

# Integrated Plant Medicine, ALS 6925

## Fall 2015

**Instructor:** Amanda C. Hodges, Ph.D.  
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**Course Website:**

Grades and reading materials will be posted in the UF Canvas e-learning system (<https://lss.at.ufl.edu/>). Course will occur on Friday's from 1:55pm-4:55pm in Steinmetz Hall, room 3118, unless otherwise designated in the syllabus and course announcements.

**Office Hours:**

Instructor is available by appointment.

**Credits:**

4

**Description:** This course will provide opportunities for students to synthesize and apply the concepts and methodologies of plant medicine to plant problem diagnosis and management. The learning environment will be highly interactive and will include reviews, case studies, and discussions of current literature.

**Objectives:** Upon completion of this course, DPM students will:

- Be able to synthesize the concepts and methodologies of plant medicine for rapid and accurate plant problem diagnosis.
- Be able to synthesize the concepts of plant medicine for applied research efforts
- Be able to identify and recommend management strategies for abiotic and biotic plant problems.
- Be able to coherently deliver a presentation on integrated crop management.
- Be prepared for final written and oral comprehensive DPM exams.

**Prerequisites:** Approval by the instructor.

**Registration:** Please contact program assistant Elena Alyanaya [ealyanaya@ufl.edu](mailto:ealyanaya@ufl.edu) for scheduling.

**Reading Materials:** Journal articles will be posted in Canvas.

| <b>Week #</b> | <b>Date</b>                       | <b>Class Topic</b>   | <b>Assignment Due</b>  |
|---------------|-----------------------------------|--|--|
| 1             | Aug 28                            | Course Overview and Introduction. Student presentation topical assignments will occur on the first day of class. Discuss class project plan. |  |
| 2             | Sept 4                            | Guest Lecture-Plant Disease Diagnostics, Dr. Tim Schubert, FDACS-DPI   |  |
| 3             | Sept 11                           | Begin data collection for research report. Vegetable Crops Presentation and Literature Discussion. Continue data collection as needed.       |  |
| 4             | Sept 18                           | <b>Field Trip-Hernando and Sumter County Agriculture Production. Meet at Steinmetz Hall @7:00am</b>  |  |
| 5             | Sept 25                           | <b>Field Trip-FNGLA Conference. Meet at Steinmetz Hall @7:00am</b>   | <b>Assignment 1: Research Project Introduction</b>                               |
| 6             | Oct 2                             | Greenhouse and Landscape Ornamental Presentations (Students TBD). Continue data collection as needed.  |  |
| 7             | Oct 9                             | Fruit Crops Presentations. (Students TBD). Continue data collection as needed.   |  |
| 8             | Oct 16                            | Continue data collection as needed.  |  |
| 9             | Oct 23                            | Row Crops Presentations. (Students TBD). Continue data collection as needed.   | <b>Assignment 2: Research Project Methods and preliminary Figures and Tables</b> |
| 10            | <b>Oct 25-<br/>November<br/>1</b> | <b>Arizona and California Field Trip</b>   |  |
| 11            | Nov 6                             | Homecoming Holiday   |  |
| 12            | Nov 13                            | Continue data collection as needed. Discuss course assignments and deadlines.  | <b>Assignment 6: Teaching Plan for Integrated Pest Management</b>                |
| 13            | Nov 20                            | Discuss course assignments and deadlines.  | <b>Assignment 3: Research Project Results, Figures, and Tables</b>               |

|    |         |   |   |
|----|---------|---|---|
|    |         |   |   |
| 14 | Nov 27  | No Class-Thanksgiving   |   |
| 15 | Dec 3-4 | Field Trip: Giant African Land Snail Eradication Program in Miami, FL | Assignment 4: Research Project Report<br>Assignment 5: Summary of Arthropods, Plant Diseases, and Weeds<br>Assignment 7: Teaching Plan for Integrated Pest Management-Arizona |

## Assignments

### Research Project: Assignments 1-4

You will execute a research project that identifies and assesses the presence and damage associated with stink bugs (Hemiptera: Pentatomidae) in a plot within the Agronomy Teaching Farm and in an Organic Garden. You will also be expected to provide a summary of arthropod (by family), plant disease, and weed problems that you observe in the plots throughout the semester.

#### **Assignment 1: Research Project Introduction**

Research information related to stink bugs (Hemiptera: Pentatomidae) and the following host plants: okra, sunflowers, cabbage, radishes, cauliflower, broccoli, kale, and beans. Consider common phytophagous and beneficial stink bugs that may occur in Gainesville, Florida in your introduction. Also, address exotic species of concern that are not known to be established in Gainesville, Florida.

