Insects are the most diverse group of animals on the planet... and also one of the most fascinating! This course will provide students with a conceptual framework for understanding the wonderful world of insects, including their diversity, evolution, morphology, physiology, behavior, and ecology. We will also explore the many ways in which insects affect our lives (as both pests and allies) and apply those fundamental concepts to address questions in the fields of pest management, medicine, insect conservation, biotechnology, and more. By the end of this course, students will have a firm foundation in basic and applied insect biology, and thus be prepared for upper-level courses in entomology and related disciplines. This course complements ENY 3005L (Principles of Entomology lab), which provides students with hands-on experience in insect identification and entomology lab techniques.

**Catalog description:** Introduces principles of insect study, including insect structure, insect development, evolutionary insect history, and its ecological significance. (B)

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**Instructor Info:**

**Dr. Anthony Auletta**

anthonyauletta@ufl.edu

(352) 273-3954

**Office:** 3102 Steinmetz Hall

**Drop-In Hours:** Tuesdays, 11:00am - 12:00pm and Wednesdays, 3:00pm - 4:00pm (or by appointment: calendly.com/anthonyauletta)

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**Student Learning Outcomes**

By the end of the course, students will be able to:

- **Distinguish** insects from other invertebrates, including related groups of arthropods.
- **Identify** the major orders of insects (as well as select insect families) and **describe** the natural history of these groups.
- **Explain** fundamental concepts in entomology, including insect morphology and physiology, insect evolution and diversification, the ecological impacts of insects, and insect behavior.
- **Apply** those fundamental concepts to address questions in fields such as pest control, medicine, forensics, conservation, and biotechnology.
- **Critically read** and **evaluate** primary scientific literature, and effectively **communicate** those findings to a broad audience.

In working towards these goals, students will hopefully also foster a greater curiosity & appreciation for insects and the many important roles they play (both in the natural world and human society).
Teaching Assistants

We are fortunate to have an excellent teaching assistant joining us this semester; do not hesitate to contact your TA if you have any questions about the course:

Yichen Li
Graduate Teaching Assistant
Email: yli10@ufl.edu
Office Hours: By email appointment

Readings & Course Materials

Textbooks & Readings: The following textbook is required for this course:


Required readings will be assigned from this textbook starting in Week 2 of the semester—so make sure to purchase your copy by then! Due dates for the readings will be posted on Canvas; students are expected to complete all required readings before the corresponding class session.

Additional readings and resources may be posted on Canvas throughout the semester.

Computer Requirement: All students must have regular access to a computer with a reliable internet connection to access assignments and course materials on Canvas.

Communication & Conduct

Meeting Policy: If you need assistance with any aspect of the course, we encourage you to come to drop-in office hours (details on Page 1 of this syllabus). Alternatively, you can schedule a 1-on-1 meeting with Dr. Auletta via Calendly (http://calendly.com/anthonyauletta) or with your TA via email. Outside of class and office hours, email is our preferred method of contact. We will do our best to respond to messages within 48 hours (not including weekends or holidays). As a courtesy, please check the syllabus and Canvas before reaching out; answers to many of your questions can be found there!

Canvas: Important announcements and updates will be regularly posted to the course Canvas website, so be sure to check Canvas frequently! To ensure that you do not miss anything, please ensure that your Canvas profile is set to receive notifications.

Email Accounts: It is UF policy that you use your GatorLink account or Canvas when emailing your instructors; we will not answer emails sent from other accounts (e.g., personal Gmail, etc).
**Professional Conduct:** All members of the class are expected to conduct themselves in a professional and respectful manner at all times. Please use appropriate etiquette when interacting with your peers and instructors, including during class, on Canvas, and via email. Students who behave disrespectfully or disruptively will be reported to the Dean of Students Office.

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**Projects, Assignments, & Exams**

**Weekly Review Assignments:** Throughout the semester, you will be assigned short review assignments based on concepts we’ve recently covered in class. These reviews will consist of multiple choice, fill-in-the-blank, and free response questions. They are designed to help you keep up with the readings, review course material in preparation for the exams, and think more deeply about the course content. There will be one review assignment due each Friday, with a few exceptions—see the Course Schedule below for due dates. At the end of the semester, your lowest review assignment grade will be dropped.

**Hexapod Order Quiz:** There will be one in-class quiz in the course, which will assess your knowledge of the hexapod orders that we’ll cover during the first few weeks of the semester. This quiz will primarily consist of fill-in-the-blank questions.

**Exams:** There will be three exams in the course—two preliminary exams during the semester, as well as a cumulative final exam during Finals Week. These exams are designed to assess your mastery of the course content and will consist of multiple choice, fill-in-the-blank, and free response questions.

