

BIOLOGY OF BUTTERFLIES

Spring 2026

Credits: 1

Course number: ENY 4932, class number 26621

Schedule: Thursday, period 6 (12:50 – 1:40 pm)

Location: Room 1027 Entomology Department (see attached map)



INSTRUCTORS

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OFFICE LOCATION

McGuire Center for
Lepidoptera,
Florida Museum of Natural
History,
Powell Hall, 3215 Hull
Road, office 220

OFFICE HOURS

By appointment

COURSE OVERVIEW

Butterflies are one of the best known and most charismatic groups of insects, and with nearly 20,000 species occupying virtually all habitats, they offer limitless opportunities to appreciate and understand the natural world. This course is loosely based around "The Little Book of Butterflies", which summarizes our current knowledge of these fascinating insects in twelve highly accessible chapters. We will use the material covered in book chapters as a starting point for discussion in each class. The book covers the diversity and classification of butterflies, their evolutionary history, habitats, life histories, color patterns, biology, development, and conservation, and their place in our culture and society. Chastity belts placed on females by males, mud-puddling males collecting minerals for spermatophores, eyespots and false heads as defenses against predators, frass flinging and carnivorous caterpillars, gynandromorphs and ultraviolet wings – there are many surprises in the world of butterflies that we will seek to appreciate and understand. Butterflies are often considered to be a 'model group', the study of which can help us to understand broader patterns applicable to biodiversity and its conservation. Observations of unbelievably similar yet unrelated butterflies flying together in the Amazon rainforest led Henry Walter Bates to formulate his theory of mimicry, one of the first and clearest examples of natural selection in action. Research on the genetics of brightly colored *Heliconius* butterflies continues to improve our understanding of how new species arise. And the efforts by citizen scientists to count butterflies across the world provided some of the first insights into how environmental changes are impacting biodiversity. In addition to lectures and discussion sessions, students will have a chance to visit one of the largest butterfly collections in the world at the Florida Museum of Natural History, and observe caterpillars and butterflies in UF's 60-acre Natural Area Teaching Laboratory. Students will gain an appreciation and understanding of the evolution and biology of an iconic group of insects, in addition to developing their ability to think critically about scientific research. This course is intended to stimulate a broader and deeper interest in the natural world, of which butterflies are such conspicuous members, and there are no prerequisites beyond a fascination in the diversity of life.

COURSE TEXTBOOK

Andrei Sourakov, Alexandra Sourakov (2024). *The Little Book of Butterflies*. Princeton University Press. 160 pp. [to be provided free on loan to students]

OBJECTIVES AND BASIS FOR GRADING

Lectures

Short lectures during each class will provide an introduction and describe classical and contemporary research relevant to each week's topic. Students will be introduced to a broad variety of research methods and will learn common empirical patterns, processes and theories proposed to explain them. Additional articles from the primary scientific literature may be suggested or required as background reading in preparation for each lecture.

Class discussion

Students will read sections of the course textbook in preparation for discussion each class. Students are expected to come to class with at least two questions or comments prepared about aspects of the literature reviewed, including concepts that they do not understand or would like to discuss further, or additional information on a particular topic. All students are expected to contribute to open discussions, and the overall grade will reflect this contribution.

