# **SLO Presentation**

**BOT** 

Date: 09-15-2022

#### **ISLO**

### Civic Engagement

• Students will develop values and beliefs in their role as a member of local, national and global societies to promote truth, fairness and goodwill to others. They will use the democratic process to further their values and beliefs and recognize and accept differing perspectives based on cultural diversity. They will engage in actions which provide service to others and have a positive impact on their local community.

### Communication and Expression

• Students will demonstrate the ability to effectively and appropriately communicate their thoughts and ideas both in written and oral forms. They will develop verbal and non-verbal delivery skills, in an appropriate manner, to communicate their ideas as well as evaluate the ideas of others in a wide variety of contexts.

#### Critical Thinking and Quantitative Reasoning

• Students will demonstrate the ability to recognize assumptions within an argument and actively and skillfully analyze underlying reasoning to develop a conclusion. They will apply qualitative and/or quantitative analysis to solve problems, predict outcomes, test hypotheses, and explore alternatives in an ethical manner.

#### Information Literacy

• Students will demonstrate the ability to determine when gathering additional information is necessary. They will use appropriate resources and technologies to locate, evaluate and incorporate the information when developing supporting arguments and drawing conclusions. Students will also develop the ability to understand any legal, ethical or social issues regarding the use of information.

#### Personal Knowledge and Responsibility

• Students will develop the necessary skills to define, maintain and complete their personal educational goals. They will learn to work independently to accomplish personal goals toward realizing their full potential academically, physically and emotionally whether for personal enrichment, further education or career advancement.

# Science, Engineering, and Math

#### **BOT**

#### **PSLO**

No PSLOs

## **CSLO**

## BOT120 - Introduction to Plant Science

- In lab, apply scientific methodology by designing and conducting experiments, analyzing data, and communicating conclusions through a written paper and/or presentations
- Explain the scientific process and how it generates new knowledge
- Compare and contrast members of different taxa within the plant kingdom, and explain the different between photosynthetic bacteria, algae, and plants
- Describe the macroscopic and microscopic anatomy of plants, algae, and photosynthetic bacteria and explain the relationship between structure and function
- Explain the basic principles of plant ecology and adaptations of plants to their environment
- $\bullet$  Describe the mechanisms of regulation, communication, and defense in plants
- In lab, identify microscopic and macroscopic structures of plants, algae, and photosynthetic bacteria