

AGRICULTURE PEST CONTROL ADVISER PREPARATION

The Certificate of Achievement in Agriculture Pest Control Adviser Preparation is designed to prepare students to develop the core skills necessary to meet the needs and challenges of modern agricultural production. Students integrate concepts from plant science, pest management, and agronomy, and apply them to agricultural production operations. A student completing the Certificate of Achievement in Agriculture Pest Control Adviser Preparation may apply the credits completed towards qualification for examination to take the Agricultural Pest Control Adviser (PCA) licensing exam through the Department of Pesticide Regulation (DPR).

Students who complete this certificate will be prepared for careers in crop protection, pest control, agronomy, crop science, soil science, agricultural biology, entomology, and environmental applications related to pest management. The program emphasis is on local career opportunities such as pest management and control, pest control advising, agronomy, and agricultural inspection. This program will also adequately prepare students for further study in many agricultural science fields including: agriculture plant science, crop protection, agriculture science and agronomy.

Course ID	Title	Units/ Hours
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Required Core Courses (33 units minimum):

Category 1 - Physical & Biological Sciences:

Complete 12 units minimum from the following:

BIOL V01 & V01L	Principles of Biology and Principles of Biology Laboratory	3 +1
BIOL V03	Evolution, Ecology, and Organismal Biology	5
BIOL V04	Cell and Molecular Biology	5
BIOL V10	Introduction to Environmental Issues	3
BIOL V14	Field Biology: A Natural History of California	4
CHEM V01A & V01AL	General Chemistry I and General Chemistry I Laboratory	3+2
CHEM V01B & V01BL	General Chemistry II and General Chemistry II Laboratory	3+2
CHEM V12A & V12AL	General Organic Chemistry I and General Organic Chemistry I Laboratory	3+2
CHEM V12B & V12BL	General Organic Chemistry II and General Organic Chemistry II Laboratory	3+2
CHEM V20 & V20L	Elementary Chemistry and Elementary Chemistry Laboratory	4+1
CHEM V21 & V21L	Introduction to Organic and Biochemistry and Introduction to Organic and Biochemistry Laboratory	3+2

Category 2 - Crop Health:

Complete 9 units minimum from the following:

AG V04	Introduction to Soil Science	3
AG V42	Plant Identification and Culture: Spring Specimens	3

AG V43	Plant Identification and Culture: Fall Specimens	3
AG V95 or AG V96	Agriculture Internship I or Agriculture Internship II	1-4
ESRM V14	Conservation of Natural Resources	3

Category 3 - Pest Management:

Complete 6 units minimum from the following:

AG V20	Principles of Pesticide Use	3
AG V21	Introduction to Integrated Pest Management (IPM)	3
AG V22	Introduction to Plant Pathology: Insects and Diseases of Plants	3

Category 4 - Production Systems:

Complete 6 units minimum from the following:

AG V06	Introduction to Plant Science (with Laboratory)	3
AG V30	Plant Propagation and Production	3
AG V61	Introduction to Animal Science	3

Category 5 - Restricted Electives (9 units):

Complete an additional 9 units from Categories 2-4 above.

TOTAL	42 units
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One-Year Plan:

Year 1		Units/Hours
Fall Semester		
AG V06	Introduction to Plant Science (with Laboratory)	3
AG V20	Principles of Pesticide Use	3
AG V21	Introduction to Integrated Pest Management (IPM)	3
AG V22	Introduction to Plant Pathology: Insects and Diseases of Plants	3
AG V43	Plant Identification and Culture: Fall Specimens	3
Units/Hours		15
Spring Semester		
AG V04	Introduction to Soil Science	3
AG V30	Plant Propagation and Production	3
AG V42	Plant Identification and Culture: Spring Specimens	3
AG V61 or ESRM V14	Introduction to Animal Science or Conservation of Natural Resources	3
Select course(s) from Category 1 - Physical & Biological Sciences		3
Units/Hours		15
Summer Semester		
AG V95 or AG V96	Agriculture Internship I or Agriculture Internship II	3
Select courses from Category 1 - Physical & Biological Sciences		9
Units/Hours		12
Total Units/Hours		42

Two-Year Plan:

Year 1		Units/Hours
Fall Semester		
AG V06	Introduction to Plant Science (with Laboratory)	3
AG V22	Introduction to Plant Pathology: Insects and Diseases of Plants	3
AG V43	Plant Identification and Culture: Fall Specimens	3
Select course(s) from Category 1 - Physical & Biological Sciences		3
Units/Hours		12

Spring Semester

AG V04	Introduction to Soil Science	3
AG V30	Plant Propagation and Production	3
AG V42	Plant Identification and Culture: Spring Specimens	3
AG V61 or ESRM V14	Introduction to Animal Science or Conservation of Natural Resources	3
Units/Hours		12

Year 2**Fall Semester**

AG V20	Principles of Pesticide Use	3
AG V21	Introduction to Integrated Pest Management (IPM)	3
Select course(s) from Category 1 - Physical & Biological Sciences		5
Units/Hours		11

Spring Semester

AG V95 or AG V96	Agriculture Internship I or Agriculture Internship II	3
Select course(s) from Category 1 - Physical & Biological Sciences		4
Units/Hours		7
Total Units/Hours		42

Upon successful completion of this program, students will be able to:

- Identify and describe various methods to diagnose and manage a wide range of plant pests for effective crop protection.
- Prescribe economical, effective, legal, and safe control measures for agricultural and horticultural pests in various agricultural production settings.
- Demonstrate effective application of pesticides in a safe manner, include selecting proper PPE, mixing, calibration and application.