**Group Project:** Throughout the course, each student will work in a small team on a group project in which they research a topic in entomology and present it in the form of an infographic. The goal of this project is to help you practice effectively engaging with the primary literature, which is a crucial skill for any scientist. Additionally, this project will allow you to further explore an aspect of insect biology that is of interest to you. More information about the project will be presented in class during the beginning of the semester and also posted on Canvas. The project will be divided into multiple parts, to be submitted at different points during semester. The due dates for each part are listed later in this syllabus (see the Course Schedule).

**Extra Credit:** Extra credit opportunities may be posted at the instructor’s discretion only. Any other extra work submitted in order to raise a grade will not be accepted and requests for additional extra credit will not be considered.

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**Submitting assignments:** All assignments must be submitted electronically via Canvas unless otherwise noted. Emailed or paper submissions for Canvas assignments will not be accepted. You are responsible for ensuring that all your work is uploaded correctly and completely by the deadline. Corrupted files will be treated as missing work (= 0 grade) until they are reuploaded correctly and late penalties will apply if your resubmission is past the deadline. So, please always double check your files right after you upload them! If you
Grading Policies

This course uses a points system for grading. The anticipated maximum that can be earned in the course is **700 points**, distributed as follows:

- Weekly Reviews: **150 pts (15 pts ea.)**
- Hexapod Order Quiz: **40 pts**
- Preliminary Exams: **200 pts (100 pts ea.)**
- Final Exam: **150 pts**
- Group Project: **100 pts**
- Class Participation: **60 pts**

At the end of the semester, your total course grade will be converted to a letter grade using the scale below:

- 93 - 100% = A
- 90 - 92.9% = A-
- 87 - 89.9% = B+
- 83 - 86.9% = B
- 80 - 82.9% = B-
- 77 - 79.9% = C+
- 73 - 76.9% = C
- 70 - 72.9% = C-
- 67 - 69.9% = D+
- 63 - 66.9% = D
- 60 - 62.9% = D-
- below 60% = E

Please note that the instructors do not round up grades—requests to do so will not be considered.

For current UF policies on assigning grade points, consult the following policy website: [https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx](https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx)

**Disputing a grade:** If you wish to dispute a grade for any exam/assignment, you must contact the instructors in writing after the assignment has been returned. In your message, you must include a specific explanation for why you think the grade is incorrect and how you think it should be changed. An instructor will then arrange a meeting with you to discuss the issue and determine whether or not the grade should be changed. The grade assigned following this meeting will be final.
Attendance & Participation

Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at: https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies.

The learning experience is greatest when everyone in the class is present and contributes; if you are absent, you will not be able to share your insights during class or benefit from the insights of your peers and instructors. Thus, all students are expected to attend every class session on time and stay for the entire session. Students are also expected to be fully prepared for and engaged in each session—this includes completing all required readings/videos, submitting all assignments on time, paying attention during class, and actively participating in all class activities. Participation in our class sessions is worth 60 points (≈9% of your final course grade). Your participation grade will be calculated based on the percentage of class sessions in which you are present for the entire time and complete the assigned in-class activities (to be turned in at the end of each class).

Since this is a face-to-face course, students will not have the option to join remotely via Zoom under any circumstances. The instructor will not record the class sessions.

Late Work & Make-Up Assignments / Exams

Policy on Late Work: All assignments are due by the date and time indicated on the assignment page in Canvas. For all assignments except exams and quizzes, there is a 12-hour grace period after the deadline during which you may submit the assignment without incurring late penalties. If an assignment is submitted after that grace period, 20% of its total point value will be deducted for every day that it is late. Please note that credit cannot be earned for an assignment after that assignment has been graded and returned to the rest of the class. Late work will not be accepted after the deadline for the final assignment in the course.

Extensions: Extensions for assignments will be considered on a case-by-case basis (and granted at the instructor’s discretion) only in the event of unforeseen emergencies. In such a case, you must contact the instructor as soon as possible to discuss your situation. You must also submit appropriate documentation of your emergency in a timely manner; you can do so via the official Instructor Notification portal: https://care.dso.ufl.edu/instructor-notifications. No extensions will be granted for students who miss a deadline for any other reason.

A note about deadlines: Remember, the due date doesn’t have to be the “do” date! In other words, I encourage you to work on your assignments in advance—don’t wait until right before the deadline to submit your work! Last-minute computer problems or other non-emergency situations that arise right before the deadline are not valid reasons for requesting an extension; such requests will not be considered and late penalties will be applied to your work if it is not submitted before the deadline.
**Make-Up Assignments:** If you miss class due to an excusable absence, it is your responsibility to contact the instructor as soon as possible to discuss options for making up the work that you missed. As noted above, the instructors may ask for **valid documentation** of your absence before allowing make-up work to be submitted. Make-up assignments will not be provided for students who miss class for unexcused absences or who fail to make arrangements with the instructor in a reasonable time frame.

