

WELCOME TO ALS 4161/6166
Exotic Species and Biosecurity Issues
3 credits
Fall 2011

Instructor: Amanda C. Hodges, Ph.D.

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Course Website: <http://entnemdept.ufl.edu/Hodges/als4161/index.html>

In 2011, primary information for students enrolled in the course will be accessed through the University of Florida, Sakai e-learning system (<https://lss.at.ufl.edu/>). The course syllabus will also be maintained on the course website, and the course website will serve as an informational source for students and others interested in enrolling in the course.

Office Hours:

Monday and Wednesday 8:00am-9:00am or by appointment.

Class members will be notified during class, the course UF Sakai website, and via a course list-serv if office hours are unavailable in a given week. Faculty members are subject to university, college and departmental commitments, and it is recommended that you contact the instructor prior to coming to the office outside of the designated time for office hours.

Course TA: None

TEXTBOOK AND OTHER RESOURCES

Optional Textbook: Exotic Pests and Diseases: Biology and Economics for Biosecurity, D.A. Sumner (ed.), 2003, ISBN#0-8138-1966-0, Iowa State Press

This book can be purchased at the UF bookstore, or through various online vendors.

Reading Assignments

Reading assignments will be provided to students in the form of PDF files or website links on the course, UF e-learning Sakai website (<https://lss.at.ufl.edu/>). PDF files are posted under the resources section of the UF Sakai site. A link to the Sakai login is provided from the general course website on the UF Entomology and Nematology Department's homepage at: <http://www.entnemdept.ufl.edu/Hodges/als4161/>.

Lectures

Available to classroom and distance education (web) students following each class. Weblink to lectures (recorded using Accordent) provided in Sakai.

COURSE PREREQUISITES

Integrated Principles of Biology 1 and Laboratory (BSC 2010 and 2010L) and Integrated Principles of Biology 2 and Laboratory (BSC 2011 and 2011L) or equivalent.

COURSE OBJECTIVES

From the lecture and course assignments, students will gain an understanding of the following agricultural biosecurity concepts:

- 1) An awareness of the importance of invasive species to U.S. agricultural and natural areas.
- 2) An awareness of trade issues and their relevance to agricultural biosecurity.
- 3) An understanding of the foundation principles and basic practices of pest exclusion, eradication, and management tactics for invasive species issues.
- 4) An ability to assimilate information on invasive species, and develop inferences from case study examples.
- 5) A perspective on the research, extension, and regulatory components of invasive species issues.
- 6) An appreciation of early detection and correct identification of new and emerging pest problems.
- 7) An awareness of news and developments reported in the popular and scientific media on issues affecting the subject matter of this course.
- 8) An awareness of the importance of insect vectors to animal and human health.
- 9) An awareness of the importance of exotic animal disease threats to agriculture.

GENERAL COURSE DETAILS

Credits: 3

Catalog Statement: "Study of U.S. policies and programs affecting agricultural biosecurity. Attention is devoted to current agricultural and extension and regulatory programs. Emphasis is on the policies and procedures involved in detecting and reporting non-indigenous species. Students will develop the analytical capabilities to assess the consequences of agricultural biosecurity threats."

Time Offered: M, W 4:05pm-4:55pm (Class Period 9)

Location Offered: Entomology and Nematology Department, Building 970, RM 1027, and at Research and Education Centers via Web Distance Education.

COURSE OUTLINE

WEEK	DATE	LECTURE/ACTIVITY
1	8/22/11	Welcome and Course Introduction
1	8/24/11	The Importance of Invasive Species-Historical Examples
2	8/29/11	Biosecurity-What is It? How do We Communicate?
2	8/31/11	Invasive Species Affecting Plants, A Florida Perspective <i>Guest Lecture: Dr. Greg Hodges, FDACS-DPI</i>
3	LABOR DAY	
3	9/07/11	Invasive Species and Biosecurity: Potential Pathways for Introduction
4	9/12/11	International Trade Issues, Part 1
4	9/14/11	International Trade Issues, Part 2
5	9/19/11	Arthropods as Vectors of Plant, Human, and Animal Disease

