
INVERTEBRATE BIODIVERSITY

ZOO 4205C

SUMMER C 2020 • THE UNIVERSITY OF FLORIDA

CLASS TIMES

Lecture: Tuesdays and Thursdays 9:30 – 12:15

Lab: Friday 8:00 – 12:15, 2:00 – 6:15

Class will be **asynchronous** and online due to COVID-19. Lectures, activities, and discussions will be uploaded for each Tuesday and Thursday, taking ~1.5 hrs to complete each class day. Your instructor will be available for online discussion from 11-12:15. Lab assignments will be independently conducted (see more information below).

INSTRUCTOR

Melissa Meadows, Ph. D.

Department of Biology

Online office hours: T/Th 11:00 – 12:15

Email: melissa.meadows@ufl.edu

COURSE GOALS

In this course, you'll learn in brilliant detail about our incredible diversity of invertebrate animals. Courses such as this one focus a great deal on anatomy and identification, but you'll also be learning about the evolution of these organisms as well as their ecology. Along the way, you'll develop your skills in scientific illustration (no, you don't have to be an artist!), keeping a lab/field journal, reading primary literature and understanding research lectures, and more.

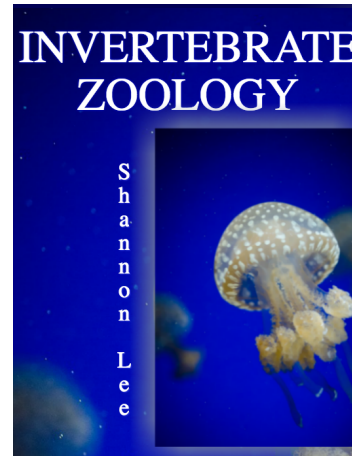


COURSE RESOURCES AND MATERIALS

Text: *Required:* Invertebrate Zoology by Dr. Shannon Lee, published in Top Hat and updated by Dr. Melissa Meadows (that's me 😊). See more below.

Recommended excellent text for more information about your favorite topics: Brusca, R. C. et al. 2016. Invertebrates. 3rd Edition. Sinauer, Sunderland, MA. You will not need this book fully participate in the course, but it's great to have on hand to learn more if you can get a used or e-book copy.

A good field guide for use on *optional* self-guided field trips: Rupperts EE, Fox RS. 1988. Seashore animals of the southeast. U South Carolina Press



Top Hat: Your required textbook and embedded videos, questions, and discussions will be hosted on Top Hat in a really cool, interactive format. Assignments in Top Hat will be due each week and a subscription is required for each student. Each of you who was not already enrolled in the course should have received an email inviting you to our Top Hat course – please join using that email. It will be free for the first few weeks, and then you'll need to purchase access either through UF All-Access (we're working on getting this working) or directly through Top Hat. It is very inexpensive. If you don't have the email handy, follow this link to sign up: <https://app.tophat.com/e/276193>, which is also published on our E-learning site. The course join code is the same as the end of the web address: 276193. Here is a guide to getting started in Top Hat: <https://success.tophat.com/s/article/Student-Top-Hat-Overview-and-Getting-Started-Guide>. IMPORTANT: Especially those who already have Top Hat accounts – please ensure that you have access until the end of this semester, August 14! Top Hat is required, and a lapsing account is not an acceptable excuse for missed homework.

E-learning: Please set your preferences in E-Learning/Canvas so that you receive timely notifications of course announcements and other information. I will be communicating extensively and often with you using Canvas announcements which you can set to come to your email. When in doubt, go to our Canvas page and click "Announcements" for all of the latest information and assignments.

Lab Materials: Lab will be a little bit different this semester due to COVID-19. However, keeping a lab/field notebook and drawing specimens are essential skills that we will practice in this course as best we can given the less-than-ideal conditions. Therefore you will need: drawing supplies (I suggest drawing pencils and paper if you can get them or have them, but regular old notebook or printer paper and standard writing pencils will do, too), a notebook in which to keep your lab notes and drawings – can be bound or a binder with loose-leaf paper, and ideally a waterproof field notebook if you're going to be able to make some field forays. You may also wish to have colored pencils, though adding color to drawings is optional. Please use what you have on hand as much as possible rather than shopping for new things. This is a special semester!

ASSESSMENTS AND GRADING

Grade Component	Description	Percentage
Exams	4 non-cumulative exams on topics discussed in lecture and assigned readings. Exams will be conducted using HonorLock proctoring through Canvas. They will be closed-book exams with a variety of question types. Tentative exam dates are included on the schedule and will typically take the place of labs on Fridays. The exam window on Honorlock will be from 8:00 am – 6:00 pm on exam days. Exams must be started at least 1.5 hours <u>before</u> the due time (by 4:30 PM).	60%
Lab Assignments & Projects	Single or multi-week projects will be assigned that can be completed at home (virtually), in field environments (including in your backyard or park), or at public zoos/aquaria (if/when safe to do so, as determined by the student). Labs will be very flexible and thus there will be no lab exam. There will not be any required labs/projects that involve environments that may be inaccessible to you during the pandemic.	25%
Top Hat Homework & Discussion Participation	Textbook chapter readings and completion of embedded questions will be due Mondays at 11:59 PM following the week we discuss a chapter. However, it is suggested to read each chapter and complete the questions BEFORE we have lectures on that topic. We will also have questions and/or discussions included as part of lectures on most class days. To help keep you on track, these will be due at 11:59 PM on the same day as the lecture.	15%

ACADEMIC HONESTY

All students registered at the University of Florida have agreed to comply with the following statement:

"I understand that the University of Florida expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University."

