Biological Sciences (BS)

### **Biological Sciences (BS)**

- MATH 1620 Calculus II (5 hours)
- Minimum of 9 credit hours of 3000+ level CHEM electives. No more than three hours can be applied from Independent Chemistry Research (CHEM 4700, 4710, 4720 and/or 4730) for this emphasis.

### **Emphasis in Bioinformatics (79 hours)**

The emphasis in bioinformatics prepares students with a diverse scientific foundation in biology, math and computer languages, to prepare students for careers in bioinformatics that use data analysis skills, such as: biotechnology, computational biology, academic research labs, medicinal chemistry, pharmaceuticals research, agriculture technology, personalized healthcare, or any biology-related field that involves data analysis.

#### **Emphasis-Specific Learning Outcomes**

In addition to the general learning outcomes, students who complete the emphasis in bioinformatics will be able to:

 Use computational and bioinformatics methods to analyze data for studying biological processes, and relate results back to core principles in biological sciences.

## Degree Requirements for the Emphasis in Bioinformatics

 MATH 2200 is the required statistics courses in place of STAT 3100 or PSYC 2750

For students completing a dual degree in mathematics, or a minor in mathematics that incorporates MATH 1610 Calculus I and MATH 2200 Statistics, these courses will not be required for the BS in biological sciences with an emphasis in bioinformatics. If the student drops the mathematics major or minor, the courses will be required and counted toward the BS in biological sciences.

In addition to the 64 credit hours of core coursework in biological sciences, the following courses are required for the emphasis in bioinformatics:

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## **Biological Sciences (BS)**

# **Dual Major Option: Psychological Science/ Biological Sciences**

Students who wish to pursue a dual major in biological sciences and psychological science may do so. The two majors cannot be awarded separately or sequentially under this arrangement.

### **Degree Requirements**

For information on the general requirements for a degree, see Baccalaureate Degree Requirements under the Academic Policies and Information section of this catalog. For information on the general requirements for dual degrees, see Dual Majors and Dual Degrees under the Academic Policies and Information section of this catalog.

- · 118 required credit hours
- Applicable University Global Citizenship Program hours, with accommodations\*

\*All students pursuing a dual degree will complete the Global Citizenship Program requirements of one of the programs. Students should review the GCP accommodations for each degree before making their selection of which GCP program to pursue.

#### Curriculum

- WRIT 1010 The Craft of College Writing (3 hours)
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