

**COURSE SYLLABUS**  
**ENTO 3740: Insect Pest Management**  
**Fall Semester 2009**

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**INSTRUCTORS**

ENTO 3740 will be team taught with two instructors and a graduate teaching assistant. Guest speakers with expertise in specific areas of insect pest management also will be presenting lectures and laboratories during the semester. The instructors are:

G. David Buntin  
206 Cowart Building, 770-412-4713, gbuntin@uga.edu  
Office hours by appointment scheduled in person, by telephone or by email

Wayne A. Gardner  
208 Cowart Building, 770-228-7288, wgardner@uga.edu  
Office hours by appointment scheduled in person, by telephone or by email

Christopher M. Scocco, Graduate Teaching Assistant  
Urban Entomology Laboratory, Research Services Building (Alamo), 770-228-7346, cscocco@uga.edu  
Office hours by appointment scheduled in person, by telephone or by email

**REQUIRED TEXT**

Pedigo, Larry P. and Marlin E. Rice. 2008. *Entomology and Pest Management*, 6<sup>th</sup> Edition. Pearson Prentice Hall, Upper Saddle River, NJ. 784 p.

**ADDITIONAL MATERIALS AND RESOURCES**

Eaton, E. R. and K. Kaufman. 2006. *Kaufman Field Guide to Insects of North America*. Houghton Mifflin Press, NY, 392 p. (Provided).

The UGA eLearning Commons system will be used as an interactive medium outside the classroom and laboratory for resources, grades, and other information. Students should access the site for ENTO 3740 regularly (elc.uga.edu).

Additional readings and materials to meet student and instructional needs may be distributed as needed.

**CATALOG COURSE DESCRIPTION**

Insect Pest Management is a 4-semester hour course with 3 hours of lecture and 2 hours of laboratory each week.

Prerequisite: BTNY 1220-1220L or BIOL 1104-1104L or BIOL 1108-1108L.

This course is an introduction to entomological science as a foundation for recognition and management of insect pests in agriculture, landscape, and urban environments. Emphasis is on concepts of integrated pest management using a combination of cultural, biological, and chemical control strategies.

## **PURPOSE**

Insect Pest Management is offered in fulfillment of the requirements for the Bachelor of Science in Biological Sciences and the Bachelor of Sciences in Environmental Resource Science at the University of Georgia. This course relates to the basic premises of undergraduate education at the University in educating and preparing future generations of practitioners, scientists and scholars; improving the understanding of our world; enhancing the preservation of our environmental resources; developing communication skills to accurately and successfully compete in our global society, and; developing individual and collaborative problem-solving skills.

## **COURSE OBJECTIVES**

Upon completion of this course, the student will:

1. Broaden his/her perspective and appreciation of the form, function and diversity of insects as well as their status as pests of man's food, shelter, fiber and other products.
2. Become more confident in visually identifying insects from the major taxa comprising the Class Hexapoda.
3. Demonstrate knowledge of the strategies and tactics involved in insect pest management.
4. Realize differences in strategies and tactics used in the various systems (i.e., agricultural row crops, forests and orchards, homes and institutions, etc.) in which insects are pests.
5. Accurately report views, facts, and solutions to problems on topics relevant to insect pest management.

## **COURSE REQUIREMENTS AND EVALUATION**

### ***Hourly Tests – 50% of final grade***

Five hourly tests will be given during the semester. Each test will cover material covered since the previous test. Each test will count as 10% of the final grade.

### ***Insect Collection – 15% of final grade***

Each student must submit a collection of insects including 40 species representing 12 taxonomic orders. Each of the 40 specimens should be identified to taxonomic family and properly pinned and labeled.

### ***Final Exam – 15% of the final grade***

The final exam will be comprehensive.

### ***Laboratory Quiz – 10% of the final grade***

A comprehensive test on topics and information presented in the laboratory component of the course will be given prior to fall break. Any information presented in laboratory sessions after fall break will be in support of presentations on IPM systems and will be included on the final hourly lecture test and final exam.

### ***Laboratory Reports – 10% of final grade***

Each student will submit 5 written laboratory reports during the semester. Requirements, formats, due dates, and other pertinent information for these reports will be provided with the assignments.

