TROPICAL ENTOMOLOGY
ENY 5566
Summer A 2013
Credits: 3

PRINCIPAL INSTRUCTORS:

Ronald D. Cave
Indian River REC
772-468-3922 ext. 145
rdcave@ufl.edu

Jacqueline Y. Miller
McGuire Center for Lepidoptera and Biodiversity Studies
352-846-2000 ext 480
jymiller@ufl.edu

Michelle S. Samuel-Foo
Food Science and Human Nutrition Dept.
352-392-1978 ext 406
mfoo@ufl.edu

GUEST LECTURERS:

Jaret Daniels
Entomology and Nematology Dept.
352-273-3916
jcdnla@ufl.edu

Jamie Ellis
Entomology and Nematology Dept.
352-273-3924
jelles@ufl.edu

Philip Kaufman
Entomology and Nematology Dept.
352-273-3975
pkaufman@ufl.edu

Andrea Lucky
Entomology and Nematology Dept.
352-273-3952
alucky@ufl.edu

Jorge Peña
Tropical REC
305-246-7001 ext. 223
jepena@ufl.edu

Rudi Scheffran
Ft. Lauderdale REC
954-577-6312
rhsc@ufl.edu

COURSE OBJECTIVES:

This course provides the student an overview of the ecology, diversity, and agricultural and veterinary importance of insects in the tropics. Insects are the most diverse multicellular organisms in the tropics. Their roles in nature have diversified into most habitats where they are fungivores, herbivores, necrophages, coprophages, saprophages, parasitoids, parasites, and predators. They provide critical ecosystem services such as decomposition, nutrient recycling, pollination, and biological control. Tropical insects have been used as bioindicators of ecosystem health and conservation needs, in butterfly farming, live material in insect zoos, and showcase specimens in literature, art, and sculpture.

In this course, the student will learn about:
1. basics concepts about the tropics and tropical ecosystems;
2. faunistic richness of insects in the tropics;
3. seasonality and survival in tropical environments;
4. ants and termites in tropical environments;
5. insect conservation;
6. pollination of tropical plants by insects;
7. tropical insect-plant interactions and associations with plants such as bromeliads and orchids;
8. integrated pest management in tropical agriculture;
9. economic importance of tropical insects in tropical crops;
10. medical and veterinary importance of tropical insects.

**COURSE DESCRIPTION:**

The **NARRATED POWERPOINT PRESENTATIONS** (PPTs) form a series of lectures covering 11 basic themes. All presentations are available on Sakai. These PPTs should be viewed before the appropriate discussion session (see Course Outline) so that the student is capable of answering questions posited during the session.

The **READING ASSIGNMENTS** should be read before the student arrives to the appropriate discussion session. The purpose of these readings is to provide further information on the lecture topics for discussion in class.

The **VIDEOCONFERENCED DISCUSSION SESSIONS** are periods during which the students will have an opportunity to ask questions, request clarification on specific topics in the narrated PPTs and reading assignment, and share experiences and opinions. In the remaining time, each student will be question for which they must present a response to the class. Questions for each discussion session will be delivered to all students a few days before the appropriate discussion session, but assignment of specific questions to students will not be done until the appropriate discussion session.

The **EXAMS** are proctored and closed-book. The midterm exam will cover all lecture and reading assignments up to and including “Pollinators of tropical plants”. The final exam will cover all lectures and reading assignments after the midterm exam. The final exam is not cumulative. The format of the exam questions will include, but not exclusive to, multiple choice, lists, and short essay. The time limit for the exam is 75 minutes.

The **ORAL PRESENTATION** is a synthesis of information from literature and/or experience on a topic directly related to any aspect of tropical entomology. The topic of the presentation will be decided by mutual agreement between Dr. Cave and the student. The topic of the presentation must finalized no later than May 24, 2013. No two presentations may be done on the same topic, so decide on a topic and have it finalized with Dr. Cave soon. PowerPoint slides must be utilized as visual aids and these are to be delivered to the instructor in their final form no less than 2 days before the oral presentation, along with a maximum 300-word abstract. The duration of the oral presentation shall be 12-15 minutes. There will be a question and discussion period with the class immediately following the oral presentation. After the 300 words, the abstract must list a least five references and no more than eight. At least three journal articles or books must be included in the list and no more than four websites; provide the complete reference of all literature cited and the title and URL for all websites cited. Use of information gathered from Wikipedia is not allowed.
ATTENDANCE at all videoconferenced discussion periods is required. Interactive discussion is a critical component of this class, so students should come prepared by having read the assigned reading material and viewed the lecture presentations, and they should be willing to share opinions, perceptions, and experiences in class. Ten points will be awarded for attendance at any 12 discussion sessions from May 15 to June 17; therefore, students may miss one discussion session without penalty.

