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# INVERTEBRATE BIODIVERSITY

ZOO 4205C

## SUMMER C 2022 • THE UNIVERSITY OF FLORIDA

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### CLASS TIMES

Lecture: Tuesday and Thursday 9:30 am – 12:15 pm

Lab: Thursday 2 pm – 6:15 pm

### INSTRUCTOR

Dr. Melissa Meadows

Department of Biology

Email: [melissa.meadows@ufl.edu](mailto:melissa.meadows@ufl.edu)

Zoom Office: <https://ufl.zoom.us/j/3066712046>

In-person Office: Carr 522B

Zoom Office Hours: T 1-2 pm; W 1-3 pm BY  
APPOINTMENT

Reserve your spot: <https://tinyurl.com/yxnkyl96>



### CONTACTING YOUR INSTRUCTOR

**Course Questions Discussion:** For questions that may pertain to the entire class (about an assignment, about course policies), please use the Course Questions Discussion on Canvas. Also, don't forget to see if your question has already been answered. Please help classmates, too, if you know the answer!

**Email:** I will respond to you within 24 hrs during the week to questions that are individual in nature (grades, absences, etc). After 5 on Fri I will not respond until Mon. Be professional in tone and expectations. Please do not expect an immediate response. Also note that I do not usually respond to questions that are answered elsewhere via email (such as in the Course Questions Discussion, in the Syllabus, or in an Announcement on Canvas).

**Office Hours:** I am available for one-on-one help on more detailed questions about course content, grades, etc., and also if you just want to pop on to say hi sometimes! Office hours are BY APPOINTMENT at the link above which will take you to my Google Calendar where you can see available appointment slots. Office hours appointments are available Tuesdays 1-2 pm and Wednesdays 1 – 3 PM. Office hours meetings will be at the Zoom link listed above.

## COURSE GOALS

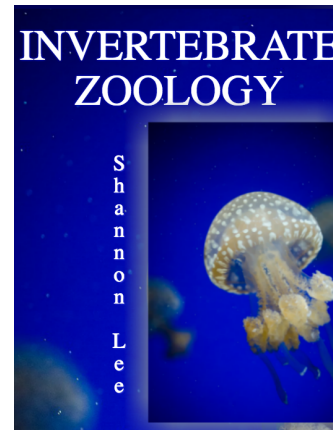
In this course, you'll learn in brilliant detail about our incredible diversity of invertebrate animals. Courses such as this one focus a great deal on anatomy and identification, but you'll also be learning about the evolution of these organisms as well as their ecology. Along the way, you'll develop 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 an interactive format. Assignments in Top Hat will be due each week and a subscription is required for each student. You'll need to purchase access either through UF All-Access or directly through Top Hat. It is very inexpensive. Here is the link to our class: <https://app.tophat.com/e/348585>. The course join code is the same as the end of the web address: 348585. 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 5! 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 specimen and dissection-based. All dissection materials will be provided. In addition to practical work learning and dissecting specimens, you will also be keeping a lab/field notebook and drawing specimens; these are essential skills that we will practice in this course. 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. Alternatively, you might wish to use an Apple Pencil and iPad – whatever you are comfortable

using to make high-quality hand drawings. Do NOT use images from your camera/phone or take images from the internet as this will be considered academic dishonesty.

## ASSESSMENTS AND GRADING

Grade Component	Description	Percentage
Exams	4 non-cumulative exams on topics discussed in lecture and assigned readings. They will be closed-book exams with a variety of question types. Exam dates are included on the schedule. <b>Please check the schedule for exams ahead of time and clear your schedule at those times. Make-ups are not allowed due to work or other personal obligations.</b>	40%
Lab Assignments & Projects	Single or multi-week projects will be assigned that can be completed during the lab period, in field environments (including in your backyard or park), or at public zoos/aquaria (optional). Labs are due on Sundays each week and will be submitted online.	25%
Lab Exams	There will be 2 lab practical exams (see schedule).	20%
Top Hat Homework & Discussion Participation	Each week's assignments are due at 11:59 PM the Sunday after the assigned week. However, it will NOT be possible to finish all assignments at the last minute. I suggest read each chapter and complete the embedded questions on Monday (before lecture on Tuesday). Do NOT wait until Saturday night. Saturday night internet or website issues are not a valid excuse for late assignments.	15%

### Grading Scale:

A	A-	B+	B	B-	C+	C	C-	D	E
≥93.00%	≥90.00%	≥87.00%	≥83.00%	≥80.00%	≥77.00%	≥73.00%	≥70.00%	≥60.0%	<60.00%

## ATTENDANCE

This is a small class, and if you aren't completing assignments on time, I'll worry, especially during the COVID-19 pandemic. If you have a planned conflict, discuss it with me in advance. If there is an unforeseen circumstance, please let me know as soon as possible. I know that special circumstances may come up during this difficult time, and we will stay in communication to ensure your success. Please see the UF policy for excused absences here: <https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>

No make-up exams without prior permission or documentation of illness. Students missing an exam due to a university-approved excused absence should let the instructor know in advance. In

case of illness or emergency on exam day, students must submit documentation here: <https://care.dso.ufl.edu/instructor-notifications/> and request a letter be sent to the instructor.

