Course Number: 3451C/6905
Credit Hours: 3
Class location: TBA
Class meeting times: TBA

**COURSE DESCRIPTION:** Provides a theoretical and empirical overview of insect behavior, ranging from physiology underlying behavior to the evolution of behavioral diversity. Focus will be on recent and current research on insect behavior, the diversity of approaches for studying it, and how this knowledge can be applied to solve human challenges.

**INSTRUCTOR:** Dr. Lisa Taylor
2211 Steinmetz Hall (office)
Entomology and Nematology Department
Lisa.taylor@ufl.edu
Office phone: 352-273-3937

**OFFICE HOURS:** Specific times TBA, or by appointment (email to schedule a time).

**COURSE WEBSITE:** This course uses the Canvas course management system on E-Learning. Students should follow the provided URL and log on with their GatorLink ID and password: http://lss.at.ufl.edu

**REQUIRED TEXT:** There will be no required textbook for this course; each week you will be assigned papers from the scientific literature (posted in Canvas). However, I highly recommend the following textbook, which provides excellent coverage of many of the general topics we will discuss in this course.


**PREREQUISITE KNOWLEDGE AND SKILLS:** At least one semester of a college-level biology or entomology course is required, or permission of the instructor.

**COURSE LEARNING OBJECTIVES:** By the end of this course, students will be able to:

1. Give examples of how insect behavior has evolved to make insects one of the most successful and diverse taxonomic groups on the planet (e.g., give examples across a range of insect taxa of how they find food, how they find mates, how they protect themselves from predators, etc.)

2. Based on observations of insect behavior in nature and in the laboratory, develop hypotheses for the function of the behaviors observed
3. Describe methods employed to study insect behavior and be able to propose specific experiments to logically test hypotheses
4. Design an independent research study and develop a written research proposal
5. Design and conduct experiments (including collecting and analyzing behavioral data) to test hypotheses about the functions of insect behavior
6. Write a scientific paper that summarizes and clearly presents the findings of your own research on insect behavior
7. Evaluate and critically assess articles from the primary literature in the field of insect behavior
8. Describe how scientists are using our modern understanding of insect behavior to solve human problems (e.g., pest management, design of cities)

INSTRUCTIONAL METHODS: This course will include both lecture and laboratory meetings. Lecture periods will be devoted to introducing and discussing new content, while laboratory sessions will be devoted to hands on activities and independent research projects. All course material will be available through Canvas, separated into weekly modules. The majority of your grade in this course will be calculated from two exams (midterm and final), a written research proposal, and a final research paper. Quizzes, worksheets, class participation, and other activities will make up a smaller (but still significant) portion of your grade. See below for the specific point breakdown.

COURSE COMMUNICATIONS: If you have questions either before or during the course, feel free to email me directly at any time or send me a message via Canvas. If you have general questions that you think might be relevant to other students in the course (i.e., questions about assignments, course logistics, or course material), I’d encourage you to post such questions as a discussion in Canvas.

TENTATIVE COURSE SCHEDULE (SPRING 2016):

FINAL EXAM DATE: TBA

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<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Graded assignments due this week</th>
<th>Exams and quizzes this week</th>
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<tr>
<td>1</td>
<td>introduction and framework for studying behavior</td>
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<td>quiz 1</td>
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<td>2</td>
<td>social behavior and insect societies</td>
<td>in-class worksheet: three proposed research ideas</td>
<td>quiz 2</td>
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<tr>
<td>3</td>
<td>communication systems (visual, chemical, acoustic, tactile)</td>
<td>in-class worksheet: research proposal topic and outline</td>
<td>quiz 3</td>
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<td>4</td>
<td>insects as prey: defenses against predators</td>
<td>submit preliminary bibliography</td>
<td>quiz 4</td>
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<tr>
<td>5</td>
<td>insects as predators and parasites</td>
<td>submit rough draft of research proposal</td>
<td>quiz 5</td>
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<tr>
<td>6</td>
<td>plant-insect interactions</td>
<td>proposal peer-reviews due</td>
<td>quiz 6</td>
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<tr>
<td>7</td>
<td>navigation, dispersal, and habitat selection</td>
<td>submit final draft of research proposal</td>
<td>quiz 7</td>
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<tr>
<td>8</td>
<td>finding mates and courtship</td>
<td></td>
<td>quiz 8, midterm exam</td>
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<td>9</td>
<td>SPRING BREAK</td>
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<td>10</td>
<td>diversity of insect mating systems</td>
<td>in-class worksheet: data analysis plan</td>
<td>quiz 9</td>
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<tr>
<td>11</td>
<td>student-driven topics (TBD)</td>
<td>in-class worksheet: preliminary data summary and analysis</td>
<td>quiz 10</td>
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<tr>
<td>12</td>
<td>parental care</td>
<td>rough draft of complete research paper due</td>
<td>quiz 11</td>
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<tr>
<td>13</td>
<td>hormones and behavior</td>
<td>research paper peer-reviews due</td>
<td>quiz 12</td>
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<td>14</td>
<td>applying insect behavior to pest management</td>
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<td>quiz 13</td>
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<tr>
<td>15</td>
<td>using insect behavior to inspire human design</td>
<td>final research paper due</td>
<td>quiz 14</td>
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<tr>
<td>16</td>
<td>course wrap up and review</td>
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<td>final exam, course evaluations</td>
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**COURSE POLICIES:**

**GRADES:** All assignments and exams will be returned within one week, meaning that at any point in the semester, you should be able to calculate your current grade for the course. To be fair to all students, I follow the rules and point system laid out in this syllabus very closely. If you ever have a question about a score you earn, I would be happy to discuss it. I do ask that you address all questions about grading of particular assignments within two weeks of receiving a grade on that assignment.