Student learning assessment:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
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<tbody>
<tr>
<td>Two exams (100 points each)</td>
<td>200 pts</td>
</tr>
<tr>
<td>Oral presentation (90%) and abstract (10%)</td>
<td>100 pts</td>
</tr>
<tr>
<td>Attendance</td>
<td>120 pts</td>
</tr>
<tr>
<td>TOTAL</td>
<td>420 pts</td>
</tr>
</tbody>
</table>

Grading scale:

A    = 90-100%
B+   = 86-89%
B    = 80-85%
C+   = 76-79%
C    = 70-75%
D+   = 66-69%
D    = 60-65%
F    = 0-59%

Academic Honesty, Software Use, Campus Helping Resources, Services for Students with Disabilities

Academic Honesty

In 1995 the UF student body enacted an 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 students.

The Honor Pledge: 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."

Students should report any condition that facilitates dishonesty to the instructor, department chair, college dean, Student Honor Council, or Student Conduct and Conflict Resolution in the Dean of Students Office.

(Source: 2012-2013 Undergraduate Catalog)

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.
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 crises or personal problems that interfere with their general well-being are encouraged to utilize the university’s counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

- University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, www.counseling.ufl.edu/cwc/
  Counseling Services
  Groups and Workshops
  Outreach and Consultation
  Self-Help Library
  Training Programs
  Community Provider Database

- Career Resource Center, First Floor JWRU, 392-1601, www.crc.ufl.edu/

Services for 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, 352-392-8565, www.dso.ufl.edu/drc/
Course Outline 2013

1. May 13-14
   - Class May 13: Introductions of instructors and students, discussion on course format, syllabus, and student performance expectations
   - Chapter 1: Ecological diversity and the tropics – R. Cave
   - View PPT of Chapter 2: Faunistic richness of insects in the tropics
   - Reading assignment:

2. May 15-16
   - Class May 15: Discuss faunistic richness of insects in the tropics – J. Miller
   - View PPT of Chapter 3: Seasonality and survival in tropical environments
   - Reading assignment:

3. May 17-19
   - Class May 17: Discuss seasonality and survival in tropical environments – J. Miller
   - View PPT of Chapter 4: Ants in tropical ecosystems
   - Reading assignment:

4. May 20-21
   - Class May 20: Discuss ants in tropical ecosystems – A. Lucky
   - View video of Chapter 5: Termites in tropical ecosystems
   - Reading assignment:

5. May 22-23
   - Class May 22: Discuss termites in tropical ecosystems – R. Scheffran
   - View PPT of Chapter 6: Insect conservation
   - Reading assignment:

6. May 24-28
   - Class May 24: Discuss insect conservation – J. Daniels and R. Cave
   - View PPT of Chapter 7: Pollinators of tropical plants
   - Reading assignment:

7. May 29-30
   - Class May 29: Discuss pollinators of tropical plants – J. Ellis

8. May 31 – June 2:
   - Class May 31: Midterm exam
   - View PPT of Chapter 8: Plant associations I
   - Reading assignment:
9. June 3-4
   • Class June 3: Discuss plant associations I – R. Cave
   • View PPT of Chapter 9: Plant associations II
   • Reading assignment:

10. June 5-6
    • Class June 5: Discuss plant associations II – R. Cave
    • View PPT of Chapter 10: IPM in tropical agriculture
    • Reading assignment:

11. June 7-9
    • Class June 7: Discuss IPM in tropical agriculture - M. Samuel-Foo
    • View PPT of Chapter 11: Economic importance of tropical insects I

12. June 10-11
    • Class June 10: Discuss economic importance of tropical insects I – R. Cave
    • View PPT of Chapter 12: Economic importance of tropical insects II

13. June 12-13
    • Class June 12: Discuss economic importance of tropical insects II – R. Cave and J. Peña
    • View PPT of Chapter 13: Economic importance of tropical insects III

14. June 14-16
    • Class June 14: Discuss economic importance of tropical insects II – R. Cave and M. Samuel-Foo
    • View PPT of Chapter 14: Medical and veterinary importance of tropical insects
    • Reading assignment:

15. June 17
    • June 17: Discuss medical and veterinary importance of tropical insects – P. Kaufman

16. June 19
    • Class June 19: Student presentations

17. June 21
    • Class June 21: Final exam