

FIELD TECHNIQUES IN INTEGRATED PEST MANAGEMENT  
PMA 4570 / 6228 (2 credits)

SYLLABUS 2014

Entomology and Nematology Bldg. Room 3118

**Instructor:** Dr. Oscar E. Liburd

e-mail. oeliburd@ufl.edu

Office: 2102; Laboratory 2111 Entomology and Nematology Bldg.

Bldg. 970 Natural Area Drive

P. O. Box 110620

**Class Hours:** Tuesday and Thursday 9:30 -12:00

**Office Hours:** Open - (whenever I am free) scheduled hours 1-3 Wednesdays and Fridays

**Teaching Assistant:** Lindsay Iglesias

e-mail: liglesias@ufl.edu

Office: Laboratory 2111. Entomology and Nematology

P.O. Box 110620

Office Hours: Open - Make sure that I know you are coming to my office.

**Class Format:** This is primarily a laboratory/field-oriented class. During each class, the first 45 minutes will be spent discussing pest management strategies and tactics. These strategies will be demonstrated in laboratory or field exercises either during the same class or in a subsequent class. A few videos will be shown in selected lectures to supplement class discussion.

**Description:** Field Techniques in IPM emphasizes the practical aspects of pest management. Students will study general information that is required when developing a pest management program for a specific crop. They will be introduced to techniques including monitoring, sampling, decision-making, biological control and pesticide usage. Laboratory will be designed to expose students to standard field operations and provide hands-on experience.

**Course Goals:** The overall objectives are 1) to teach practical skills in IPM and 2) to provide training on how IPM practices and concepts can be implemented into a production system.

**Expectations:** The successful student is expected to: 1) be familiar with IPM concepts and practices; 2) demonstrate basic practical skills, including recognizing beneficials and sampling pest populations; 3) be familiar with experimental designs; 4) use IPM knowledge to solve pest management problems.

**Prerequisites:** There are no prerequisite for undergraduate and graduate students.

**Quiz (15%).** Two Quizzes on lecture material; (7.5% per quiz)

**Laboratory (30%).** Laboratory Practical Exam 20%, Lab reports 10%

**Comprehensive Examination (40%).**

**Mini-proposal / Term paper (15%)** (Writing requirement)

**Graduate students.** Each graduate student must write a five-page (max) double spaced IPM mini-proposal to address a specific problem using IPM techniques. The five-page limit does not include the references and must have the following format. A) Abstract, B) Introduction, C) Objectives, D) Methodology, E) Expected Results, F) Limitations of Study and G) References. The criteria for judging the proposal will be content, potential to accomplish task, literature review, and writing styles. An example of a project will be: “Using biological control techniques to control Dandelion in homeowner’s landscape”. You will need to know general information about dandelion, including the current methods and previous attempts used to control dandelion. This information will be included in the “introduction” with the appropriate references. You will then outline what you hope to accomplish, “objectives”, and develop a protocol as to how you will carry out your research, “methodology”, and the results you expect to get from your proposed project, “expected results”. Indicate limitations that may hinder or impede aspects of the study in “limitations to study”. Then, list your references according to the Entomological Society of America (ESA) reference guide.

**Undergraduate students.** Each undergraduate student must write a 3-4 page (max) term paper on an insect / disease pest of economic importance and current IPM techniques that are being used to address the problem. You can use the UF Entomology-Nematology “Featured Creatures” format as a guide for your paper. The paper will be evaluated on scientific writing styles and literature review. If you follow the featured creatures’ format you will have 1) Introduction, 2) Description, 3) Biology, 4) Damage, 5) Control and 6) References.

<i>Evaluation</i>	<b>% of grade</b>	<b>Grade Distribution</b>	
Quiz	15	90-100	A
Labs + Practical Exam	30	80-89	B
Comprehensive Final	40	70-79	C
Mini-Proposal /Term Paper	15	60-69	D
		< -59	E
	<hr/>		
	100		

## **Textbook (Supplied)**

M. L. Flint and P. Gouveia. 2001. IPM in Practice: Principles and Methods of Integrated Pest Management, University of California, Oakland, California.

## **References:**

L. P. Pedigo and R.E. Marlin. 2009. Entomology and Pest Management 6<sup>th</sup> edition, Prentice Hall, Upper Saddle River, New Jersey

R. F. Norris, Edward P. Caswell-Chen, and Marcos Kogan. 2003. Concepts in Integrated Pest Management. Pearson Education, Inc., Upper Saddle River, New Jersey.

M. R. Binns, J. P. Nyrop and W. van der Werf. 2000. Sampling and Monitoring in Crop Protection. CABI Publishing, New York, New York.

---

## **Make-up Policy**

Exams, assignments, and demonstrations are made on a continuing basis, so absence of two consecutive classes imposes a hardship. Prolonged absences will be accommodated by mutual agreement, but all work must be completed by the date of the scheduled final examination. Medical excuse with a doctor's notification will allow for a makeup exam.

## **Students with Disabilities**

Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation.

## **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."

## **Software Use**

All students 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 Counseling Services**

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

- 1) University Counseling Center, 301 Peabody Hall, 392-1575, personal and career counseling.
- 2) Student Mental Health, Student Health Care Center, 392-117, personal counseling.
- 3) Sexual Assault Recovery Services (SARS), Student Health Care Center, 392-1161, sexual counseling.
- 4) Career Resource Center, Reitz Union, 392-1601, career development assistance and counseling.