

## Summer 2018 Zoology Course Offerings

### **Animal Biology (Biology/Zoology 101)**

**8-week session (5/21/2018-7/15/2018)**

General biological principles. Topics include: evolution, ecology, animal behavior, cell structure and function, genetics and molecular genetics and the physiology of a variety of organ systems emphasizing function in humans.

*Pre-requisites: Open to freshman. Not recommended for students with credit already in Zoology/Biology/Botany 151 or 152*

### **Animal Biology Lab (Biology/Zoology 102)**

**4-week session (5/21/2018-6/17/2018)**

General concepts of animal biology at an introductory level. The general body plans and strategies used to accomplish the basic tasks of staying alive of 9 major animal groups are studied using preserved and live animals. The diversity within each group of animals is studied by integrating the body plans with the lifestyle and ecology of the animals. The evolutionary relationships between the animals is a major part of the course. Dissections of earthworm, freshwater mussel, squid, sea star, and rat also aid the study of these general principles.

*Prerequisites: Open to freshman. Not recommended for students with credit already in Zoology/Biology/Botany 151/152*

### **Introductory Ecology (Botany/Envir St/Zoology 260)**

**8-week session (5/21/2018-7/15/2018)**

For students not majoring in biological sciences. The relationships of organisms and the environment. Population dynamics and community organization, human-environment relationships, action programs.

*Pre-requisites: Open to freshmen. Does not count toward Botany or Zoology major*

### **Neurobiology (Zoology/Psych 523)**

**4-week session (5/21/2018-6/17/2018)**

Basic mechanisms in cellular neurophysiology: electrophysiology and chemistry of nerve signals, mechanisms in integration, simple nervous pathways and their behavioral correlates. We highly recommend entering students have a strong background in the principles of basic electricity (charge, voltage, current, resistance, capacitance), as provided by Physics 104, 202, 208, or a strong high school physics program.

*Pre-requisites: Zoology/Botany/Biology 151 or Zoology/Biology 101 or Biocore 485 and Chemistry 103/104 or Chemistry 109*