5	9/21/11	Mollusks, Plant and Human Health Concerns Topic Approval Deadline (Written Assignment 3) Topic Approval Deadline (Written Assignment 4-ALS 6166) Written Assignment 1 Due: Describe the Importance of Invasive Species and Biosecurity to the U.S. and the Global Community
6	9/26/11	Regulatory Issues and Case Studies-Arthropods
6	9/28/11	EXAM 1-NO LECTURE (WEEKS 1-5)
7	10/03/11	Historical and Current Issues, Invasive Termites <i>Guest Lecture: Dr. Rudolf Scheffrahn, FLREC, UF</i>
7	10/05/11	Regulatory Case Studies and Recent Examples-Plant Parasitic Nematodes
8	10/10/11	Regulatory Issues and Case Studies-Plant Pathogens
8	10/12/11	Plant Pathogens of Concern-Recent Examples and Issues
9	10/17/11	Plant Pest Regulations-A State of Florida Perspective <i>Guest Lecture: Mr. Tyson Emery, FDACS-DPI</i>
9	10/19/11	Methods for Managing Established and/or Emerging Invasive Species <i>Guest Lecture: Dr. Trevor Smith, FDACS-DPI</i>
10	10/24/11	Select Agents-Human or Animal Concern? (Part 1)
10	10/26/11	Select Agents-Human or Animal Concern? (Part 2) Written Assignment 2 Due: Select an Exotic Pest and Describe its Potential Impact to a State, Region, or the Continental U.S.
11	10/31/11	Animal Diseases of Concern <i>Guest Lecture: Dr. Fiona Maunsell, College of Veterinary Medicine, UF</i>
11	11/02/11	EXAM 2-NO LECTURE (WEEKS 6-10)
12	11/07/11	Swine Diseases of Concern
12	11/09/11	Aquatic Species Risk Concern Analysis <i>Guest Lecture: Dr. Jeff Hill, Tropical Aquaculture Laboratory, UF</i>
13	11/14/11	Sheep Pox Virus, Goat Pox Virus, and Lumpy Skin Disease
13	11/16/11	Poultry Diseases of Concern

14	11/21/11	Challenges in Animal Biosecurity
14	11/23/11	No Lecture, Happy Thanksgiving!
15	11/28/11	Poultry Biosecurity Issues
15	11/30/11	The Importance of Correct Pest Identification and Communication Procedures Written Assignment 3 Due: Develop an Extension Fact Sheet on a Pest of Concern (Note: Topic approval required).
16	12/05/11	Career Opportunities with Invasive Species and Biosecurity Activity Assignment Due: Complete the NPDN chilli thrips and <i>Ralstonia</i> e-learning modules. Complete the Protect U.S. redbay ambrosia beetle/laurel wilt and citrus greening/Asian citrus psyllid modules (http://cbc.at.ufl.edu). Upon completion of the modules, submit the student feedback form (posted in Sakai). Written Assignment 4 Due (ALS 6166 only): Develop a Risk Assessment
16	12/07/11	Final Exam Review
	12/16/11	Final Exam (12:30-2:30)

GRADING POLICY-ALS 4161**EVALUATION**

Exam 1	50
Exam 2	50
Written Assignments	75
Activity Assignment	30
Class Participation	30
Final Exam	75
Total ALS 4161	310 points

GRADING POLICY-ALS 6166**EVALUATION**

Exam 1	50
Exam 2	50
Written Assignments	125
Activity Assignment	30
Class Participation	30
Final Exam	75
Total ALS 6166	360 points

Final Grading	Scale: Percentage
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://cals.ufl.edu/faculty_staff/advising_resources.shtml 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.

EXTRA CREDIT: NO EXTRA CREDIT WILL BE AVAILABLE**ASSIGNMENTS****Activity Assignment**

One activity assignment, valued at 30 points, is included as a component of the course. The activity assignment deadline is December 5, 2011, but you may choose to complete the activity earlier. You must complete two NPDN pest-specific modules (chilli thrips and *Ralstonia*) and two Protect U.S. modules (redbay ambrosia beetle/laurel wilt and Asian citrus psyllid/citrus greening). Modules are located at: <http://cbc.at.ufl.edu>. You are also required to submit the summary evaluation of the pest-specific e-learning modules. E-mail the course instructor once the activity is complete. The activity should be completed by 11:59pm on the due date, but may be completed prior to the due date.

You will need high-speed internet to access the e-learning modules. You will need to install Adobe® Flash Player <http://get.adobe.com/flashplayer/> on your computer to view the e-learning content.

Class Participation

Class participation is worth 30 points.

