

ARIZONA WESTERN COLLEGE  
SYLLABUS

## PLS 110 CHEMICAL APPLICATIONS USING INTEGRATED PEST MANAGEMENT

Credit Hours: 2 Lec 2

PREREQUISITE: None

COURSE DESCRIPTION

To introduce students to the world of chemical application emphasizing the importance of integrated pest management. Students will accomplish this through laws and regulations governing chemical applications, drift management, crop protection, application equipment, and personal safety.

1. COURSE GOAL

Develop a basic understanding of chemical application utilizing integrated pest management in the decision process.

2. OUTCOMES

Upon satisfactory completion of this course, students will be able to:

- 2.1 Implement integrated pest management plans
  - 2.1.1 Pest identification
  - 2.1.2 Pest damage characteristics
  - 2.1.3 Understanding the pest management methods
  - 2.1.4 Understanding the components of an IPM plan
- 2.2 Discuss federal pesticide laws
  - 2.2.1 Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)
  - 2.2.2 Pesticide Registration
  - 2.2.3 Pesticide Tolerance
  - 2.2.4 Violation Policy
  - 2.2.5 Other Federal laws regulating the use of pesticides
  - 2.2.6 Federal record keeping requirements
- 2.3 Utilize an EPA pesticide label
  - 2.3.1 Labeling Process
  - 2.3.2 Pesticide label sections
  - 2.3.3 Types of pesticide labels
  - 2.3.4 Material Safety Data Sheets
- 2.4 Recognize and properly utilize pesticide formulations
  - 2.4.1 Liquid formulations
  - 2.4.2 Dry or solid formulations
  - 2.4.3 Other significant formulations
  - 2.4.4 Pesticide mixtures
  - 2.4.5 Adjuvants
- 2.5 Recognize pesticide hazards and first aid
  - 2.5.1 Harmful effects of pesticides
  - 2.5.2 Exposure
  - 2.5.3 Product toxicity
  - 2.5.4 Symptom recognition
  - 2.5.5 First Aid for pesticide poisoning
  - 2.5.6 Heat stress
- 2.6 Demonstrate appropriate use and care of person protective equipment
  - 2.6.1 Protect your skin
  - 2.6.2 Protect your eyes
  - 2.6.3 Protect your respiratory tract
  - 2.6.4 Maintain PPE

- 2.7 Manage pesticides safely in the environment
  - 2.7.1 Pesticide characteristics
  - 2.7.2 Pesticide movement in the environment
  - 2.7.3 Preventing pesticide drift
  - 2.7.4 Sources of water contamination
  - 2.7.5 Preventing water contamination
  - 2.7.6 Preventing pesticide effects in sensitive areas or non-target organisms
- 2.8 Safely transport, store, and secure pesticides
- 2.9 Safely respond to a pesticide emergency or incident
  - 2.9.1 Emergency response planning
  - 2.9.2 Fires
  - 2.9.3 Pesticide spills
- 2.10 Prepare for a pesticide application
  - 2.10.1 Selecting the pesticide
  - 2.10.2 Safely mix and load the pesticide
  - 2.10.3 Clean and dispose of pesticide containers
  - 2.10.4 Applying the pesticide
  - 2.10.5 Clean up after application
- 2.11 Follow all pesticide application procedures
  - 2.11.1 Safety Systems
  - 2.11.2 Application equipment
  - 2.11.3 Equipment calibration
  - 2.11.4 Equations for application
- 2.12 Professionally conduct pesticide applications
  - 2.12.1 Supervision
  - 2.12.2 Public and customer communication
  
- 3. METHODS OF INSTRUCTION
  - 3.1 Lectures by the professor or invited speakers
  - 3.2 Audio-visual
  - 3.4 Discussion
  
- 4. LEARNING ACTIVITIES
  - 4.1 Textbook reading assignments
  - 4.2 Participation in class discussions
  - 4.3 Lectures, demonstrations, and visual presentations
  - 4.4 Written exercises and periodic exams
  
- 5. EVALUATION
  - 5.1 Written exams and quizzes
  - 5.2 Class participation
  - 5.4 Written assignments
  
- 6. STUDENT RESPONSIBILITIES
  - 6.1 Under AWC Policy, students are expected to attend every session of class in which they are enrolled.
  - 6.2 Classroom Assignments: Students are responsible for work missed and for completing all work before the next class meeting. Students are responsible for participating in all oral drills and for taking all exams.
  - 6.3 If a student is unable to attend the course or must drop the course for any reason, it will be the responsibility of the student to withdraw from the course. Students who are not attending as of the 45th day of the course may be withdrawn by the instructor. If the student does not withdraw from the course and fails to complete the requirements of the course, the student will receive a failing grade.

- 6.4 Americans with Disabilities Act Accommodations: Arizona Western College provides academic accommodations to students with disabilities through AccessABILITY Resource Services (ARS). ARS provides reasonable and appropriate accommodations to students who have documented disabilities. It is the responsibility of the student to make the ARS Coordinator aware of the need for accommodations in the classroom prior to the beginning of the semester. Students should follow up with their instructors once the semester begins. To make an appointment call the ARS front desk at (928) 344-7674 or ARS Coordinator at (928) 344-7629, in the College Community Center (3C) building, next to Advising.
- 6.5 Academic Integrity: Any student participating in acts of academic dishonesty including, but not limited to, copying the work of other students, using unauthorized “crib notes”, plagiarism, stealing tests, or forging an instructor’s signature—will be subject to the procedures and consequences outlined in AWC’s Student Code of Conduct.
- 6.6 Textbooks and materials: Students are required to bring notebook or looseleaf book, pens, pencils, dictionaries, and purchase textbook required for class.
- 6.7 Arizona Western College students are expected to attend every class session in which they are enrolled. To comply with Federal Financial Aid regulations (34 CFR 668.21), Arizona Western College (AWC) has established an Attendance Verification process for "No Show" reporting during the first 10 days of each semester. Students who have enrolled but have never attended class may be issued a “No Show” (NS) grade by the professor or instructor and receive a final grade of “NS” on their official academic record. An NS grade may result in a student losing their federal financial aid.
- For online classes, *student attendance in an online class is defined as the following* (FSA Handbook, 2012, 5-90):
- Submitting an academic assignment
  - Taking an exam, an interactive tutorial or computer-assisted instruction
  - Attending a study group that is assigned by the school
  - Participating in an online discussion about academic matters
  - Initiating contact with a faculty member to ask a question about the academic subject studied in the course