Your final grade for this course will be based on the percentage of points that you earn out of a possible total of 650 points. The point breakdown is the following:
**Assessment** | **Details** | **Total points** | **% of grade**
--- | --- | --- | ---
Weekly quizzes | 14 quizzes at 5pts each | 70 | 10.8
Exams | midterm at 100pts and cumulative final at 100pts | 200 | 30.8
In-class worksheets | 4 worksheets at 10pts each | 40 | 6.2
Research proposal | including preliminary bibliography (10pts), rough draft (50pts), and final draft (100pts) | 160 | 24.6
Research paper | including rough draft (50pts) and final draft (100pts) | 150 | 23.1
Peer-reviews of classmates' research proposals and papers | including peer reviews of proposals (10pts) and final papers (10pts) | 20 | 3.1
Class participation | | 10 | 1.5
**GRAND TOTAL** | | **650** | |

Grades will be calculated as follows:
A 100-90%
B+ 89-85%
B 84-80%
C+ 79-75%
C 74-70%
D+ 69-65%
D 64-60%
E 59% and below

*Final percentages will be rounded to the nearest whole number to determine your final grade*

For information on current UF policies for assigning grade points, see:
[http://www.isis.ufl.edu/minusgrades.html](http://www.isis.ufl.edu/minusgrades.html)

**ATTENDANCE AND MAKE-UP POLICY:**

Attendance in this course is crucial for success; you must be present in both lecture and lab to take quizzes, exams, and complete in-class activities and assignments.

Requirements for make-up exams, assignments and other work are consistent with university policies that can be found at:
[https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx](https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx)
UF policy states that “in general, acceptable reasons for absence from or failure to participate in class include illness, serious family emergencies, special curricular requirements (e.g., judging
trips, field trips, professional conferences), military obligation, severe weather conditions, religious holidays and participation in official university activities such as music performances, athletic competition or debate. Absences from class for court-imposed legal obligations (e.g., jury duty or subpoena) must be excused.”

If your absence falls into one of the categories above (and can be documented), you can make special arrangements with the instructor to make up missed work, including exams. Where possible, contact the instructor at least one week BEFORE the due date (e.g., in the case of religious holidays, etc.). In cases of unforeseen emergencies (e.g., medical emergency documented with a doctor’s note), contact the instructor as soon as possible following the emergency. Such situations will be handled on a case-by-case basis.

**QUIZ/EXAM POLICY:** Quizzes will be given weekly either in lecture or lab; there will be a quiz each week, but the exact timing of the quiz will not be announced ahead of time, so be prepared and arrive at class on time. Exams will cover material from both lecture and lab and the final exam is cumulative.

**POLICY ON LATE ASSIGNMENTS:** Late assignments will be accepted, but will be deducted 20% per day late. This means that assignments that are 5 (or more) days late will earn no credit. Assignments turned in via Canvas must be submitted by 11:59pm on the day they are due. In-class assignments are typically due in hard copy by the end of the class period.

**COURSE TECHNOLOGY:** This course will rely heavily on Canvas (http://lss.at.ufl.edu). All students must have access to a computer with a reliable Internet connection (a high speed connection is recommended). Please be sure to have a backup option in case your computer or Internet connection fails. See the ‘Getting Help’ section below for technical assistance with Canvas.

**UF POLICIES:**

**UNIVERSITY POLICY ON ACCOMMODATING 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. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

Disability Resource Center
ACADEMIC HONESTY
As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following 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.” You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: http://www.dso.ufl.edu/SCCR/honorcodes/honorcode.php

NETIQUETTE: COMMUNICATION COURTESY: All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats. Take a moment to read this netiquette guide for online courses: http://teach.ufl.edu/wp-content/uploads/2012/08/NetiquetteGuideforOnlineCourses.pdf

ONLINE COURSE EVALUATION PROCESS:
Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. These evaluations are conducted online at: https://evaluations.ufl.edu.

Evaluations are typically open for students to complete during the last two or three weeks of the semester; students will be notified of the specific times when they are open. Summary results of these assessments are available to students at: https://evaluations.ufl.edu/results.

Each online distance learning program has a process for, and will make every attempt to resolve, student complaints within its academic and administrative departments at the program level. See http://distance.ufl.edu/student-complaints for more details.
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.

GETTING HELP:

For issues with technical difficulties for E-learning in Canvas, please contact the UF Help Desk at:

- Learning-support@ufl.edu
- (352) 392-HELP - select option 2
- https://lss.at.ufl.edu/help.shtml

** Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from LSS when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

Other resources are available at http://www.distance.ufl.edu/getting-help.

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
- Wellness Coaching

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