

BIO 108 - PLANT BIOLOGY

Course Description

In this class, we will examine some of the major ideas biologists use to study the living world. These will include the scientific method, biology of cells, and genetics. The emphasis in this course will be on: plant anatomy, the life cycle of plants, growth and its regulation, metabolism, and reproduction. Field and laboratory exercises, as well as experiments in the greenhouse, will allow the student to observe these principles, and practice the skills required to cultivate and propagate plants. Group 1 lab course.

Credit Hours

4

Contact Hours

5

Lecture Hours

3

Corequisites

BIO 108L

Recommended Prerequisites or Skills

Competencies

ENG 111, MTH 23

General Education Outcomes supported by this course

Quantitative Reasoning

Course Learning Outcomes

Knowledge:

- Describe the following core concepts: Evolution in organisms, Structure and function, Information flow, Exchange and storage, Pathways and transformation of energy and matter, Living systems.

Application:

- Use the scientific problem solving process to make decisions.
- Present key information regarding a plant family to peers.
- Use quantitative reasoning and understand the role of Math in Biology.

Integration:

- Explain the interdisciplinary nature of science.
- Use problem solving strategies.
- Use quantitative reasoning in biological analysis.

Human Dimension:

- Describe the role of science in society.
- Collaborate with peers.

Caring - Civic Learning:

- Demonstrate curiosity by developing questions about matters dealing with scientific topics.
- Understand the importance of micro-organisms in both human health and disease.

- Recognize the importance of micro-organisms in ecological health and disease.
- Reflect on the relationship humans have with the environment.

Learning How to Learn:

- Formulate useful questions about controversial subjects.
- Identify important sources of information.