

Basic Course Information

Semester:	Spring 2017	Instructor Name:	Dr. Michael Kanyi
Course No. & Title	AG 270 – Weeds and Weed Control	Email:	michael.kanyi@imperial.edu
CRN #:	21011	Webpage (optional):	
Classroom:	2732	Office #:	3114
Semester Dates:	February 13 – April 6	Office Hours:	TR 12:50 PM – 1:50 PM MW 4:30 PM – 5:30 PM
Class Days:	Tuesday & Thursday	Office Phone #:	760-355-5717
Class Times:	09:40 AM – 12:50 PM TR	Emergency Contact:	Frances Arce-Gomez Industrial Technology Staff Secretary 760 -355-6361
Units:	3		

Course Description

This course covers the classification, life cycles, characteristics, and management of weeds with emphasis on common and noxious weeds of California. It looks at chemicals and equipment as well as cultural, mechanical, and biological control methods used in managing weeds on cultivated land, in irrigation ditches, on the range, and on wasteland. Poisonous weeds, their effects, and prevention are discussed. (CSU)

Student Learning Outcomes

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:

1. Identify and discuss biotechnical advancements in the control weeds (ILO1, ILO2, ILO4).
2. Identify and discuss trends that influence weed management here and abroad (ILO1, ILO2, ILO4, ILO5).
3. Identify and discuss common weed species and integrated systems of control here and abroad (ILO1, ILO2, ILO4, ILO5).

Course Objectives

Measurable course objectives and minimum standards for grade of "c."

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

1. Discuss the place of weeds in agriculture.
2. Classify weeds based on different characteristics
3. Describe the ecological factors affecting the interaction of weed and crop plants.
4. Describe the different weed life cycles and factors affecting weed reproduction, seed dispersal and soil seed bank.
5. Describe cultural measures of weed control.
6. Describe the various mechanical methods of weed control.
7. Describe chemical weed control including different types of chemicals, different timing and methods of application, advantages and disadvantages and application equipment.
8. Read and herbicide label and calibrate a sprayer to apply the correct amount of chemical.
9. Describe biological methods of weed control.

10. Appraise integrated approach and strategies of weed management.

Textbooks & Other Resources or Links

Required Text Book

Zimdahl, Robert L. 2007. Fundamentals of Weed Science, Third Edition 3/E. Burlington, MA. Academic Press
 ISBN: 9780123725189

Course Requirements and Instructional Methods

Learning activities for this class will include, but not limited to, instructor’s guided discussions, lecture, lab and field practical experience, individual and group presentations, assignments, and tests. **Participation in class learning activities is highly encouraged and will have a significant effect on the final grade.** Critical thinking approach in addressing weeds and weed control issues in Imperial valley and beyond will be emphasized.

Course Syllabus	
	Topics
1.	Course overview Place of weeds in agriculture A. Define weeds a. Agricultural losses caused by weeds b. Ways in which weeds damage crops, livestock and humans
2.	Weed classification A. Common names B. Scientific names a. Morphology b. Number of cotyledons c. Flower structure d. Leaf structure e. Root structure
3.	Ecological factors A. Botany and plant physiology B. Plant competition C. Factors for which weed and crop plants compete D. Characteristics that make weeds successful
4.	Reproduction and seed dispersal A. Weed life cycles B. Vegetative and sexual reproduction C. Seed number produced per plant D. Viability and germination E. Longevity in the soil F. Factors affecting germination G. Weed seed dispersal a. Dispersal agents b. Seed morphology

Course Syllabus	
	c. Plant dispersal characteristics
5.	Cultural weed control A. Prevention B. Crop rotation C. Tillage
6.	Mechanical weed control A. Hand pulling B. Hoeing C. Intertillage D. Mowing E. Flaming and burning F. Flooding
7.	Chemical weed control A. Chemical activity a. Selectivity b. Physiological pathway affected B. Time and method of application a. Pre-plant, pre-emergent, post-emergent b. Spray, irrigation, granular, rubbing C. Soil sterilization D. Advantages and disadvantages of chemical control E. Application equipment a. Types of sprayers b. Sprayer components
8.	Herbicide labels and sprayer calibration
9.	Biological control A. Allelopathy B. Insects C. Pathogens D. Vertebrates
10.	Weed management A. Management vs. control B. Integrated approach C. Current strategies D. Future possibilities
11.	Weed Identification A. Poisonous weeds B. Common weeds of the Imperial Valley
12.	Weed Science and the Future -Special problems of weeds and irrigation

***This syllabus may be subject to change ***

Course Grading Based on Course Objectives

Students are advised to acquaint themselves with all rules and regulations of Standards of Student Conduct outlined in the Imperial Valley College General Catalog. For writing assignments, it is expected that each student will demonstrate proficiency in the use of the English Language. Grammatical errors and writing that do not express ideas clearly will affect your grade.

Individual Research Paper and Presentation

There will be one research paper write-up (100 point) about an agricultural economics issue of your choosing. Specific details about this paper, including due dates will be announced in class.

Practical demonstrations and Lab Work

Students will participate in field demonstrations and lab work. Participation will be graded out of a possible 100 points.

Group Work and Presentation

There will be one group presentation (group membership will be determined). Class time will be set for this task. However, students might need some extra time outside the set class time to complete their work. Details about this assignment will be communicated in the due course.

