Biological Sciences II

Course Information
Course Number      BIOL 153
Instructional Area Biology
Division           Science and Mathematics
Potential Hours of Instruction 90
Total Credits      4

Description
General Biology is designed to cover selected biological topics which should help the student gain an understanding and appreciation of basic life functions, man’s relationship to the environment, and the application of biological data to effective decision making. The class will cover plant and animal anatomy, physiology and diversity. This is the second semester of a two semester sequence. Course requires laboratory work. Dissection of preserved animal specimens is required.

Major Units
- Evolutionary history and Protists
- Plants and Fungi evolution
- Plant anatomy and reproduction
- Plant physiology
- Plant hormones
- Invertebrate evolution
- Vertebrate evolution
- Animal structure and function
- Gas exchange and osmotic regulation
- Circulation
- Animal hormones
- Nutrition and Digestion
- Reproduction
- Nervous system and Senses
- Muscles and movement

Laboratory Topics
- Plant Anatomy
- Plant Reproduction
- Seedless plants
- Seed plants
- Animal anatomy
- Digestion
- Homeostasis
- Nervous system and Senses
- Invertebrate diversity
- Invertebrate dissection (2 weeks)
- Vertebrate Diversity
- Vertebrate dissection

Types of Instruction
Instruction Type                  Contact Hours  Credits
Classroom Presentation            45            4
On-Campus Lab                     45

Prerequisites
BIOL 151 - Biological Sciences I
Course Outcomes

1. Achieve an understanding of how science influences our daily lives.
2. Explain evolution of eukaryotes.
3. Describe how plants colonized land and evolved from algae.
4. Achieve an understanding of plant structure and function.
5. Differentiate between invertebrate and vertebrate evolution.
6. Achieve an understanding of animal structure and function.