#### **Basic Course Information**

Semester:	Spring 2022	Instructor Name:	Dr. Michael Kanyi
Course No. & Title	AG 170 Principles of Entomology	Email:	michael.kanyi@imperial.edu
CRN #:	20500	Webpage (optional):	
Classroom:		Office	3114
Semester Dates:	Feb. 14, 2022 – June 10, 2022	Office hours: Virtual (Email, text canvas, pronto, zoom)	MTWR 1:00pm 2:00pm.
Class Days:	Tuesday & Thursday	Office Phone #:	(760)355-5717
Class Times:	10:15am – 12:45pm	Emergency Contact:	Tisha Nelson Economic & Workforce Development (760) 355-6361/ (760) 355-6161
Units:	3	Class Format:	In class face-to-face

# **Course Description**

This course covers the principles of the classification, identification, anatomy, physiology, ecology, management, and collecting of arthropods (i.e., insects, spiders, mites, etc.), with emphasis on those of importance to agriculture. Laboratory work is required (CSU, UC, UofA)

# **Course Prerequisite(s) --**

Although there is no prerequisite requirement for this course, general knowledge about insects and crop production is expected.

## **Student Learning Outcomes -SLOs**

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

- 1. Identify and report common pests to the crop and type of damage (ILO1, ILO2, ILO4).
- 2. Prepare mounted specimens and label according to discipline protocol (ILO1, ILO2, ILO4).
- 3. Identify and discuss interrelations between host crop, pest insect & beneficial insects (ILO1, ILO2, ILO4).

# **Course Objectives**

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

- 1. Describe the important ways arthropods relate to humans.
- 2. Identify the important anatomical structures of arthropods.
- 3. Identify the development and stages of arthropod growth.
- 4. List the important classes and orders of arthropods.
- 5. Identify major pest arthropods and demonstrate the principles of arthropod identification.
- 6. Describe the key concepts in arthropod pest management and control.
- 7. Describe the important ways that arthropods are beneficial to humans, including pollination of crops.
- 8. Demonstrate the principles of sampling, collecting, preserving, and mounting arthropods.
- 9. Develop an arthropod collection.

### **Textbooks & Other Resources or Links**

The following textbooks will be used for reference.

- Tamoghna, S., & Nithya, C. (2018). Fundamentals of Entomology. ISBN: 9789386283740
- Elzinga, Richard (2004). Fundamentals of Entomology (6th ed.): Pearson/Prentice Hall, ISBN: 978-0130480309

Note: This course will make use of various open/online educational resources (OERs).

## **Course Requirements and Instructional Methods**

Learning activities for this class will include, but not limited to, lectures, demonstrations, guided discussions in canvas, notes posted in canvas, instructional YouTube videos, simulated laboratory activities, outside/field practical activities, assignments, quizzes, and tests. Effective participation in all course activities (discussion in canvas) is highly encouraged and will impact the final grade. Critical thinking approach to solving agricultural economic issues at the regional, state, national and global level will be emphasized.

Out of Class Assignments (mainly f2f): The Department of Education policy states that one (1) credit hour is the amount of student work that reasonably approximates not less than one hour of class time and two (2) hours of out-of-class time per week over the span of a semester. WASC has adopted a similar requirement.

You are therefore advised to dedicate ample time for the daily instructional activities and assignments.

• This class will involve outside class and inside class practical activities and virtual lab simulations. Labster simulations will require a computer (not mobile phone) and reliable internet.

# **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 <u>Imperial Valley College General Catalog</u>. 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.

#### Tests

There will be **weekly module quizzes** and a **final comprehensive test which will cover all the modules**. The due dates will be indicated in canvas. Test questions may include true/false, multiple choice, matching, and short answer questions. All students are advised to strictly adhere to the dates and times for the tests which will be communicated. Late submission of assignments must be communicated to the professor before the due date to avoid loss of points. **There will be no make-up tests**.

### Distribution of grading points towards the final grade will be as follows:

Total		100%
•	Fina test	40%
•	Quizzes	20%
•	Lab/assignments/test	25%
•	Discussion	15%

## **Grading Legend**

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

#### **Course Polices**

#### 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 absence 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.

