Syllabus ENTM 1001, version 1.2 Updated: May 20, 2016

ENTM 1001—Insects and Society

Course Description: Introduction to insect effects on agriculture, human health and the environment

Textbooks and Other Materials

ODL is *not responsible* for student purchases that result in *the receipt of the wrong materials. It is the responsibility of the student to* order the correct textbook materials. Courses are written to specific textbook editions; edition substitutions *are not allowed*.

Textbook

- T. D. Schowalter. Insects and Sustainability of Ecosystem Services. CRC Press, 2013. ISBN-10: 1-466-55390-1 Print ISBN-13: 978-1-4665-5390-3 eBook ISBN: 978-1-4665-5391-0 Special Note on eBook Rental or Purchase:
 - Available for purchase at https://www.crcnetbase.com/action/ecommerce?doi=10.1201%2Fb1 4911 with unlimited access.
 - Available for rental or purchase at http://www.crcpress.com/product/isbn/9781466553910.

Ordering Information

Please review the following tips for ordering your course materials:

 Do not purchase your textbooks until your enrollment is approved. During the processing period, a new section may be opened that could require a different textbook or edition.

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- 2. Always order by the ISBN. Publishers and vendors often offer the same textbook title under different ISBNs. You must have the correct ISBN to access your online website.
- 3. If you are having problems locating a textbook, contact us at Answers@outreach.lsu.edu for assistance.

Other Materials and Resources

Reading assignments from the text will help you understand the PowerPoint presentations in each module. *Glossary* containing definitions of technical terms used in this course and additional information from cited sources, are available in each module.

Software: PowerPoint, Web Browser, Adobe Acrobat Reader

After the initial reading of each chapter, it is recommended that you review the provided PowerPoint presentations.

It is recommended that you use Mozilla Firefox or Google Chrome as your web browser. Internet Explorer is not compatible with your Moodle course site.

Adobe Acrobat Reader is required to view PDF document files.

Hardware: Digital or Phone Camera, Web cam with a microphone (built-in or external), headphones or working speakers, and high speed internet

Some module assignments may require that you take pictures and upload them the course site. This will require use of a digital or high quality phone camera.

Exams are completed online and require the hardware listed above. Students are encouraged to review the technical requirements provided on the ProctorU website and to perform a test on their equipment prior to enrolling in this course to make sure they have the necessary resources available.

Technical Requirements: http://www.proctoru.com/tech.php

Equipment Test: http://www.proctoru.com/testitout/

Nature and Purpose of the Course

Course Outcomes: Upon completion of this course, students are expected to be able to:

- 1. Describe ecosystem services on which human survival depends
- 2. Describe ways in which humans have interacted with insects over time
- 3. Identify factors that influence insect abundance and their effects on ecosystem services
- 4. Outline ecosystem processes that produce services
- 5. Explain ways in which humans and insects affect ecosystem services
- 6. Distinguish positive and negative values of human and insect effects on ecosystem services
- 7. Describe ways in which management of insects and ecosystems can be changed to improve ecosystem delivery of services

This course follows the reference book *Insects and Sustainability of Ecosystem Services* and is designed to provide basic principles of insect ecology and ecosystem ecology. These principles will be used to describe how ecosystems produce services on which human survival depends. In addition, students will learn how insects and humans affect ecosystems and delivery of services, and will be introduced to an integrated approach to management of insects and ecosystems that focuses on, and protects, ecosystem services.

Ecosystem services are the harvestable resources (including food, fresh water, fuel, building materials, industrial, and medical products) and cultural values (recreation, spiritual retreat, religious sites, etc.) that we obtain from ecosystems (natural, managed, and urban), along with ecosystem processes that are critical to producing these resources. Humans depend on these services for survival.

Protecting the ecosystem processes that produce these services is not optional. Insects influence these processes in fundamental ways. Their adaptations to environmental changes function in natural ecosystems to sustain ecosystem processes over long periods of time. Similar responses to anthropogenic changes appear to conflict with human interests, but in the absence of "pest" control, would function to restore a balance between plant growth, diversity, and natural rates of nutrient supply. Insects and how we manage insects will affect the ability of ecosystems to sustain delivery of these services.

Working with the Course Materials

Remember, this course covers an entire semester of work or the equivalent of a classroom course lasting 15 weeks. That means that each module in this course equals nearly a week of course work and will require the same time and effort on your part. *Do not expect to complete each module in a single study session. Understand, too, that if you choose to submit assignments at a very high pace, your instructor may not be able to grade your work at the same rate.*

Each module contains information, activities, and assignments organized under a consistent series of headings. Get familiar with how the module is organized.