**Make-Up Exams:** Exams and quizzes must be taken on their **scheduled dates and times** (as indicated in the Course Schedule below). Make-up exams/quizzes (or an incomplete course grade) will only be offered to students who miss an exam/quiz due to an **unforeseen emergency**. In this case, you must contact the instructor as soon as possible and also submit **appropriate documentation** of your emergency (e.g., through the official Instructor Notification portal: [https://care.dso.ufl.edu/instructor-notifications](https://care.dso.ufl.edu/instructor-notifications)). The make-up exam/quiz will be similar in format to the original, but will consist of different questions. If you miss an exam/quiz for any other reason, you will not be permitted to make it up and will earn a grade of 0 for it. Remember, personal travel/vacations are **not** excusable absences, so students will **not** be allowed take a make-up exam to accommodate personal travel plans.

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### Course Schedule

Below is a tentative* schedule of topics & assignments for the semester. Readings and videos for each session will be posted on Canvas and must be completed before the start of class. All assignments must be submitted by the end of the class period on the due date listed below, unless otherwise noted- see Canvas for the most up-to-date deadlines for assignments!

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Topics</th>
<th>Assignments Due</th>
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<tbody>
<tr>
<td>1</td>
<td>Jan. 10 (Tu)Jan. 12 (Th)</td>
<td>Course Intro &amp; The Importance of InsectsOverview of Arthropod Diversity</td>
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<td>2</td>
<td>Jan. 17 (Tu)Jan. 19 (Th)</td>
<td>Evolutionary Origins of the InsectsThe Insects Take Flight</td>
<td>Review #1 (1/20)</td>
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<tr>
<td>3</td>
<td>Jan. 24 (Tu)Jan. 26 (Th)</td>
<td>Diversification of the InsectsMetamorphosis &amp; Holometaboly</td>
<td>Review #2 (1/27)</td>
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<td>4</td>
<td>Jan. 31 (Tu)Feb. 2 (Th)</td>
<td>The “Big 4” Insect OrdersExternal Anatomy &amp; Molting</td>
<td>Project Part 1 (1/31)Review #3 (2/3)</td>
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<tr>
<td>5</td>
<td>Feb. 7 (Tu)Feb. 9 (Th)</td>
<td>External Anatomy &amp; MoltingInternal Anatomy &amp; Physiology</td>
<td>Review #4 (2/10)</td>
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<td>6</td>
<td>Feb. 14 (Tu)Feb. 16 (Th)</td>
<td>Internal Anatomy &amp; Physiology</td>
<td>Review #5 (2/17)</td>
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<td>7</td>
<td>Feb. 21 (Tu)Feb. 23 (Th)</td>
<td>Internal Sensory Biology &amp; BehaviorExam #1 (Thursday)</td>
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<tr>
<td>Date</td>
<td>Instructors</td>
<td>Course Content</td>
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<td>Feb. 28</td>
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<td>Insect Sensory Biology &amp; Behavior Project Part 2 (2/28) Review #6 (3/3)</td>
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<td>Mar. 2</td>
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<td>Mar. 7</td>
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<td>Insect Courtship &amp; Mating                                                    Review #7 (3/10)</td>
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<td>Mar. 9</td>
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<td>Mar. 14</td>
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<td>Spring Break- NO CLASS!</td>
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<td>Mar. 16</td>
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<td>Mar. 21</td>
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<td>Social Insects                                                               Review #8 (3/24)</td>
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<td>Mar. 23</td>
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<td>Mar. 28</td>
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<td>Insect-Plant Interactions                                                    Project Part 3 (3/28) Review #9 (3/31)</td>
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<td>Mar. 30</td>
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<td>Apr. 4</td>
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<td>Predators &amp; Parasites                                                        Exam #2 (Thursday)</td>
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<td>Apr. 6</td>
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<td>Apr. 11</td>
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<td>Integrated Pest Management                                                   Review #10 (4/14)</td>
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<td>Apr. 13</td>
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<td>Apr. 18</td>
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<td>Medical &amp; Veterinary Entomology                                              Review #11 (4/21)</td>
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<td>Apr. 20</td>
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<td>Additional Applications of Entomology</td>
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<td>May 1</td>
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<td>Final Exam                                                                   3:00pm – 5:00pm in 1031 Steinmetz Hall</td>
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* Although we will do our best to adhere to this schedule, it may be adjusted during the semester to accommodate opportunities, disruptions, and other circumstances. These changes will be communicated clearly via Canvas.

