

Exotic Species and Biosecurity Issues, ALS 4161

Fall 2016 Live Syllabus

Meeting Time and Place:

Lecture: 9th Period Mon/Wed (4:05-4:55 PM), 1027 Entomology and Nematology Building

Instructor: Dr. Amanda Hodges, achodges@ufl.edu

Office: 3212, ENY Building, Steinmetz Hall
1881 Natural Area Drive
Gainesville, FL32611
Phone: (352) 273-3957

Office Hours: Monday and Tuesday, 8:30-9:30am, or by appointment

Students will be notified by Canvas e-mail if instructor will be unavailable for office hours.

Teaching Assistant: Sage Thompson, sagemthompson@ufl.edu

Office: 3235, ENY Building, Steinmetz Hall
1881 Natural Area Drive

Office Hours: Monday 9:30am-10:30am and Thursday 8:00-9:00am, or by appointment

Course Website: University of Florida, Canvas e-learning system(<https://lss.at.ufl.edu/> (Links to an external site.)). ALS 4161, 6166 will only be offered as a live and online class during fall semester 2016. Links to live lectures will be posted in Canvas following the live class on Monday and Wednesday from 4:05pm-4:55pm.

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.

Textbook and other resources:

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

Potential Invasive Pests of Agricultural Crops, J.E. Peña (ed.), 2013, ISBN#13-978-1-84593-829-1, CABI

Course Objectives

Catalog Statement: "Study of U.S. policies and programs affecting agricultural biosecurity. Attention is devoted to current agricultural 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."

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 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.

Assignments

Weekly assignments will be provided to students within the UF e-learning Canvas website. Some assignments may require students to locate additional references or specific articles within UF libraries (<http://cms.uflib.ufl.edu/>) or on the internet. Students enrolled in distance education sections will be required to submit answers to classroom questions instead of course attendance and participation during classroom discussions. Students must remain in his/her section (classroom or distance) after the conclusion of the drop/add period.

Grading

| ALS 4161 | Point Value | Total |
|-------------------------------------|--------------------|--------------|
| Assignments (5) | 40 points each | 200 |
| Written Assignment Draft | 40 | 40 |
| Written Assignment Final | 175 | 175 |
| Exam (2) | 50 points each | 100 |
| External E-learning activity | 50 | 50 |
| Course Attendance and Participation | 60 | 60 |
| Total possible points: | | 625 |

| 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://www.cals.ufl.edu/faculty-staff/docs/forms/incompleteGradeContract.pdf> (Links to an external site.) 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.
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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.

External E-Learning Activity Assignment

The external e-learning activity, valued at 50 points, is included as a component of the course. The external activity assignment deadline is November 30, 2016, but you may choose to complete the activity earlier. You must also complete the following Florida First Detector (<http://www.flfirstdetector.org/>) modules: Agencies Involved and Their Roles; Pests and Pathways; Submitting Samples; European Pepper Moth; Mexican Rice Borer; Giant African Land Snail; Kudzu Bug; Brown Marmorated Stink Bug; Light Brown Apple Moth; Needle Blight; Red Ring Disease; Texas Phoenix Palm Decline; and *Tuta absoluta*.

You are required to submit a maximum two-page summary report describing your learning experience with the external e-learning modules. You are also required to complete the module post-tests at the 70% level. The instructor has access to the database for the external e-learning modules, and will be able to verify your score. The external e-learning module will provide you additional information related to plant pests of concern to Florida agricultural and natural areas. The activity should be completed by 11:59pm on November 30, 2016, but may be completed prior to the due date. Information from the external e-learning activity may be included on your exam.

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

Written Assignment

All students will complete one written assignment, worth 175 points. The first draft of your written assignment is worth 40 points. You must submit your original first draft with your final written assignment. The final written assignment will be no more than ten pages in length, double-spaced. Written assignments will be 12 point, Times New Roman font and 1 inch margins. Your written assignment will require that you can assimilate lecture, reading, and other assignment 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 are due by 11:59pm on the due date. Written assignments will be checked for plagiarism with Turnitin software (<https://lss.at.ufl.edu/help/Turnitin>). Plagiarism will result in a grade of '0' for the assignment.