#### **Assignment 2: Research Project Methods and preliminary Figures and Tables**

Write a draft of the methods section of your research project report and prepare preliminary figures and tables. Include an updated Literature Cited section. Refer to the Research Project Report Guidelines for details about preparing these sections of the report.

#### **Assignment 3: Research Project Results, Figures, and Tables**

Write a draft of the results section of your research project report and prepare figures and tables. Include an updated Literature Cited section. Refer to the Research Project Report Guidelines for details about preparing these sections of the report.

#### **Assignment 4: Research Project Report**

Prepare a final report of your research project. The sections of the report that you have already prepared thus far (Title, Introduction, Methods, Results, Figures, Tables, Literature Cited) should be revised and improved. The remaining sections of the report (Abstract, Keywords, Discussion, and Acknowledgements) will need to be prepared. Refer to the Research Project Report Guidelines for details about preparing each section of the report. The Research Project Report Grading Sheet specifies how the reports will be graded.

#### **Assignment 5: Summary of Arthropods, Plant Diseases, and Weeds**

A written summary report of arthropods, plant diseases, and weeds detected in both the UF Agronomy Teaching Farm and Organic Garden plot will be submitted at the end of the semester.

**Assignment 6: Teaching Plan for Integrated Pest Management**

Imagine that you are leading the UF Agronomy Teaching Farm. Describe the crop rotation plan that you would consider on an annual basis. Specifically highlight the integrated pest management concepts that you would want to be available for demonstration purposes to local school groups. Include scientific (refereed journal) literature references in your plan. Also, reference other model extension programs as needed. Include descriptions of at least two grant programs that you would pursue in support of the UF Agronomy Teaching Farm in your plan.

**Assignment 7: Teaching Plan for Integrated Pest Management-Arizona**

Imagine that you had a teaching area similar to the UF Agronomy Teaching Farm in Yuma, Arizona. Modify your plan in Assignment 6 for crop complexes in Arizona.

**Assignment 8: Oral Presentation**

Students will be assigned commodity presentations in groups. Student groups are responsible for posting journal articles for class discussion at least one week prior to the commodity presentation.

**GRADING POLICY-ALS 6925****EVALUATION**

Assignment 1 10 points  
Assignment 2 10 points  
Assignment 3 10 points  
Assignment 4 25 points  
Assignment 5 15 points  
Assignment 6 25 points  
Assignment 7 25 points  
Assignment 8 30 points  
Participation 50 points

**Total ALS 6925 200 points**

| <b>Final Grading</b> | <b>Scale: Percentage</b> |
|----------------------|--------------------------|
| A                    | 93-100                   |
| A-                   | 90-92                    |
| B+                   | 87-89                    |
| B                    | 83-86                    |
| B-                   | 80-82                    |
| C+                   | 77-79                    |
| C                    | 73-76                    |
| C-                   | 70-72                    |
| D+                   | 67-69                    |
| D                    | 63-66                    |
| D-                   | 60-62                    |
| E                    | 0-59                     |

**INCOMPLETE GRADES**

The application process for receiving an incomplete grade is the responsibility of the student. Students may download the CALS incomplete grade form at: <http://www.cals.ufl.edu/faculty-staff/docs/forms/incompleteGradeContract.pdf> The instructor must sign the application for an incomplete grade, but the student must initiate the paperwork process. The instructor will only approve an incomplete grade application if the following conditions are met:

- The student has completed a major portion of the course with a passing grade (“D” or better).
- The student is unable to complete course requirements because of documented circumstances beyond his or her control.
- The student and instructor have discussed the situation prior to the final exam (except under emergency conditions).
- The instructor will submit a final grade for the student on the date due (indicated below) whether or not all work is completed.

Note that the paperwork for receiving an incomplete will also include deadlines for remaining assignments due. The instructor will not consider incomplete requests after the last day of classes.

**Class Participation**

A student will receive a 5 point deduction for missed classes. Students are expected to participate in field trips. Students should notify the instructor as soon as possible if he/she is unable to participate in a field trip. Students will receive a 15 point deduction for missed field trips.

**E-MAIL/GATORLINK ACCOUNT REQUIREMENTS**

You will be required to get a Gatorlink computer account through the university. This service is free to all students. Using this account, you will be able to send and receive e-mail and access the World Wide Web from home or school. Instructions for getting a Gatorlink account can be found at <http://www.gatorlink.ufl.edu/> **You must correspond through this e-mail account.**

**POLICY STATEMENTS: ACADEMIC HONESTY, PLAGIARISM, SOFTWARE USE, UF COUNSELING SERVICES, SERVICES FOR STUDENTS WITH DISABILITIES**

In 1995, the UF student body enacted a new honor code and voluntarily committed itself to the highest standards of honesty and integrity. When students enroll at the university, they commit themselves to the standard drafted and enacted by the students.

