Miami Dade College

Course Description

BOT1010L | Botany Laboratory | 1.00 credit

Laboratory for BOT 1010. Corequisite: BOT1010. Laboratory fee.

Course Competencies

Competency 1: The student will demonstrate an understanding of plant cell structure and function by:

1. Identifying different cell types and their functions within the angiosperm plant body.
2. Describing the process of plant transformation and propagation.
3. Illustrating the primary growth of stems and the role of different cell types in this process.

Competency 2: The student will Illustrate knowledge of plant physiology and growth by:

1. Explaining the process of photosynthesis and its significance in plant nutrition.
2. Discussing the mechanisms of transpiration and their impact on plant water relations.
3. Describing the role of hormones in plant growth and development.

Competency 3: The student will apply practical skills in botanical experimentation by:

1. Preparing and conducting experiments on the growth and development of flowers and fruits.
2. Analyzing soil composition and its impact on plant nutrition.
3. Demonstrating the characteristics and classification of algae, mosses, ferns, fern allies, and gymnosperms through hands-on experiments.

Learning Outcomes:

- Solve problems using critical and creative thinking and scientific reasoning
- Formulate strategies to locate, evaluate, and apply information
- Describe how natural systems function and recognize the impact of humans on the environment