

Abraham Baldwin Agricultural College

Tifton, Georgia

AGRP 4422: INSECT PEST MANAGEMENT (3 credit hours)

Spring Semester, 2012 (CRN 30142)

Lecture: 10:00-10:50am, Mon., Wed.; 109 Environmental Horticulture

Lab: 1:00pm-2:50pm, Mon.; 167 Ag Science

INSTRUCTOR:

Alan Murphy, School of Agriculture and Natural Resources

OFFICE: 102 Environmental Horticulture Technology Building

OFFICE HOURS: (Spring Semester, 2012)

Mon: 9:00am – 9:50am; 3:00pm – 5:30pm

Wed.: 9:00am – 9:50am; 11:00 – 11:50am

Thurs.: 3:00pm – 5:30pm

Fri: 9:00am – 10:50am; 1:00pm – 3:00pm (afternoon by appointment only)

Other times by appointment.

PHONE: 229-391-4806 E-MAIL: amurphy@abac.edu

WEBSITE: http://www.abac.edu/ag_web/amurphy/

TEXTBOOKS:

Pedigo, L. P. and M. E. Rice. 2009. *Entomology and Pest Management*. Sixth Ed. ISBN: 0-13-513295-9

SUPPLIES:

Pen, notebook, calculator.

DESCRIPTION:

PREREQUISITE: AGRP 1125 - Fundamentals of Plant Protection

This course is designed to familiarize students with the basic biology of insects, insect ecology and population dynamics as they relate to pest management and the ecologically sound techniques used in plant and animal production. The major groups of pest insects and related arthropods will be discussed, with an emphasis on identification and sound management practices. Management practices discussed will include biological, ecological, chemical and insect behavior modification methods, as well as the use of resistant plants.

OBJECTIVES:

Students will:

1. Describe the basic anatomy and physiology of insects and related arthropod pests.
2. Identify insects and related arthropod pests.
3. Demonstrate a working knowledge of appropriate management techniques for insects and related arthropod pests.
4. Discuss the importance and proper use of integrated management techniques for arthropod pest management.
5. Formulate a pest management program for specific insect pests of a specific agronomic crop.

OUTLINE:

- Introduction
 - Insect Pest Management
- Insect Biology
 - Anatomy, physiology, life cycles
- Insect Taxonomy
 - How relationships affect management techniques, Important pest Orders
- Insect Ecology
 - Insects in ecosystems, Insect Population Dynamics
- Identification and Population Monitoring
 - Sampling and Identification Techniques (Keys, Guides, Experts), Sampling programs
- Insect Pest Management
 - Integrated pest management, "thresholds", Biological management, Ecological management, Conventional insecticides, Resistant plants (conventional and bioengineered), Modified insect behavior, Sterile insect technique
- Insect Pest Management in Practice
- Managing Ecological Backlash
 - Resistance, Pest population resurgence, enhanced microbial degradation, upsets in community balance

LABORATORY:

Labs will parallel lecture materials providing both hands-on experiential learning opportunities and written responses.

GRADING:

The grading system is as outlined in the college catalog:

A (4.0). . . 90-100%	C (2.0). . . 70-79.9%	F (0.0). . . 0-59.9%
B (3.0). . . 80-89.9%	D (1.0). . . 60-69.9%	

EVALUATION:

Semester average determined by using the following percentages.

Lecture Exams (3 @ 12%)	36%
Final Exam	25%
Detailed Insect Pest Reports (6 @ 2%)	12%

Detailed insect pest reports will consist of six detailed reports that will have a value of 12 points total (2 points each). Due dates for detailed reports are stated in the course calendar.

Lab Reports and Exercises	15%
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The lab grade (15 points) will be evenly distributed among several lab exercises (usually about ten). The total number of lab exercises may be variable due to the availability of suitable study material during the semester.

Lab reports will be due the lab meeting after the lab is held, unless the instructor makes the due date later. Students will be informed of the due dates for these labs during the lab session.

Lab assignments will be graded on content (quality). LATE lab reports can earn up to 70%.

Lab reports will be considered late if turned in two or more class meetings after the due date.

<u>Term Project: Insect Pest Management</u>	<u>12%</u>
Total: 100%	

Students enrolled in junior and senior level classes (numbered 3000 and higher) will be expected to demonstrate an understanding of subject matter requiring higher order processing skills.

Examination questions may include essay, synthesis, analysis, and application as well as completion, multiple choice, true false and matching. Computational skills and drawing or diagramming may also be required.

The date and time of the final lecture exam will be identified in the class calendar.

ATTENDANCE:

Be There! Class attendance is expected!

While ABAC does not have a college-wide defined penalty for poor class attendance, the principles outlined in the college catalog in the section on class attendance are pertinent and valid.

In part, the catalog states that:

“To attain maximum success, students must attend all their classes, be on time, and attend all scheduled course activities including, but not limited to, field trips, seminars, study sessions, individual conferences, and lectures. This interaction with instructors and other students is an important element of the learning process, and a high correlation exists between class attendance and course grades. A student must understand the importance of regular participation in classroom and laboratory activities. The absence of any student affects not only his or her performance but the performance of the class as a whole. Absence from class, for whatever reason, does not excuse a student from full responsibility for class work or assignments missed. Students must accept this responsibility. “

I have decided to adopt the following policy for my courses: **Students whose number of unexcused absences is more than twice the number of class meetings per week (the equivalent of two weeks of instruction) will receive a grade of “F” for the course. Final determination of what constitutes an excused absence rests with the classroom instructor.**

Whenever a student is absent, whether for official or personal reasons, the student must assume responsibility and provide notice to the instructor, preferably in advance, for making arrangements for any assignments and class work missed because of the absence. However, final approval for make up work remains with the instructor.

A student who stops attending class without officially withdrawing from the course is subject to this attendance policy and will receive a grade of “F” for the course.

A student penalized for excessive absences may appeal through the grade appeal process, as stated in ABAC’s college catalog and student handbook.

WITHDRAWAL:

(Spring Semester, 2012)

The final date to withdraw from this course with a grade of “W” is **Wednesday, February 29, 2012 at 4:30pm**. Please see the current ABAC Catalog section on “Withdrawals” in the section on “Academic Policies” at http://www.abac.edu/catalog/2010_2011/AcademicPolicy.pdf for a description of withdrawal reasons and policies.

CLASSROOM POLICIES:

See Classroom Policies Document at

<http://www.abac.edu/amurphy/CLASSROOM-POLICIES.pdf>