Department Chair. If they have not completed a research project, or their internship is inadequate, then they must register for BIOL-451 to complete a Capstone research project. All majors in the department are required to successfully complete Senior Seminar (Capstone II, BIOL-499), no exceptions can be made.

All Biology majors are required to successfully complete Senior Seminar (Capstone II, BIOL-499), no waivers or substitutions.

General Note: The minimum University requirement for graduation is 121 hours; in Biology you will usually complete between 121-125 hours depending on selections.

General Biology[^]

Recommended Biology Electives:

BIOL-307 Principles of Physiology
BIOL-315 Behavior
BIOL-316 Phys Reprod Dev
BIOL-322 Microbiology
BIOL-370 Human Anatomy
BIOL-407 Biology of Cancer
BIOL-411 Pharmacology
BIOL-420 Immunology

Recommended Open Electives:

AGRI-205 Plant Physiology
AGRI-206 Intro Animal Science
AGRI 375 Molec Genetics & Genomics
NTRS-205 Ecology
NTRS-314 Ichthyology
PSYC-201 General Psychology
PSYC-208 Health Psychology
PSYC-300 Neuropsychology

[^] Electives not on the list require advisor / Chair written approval in advance. Non-majors biology courses are not suitable electives for Biology Majors, and will not be approved.