

GENERAL BIOLOGY MAJOR (B.S.)

A minimum of **21** units with the following distribution:

1. Foundation requirements – 4 units, all as follows:

- _____ BI 213 *Cells, Genes and Evolution* (fall & spring)
- _____ BI 215 *Biodiversity and Ecology* (fall & spring) (prerequisite: BI 213)
- _____ BI 217 *Forms and Functions of Life* (fall & spring) (prerequisite: BI 213)
- _____ BI 221 *Biostatistics and Experimental Design* (fall & spring)

2. Upper level requirements – 2 units, both as follows:

- _____ BI 350 *Cell Physiology* (fall) (prerequisites: all four foundation courses; CH 112)
- _____ BI 360 *Molecular Genetics* (spring) (prerequisites: BI 213, 217; CH 112)

3. Major Core requirements – 4 units with lab, 300-level or higher, from the following:

- _____ BI 304 *Animal Behavior* (fall even years) (prerequisites: BI 213, and BI 215 or PS 101)
- _____ BI 323 *Basic Medical Histology* (fall) (prerequisites: BI 213, 215, 217)
- _____ BI 340 *Electrophysiology* (spring even years) (prerequisites: BI 213, 215, 217)
- _____ BI 412 *Developmental Biology* (spring odd years) (prerequisites: BI 213, 215, 217 and CH 112)
- _____ BI 493 *Undergraduate Research* (permission of instructor required) (prerequisites: BI 213, 215, 217)
- _____ BI 492 *Ecological and Evolutionary Theory* (spring) (BI 213, 215, 360)

4. Upper level electives – 2 units, from the following:

- _____ 2 units 300-level or higher
- _____ 1 unit 300-level or higher & 1 unit Physical Science or Math
- _____ Research Track (BI493, BI 494)

5. Cognate Courses – 7 units: 4 units in Chemistry, 2 units in Physics, and 1 unit in Math:

- _____ CH 111 *General Chemistry I* (fall)
- _____ CH 112 *General Chemistry II* (spring) (prerequisite: CH 111)
- _____ CH 211 *Organic Chemistry I* (fall) (prerequisites: CH 111, 112)
- _____ CH 212 *Organic Chemistry II* (spring) (prerequisite: CH 211)
- _____ MA 121 *Analytic Geometry & Calculus I* (fall, spring)
- _____ PY 131 *Elements of Physics I* (fall)
- _____ PY 132 *Elements of Physics II* (spring) (prerequisite: PY 131)
- or _____ PY 141 *General Physics I* (fall) (co-requisite: MA 121)
- _____ PY 142 *General Physics II* (spring) (prerequisite: PY 141, MA 122)

6. Senior Learning Community – 2 units:

_____ BI 400E *Experiential Component* (fall, spring, summer) (**zero units**) (permission of SLC coordinator required)

_____ BI 400 *Senior Thesis in Biological Sciences* (fall, spring) (prerequisite: BI 400E)

CHOOSE ONE:

_____ MCB 491 *Advances in Molecular & Cellular Biochemistry* (spring)

_____ MI 491 *Advances in Microbiology & Immunology* (spring)

_____ NS 491 – *Advances in Neuroscience* (spring)

COMBINED BIOLOGY MAJOR/CHEMISTRY MINOR

18 units required for the major in Biology (shown above)

And any two additional units in Chemistry above Chemistry 212