COURSE SCHEDULE

WEEK	SUBJECT
1. Jan 15	Introduction
2. Jan 22	CLASS DISCUSSION: <i>The Little Book of Butterflies</i> ; pp. 8-21. Diversity and evolution.
3. Jan 29	CLASS DISCUSSION: <i>The Little Book of Butterflies</i> ; pp. 22-33. Biogeography and habitats.
4. Feb 5	CLASS DISCUSSION: <i>The Little Book of Butterflies</i> ; pp. 34-45. Swallowtails, hedyliids, skippers.
5. Feb 12	CLASS DISCUSSION: <i>The Little Book of Butterflies</i> ; pp. 46-57. Pierids and nymphalids.
6. Feb 19	CLASS DISCUSSION: <i>The Little Book of Butterflies</i> ; pp. 58-69. Gossamer wings and metalmarks.
7. Feb 26	CLASS DISCUSSION: <i>The Little Book of Butterflies</i> ; pp. 70-81. Life histories.
8. Mar 5	CLASS DISCUSSION: <i>The Little Book of Butterflies</i> ; pp. 82-93. Anatomy and physiology.
9. Mar 12	CLASS DISCUSSION: <i>The Little Book of Butterflies</i> ; pp. 94-105. Senses and behavior.
10. Mar 19 [SPRING BREAK]	Reading assignment [for next class]: <i>The Little Book of Butterflies</i> ; pp. 106-117. Color patterns.
11. Mar 26	CLASS DISCUSSION: <i>The Little Book of Butterflies</i> ; pp. 118-129. Butterflies and humans.
12. Apr 2	CLASS DISCUSSION: <i>The Little Book of Butterflies</i> ; pp. 130-141. Butterflies across cultures.
13. Apr 9	CLASS DISCUSSION: <i>The Little Book of Butterflies</i> ; pp. 142-153. Curious facts.
14. Apr 16	FINAL CLASS: Discussion and reflection.

GRADING

% by activity

Activity	% of final grade
Attendance	50
Class discussions and assignments	50

A = 93 – 100%

A- = 90 – 92.99%

B+ = 87 – 89.99%

B= 83 – 86.99%

B- = 80 – 82.99%

C+ = 77 – 79.99%

C= 73 – 76.99%

C- = 70 – 72.99%

D+ = 67 – 69.99%

D= 63 – 66.99%

D- = 60 – 62.99%

E = below 60%

For current UF grading policies see: <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>

ACADEMIC POLICIES AND RESOURCES

Academic Policy and Resource information is provided here: <https://go.ufl.edu/syllabuspolicies>.

CLASS ATTENDANCE, WORK AND EXAM POLICIES

Students are expected to attend all classes unless there are valid reasons for absence, and part of the grade will reflect class attendance. Students who are unable to attend a class should notify one of the instructors by email with an explanation for their absence, preferably in advance of the class. Students may be asked to complete an additional assignment if they are repeatedly absent. Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: <https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>. This class has no scheduled assignments or exams outside of the class periods noted above. Students are expected to be engaged with discussion topics during class periods and not to use cell phones or other electronic devices except for purposes relevant to the class.

USE OF AI

Students may use AI in this course to help synthesize or understand information, but should be aware that the information they receive is only as reliable as information that is already available online. Online resources may provide conflicting, inaccurate, or outdated information, and we thus encourage students to always seek original sources online, as well as textbooks and field guides accessible in UF libraries, to verify information quality.

ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center. See the “Get Started With the DRC” webpage on the Disability Resource Center site: <https://disability.ufl.edu/get-started/>. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

STUDENT FEEDBACK ON COURSE

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/>.

ACADEMIC SUPPORT

- E-learning technical support: Contact the UF Computing Help Desk (<http://helpdesk.ufl.edu/>) at 352-392-4357 or via e-mail at helpdesk@ufl.edu.
- Career Connections Center (<https://career.ufl.edu/>): Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.
- Library Support (<https://cms.uflib.ufl.edu/ask/>): Various ways to receive assistance with respect to using the libraries or finding resources. Call 866-281-6309 or email ask@ufl.libanswers.com for more information.
- Teaching Center (<https://umatter.ufl.edu/office/teaching-center/>): 1317 Turlington Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.
- Writing Studio (<https://writing.ufl.edu/writing-studio/>): Daytime (9:30am-3:30pm): 2215 Turlington Hall, 352-846-1138 | Evening (5:00pm-7:00pm): 1545 W University Avenue (Library West, Rm. 339). Help brainstorming, formatting, and writing papers.
- Academic Complaints: Office of the Ombuds; Visit the Complaint Portal webpage (<https://www.ombuds.ufl.edu/complaint-portal/>) for more information.
- Enrollment Management Complaints (Registrar, Financial Aid, Admissions): View the Student Complaint Procedure webpage (<https://em.ufl.edu/complaint>) for more information.

CLASS LOCATION