Syllabus

Each module in this course is organized into the following sections: the Module Learning Objectives, the Reading Assignment, the Module Material, and the graded Module Assignment. You should work through these parts of the module in order. Specific recommendations are provided in a link to the course module instructions, which you should review before beginning the first module.

1. Complete the *Reading Assignment* from the textbook and then review the *Module Material*.

Important: PowerPoint's may include notes; best viewed by selecting the 'Note Pages' Presentation View, on the 'View' tab.

2. When you are ready, view, complete, and submit your *Module Assignment*.

Each module and unit is designed to meet particular objectives, identified at the beginning of each unit. Modules also include questions and exercises to demonstrate principles from that unit.

Suggested Study Techniques

- 1. Carefully review the module objectives to help you focus on the information that will be covered on the exams.
- 2. Concentrate on the reading assignments, the module lecture material, and any additional resources provided. This review should include a detailed examination of any illustrative problems and examples. After an assignment has been completed, a rapid re-reading of the related text and other materials is strongly recommended.
- 3. Put yourself on a definite schedule. Set aside a certain block of hours per day or week for this course and work in a place where distractions are minimal.
- Try to submit one assignment each week or at least every two weeks. Delays in submitting assignments usually result in lagging interest and the inability to complete the course.
- 5. Review your module assignments after they have been graded, paying special attention to any instructor feedback provided. (We suggest that you wait for assignment feedback before you submit subsequent assignments.)
- 6. Regardless of how you complete your graded assignments, keep in mind that module completion should not be your sole preparation for your exams. As with any college course, you should study for your exams.

Reading Assignments

To do well in this course, it is essential that you read and study all the course materials that precede the *Module Assignment*. Do not begin the module assignment until you have done so. For each type of assignment you prepare for this course, follow carefully the guidelines provided in the textbook and the course website.

You will read an average of 20 pages per module. Specific reading assignments will be given in each module.

Topic Outline

This course covers the following specific topics:

Module Topic

- 01 Introduction and Pre-Test
- 02 Humans Interactions with Insects
- 03 Mechanisms of Insect Responses to Environmental Changes
- 04 Insect Responses to Environmental Changes
- 05 Population Change in Time and Space
- 06 Mechanisms by Which Ecosystems Provide Services
- 07 Regulation and Stability of Ecosystem Processes

Mid-Course Examination

- 08 Anthropogenic Changes
- 09 Effects of Anthropogenic Changes and Management
- 10 Effects of Insects on Provisioning Services
- 11 Effects of Insects on Other Ecosystem Services
- 12 Value of Insect Effects on Ecosystem Services
- 13 New Management Approaches
- 14 Urban Population Responsibilities to Maintain Sustainable Services
- 15 Summary and Conclusions

Final Examination

Module Assignments

Specific instructions for completing Module Assignments are included in the course site with each assignment.

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Syllabus

The Pre-Test in Module 01 is simply a means to gauge student background and familiarity with material in this course. The Pre-Test will not be graded, but must be completed to continue to the next module.

Module Assignments will be either 1) a reflection on material covered, in which students must express how the material applies to their own experience or perception, or 2) an exercise in which the student will use information provided to reach a conclusion. Some assignments are interactive, requiring upload of JPEG images or use of GIS or Landsat Map, others only require an online text submission.

Please prepare your JPEG files for upload using the following naming convention:

CourseNumber_Version_Section_LastName_ModuleNumber_PhotoNumber

(Example: ENTM1001_1.2_1_jones_sam_M01_Photo01)

Access to, and Instructions for Landsat viewer are located in Module 13 Assignment on the course site.

Outside reading will not be required, but simple mathematics will be involved in some assignments. Assignments must be completed by providing typed responses in the designated text area. Correct spelling and grammar are required for assignments.

Carefully study the Module Material before you begin to prepare the Module Assignment. This study should include a detailed examination of the illustrative problems and examples, as well as the assigned reading.

You should submit each module assignment as soon as it is completed. Some courses have restrictions that require that a grade be received before you can submit additional assignments. Specific information on assignment submission is included in the Module Instructions. Please be sure to follow these instructions.

You must have a *grade posted in the Moodle grade book for the Module 15 Assignment in order to unlock access to the Final Exam.* Please allow at least 7 days for the final assignment grade to be posted in the gradebook.