## 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: <https://disability.ufl.edu/>. 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.career.ufl.edu/>, Reitz Union, 392-1601
4. CLAS Academic Advising Center, <http://www.advising.ufl.edu/>, Farrison 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](mailto: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

**Due Dates:** All assignments for each week are due on Sundays at 11:59 PM except for a few exceptions where noted on Canvas.

Week Number	Week of	Reading & Lecture Topic	Ch.	Lab
1	5/9	Introduction Body plans, reproduction, development, & our own phylum	1 2	No Lab
2	5/16	Phylum Chordata Phylum Hemichordata	3 4	Lab 1: Hemichordates and Chordates
3	5/23	Phylum Echinodermata The Lophophorates: Phylum Phoronida, Phylum Brachiopoda, & Phylum Bryozoa	5 6	Lab 2: Echinodermata
<b>EXAM 1 (CH 1 – 6) TUESDAY 5/31</b>				
4	5/30	Phylum Mollusca Part 1 Phylum Mollusca Part 2	7 8	No Lab (we may use lab time to complete the lectures)
5	6/6	Phylum Mollusca Part 3	9	Lab 3: Mollusca

Week Number	Week of	Reading & Lecture Topic	Ch.	Lab
6	6/13	Phylum Annelida	10	Lab 4: Annelida and Nemertea
		Echiurans and Sipunculids, where do they belong?	11	
		Phylum Nemertea.	12	
<b><u>SUMMER BREAK WEEK OF 6/20</u></b>				
<b><i>EXAM 2 (CH 7 – 12) TUESDAY 6/28</i></b>				
7	6/27	Phylum Nematoda, Phylum Onychophora, Phylum Tardigrada, and Phylum Priapulida	13	<b><i>LAB EXAM 1</i></b>
		Phylum Arthropoda Part 1: Introduction	14	
		Phylum Arthropoda Part 2: Subphylum Chelicerata	15	
8	7/4	Phylum Arthropoda: Subphylum Hexapoda (Insects and friends)	16	Lab 5: Arthropoda and Friends 1
9	7/11	Phylum Arthropoda: Subphylum Crustacea	17	Lab 6: Arthropoda 2 Hexapods
<b><i>EXAM 3 (CH 13 – 17) TUESDAY 7/19</i></b>				
10	7/18	Phylum Platyhelminthes	18	Lab 7: Arthropods 3 Crustacea
		Phylum Ctenophora	19	
11	7/25	Phylum Cnidaria	20	Lab 8: Platyhelminthes, Ctenophora, Cnidaria, Porifera
		Phylum Porifera	21	
12	8/1	Exam 4; NO LECTURE THURSDAY		<b><i>LAB EXAM 2</i></b>
<b><i>EXAM 4 (CH 18 – 21) TUESDAY 8/2</i></b>				

## TIPS FOR SUCCESS

Taking a course online can be a lot of fun! Here are some tips that will help you get the most of this course while taking full advantage of the online format:

- **Attend and participate:** Studies show that the more you discuss, draw, analyze, and actively participate in class, the more you learn!

- **Read:** Read assigned reading before lecture each week. Then use lectures and labs to hone understanding and apply your knowledge.
- **Take notes:** Do not be a passive listener! Take active notes while watching lectures, especially on questions asked in the lecture.
- **Ask question:** Ask immediately. Don't be afraid to ask me to meet and go over something again! Chances are, others need a clarification, too (which I can post as an announcement).
- **Use your resources:** Use this syllabus to answer questions about the course and locate help when you need it. Use the Course Questions Discussion on Canvas. Use your textbook. Use your professor!
- **Plan ahead:** Plan 12-16 hrs/wk, including 10 hrs for lecture and lab and 2-6 hrs on reading, assignments, and studying. Don't start studying for exams or completing labs or assignments at the last minute.
- **Study effectively:** Visit [www.learningscientists.org](http://www.learningscientists.org) to learn the 6 strategies for effective learning. Guess what the first one is? NO CRAMMING!
- **I care:** I am deeply invested in YOU and your happiness and success. Email me, make an appointment for office hours, etc. to go over course material, talk about life, or just say hi!