Course Information

Description
This course is designed to prepare students to take the Commercial Pesticide Applicator Exam in the areas of Category A (Core) and Category C (Field Crops). In Category A the focus is on learning how to handle pesticides correctly so that students will be able to protect themselves, others and the environment from pesticide misuse. Category C covers the management and control of common pests in alfalfa, corn, dry beans, soybeans, small grains and sugar beets. At the completion of this course students will take the tests necessary to obtain a commercial or non-commercial pesticide applicator license from the Minnesota Department of Agriculture. (Prerequisites: None)

Total Credits 1
Total Hours 16

Types of Instruction

Instruction Type Credits/Hours
Lecture 1/16

Institutional Core Competencies

Civic Engagement and Social Responsibility - Students will be able to demonstrate the ability to engage in the social responsibilities expected of a community member.

Critical and Creative Thinking - Students will be able to demonstrate purposeful thinking with the goal of using a creative process for developing and building upon ideas and/or the goal of using a critical process for the analyzing and evaluating of ideas.

Course Competencies

1. Explain the concept of integrated pest management.
   Learning Objectives
   Calculate the economic threshold of pests.
   Define and give examples of a natural enemy.
   Explain the three ways that cultural control methods work.
   Describe the various types of pesticides.
   Explain the importance of pre-harvest interval, residues, reentry interval, phytotoxicity, and pesticide resistance.

2. Describe the laws and regulations related to pesticide use.
Learning Objectives
Identify records required by pesticide applicators.
Review information on material safety data sheets (MSDS).
Interpret information on a pesticide label: instructions, personal protective equipment, mixing/loading, environmental hazards, first aid statements, restrictions and precautions.

3. **Explain the health risks during pesticide application.**

   Learning Objectives
   Identify and differentiate between types of harmful effects (acute, delayed allergic, chronic) associated with pesticide application.
   Identify the common exposure routes for various pesticides and application methods.
   Explain the hazard level classification system for pesticides, including the associated signal words.
   Select the proper personal protective equipment (PPE) required.
   Recognize signal words on a pesticide label.

4. **Explain how to safely store, transport and apply pesticides.**

   Learning Objectives
   Explain how to maintain and store pesticide containers according to current regulations.
   Describe how to dispose of pesticide wastes and containers according to label directions.
   Explain how to implement an emergency response procedure as necessary to execute an emergency response plan (contact agencies, administer first aid, clean up spills).
   Identify the minimum required personal protective equipment.
   Describe how to clean, maintain, and store personal protective equipment.

5. **Summarize the environmental consequences of pesticide application.**

   Learning Objectives
   Define the characteristics of pesticides: solubility, persistence, volatility and adsorption.
   Explain the difference between point and non-point pollution.
   Identify pesticide-sensitive areas.
   Describe the procedures which can be taken to prevent pesticide drift, runoff or loss to unintended areas of the environment.
   Explain the three C’s in dealing with a chemical spill.
   Outline the steps to dispose of contaminated items.
   Outline the emergency response procedure to follow for a chemical spill.

6. **Select appropriate pesticides and additives.**

   Learning Objectives
   Recognize signal words on a pesticide label.
   Describe the common application methods.
   Determine pesticide application rates.
   Select proper adjuvant(s) according to the label.

**SCC Accessibility Statement**
South Central College strives to make all learning experiences as accessible as possible. If you have a disability and need accommodations for access to this class, contact the Academic Support Center to request and discuss accommodations. North Mankato: Room B-132, (507) 389-7222; Faribault: Room A-116, (507) 332-7222.

Additional information and forms can be found at: www.southcentral.edu/disability

This material can be made available in alternative formats by contacting the Academic Support Center at 507-389-7222.