

WELCOME TO ALS 6166
Exotic Species and Biosecurity Issues
3 credits
Fall 2015

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

Course Website: University of Florida, Canvas e-learning system (<https://lss.at.ufl.edu/>). ALS 4161, 6166 will only be offered as an online course during the Fall 2015 semester.

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, Iowa State Press

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

Assignments

Weekly assignments will be provided to students within the UF e-learning Canvas website (<https://lss.at.ufl.edu/>). Some assignments may require students to locate additional references or specific articles within UF libraries (<http://cms.uflib.ufl.edu/>) or on the internet. Adobe Flash® player (<http://get.adobe.com/flashplayer/>) will be required for some lectures.

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."

Location Offered: Online

COURSE OUTLINE

WEEK	DATE	TOPIC
1	8/24/15	Review Syllabus, Login to Canvas Biosecurity-What is it and Why is it Important? The Importance of Invasive Species-Historical Examples
2	9/7/15	Select Agents HHS-CDC Video Series
3	9/14/15	Assignment 1: Ebola Assignment Due by 11:59pm on September 17, 2015 Invasive Species Pathways
4	9/21/15	International Trade Concepts
5	9/28/15	Assignment 2: Biosecurity Term Assignment Due by 11:59pm on October 2, 2015 Select Agent or Not-Potential Diseases of Human and Animal Concern

6	10/5/15	Arthropods as Vectors of Disease
7	10/12/15	Written Assignment-Draft Due by 11:59pm on October 16, 2015 Animal Biosecurity <i>2013 Guest Lecture: Dr. Fiona Maunsell, College of Veterinary Medicine, UF</i>
8	10/19/15	Animal Biosecurity Aquatic Species Risk Concern Analysis (Invited) <i>2013 Guest Lecture: Dr. Jeff Hill, Tropical Aquaculture Laboratory, UF</i>
9	10/26/15	Assignment 3: Zoo Biosecurity Assessment Activity Due by 11:59pm on October 30, 2015 The Importance of Diagnostic Plant Pest Identification Invasive Species Affecting Plants, A Florida Perspective <i>2013 Guest Lecture: Dr. Greg Hodges, FDACS-DPI</i>
10	11/2/15	Assignment 3: Response to Another Student's Zoo Biosecurity Assessment Due by 11:59pm on November 6, 2015 Assignment 4: Mosquito Activity Due by 11:59pm on November 6, 2015 Plant Pest Regulations-A State of Florida Perspective (Invited) <i>2013 Guest Lecture: Mr. Tyson Emery, FDACS-DPI</i> Methods for Managing Established and/or Emerging Invasive Species (Invited) <i>2013 Guest Lecture: Dr. Trevor Smith, FDACS-DPI</i>
11	11/9/15	Assignment 5: Biosecurity Farm Assessment Due by 11:59pm on November 13, 2015 Mollusks, Plant and Human Health Concerns Regulatory Case Studies and Recent Examples-Plant Parasitic Nematodes
12	11/16/15	Plant Pest Arthropod Case Studies Historical and Current Issues, Invasive Termites (Invited)

13	11/23/15	Happy Thanksgiving!
14	11/30/15	<p>Assignment 6: Invasive Weed Scenario Activity Due by 11:59pm on December 4, 2015 Plant Pathogen Case Studies</p> <p>External E-learning Assignment Due by 11:59pm on Friday, December 4, 2015</p> <p>ALS 6166 Only, Risk Assessment Due: Friday, December 4, 2015 at 11:59pm</p>
15	12/7/15	<p>Final Written Assignment Due: Monday, December 7, 2017 at 11:59pm</p> <p>Exam (open book), 12/1/15-12/9/15. Exam due by 11:59pm on Wednesday, December 9, 2015.</p>

<p><u>GRADING POLICY-ALS 6166</u> EVALUATION Written Assignment Draft 40 Final Written Assignment 175 Risk Assessment 175 Exam 100 Assignment 1-6 (40 points each) 240 External E-Learning Activity Assignment 170 Course Assessment 40</p> <p>Total ALS 6166 940 points</p> <p><u>INCOMPLETE GRADES</u> The application process for receiving an incomplete 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:</p> <ul style="list-style-type: none"> <input type="checkbox"/> The student has completed a major portion of the course with a passing grade (“D” or better). <input type="checkbox"/> The student is unable to complete course requirements because of documented circumstances beyond his or her control. <input type="checkbox"/> The student and instructor have discussed the situation prior to the final exam (except under emergency conditions). <input type="checkbox"/> The instructor will submit a final grade for the student on the date due (indicated below) whether or not all work is completed. 	Final Grading	Scale: Percentage	grade is	
	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			

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 assigned.

ASSIGNMENTS

External E-Learning Activity Assignment

The external e-learning activity, valued at 170 points, is included as a component of the course. The external activity assignment deadline is December 4, 2015, but you may choose to complete the activity earlier. You must complete three Protect U.S. modules (redbay ambrosia beetle/laurel wilt; Asian citrus psyllid/citrus greening; and college-level plant biosecurity). Modules are located at: <http://firstdetector.org/> . 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 activity should be completed by **11:59pm on December 4, 2015**, 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 will need to install Adobe® Flash Player <http://get.adobe.com/flashplayer/> on your computer to view the e-learning content.

Assignments

You have six assignments worth 40 points each due during the semester. Please see your assignment due dates on your syllabus. Assignments provide you an opportunity to assimilate concepts from class learning materials. Detailed instructions are provided for each assignment.

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.

Written Assignment 2 (ALS 6166 Only)

Graduate students will be required to complete one additional, more detailed writing assignments. The

additional assignment is worth 175 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 course assignments assignments.
- The pest risk assessment will be 15-20, double spaced in length.
- Topic pre-approval by course instructor is recommended.

Course Evaluation

You will receive 40 points by confirming that you have completed the course evaluation.

EXAM INFORMATION

One exam worth 100 points will be administered during the semester. The exam will be open notes, but exams will be checked for plagiarism. Students are expected to provide exam answers in his/her own words. The exam will be open book/notes and essay-based. The exam will be available from **December 1, 2014 until December 9, 2015**. The exam is due at **11:59pm on December 9, 2015**.

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.

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/