

Course Objectives/Course Outline
Spokane Community College

Course Title: Weed Biology and Control

Prefix and Course Number: AGHRT 225

Course Learning Outcomes:

By the end of this course, a student should be able to:

- Identify over 100 common weeds
- Identify unknown plants to family using a key
- Identify many unknown plants to species using a key
- Describe plants using common taxonomic terminology
- Explain the characteristics of common weeds
- Determine how to control particular weeds using current resources

Course Outline

- I Plant Identification
 - A. Plant Morphology Terminology
 - 1. Monocots
 - 2. Dicots
 - 3. Flowers
 - 4. Leaves
 - 5. Miscellaneous Characteristics
 - B. Lifecycles of Weeds
 - 1. Summer Annuals
 - 2. Winter Annuals
 - 3. Biennials
 - 4. Simple Perennials
 - 5. Creeping Perennials
 - C. How to use a Dichotomous key
 - 1. Plant Family Key
 - 2. Weed Seedling Key
 - 3. Weedy Grasses Key
 - 4. Using the XID Database Key
 - D. Weed Identification
 - 1. Family Characteristics
 - 2. Growth Habit
 - 3. Leaves
 - 4. Flowers
 - 5. Fruit and Seeds
 - 6. Habitat
 - 7. Other Important Characteristics
- II Basic Weed Science
 - A. What is a Weed?
 - B. Weed Origins
 - C. How Weeds Spread
 - D. How Weeds Establish and Persist
- III Why Weeds are a Problem
 - A. Effects of Weeds
 - B. Characteristics of Weeds
- IV Weed Management Strategies
 - A. Identify and Understand the Enemy

- B. Create a Weed Management Plan
 - 1. Prevention
 - 2. Mechanical Control
 - 3. Cultural Control
 - 4. Biological Control
 - 5. Chemical Control
- V Herbicide Activity and Selectivity
 - A. Uptake and Movement of Herbicides in Plants
 - 1. Herbicide Application
 - 2. Herbicide Activity
 - B. Modes of Herbicide Action