



# AG 125: PRINCIPLES OF PESTICIDE USE

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**Proposer:****Name:**

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**Effective Term:**

Fall 2021

**Credit Status:**

Credit - Degree Applicable

**Subject:**

AG - Agriculture

**Course Number:**

125

**Catalog Title**

Principles of Pesticide Use

**Catalog Description**

Covers federal and California pesticide laws, safety, application equipment and types of pesticides. Includes basic information for use in preparation for state pesticide certification.

**Method of Instruction:**

Distance Education

Lecture and/or Discussion

**Course Units/Hours:****Course Units Minimum:**

3

**Lecture Hours Minimum (week)**

3

**Lab Hours Minimum (week)**

0

**Activity Hours Minimum (week)**

0

**Total Contact Hours Minimum (semester)**

52.5

**Total Outside Hours Minimum (semester)**

105

**Total Student Learning Minimum Hours (semester)**

157.5

**Repeatability:**

No

**Open Entry/Exit:**

No

**Field Trips:**

Not Required

**Grade Mode:**

Standard Letter

**TOP Code:**

010310 - \* Agricultural Pest Control Adviser and Operator (Licensed)

**SAM Code:**

C - Clearly Occupational

**Course Content****Methods of Assessment:**

Essay quizzes or exams  
 Multiple choice tests  
 Oral presentations  
 Problem solving assignments or activities  
 Problem solving quizzes or exams  
 Project  
 Short answer quizzes or exams  
 Skill demonstrations  
 Written essays or extended papers

**Course Topics:**

Course Topics	
1	Federal and State Pesticide Laws
2	Pesticide Safety
3	Toxicology of Pesticides
4	Types of Pesticides
5	Pesticide Formulations
6	Pesticide Application Equipment
7	Pesticide Storage and Disposal
8	Adjuvants and Tank-Mixing
9	Resistance Management
10	Pests
11	Integrated Pest Management

**Course Objectives:**

Course Objectives	
1	Students will interpret current federal and state pesticide laws.
2	Students will list the correct procedures for applying pesticides safely and reducing environmental hazards.
3	Students will compare and contrast acute and chronic exposure, and describe LD50.
4	Students will describe the types of pesticides and identify the targeted pest.
5	Students will compare and contrast common pesticide formulations.
6	Students will describe common application equipment and will determine the correct application nozzles.
7	Students will describe the correct procedure for storing and disposing of pesticides.
8	Students will name the functions of adjuvants and name the correct sequence for tank-mixing pesticides and fertilizers.
9	Given a crop scenario, students will create a plan for reducing pesticide resistance.



10	Students will be able to identify the basic anatomy and life cycles of weed, invertebrate, vertebrate, fungi, bacteria, viruses and nematode pests.
11	Students will be able to describe the core principles and advantages of using Integrated Pest Management.

**Course Outcomes:**

Course Outcomes	
1	Students will describe and explain current California Department of Pesticide laws and regulations pertinent to agricultural pesticide use.
2	Students will be able to describe the safe-handling of pesticides and equipment in agriculture and related industries.

**Assignments:**

Assignment Type:	Details
Reading	Students will read a pesticide label and identify pertinent information including personal protective equipment required, active ingredient, application amounts, registered crops and re-entry intervals.
Writing	Students will summarize current pesticide recommendations for a key pest in Tulare County.
Homework	Students will calculate pesticide application equations, including amount of active ingredient per tank and per acre.

**Textbooks or other support materials**

Resource Type:	Details
Books	The Safe and Effective Use of Pesticides, 2016, by Shannah Whithaus and Lisa Blecker, ISBN-13: 978-1601078957

**Transferable to CSU**

Yes - Approved

**CSU General Education**

Transferable to CSU

**Other Degree Attributes**

Degree Applicable

Not a Basic Skills Course

**Distance Learning Addendum**

DLA AG 125.pdf

**Additional Attachment**

Spring 2020 Plant Science Advisory Board Committee Meeting .docx

**Banner Title:**

Principles of Pesticide Use

**Curriculum Committee Approval Date:**

02/25/2021

**Academic Senate Approval Date:**

03/10/2021

**District Governing Board Approval Date:**

04/12/2021

**Course Control Number:**

CCC000624186