

## 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 9<sup>th</sup> Street SE, Vero Beach, FL 32962  
Tel. 772-778-7200 x. 141; Email: [nburkettcadena@ufl.edu](mailto:nburkettcadena@ufl.edu)

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

**Required Textbook:** Identification and Geographic Distribution of the Mosquitoes of North America, North of Mexico. 2005. Richard F. Darsie and Ronald A. Ward. University Press of Florida. Gainesville, FL. This text is essential for the course and must be acquired in advance of the laboratory trainings in Vero Beach, FL.

**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:

- 90% - 100%      A
- 80% - 89.99%    B
- 70% - 79.99%    C
- 60% - 69.99%    D
- 0 - 59.99%      E

Grade assignment	Undergraduate ENY 4590C	Graduate ENY 6591C
Component	PERCENT OF FINAL GRADE	PERCENT OF FINAL GRADE
LAB EXAM – ADULT Mosquitoes	24%	20%
LAB EXAM – LARVAL Mosquitoes	24%	20%
WRITTEN EXAM – ADULT Mosquitoes	24%	15%

WRITTEN EXAM – LARVAL Mosquitoes	24%	15%
LECTURE ATTENDANCE	4%	4%
Topic of writing assignment due by Jan 31	-	1%
Final draft of paper due April 19	-	25%
TOTAL	100%	100%
	100%	100%

**Grades and Grade Points:** For additional information on current UF grading policies, see: <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx> (Links to an external site.)Links to an external site.

**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: Students requesting accommodation for disabilities must first register with the Dean of Students Office (<http://www.ufl.edu/dso/> (Links to an external site.)Links to an external site.:// (Links to an external site.)Links to an external site.o (Links to an external site.)Links to an external site.. (Links to an external site.)Links to an external site.ds (Links to an external site.)Links to an external site.o (Links to an external site.)Links to an external site.. (Links to an external site.)Links to an external site.ufl (Links to an external site.)Links to an external site.. (Links to an external site.)Links to an external site.edu (Links to an external site.)Links to an external site./ (Links to an external site.)Links to an external site.drc (Links to an external site.)Links to an external site./ (Links to an external site.)Links to an external site.). 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.



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:

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