### What does it mean to "attend" an online class?

Attendance is critical to student success and for IVC to use federal aid funds. Acceptable indications of attendance are:

- Student submission of an academic assignment
- Student submission of an exam
- Student participation in an instructor-led Zoom conference
- Documented student interaction with class postings, such as an interactive tutorial or computer-assisted instruction via modules
- A posting by the student showing the student's participation in an assignment created by the instructor.
- A posting by the student in a discussion forum showing the student's participation in an online discussion about academic matters.
- An email from the student or other documentation showing that the student has initiated contact with a faculty member to ask a question about an academic subject studied in the course.

Logging onto Canvas alone is NOT adequate to demonstrate academic attendance by the student.

## 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; children are not allowed.

## **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.

Taking and using the words, work, or ideas of others and presenting any of these as your own work is plagiarism. This applies to all work generated by another, whether it be oral, written, or artistic work. Plagiarism may either be deliberate or unintentional.

## **IVC Student Resources**

IVC wants you to be successful in all aspects of your education. CANVAS LMS. Canvas is Imperial Valley College's Learning Management System. To log onto Canvas, use this link: Canvas Student Login. The Canvas Student Guides Site provides a variety of support available to students 24 hours per day. Additionally, a 24/7 Canvas Support Hotline is available for students to use: 877-893-9853.

For help, resources, services, and an explanation of policies, click this link or click the heart icon in Canvas.

## **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.

	Course Syllabus		
	Topics	Chapters	Week dates
Orientation	Orientation Module	Canvas	2/14
	<ul> <li>Orientation to the course and online learning</li> </ul>		
	<ul> <li>Meet and greet discussion posts</li> </ul>		
Module 1	Introduction to Entomology	Chapter 1	2/21
	Phylum arthropod		
Module 2	<ul> <li>Arthropods and their relationship to humans</li> </ul>	Chapter 1	2/28
Module 3	Insect external anatomy	Chapter 2	3/7
	<ul> <li>Head - sutures and appendages</li> </ul>		
Module 4	Insect external anatomy	Chapter 2	3/14
	<ul> <li>Thorax -divisions and appendages</li> </ul>		
	• Abdomen		
Module 5	Internal structures and physiology	Chapter 3	3/21
	• Systems: digestive, circulatory, tracheal, muscular,		
	excretory, reproductive, nervous system		
Module 6	Insect development and specialization	Chapter 4	3/28
	<ul> <li>Embryology</li> </ul>		
	Endocrine and Exocrine systems		
Module 7	Insect ecology and habitats	Chapter 5	4/4
	Aquatic		
	Terrestrial		
Module 8	Insect behavior	Chapter 6	4/11
	• Mating		
	• Feeding		
	Mimicry		
	Camouflage		
BREAK	Spring Break		4/18
Module 9	Classification and Orders in the Class Insecta	Chapters	4/25
		7, 9, 11,	
		12 &13	
Module 10	Important Orders in the Class Insecta	Chapter 7,	5/2
		9, 11, 12	
		&13	
Module 11	Principles of Pest Management	Chapter	5/9
	<ul> <li>Cultural method of pest control</li> </ul>	11	
	<ul> <li>Biological method of pest management</li> </ul>		
	<ul> <li>Chemical method of pest control pest control</li> </ul>		
	Integrated Pest Management		
Module 12	Collecting, mounting, labeling, displaying, and storing	Chapter	5/16
	arthropods	14	
Module 13	Forensic entomology		5/23
	Review of lab report writing		5/30
<b>Course Review</b>	<b>Course Review and Final Test (all the modules)</b>		6/7

The chapters and pages in this syllabus are from Elzinga, Richard (2004). *Fundamentals of Entomology* (6<sup>th</sup> ed.): Pearson/Prentice Hall ISBN: 978-0130480309

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This schedule is very tentative and can change without notice. You are therefore advised to follow the instructions provided at the start of each module or week. Any changes to the schedule, including tests and due dates will be communicated.