

**ENY 6934 PESTICIDE RESISTANCE SEMINAR (1 cr.)**  
**Spring 2006, Fridays, 3<sup>rd</sup> period (9:35 - 10:25 am)**  
**Room 1031 Ent/Nem Bldg.**

### Course Syllabus

#### **Instructors:**

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#### **Office Hours**

We can be reached at work via email, fax, or phone during normal business hours. However, we travel frequently and are not always able to respond quickly. Please understand this and be patient, and we will be available at designated “real-time” appointments. Please use email as a means of contact during non-business hours.

#### **Course Objectives**

- Introduce students to concepts associated with the economics, measurement/detection, evolution, mechanisms and management of arthropod resistance to pesticides.
- Provide each student an opportunity to develop and deliver a coherent seminar in front of their peers.

#### **Prerequisites**

This course is aimed at Entomology and Doctor of Plant Medicine Students. There are no formal prerequisites, although a basic understanding of agriculture, pest management, and toxicology is assumed.

#### **Required Book**

No textbook is required, although a number of handouts will be provided as reading assignments.

#### **Seminars:**

Students are encouraged to pick an insect group that they are not working with in their research programs for study as a case history. In a 35-minute seminar, students will be required to address the 8 questions shown below. At the end of the seminar, there will be a 15-minute discussion and question/answer period. An LCD projector, laptop, and pointer will be available for each seminar. However, it is each student's responsibility to bring their presentation in an easily-downloadable format (e.g., flash drive or CD) at least by 9:25 am the day of their presentation, but preferably the day before to ensure compatibility.

A. COVERAGE OF 8 MAIN POINTS (10 points each; 80 points total):

1. What is the history of the insect's pest status?
2. Why is the pest a pest? (economic, health, aesthetic)
3. What kind of thresholds have led to the selection for resistance? (what is the degree of human tolerance)
4. What are the ecology, survival strategy and unique physiology of the pest?
5. What kind of insecticides/acaricides are/have been used to control the pest?
6. How is resistance measured in the pest? (describe the bioassays)
7. Have resistance management programs been devised for the pest - what are the methods, strategies and pitfalls?
8. What does the future hold for this pest?

B. PRESENTATION ORGANIZATION (5 points)

1. Logical order, minimum redundancy.
2. Smooth transitions.
3. Effective use of figures and tables.

C. SLIDES (5 points)

1. Legible (large fonts, good color contrasts, minimum of words).
2. Proofed (no grammatical or spelling errors).
3. Slide content matches talk content.

D. DELIVERY AND PROFESSIONALISM (5 points)

1. Appropriate professional attire (formal is not required, but don't be too casual).
2. Audibility.
3. Makes eye contact with audience.
4. Time used effectively.

E. DISCUSSION (5 points)

1. Interaction with audience.
2. Asking and responding to questions.

**Examinations and Grading**

Seminar - 50%

Attendance and participation in discussions - 10%

Final Exam - 40% (1-hour exam)

Letter grades in this course will be determined in the following manner:

**Grading scale:**

- A 90 - 100%
- B 80 - 89%
- C 70 - 79%
- D 60 - 69%
- E <60%

Grades will not be given out over the telephone or by email.

### **Make-up Policy**

If you know of a conflict or problem that means you will miss a class, let us know ahead of time. To avoid a grade penalty, you will be required to provide appropriate written documentation (e.g., from a doctor in case of a severe illness, or a funeral notice or obituary in case of a death of a close relative).

### **Software Use**

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate.

### **UF Policy on E-mail**

“Official University business email will be communicated to students using the University GatorLink email account. That is, official email will be sent exclusively to GatorLinkUserName @ufl.edu. The preferred email address recorded for all students will be the GatorLink address. This is the email address displayed in the online phonebook. Students may continue to use the forwarding mechanism to deliver their email to other mail services, if they wish. However, it is the student’s responsibility to insure that the forwarding address is current so that they receive official communications from the University”.

### **Academic Honesty**

As a result of completing the registration form at the University of Florida, every student has signed the following statement: “I understand that the University of Florida expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University.” We agree to comply with the new Honor Code, which specifies that “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.”

University policy regarding “Standard of Ethical Conduct” is available from the 2002-2003 Student Guide at <http://www.dso.ufl.edu/stg/>.

Further information on academic honesty and integrity is available from the Graduate School at: [http://gradschool.rgp.ufl.edu/handbook/graduate\\_student\\_handbook/integrity.html](http://gradschool.rgp.ufl.edu/handbook/graduate_student_handbook/integrity.html)

The minimum consequence for cheating and/or plagiarism is getting a zero on the assignment and possibly failing this course. Do not cheat. Do not plagiarize. Collections and written assignments should represent your own work. If you are not sure what constitutes plagiarism, please read these webpages, and ask your instructor to clarify before beginning the project.

### **UF Counseling Services**

Resources are available on campus for students having personal problems or lacking clear career and academic goals which interfere with their academic performance. These resources include:

1. University Counseling Center, 302 Peabody Hall, 352-392-1575, personal and career counseling;
2. Student Mental Health, Student Health Care Center, 352-392-1171, personal counseling;
3. Sexual Assault Recovery Services, Student Health Care Center, 352-392-1161, sexual counseling; and
4. Career Resource Center, Reitz Union, 352-392-1601, career development assistance and counseling.

### **Information for Students with Disabilities**

Students with disabilities are encouraged to register with the Office for Student Services to determine the appropriate classroom accommodations. Any student requesting classroom accommodations must be registered with the Dean of Students Office, P202 Peabody Hall, 392-1261 (TDD - 392-3008), and have documentation on file in the office of Student Services in order to receive classroom and/or examination accommodations. For students with hearing disabilities trying to contact an office that does not list a TDD, please contact the Florida Relay Service at 1-800-955-8771.

**ENY 6934 Pesticide Resistance Seminar  
Spring 2006**

**COURSE OUTLINE - DRAFT**

<b><u>Date</u></b>	<b><u>Topic</u></b>
1/13	Introduction and lecture on uses and types of insecticides/acaricides.
1/20	Lecture: Resistance detection, evolution, mechanisms.
1/27	Lecture: Resistance monitoring and management.
2/3	Cotton bollworm, Matthew Tarver
2/10	Culex mosquitoes, Barbara Bayer
2/17	German cockroach, Ricky Vazquez
2/24	Mites, Tim Durham
3/3	Housefly, Jeffrey Hertz
3/10	Codling moth, Craig Roubos
3/17	<b>Spring break - no class</b>
3/24	Corn rootworm, Olga Kostromytska
3/31	Natural enemies, Cliff Martin
4/7	Whitefly, Tracy Conklin
4/14	Colorado potato beetle, Cara Congdon
4/21	Lecture: Integration of concepts and discussion on underlying themes.
4/28	<b>Reading Day</b>
5/2, 3-5 pm	Final exam, room 1031 Ent/Nem