Classroom Students (Gainesville Campus)

Students will receive a ½ point deduction for every missed class, unless an appropriate excuse is presented. Documentation of a medical reason or death in the family is an example of an excused absence. Each class ends with a group-based discussion. Students are expected to participate in the group discussion. Students may participate in the online discussion (in Sakai, for distance education students) for a maximum of two unexcused absences.

Distance Education Students

Each distance education student is expected to post 1) one topical question and 2) respond to another student's (or the instructor's) topical question(s) each week. Each missed post will result in a ½ point deduction. Discussion posts are due weekly, prior to 8:00am ET on Monday of the following week. Responses need not be extremely lengthy, but should indicate that the learner has considered the topic in his/her response. Responses should be longer than 'yes' or 'no'. In the response, students should indicate the week of the post (week 1, 2, etc.). A total of 15 weekly posts are due. Student may miss one week of posts without penalty.

Written Assignments

You will complete three written assignments, worth 25 points each. Each written assignment will be a minimum of two pages and a maximum of five pages. Written assignments will be 12 point, Times New Roman font, 1 inch margins, and either single spaced or double spaced. Written assignments will require that you can assimilate lecture and reading content from the course, and search for your own references in some cases. Written assignments will be graded on the following criteria:

- 1) Appropriate and accurate references utilized
- 2) Requested topic addressed
- 3) Grammatical accuracy
- 4) Logical organization of content
- 5) Use of requested font, margins, and length requirements for the written assignment.

Written assignments will be returned one week after the due date. Written assignments are due by 5pm on the due date. Written assignments will be checked for plagiarism at turnitin@uf <http://www.at.ufl.edu/~turnitin/support.html> . Plagiarism will result in a grade of '0' for the assignment.

Written Assignment 4 (ALS 6166 Only)

Graduate students will be required to complete one additional, more detailed writing assignments. The additional assignment is worth 50 points each.

- Each graduate student will select a pest of concern for development of a pest risk assessment.
- The pest selected must differ from pests covered in other writing assignments.
- The pest risk assessment will be 10 to 15 pages, double spaced in length.
- Topic pre-approval by course instructor is required.

EXAM INFORMATION (GAINESVILLE CAMPUS)

Exams will be given during the scheduled class period. Exams will be closed book. Exams may include classroom lectures as well as discussion information generated during class. Material from reading assignments also may be included in the exams. Exams 1 and 2 will include: 1) 10 points of short answer and/or fill-in-the blank and 2) four 10 point essay questions. Students will be provided with up to 15 study questions one week prior to the exam. The four essay questions will be selected (by the instructor)

for the exam. The Final Exam will consist of new content (50 points) and previous material from Exams 1 and 2 (25 points). The Final Exam will include 10 points of short answer and/or fill-in-the blank for both new content (weeks 11-16) and previous material (Exams 1 and 2).

EXAM INFORMATION (DISTANCE EDUCATION-WEB STUDENTS)

Exam dates are listed on the course outline. Exams will be e-mailed to the students gatorlink account at 8am on the day of the exam. You will have from 8:00am to 11:59pm to complete the exam on the scheduled date. All exams are open notes, and open book. You are expected to provide references to your responses. Exams responses should be written in your own words. Do not copy and paste content into your exam responses. Exam will be checked for plagiarism at turnitin@uf <http://www.at.ufl.edu/~turnitin/support.html>. Plagiarism may result in '0' credit for a question or the entire exam. Exams 1 and 2 (50 points each) will include 10 essay questions worth 5 points each. The Final Exam will include 15 essay questions worth 5 points each. The Final Exam will consist of new content (50 points) and topical content from previous exams (25 points). Questions on the final will not necessarily be identification to questions from previous exams.

MISSED EXAMS

Make-up exams will only be allowed due to clearly documented medical excuses or a death in your immediate family (spouse, sibling, parent, child, or grandparent). You will need to provide the instructor with clear documentation, and contact details to verify the excuse. Make-up exams will not be identical to either the classroom exam or the distance education exam. It is the responsibility of the student to contact the instructor no later than three days following the missed exam. Students failing to contact the instructor by three days following a scheduled exam will be assigned a numerical grade of 'O' for the missed exam.

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®

(<http://www.at.ufl.edu/~turnitin/about.html>). 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://web.uflib.ufl.edu/msl/subjects/Physics/StudentPlagiarism.html>

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:

www.counsel.ufl.edu/

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/