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**List of Important Dates**

Key dates to remember are below– be sure to add them to your calendar now! Due dates for other assignments are listed in the Course Schedule above and/or on Canvas.

- February 2: Hexapod Order Quiz (in class)
- February 23: Preliminary Exam #1 (in class)
- March 11 - 18: Spring Break (no class)
- April 6: Preliminary Exam #2 (in class)
- April 25: Term Project- Final Infographic due
- May 1: Final Exam (3:00pm – 5:00pm in 1031 Steinmetz Hall)
Policy on Academic Honesty & Integrity

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/process/student-conduct-honor-code.

Instructor’s note: Any action that subverts the learning goals of the course (or a particular course activity) will be treated as academic misconduct and reported to the Dean of Students Office. This includes— but is not limited to— cheating or assisting others in cheating, plagiarism (i.e., misrepresenting someone else’s work as your own, whether it is copied directly or paraphrased), self-plagiarism (i.e., copying/reusing work that you have submitted previously), using ChatGPT or other AI tools for assignments without instructor permission, collaborating with others when it is not permitted, fabricating data, lying to an instructor, and bad faith attempts to undermine the intent of a learning activity. In addition to being reported to the Dean of Students Office, a student will earn a grade of 0 on any assignment that is plagiarized or that otherwise violates these academic honesty policies. This 0 grade is irreversible— it cannot be dropped and the assignment cannot be resubmitted for a different grade. After the first offense, any subsequent incidents of plagiarism or academic honesty will result in an automatic E (= failing grade) in the course. Please see the Guide to Academic Honesty & Integrity on Canvas for more information.

Accommodations 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. 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.
Instructor’s note: I want you to succeed in this course! To ensure your accommodations are in place when you need them, please be sure to have your DRC accommodation letter sent to the instructor as early as possible—ideally at the beginning of the semester.

Campus Helping Resources

Students experiencing crises or personal problems that interfere with their general wellbeing 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
Counseling Services, Groups and Workshops, Outreach and Consultation, Self-Help Library, Wellness Coaching
3190 Radio Road (352) 392-1575 https://counseling.ufl.edu

Other campus resources include:

U Matter, We Care: http://umatter.ufl.edu

Academic Resources (includes tutoring services, study skills workshops, 1-on-1 consultations, and more): https://academicresources.clas.ufl.edu

Career Connections Center: Reitz Student Union- First Floor; (352) 392-1601; http://career.ufl.edu

Student Success Initiative: http://studentsuccess.ufl.edu

Student Complaints: Complaints regarding on-campus courses may be filed at https://sccr.dso.ufl.edu/policies/student-honor-code-studentconduct-code. For online courses, please see https://distance.ufl.edu/getting-help/student-complaint-process.

Policy on Recording Class Sessions

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are: (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in,
or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A “class lecture” is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and an instructor during a class session.

Publication without permission of the instructor is prohibited. To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third-party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

Use of Electronic Devices

You may use personal electronic devices such as laptops or tablets in class, unless otherwise noted by the instructor. However, it is your responsibility to make sure that you use your devices in a professional and courteous manner. This includes:

- Limiting device use only to activities that are directly related to your learning of course material, such as taking notes or following along with the lecture slides. Using your devices for any other purpose is not allowed in the classroom; doing so is disrespectful to the instructor, distracting to your fellow students, and robs you of a quality learning experience.

- Keeping your devices muted at all times to prevent disrupting others around you.

- Quietly stepping out into the hall if you must take a call or contact someone. I understand that emergencies can happen and will not prevent you from attending to them, but I also ask that you try to minimize disruptions to your peers.

If your device use is disruptive or inappropriate, you will be asked to put away your device. Students who repeatedly violate this policy will no longer be allowed to use devices in class and may be reported to the Dean of Students Office.
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.

Course Evaluations

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. Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/students. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl. Summaries of course evaluation results are available to students at: https://gatorevals.aa.ufl.edu/public-results.

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It is your responsibility to ensure that you fully understand the policies outlined in this syllabus as well as the policies of the university as they relate to this course. By remaining enrolled in this course, you agree that you have read and understood all of these policies and that you will be held accountable to them.

At their discretion, the instructors may change aspects of the course during the semester to accommodate new opportunities, unforeseen disruptions, or other circumstances. These changes will be communicated clearly in class and through Canvas. The current version of the syllabus will always be available on our course’s Canvas website. It is your responsibility to ensure that you are following the most recent version of the syllabus.

If you have any questions, please contact the instructors as soon as possible (preferably at the beginning of the course).

Cover Photo: Horse fly (Tabanidae) by Nicky Bay (flickr.com/photos/nickadel)