In addition, on all work submitted for credit the following pledge is either required or implied:

"On my honor I have neither given nor received unauthorized aid in doing this assignment."

Any acts of cheating, plagiarism, or other forms of academic dishonesty will result in, at minimum, a 0 grade for the assignment or exam. Sharing information about exams with those who have not yet taken an exam or posting ANYWHERE ON THE INTERNET outside of Top Hat, Canvas, or other assigned locations (social media, Course Hero, etc.) *any information* about exams or other assignments, is a serious act of academic dishonesty. Maintaining academic honesty is especially important and requires each of you to commit to it during this pandemic during which courses are hosted online. If you witness any instances of academic dishonesty in this class, please notify the instructor or contact the Student Honor Court (392-1631) or Cheating Hotline (392-6999). For additional information on Academic Honesty, please refer to the University of Florida Student Honor Code and Student Conduct Code at: <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>

ACCOMMODATIONS

Students who will require a classroom accommodation for a disability must contact the Dean of Students Office of Disability Resources, in Peabody 202 (phone: 352-392-1261). Please see the University of Florida Disability Resources website for more information at: <http://www.dso.ufl.edu/drc/>. Note that the student should provide documentation of a requirement for accommodation by the second week of classes. No accommodations are available to students who lack this documentation. It is the policy of the University of Florida that the student, not the instructor, is responsible for arranging accommodations when needed. Once notification is complete, the Dean of Students Office of Disability Resources will work with the instructor to accommodate the student.

SUPPORT

College can be a very stressful time in a person's life. Resources are available on campus to help students meet academic goals and solve personal problems, which may interfere with their academic performance. If you find that you are having difficulty emotionally or academically, there is substantial support available. There are several online help resources (<https://counseling.ufl.edu/resources/online/>) provided by the UF Counseling and Wellness Center or contact on of the following services:

1. UF Counseling and Wellness Center, <http://www.counseling.ufl.edu/cwc/>, Radio Rd Facility, 392-1575
2. Dean of Students Office, <https://www.dso.ufl.edu>, 202 Peabody Hall, 392-1261
3. Career Resource Center, <http://www.crc.ufl.edu/>, Reitz Union, 392-1601
4. CLAS Academic Advising Center, <http://www.advising.ufl.edu/>, Farrior Hall, 100 Fletcher Drive, 392-1521

Also available is the The U Matter, We Care initiative, which is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact umatter@ufl.edu so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 911.

SCHEDULE

The schedule below is ***highly tentative*** due to the nature of COVID-19. I've found that one of the most important aspects of dealing with the pandemic, both personally and academically, is nimbleness – the ability to be quick on our feet to adapt to changing conditions and our own changing circumstances. Let's all – both professor and students – do our best to communicate as we face these changes and challenges this summer. To that end, please pay constant attention to Announcements on Canvas which will tell you day-to-day what's to be completed. Lab topics each week are TBA.

Week Number	Week of	Topics
1	May 11	Lecture: Introduction Reading and Homework: Ch 1 Introduction & Ch 2 Body plans, reproduction, development, & our own phylum No Lab
2	May 18	Lecture: Phylum Chordata and Phylum Hemichordata Reading and Homework: Ch 3: Invertebrate Chordates & Ch 4 Phylum Hemichordata
3	May 25	Lecture: Phylum Echinodermata Reading and Homework: Ch 5: Phylum Echinodermata
4	June 1	Lecture: Lophophorates and Phylum Mollusca Reading and Homework: Ch 6: Phylum Phoronida, Phylum Brachiopoda, & Phylum Bryozoa, Ch 7: Phylum Mollusca – Part 1, Ch 8: Phylum Mollusca- Part II Class Gastropoda EXAM 1 (Ch 1 – 6) tentatively June 5
5	June 8	Lecture: Phylum Mollusca (continued), Phylum Annelida Reading and Homework: Ch 9: Phylum Mollusca – Part III, Ch 10: Phylum Annelida, Ch 11: Echiurans and Sipunculids, where do they belong?
6	June 15	Lecture: Phylum Nemertea, Phylum Nematoda, Phylum Onychophora, Phylum Tardigrada, and Phylum Priapulida Reading and Homework: Ch 12: Phylum Nemertea. Ch 13: Phylum Nematoda, Phylum Onychophora, Phylum Tardigrada, and Phylum Priapulida EXAM 2 (Ch 7 – 13) tentatively June 19
Break	June 20 – July 5	Summer Break
7	July 6	Lecture: Phylum Arthropoda: Introduction and Chelicerata Reading and Homework: Ch 14: Phylum Arthropoda: Part I, Ch 15: Phylum Arthropoda: Part II Subphylum Chelicerata
8	July 13	Lecture: Phylum Arthropoda: Part III Subphylum Hexapoda (Insects and friends) Reading and Homework: Ch 16: Phylum Arthropoda: Part III Subphylum Hexapoda

9	July 20	Lecture: Phylum Arthropoda: Part IV Subphylum Crustacea Reading and Homework: Ch 17: Part IV Subphylum Crustacea EXAM 3 (Ch 14 – 17 – Arthropoda) tentatively June 24
10	July 27	Lecture: Phylum Platyhelminthes, Phylum Ctenophora Reading and Homework: Ch 18: Phylum Platyhelminthes, Ch 19: Phylum Ctenophora
11	August 3	Lecture: Phylum Cnidaria, Phylum Porifera Reading and Homework: Ch 20: Phylum Cnidaria, Ch 21: Phylum Porifera
12	August 10	Lecture: Phylum Porifera (continued) EXAM 4 (Ch 18 – 21) tentatively Aug 13