## **COURSE GRADING SCALE**

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

## **ATTENDANCE POLICY**

The student is expected to be present at all class meetings and laboratory sessions for the entire semester. In the event of a lecture/class absence, the student will be responsible for all material covered and assignments given. Students absent from classes or laboratories in which announced tests or exams are given will NOT be allowed to make up the missed test or exam unless the absence is the result of personal illness/injury or death of a member of the immediate family. Written verification from an appropriate authority (i.e., physician) is required. Students absent from laboratory sessions will be allowed to make up the work assigned for that session ONLY at the discretion of the instructors.

## **DISABILITIES STATEMENT**

Students with a documented disability should contact the UGA Griffin Campus Office of Student Affairs located in 105 Flynt (770-412-4400).

## **ACADEMIC HONESTY**

The University of Georgia seeks to promote and insure academic honesty and personal integrity among students and other members of the University Community. All students agree to abide by the Student Honor Code by signing the UGA Admission Application. This code provides, "I will be academically honest in all of my academic work and will not tolerate academic dishonesty of others." All academic work must meet the standards contained in this Code and in "A Culture of Honesty." Students are responsible for informing themselves of those standards before performing any academic work. Links for more detailed information can be found at: [www.uga.edu/honesty](http://www.uga.edu/honesty)

## **NOTE/DISCLAIMER**

This course syllabus is a general plan for the course. It is subject to change at the discretion of the instructors in order to accommodate instructional and/or student needs. Any deviations from the syllabus will be announced by the instructors.

### TOPIC OUTLINE FOR COURSE

Week	Dates	Lecture Topics	Laboratory Topics	Chapter
1	08/17 08/19 08/21	Introduction Insects & Their Relatives External Anatomy & Locomotion	Insect Collections	1 2
2	08/24-28	Insect Life Processes	Insect Anatomy Insect Development	2
3	08/31 09/02 09/04	Metamorphosis & Life Cycles Insect Taxonomy <b>Hourly Test 1</b>	Dichotomous Keys	4 3
4	09/07 09/09-11	LABOR DAY HOLIDAY Insect Taxonomy	Insect Taxonomy	3
5	09/14 09/16 09/18	Insect Taxonomy Ecological Processes Pest Management Principles	Insect Taxonomy Collecting Trip	3 5 8
6	09/21-23 09/25	Natural Enemies <b>Hourly Test 2</b>	Natural Enemy ID	9
7	09/28 09/30 10/02	Economic Injury Levels & Thresholds Sampling Cultural or Ecological Control	Sampling	7 6 10
8	10/05 10/07 10/09	Insecticides IGRs & Pheromones Insecticides	Insecticide Mortality Response	11 14 11
9	10/12 10/14 10/16	Insecticides Insect Pathogens <b>Hourly Test 3</b>	Insect Pathogens	11 12
10	10/19 10/21 10/23	Host Plant Resistance Transgenics & Genetics Sterile Insect Technique	Transgenic Corn	13 13 15
11	10/26 10/28 10/30	Ecological Backlash Practice of IPM: Case Histories FALL BREAK HOLIDAY	<b>Lab Quiz</b>	17 16/18
12	11/02 11/04 11/06	Livestock/Poultry/Companion Animal IPM (Guest: Dr. Nancy Hinkle) <b>Hourly Test 4</b>	Livestock/Poultry/Pet IPM System (Hinkle)	
13	11/09 11/11 11/13	Cotton IPM (Guest: Dr. Michael Toews) <b>Insect Collection Due</b>	Cotton IPM (Toews)	
14	11/16-18 11/20	Urban IPM (Guest: Dr. Dan Suiter) IPM System Presentation	Urban IPM (Suiter)	
15	11/23-27	THANKSGIVING HOLIDAY		
16	11/30 12/02 12/04	Landscape IPM (Guest: Dr. Kris Braman) IPM System Presentation	Landscape IPM (Braman)	
17	12/07 12/08 12/09	<b>Hourly Test 5</b> Review <b>Reading Day</b>		
	12/14	<b>Final Exam</b>	8:00 – 11:00 am	

Revised 18 August 2009