Once you *submit* an assignment, you cannot revise it, so be sure to check your work. Your instructor will normally post a grade for your assignment within *seven calendar days*. Understand that occasional delays will occur, such as during holidays and semester breaks or if you submit several module assignments within the same week.

Do not rely too heavily on your textbook or other resource material when preparing your assignments. If you do, you may not realize until exam time that the perfect response you prepared for an assignment was only possible because you referred to resource material without really learning or understanding the material and concepts. Therefore, *you should attempt each assignment without referring to the resource material,* and if you find it necessary to look up an answer, be sure you have actually learned the concept and material rather than merely reflecting it in the answer.

Academic Integrity

Students in Online Distance Learning (ODL) courses must comply with the *LSU Code of Student Conduct*. Suspected violations of the academic integrity policy may be referred to LSU Student Advocacy & Accountability (SAA), a unit of the Dean of Students. If found responsible of a violation, you will then be subject to whatever penalty SAA determines and will forfeit all course tuition and fees.

Plagiarism

Students are responsible for completing and submitting their own course work and preparing their own modules. All work submitted in the course modules must be the student's own work unless outside work is appropriate to the assignment; all outside material must be properly acknowledged. It is also unacceptable to copy directly from your textbook or to use published answer keys or the teacher's edition of a textbook.

Collaboration

Unauthorized collaboration constitutes plagiarism. Collaborative efforts that extend beyond the limits approved by the instructor are violations of the academic integrity policy. Students who study together are expected to prepare and write their own individual work for submission and grading.

For more information and links to the *LSU Code of Student Conduct* and the SAA website, go to the ODL Academic Integrity policy on our website.

Examinations and Grading Policy

Grades will be based on reports from 15 module assignments (10 points each), a Mid-Course Exam (100 points), and the comprehensive Final Exam (150 points). Exams will consist of a combination of multiple-choice, short-answer and essay questions that will require synthesis of information from lectures and assignments. No dictionaries, books, or aids are allowed during the exam, as well, correct spelling and grammar are required.

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You will have a maximum of *three* hours to complete the exam.

- Module assignments count 10 points each.
- The Mid-Course Exam counts for 100 points.
- The Final Exam counts for 150 points.
- Course grade = total points earned.

The following grading scale applies for students who complete the course on or after October 15, 2015. Prior to that date, the scale will be the same, except that pluses and minuses will be dropped from the grade posted in the student's permanent record and transcript.

97% - 100% = A + 93% - 96% = A 90% - 92% = A - 87% - 89% = B + 83% - 86% = B 80% - 82% = B - 77% - 79% = C + 73% - 76% = C 70% - 72% = C - 67% - 69% = D + 63% - 66% = D 60% - 62% = D -0% - 59% = F

YOU MUST PASS THE FINAL EXAMINATION IN ORDER TO PASS THE COURSE

IMPORTANT: The final exam cannot be taken until you meet the following requirements. Under no circumstances may the final exam be taken earlier.

- 1. You must have been enrolled in the course for *at least three weeks*, regardless of when the modules and other exams are completed.
- 2. You must have a grade posted in the Moodle grade book for the Module 15 Assignment in order to unlock access to the Final Exam. Please allow at least 7 days for the final assignment grade to be posted in the gradebook.

To read the full exam policy and other policy statements, visit http://cms.outreach.lsu.edu/cms/CEHomePage.aspx. Click on *Extended Campus*, select *Online Distance Learning*, and then click the link for *Guideline & Policies*, then click *Policies*.

Taking Your Examinations

You are *required* to create a Louisiana State University ODL ProctorU account and to take your examinations through ProctorU, a remote proctoring service that allows you to take exams anywhere with internet access. Information on creating your ProctorU account can be found in the *Getting Started* module. You cannot use an account created through another university, so if you already have an account, you will still need to create an account associated with LSU Online Distance Learning (ODL).

The ProctorU website provides links you can use to find out how ProctorU works and to check your computer to see that it meets the technical requirements. In addition, to test using ProctorU, you need access to a web cam with a microphone (built-in or external), headphones or working speakers, and high speed internet to use this service. A complete list of technical requirements is available from the ProctorU website.

You should schedule your exams about a week before you are ready to take them in order to avoid any additional charges.

Transcript Information

After you have completed this course, your grade will be filed with the Office of the University Registrar. If a transcript is needed, it is your responsibility to make a request to the registrar. If you would like to order a transcript, visit the Office of the University Registrar Transcript Requests page to view your options (http://sites01.lsu.edu/wp/registraroffice/student-services/transcript-request/).

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