

## **Course Description**

### **IPM2112 | Principles of Entomology | 3.00 credits**

This is an introductory course on the principles of entomology. Students will learn to identify characteristics of arthropods, the insect orders, and the growth cycle of insects. Students will also address insect pest's specific to South Florida and methods to responsibly manage plant pests.

### **Course Competencies:**

**Competency 1:** The student will understand the essential components of the study of entomology by:

1. Defining the study of entomology
2. Identifying the major anatomical features that distinguish the different classes of arthropods
3. Identifying and recognizing the insect orders that have paramount agricultural importance

**Competency 2:** The student will understand the insect growth cycles by:

1. Defining terms used to identify different insect life cycle stages
2. Distinguishing between incomplete and complete life cycles
3. Identifying life stages critical for pest treatment practices
4. Identifying the insect life stages that cause the most economic damage

**Competency 3:** The student will investigate the plant-pest relationships of South Florida by:

1. Researching important pests in South Florida
2. Identifying major insect pests common in South Florida
3. Matching insect-related plant damage to insect pest category: piercing-sucking or chewing pest

**Competency 4:** The student will learn how to control plant pests by:

1. Conducting surveys or sampling for pests in South Florida
2. Becoming familiar with local extension services available to growers for help with pest issues
3. Understand the basics of an IPM program
4. Distinguish between beneficial and pest insects
5. Understand the difference between contact and systemic pesticides

### **Learning Outcomes:**

- Use quantitative analytical skills to evaluate and process numerical data
- Solve problems using critical and creative thinking and scientific reasoning