Exams

There will be two continuous assessment tests and a final test. Exams may include true/false, short answer, multiple choice, and short essay questions. All students are advised to strictly adhere to the dates and times for the tests which will be communicated.

Distribution of grading points

- Topical essay and Presentation 100 points
- Field work/project and Lab activities 100 points
- Attendance and class participation 100 points
- Tests (@ 50 points) 100 points
- Final Exams 100 points

Grading

Final score will be calculated out of possible 500 points (100%). Final grade will be as follows:

- A= 100-90%
- B = 89-80%
- C = 79-70%
- D = 69-60%
- F =<59%

Attendance

- A student who fails to attend the first meeting of this class will be dropped by the instructor as of the first official meeting. Should readmission be desired, the student's status will be the same as that of any other student who desires to add a class. It is the student's responsibility to drop or officially withdraw from the class. See [General Catalog](#) for details.
- Regular attendance in all classes is expected of all students. A student whose continuous, unexcused **absences exceed the number of hours the class is scheduled to meet per week may be dropped.** For online courses, students who fail to complete required activities for two consecutive weeks may be considered to have excessive absences and may be dropped.
- Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences.

Classroom Etiquette

- Electronic Devices: Cell phones and electronic devices must be turned off and put away during class, unless otherwise directed by the instructor.
- Food and Drink are prohibited in all classrooms. Water bottles with lids/caps are the only exception. Additional restrictions will apply in labs. Please comply as directed by the instructor.
- Disruptive Students: Students who disrupt or interfere with a class may be sent out of the room and told to meet with the Campus Disciplinary Officer before returning to continue with coursework. Disciplinary procedures will be followed as outlined in the [General Catalog](#).
- Children in the classroom: Due to college rules and state laws, no one who is not enrolled in the class may attend, including children.

Online Netiquette

- What is netiquette? Netiquette is internet manners, online etiquette, and digital etiquette all rolled into one word. Basically, netiquette is a set of rules for behaving properly online.
- Students are to comply with the following rules of netiquette: (1) identify yourself, (2) include a subject line, (3) avoid sarcasm, (4) respect others' opinions and privacy, (5) acknowledge and return messages promptly, (6) copy with caution, (7) do not spam or junk mail, (8) be concise, (9) use appropriate language, (10) use appropriate emoticons (emotional icons) to help convey meaning, and (11) use appropriate intensifiers to help convey meaning [do not use ALL CAPS or multiple exclamation marks (!!!)].

Academic Honesty

Academic honesty in the advancement of knowledge requires that all students and instructors respect the integrity of one another's work and recognize the important of acknowledging and safeguarding intellectual property.

There are many different forms of academic dishonesty. The following kinds of honesty violations and their definitions are not meant to be exhaustive. Rather, they are intended to serve as examples of unacceptable academic conduct.

- **Plagiarism** is taking and presenting as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to "cite a source" correctly, you must ask for help.
- **Cheating** is defined as fraud, deceit, or dishonesty in an academic assignment, or using or attempting to use materials, or assisting others in using materials that are prohibited or inappropriate in the context of the academic assignment in question.

Anyone caught cheating or plagiarizing will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the [General Catalog](#) for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to, the following: (a) plagiarism; (b) copying or attempting to copy from others during an examination or on an assignment; (c) communicating test information with another person during an examination; (d) allowing others to do an assignment or portion of an assignment; (e) using a commercial term paper service.

Additional Student Services

Imperial Valley College offers various services in support of student success. The following are some of the services available for students. Please speak to your instructor about additional services which may be available.

- **Canvas Support Site.** The Canvas Support Site will provides a variety of complementary services to the class work.
- **Learning Services.** There are several learning labs on campus to assist students through the use of computers and tutors. Please consult your [Campus Map](#) for the [Math Lab](#); [Reading, Writing & Language Labs](#); and the [Study Skills Center](#).
- **Library Services.** There is more to our library than just books. You have access to tutors in the [Study Skills Center](#), study rooms for small groups, and online access to a wealth of resources.

Disabled Student Programs and Services (DSPS)

Any student with a documented disability who may need educational accommodations should notify the instructor or the [Disabled Student Programs and Services](#) (DSP&S) office as soon as possible. The DSP&S office is in Building 2100, telephone 760-355-6313. Please contact them if you feel you need to be evaluated for educational accommodations.

Student Counseling and Health Services

Students have counseling and health services available, provided by the pre-paid Student Health Fee.

- **Student Health Center.** A Student Health Nurse is available on campus. In addition, Pioneers Memorial Healthcare District provide basic health services for students, such as first aid and care for minor illnesses. Contact the IVC [Student Health Center](#) at 760-355-6128 in Room 1536 for more information.
- **Mental Health Counseling Services.** Short-term individual, couples, family, and group therapy are provided to currently enrolled students. Contact the IVC [Mental Health Counseling Services](#) at 760-355-6196 in Room 2109 for more information.

Student Rights and Responsibilities

Students have the right to experience a positive learning environment and to due process of law. For more information regarding student rights and responsibilities, please refer to the IVC [General Catalog](#).

Information Literacy

Imperial Valley College is dedicated to helping students skillfully discover, evaluate, and use information from all sources. The IVC [Library Department](#) provides numerous [Information Literacy Tutorials](#) to assist students in this endeavor.