Course Syllabus

Mosquito Identification and Advanced Mosquito Identification
ENY – 6591C and 4590C; 3 Credits

Instructor: Nathan Burkett-Cadena – ADULT SECTION (week 1)
Florida Medical Entomology Laboratory (FMEL) Research & Education Center
200 9th Street SE, Vero Beach, FL  32962
Tel. 772-778-7200 x. 141; Email: nburkettcadena@ufl.edu

Instructor: Dr. Derrick Mathias – LARVAL SECTION (week 2)
Florida Medical Entomology Laboratory (FMEL) Research & Education Center
200 9th Street SE, Vero Beach, FL  32962
Tel. 772-778-7200 x. 173; Email: d.mathias@ufl.edu

Office Hours: By appointment, Skype or email

Course Description: This course will provide intensive lecture and hands-on training on the identification of adult and larval mosquitoes as well as a review of current and historical mosquito taxonomy topics. The course is co-taught as a senior-level undergraduate and a first year graduate level course. Graduate students are required to demonstrate advanced study beyond what is expected of the undergraduates through more rigorous test questions, additional readings in rotating reading assignments, participation in discussion sessions, and a review article.

Course Objectives: Students will demonstrate their understanding of mosquito morphology terminology and their ability to recognize morphological features on adult and larval mosquito species that occur in North America through identification exercises. The training will enable students to complete a comprehensive practical laboratory and written examination at the conclusion of the course. Graduate students will complete a writing assignment in style and quality suitable for publication in a refereed journal.

Course Goals:
1. Train students to use mosquito taxonomic keys to identify adult female and larval mosquitoes.
2. Train students to recognize morphological features used to identify adult female and larval mosquitoes that occur in North America.
3. By the end of the course, students will have identified and recognize the 12 mosquito genera and a minimum of 50 species that occur in North America, north of Mexico.
4. (Graduate students) Writing assignment as described in the syllabus.


Course Location: The course will be conducted through Canvas, email and in-person. The required lab will be offered at the Florida Medical Entomology Laboratory in Vero Beach, FL.
for a two-week period 4 March – 15 March 2019. See calendar for the agenda for the required lab.

**Prerequisites:** ENY 3005 or ENY 4161. Students must have basic knowledge of mosquito morphology; experience and familiarity with binocular and compound microscopes and the use of taxonomic identification keys.

**Grading:** There are two written exams and two laboratory exams.

Adult mosquito exams (one written, one practical) are March 8, 2019 in Vero Beach, FL.

Larval mosquito exams (one written, one practical) are March 15, 2019.

The **written exams** are **closed-book** and include questions on mosquito morphology, larval habitats, mosquito taxonomy, assigned readings, field trips and lecture materials (including guest lectures).

The **lab practical exams** are **open-book** and each include 10 mosquito specimens that must be identified to species in the allotted time frame; partial credit is given as long as the work is shown in detail.

Lecture attendance (in-person portion) is mandatory and accounts for 4% of the final grade.

**Graduate credit for ENY 6591C**

Additional readings are required above what is expected of undergraduate students. All articles will be provided in a PDF through Canvas. Knowledge of the assigned readings will be assessed on the written exams. Readings will include current research articles related to mosquito taxonomy and systematics, as well as review articles in the same subject area.

Graduate students are required to complete a writing assignment, instructions to be provided by the instructors.

The assignment must be written in the style of a scientific article and must cite primary scientific literature.

**The final draft of the writing assignment is due on Friday, April 19, 2019.**

Letter grades correspond to the numerical score as follows:

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<thead>
<tr>
<th>Grade</th>
<th>Undergraduate ENY 4590C</th>
<th>Graduate ENY 6591C</th>
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<tbody>
<tr>
<td>90% - 100%</td>
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<tr>
<td>80% - 89.99%</td>
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<tr>
<td>70% - 79.99%</td>
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<td>60% - 69.99%</td>
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<td>0 - 59.99%</td>
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<tr>
<th>Component</th>
<th>Undergraduate ENY 4590C</th>
<th>Graduate ENY 6591C</th>
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<tbody>
<tr>
<td>LAB EXAM – ADULT Mosquitoes</td>
<td>24%</td>
<td>20%</td>
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<tr>
<td>LAB EXAM – LARVAL Mosquitoes</td>
<td>24%</td>
<td>20%</td>
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<tr>
<td>WRITTEN EXAM – ADULT Mosquitoes</td>
<td>24%</td>
<td>15%</td>
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<tr>
<td>WRITTEN EXAM – LARVAL Mosquitoes</td>
<td>24%</td>
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<tr>
<td>LECTURE ATTENDANCE</td>
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<tr>
<td>Topic of writing assignment due by Jan 31</td>
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<td>1%</td>
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<tr>
<td>Final draft of paper due April 19</td>
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<td>25%</td>
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<td>TOTAL</td>
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**Grades and Grade Points:** For additional information on current UF grading policies, see: [https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx](https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx)  

**Class Attendance:** Class attendance for laboratory and lectures is mandatory. A large portion of class time is spent at the microscope working through the steps of identification.  

**Tests and Make-up tests:** The tests are given on the last day of class each week. The examination period begins at 8:00 a.m. and ends promptly at 12:00 p.m. No make-up tests will be provided except in the occurrence of a University-approved absence, family or medical emergency or court imposed legal obligations where the student must leave Vero Beach. In the event of such an emergency, arrangements will be made accordingly.  

**Class Demeanor:** Students are expected to arrive on time for lectures, to refrain from using cell phones and text messaging during lectures; during lab time when students are studying specimens under the microscope, students are expected to take cell phone calls outside of the lab and to keep discussions to a level such as not to bother others. Please minimize sounds that may make it difficult for others to concentrate.  

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

**UF Policies:**  

[University Policy on Accommodating Students with Disabilities](http://www.dso.ufl.edu/drc/). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams. Accommodations are not retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.
University Policy on Academic Misconduct: Academic honesty and integrity are fundamental values of the University community. Students should be sure that they understand the UF Student Honor Code at [http](http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/)(Links to an external site.).

**Netiquette: Communication Courtesy:** All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats.

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.

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/](http://www.counseling.ufl.edu/cwc/)(Links to an external site.)
- Career Resource Center, First Floor JWRU, 392-1601, [www.crc.ufl.edu/](http://www.crc.ufl.edu/)(Links to an external site.)

Plagiarism

Plagiarism is unethical, unacceptable in science, and prohibited by the UF Student Honor Code (https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/)(Links to an external site.). 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.**

Course Summary:

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<tr>
<th>Date</th>
<th>Details</th>
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<td>Assignment <a href="#">Topic of writing assignment, due by Jan 31</a> due by 11:59pm</td>
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<td>Fri Apr 19, 2019</td>
<td>Assignment <a href="#">Graduate Writing Assignment</a> due by 11:59pm</td>
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<td>Fri Apr 26, 2019</td>
<td>Assignment <a href="#">University of Florida GatorEvals – Spring 2019</a> due by 11:59pm</td>
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<td>Assignment <a href="#">Required readings for graduate students ENY6591C</a></td>
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