In adopting this honor code, the students of the University of Florida recognize that academic honesty and integrity are fundamental values of the university community. Students who enroll at the university commit to holding themselves and their peers to the high standard of honor required by the honor code. Any individual who becomes aware of a violation of the honor code is bound by honor to take corrective action. The quality of a University of Florida education is dependent upon community acceptance and enforcement of this honor code.

**The Honor Code: We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.**

On all work submitted for credit by students at the university, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.”

The University requires all members of its community to be honest in all endeavors. A fundamental principle is that the whole process of learning and pursuit of knowledge is diminished by cheating, plagiarism and other acts of academic dishonesty. In addition, every dishonest act in the academic environment affects other students adversely, from the skewing of the grading curve to giving unfair advantage for honors or for professional or graduate school admission. Therefore, the university will take severe action against dishonest students. Similarly, measures will be taken against faculty, staff and administrators who practice dishonest or demeaning behavior.

Students should report any condition that facilitates dishonesty to the instructor, department chair, college dean or Student Honor Court.

It is assumed all work will be completed independently unless the assignment is defined as a group project, in writing by the instructor. This policy will be vigorously upheld at all times in this course.

**PLAGIARISM INFORMATION FROM THE ENTOMOLOGY AND NEMATOLOGY DEPARTMENT**

Plagiarism is a serious problem in academia today, especially with the ease of obtaining information from the World Wide Web. Plagiarism is defined as representing the words or ideas of another person as one’s

own, without attribution to the source. All words and ideas must be attributed to a source unless they are considered common knowledge (i.e., widely known by many people and found in many different sources). There are many kinds of plagiarism, as you will read on the Guide to Plagiarism website referenced below.

Plagiarism is unethical, unacceptable in science, and prohibited by the UF Student Honor Code (<http://www.dso.ufl.edu/sccr/honorcodes/honorcode.php>). The consequences for plagiarism while at the University of Florida range from receiving a grade of zero for the plagiarized assignment or a failing grade for the course, to, for repeated offenses, expulsion from the university. Plagiarism after graduate training calls into question one's scientific integrity and can lead to banning of publication in journals and the loss of jobs/careers.

In some countries, it is an acceptable practice to write in a manner that faculty members at the University of Florida consider to be plagiarism. Students studying in our university and with plans to publish their research in the English language need to know what plagiarism is and how to avoid it.

Students who plagiarize will be caught and consequences will be applied. Many faculty in our department check all written assignments using an anti-plagiarism software called Turnitin®. You may wish to customize this section and put in your plans to use Turnitin and your consequences for plagiarism.

For further information and examples of plagiarism, I strongly suggest that you please read the George Smathers' Library Guide to Plagiarism at <http://www.counseling.ufl.edu/cwc/Default.aspx>

Please understand that our purpose in bringing to your attention the matter of plagiarism is to help train you to be ethical scientists, not to impugn your character.

**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.

**CAMPUS HELPING RESOURCES:** Students experiencing crisis or personal problems that interfere with their general wellbeing are encouraged to utilize the university's counseling resources. Both the Counseling Center and Student Mental Health provide confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal or lacking clear career and academic goals, which interfere with their academic performance. The Counseling Center is located at 301 Peabody Hall (next to Criser Hall). Student Mental Health is located on the second floor of the Student Health Services in the Infirmary.

1. *University Counseling Center*, 301 Peabody Hall, 392-1575; personal and career counseling:

<http://www.counseling.ufl.edu/cwc/Default.aspx>

2. *Student Mental Health*, Rm. 245 Student Health Care Center, 392-1171, personal counseling:

<http://shcc.ufl.edu/>

Alcohol and Substance Abuse Program (ASAP)

Center for Sexual Assault/Abuse Recovery & Education (CARE)

Eating Disorders Program

Employee Assistance Program

Suicide Prevention Program

3. *Career Resource Center*, DR-100 J.W.Reitz Union, 392-1602, career development assistance and counseling.

**Students with Disabilities:** The Disability Resource Center Coordinates the needed accommodations of

students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. 0001 Reid Hall, 392-8565, [www.dso.ufl.edu/drc/](http://www.dso.ufl.edu/drc/)