Course Participation and Attendance

Classroom students receive course participation and attendance point by participating in classroom discussions and attending class. Students will be provided journal articles and/or news segments to read each week. Students are expected to read assigned materials prior to class and actively participate in discussions. Students will receive a 5 point deduction from class participation for unexcused classroom absences.

Distance students receive course participation points by responding to questions (posted by the instructor or TA) to the distance sections. Specifically, distance students must response to six question-based points (worth 10 point each) for course participation points.

Exam Information

Two exams worth 50 point each will be administered during the semester. The exams will be open notes, but exams will be checked for plagiarism. Students are expected to provide exam answers in his/her own words. The exams will be open book/notes and essay-based. A final comprehensive exam will not be administered for this course.

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.

Extra Credit

No extra credit will be assigned.

Course Outline

| Week | Date | Topic |
|------|---------------------|--|
| 1 | 8/22 – 8/24 | Review Syllabus, Login to Canvas Biosecurity – What is it and Why is it Important? The Importance of Invasive Species-Historical and Current Examples |
| 2 | 8/29-8/31 | The Importance of Invasive Species and Trade The Importance of Pest and Pathogen Survey Efforts for Florida and U.S. Agriculture Begin Writing Assignment |
| 3 | 9/5 (Labor day)-9/7 | Mitigating and Managing Invasive Species Problems in Florida |
| 4 | 9/12-9/14 | Arthropods as Disease Vectors Invasive Species, the Caribbean Pathway, and Cuba |
| 5 | 9/19-9/21 | Assignment 1: Zika Virus Assignment due by 11:59pm on 9/21 International Trade Concepts and Pest Risk Analysis HHS and Select Agents |
| 6 | 9/26-9/28 | Assignment 2: Biosecurity Term Assignment Due by 11:59pm on 9/28 Live class cancelled this week due to the International Congress of Entomology. Review online material provided during the weekly post. |
| 7 | 10/3-10/5 | Written Assignment-Draft Due by 11:59pm on 10/5 Animal Biosecurity |
| 8 | 10/10-10/12 | Aquatic Species Risk Concern Analysis Live Class Cancelled on 10/12/16. Exam 1 will be available from 8:00am on October 12, 2016 until Sunday, October 16, 2016 at 11:59pm. |
| 9 | 10/17-10/19 | Animal and Human Biosecurity Issues (Continued) |
| 10 | 10/24-10/26 | Assignment 3: Zoo Biosecurity Assessment Due by 11:59pm on 10/26 Mollusks, Plant and Human Health Concerns Responding to an Emergency with the Incident Command System (ICS) |
| 11 | 10/31-11/2 | Assignment 3: Response to Another Student's Zoo Biosecurity Assessment Due by 11:59pm on 11/2 Assignment 4: Mosquito Activity Due by 11:59pm on 11/2 The Importance of Diagnosing, Sample Submission, and Reporting a Potential Pest or Pathogen of Plant, Animal, or Human Concern Regulatory Case Studies and Recent Examples-Plant Parasitic Nematodes |
| 12 | 11/7-11/9 | Assignment 5: Biosecurity Farm Assessment Due by 11:59pm on 11/9 International, National, and Local Regulatory Case Studies Reconsidered |
| 13 | 11/14-11/16 | Response to the Zoo Biosecurity Post of Another Student Due on 11/16 Plant Pest Arthropod Case Studies Plant Pathogen Case Studies |
| 14 | 11/21-11/23 | Concluding Case Study Examples-Synthesizing Concepts Happy Thanksgiving! |
| 15 | 11/28-11/30 | External E-learning Assignment Due by 11:59pm on Wednesday, 11/30 Concluding Case Study Examples-Synthesizing Concepts |

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|----|------|---|
| | | Career Opportunities in Biosecurity |
| 16 | 12/7 | Final Written Assignment Due: Monday, December 5, 2016 at 11:59pm Second Exam (open book), 12/3/16-12/7/16. Exam due by 11:59pm on Wednesday, December 7, 2016 at 11:59pm. |

Policy Statements: Academic Honesty, Plagiarism, Software Use, UF Counseling Services, Services for Students with Disabilities

Academic Honesty:

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:

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> (Links to an external site.)). 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> (Links to an external site.)

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/