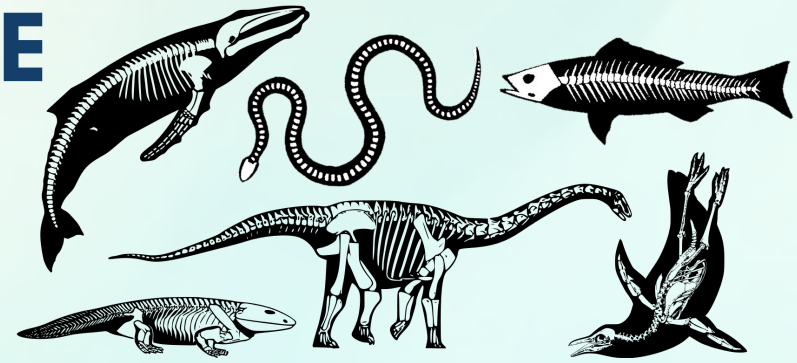
Summer 2020 ~ BIOE134 and 134L

COMPARATIVE VERTEBRATE ANATOMY



SCHEDULE

9am-12:30pm TTH:
Lectures via Zoom
ID: 962 7212 6595
Password: bioe134

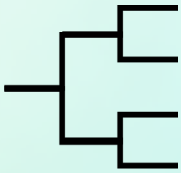
Registration required before attending first class

YOUR TEACHING TEAM

Dr. Rita Mehta

Ana Valenzuela Toro (TA)

COURSE OBJECTIVES AND GOALS



Understand basic concepts of **evolutionary biology** and **classification of vertebrates.**

Know **development, form** and **diversity** of the following systems: Skull, axial skeletal, and muscular system as they are related to function

Understand basic principles of **functional morphology**; in particular, how form contributes to different feeding and locomotor behaviors.

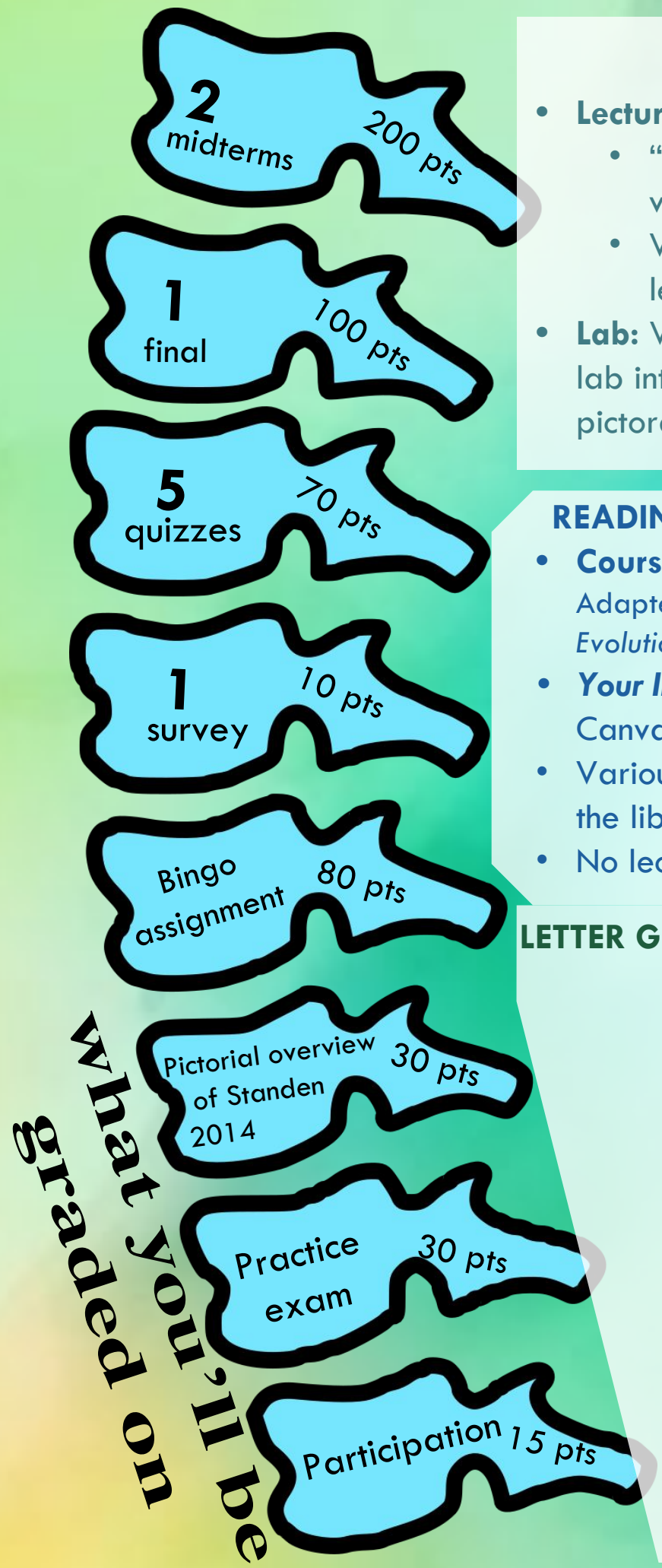
Become proficient in recognizing **skull** and **axial components** of vertebrates.

ZOOM OFFICE HOURS (2 HOURS PER WEEK!)

We are also available by appointment and email.
Please email us using your UCSC email.

Monday
10-11 Dr. Mehta
Zoom room 334 644 8760

WEDNESDAY
10-11 Ana
Zoom room 863 970 4934



COURSE STRUCTURE

- **Lecture:**
  - "Live" lecture 9:00am-12:30 pm TTH via Zoom. ID: ########
  - Weekly modules with pre-recorded lectures, handouts, and quizzes
- **Lab:** Weekly modules with pre-recorded lab introduction/dissection highlights, pictoral lab handout, and quizzes

READING MATERIALS- All provided to you

- **Course reader**, available on Canvas. Adapted from *Comparative Anatomy, Function, Evolution* (K. Kardong, 7th Ed.)
- ***Your Inner Fish*** by Neil Shubin, available on Canvas
- Various journal articles available through the library or posted on Canvas
- No lecture slides will be posted!

LETTER GRADES

97-100 = A+
94-96 = A
90-93 = A-
87-89 = B+
84-86 = B
80-83 = B-
77-79 = C+
74-76 = C
70-73 = C-
60-69 = D
< 60 = F (no course credit); Late work will be marked down by 10% of total points for each 24-hr period it is late.

Students who have demonstrated improvement over the quarter may be given some additional consideration. An incomplete (I) is given in accordance with university criteria; if criteria are met, a written contract must be signed both by instructor and student.

COURSE SCHEDULE

Week	Date	Lecture	Readings/Assignments
1A	Tues, July 28	**Live lecture:** Syllabus/introduction/taking notes Vertebrate Diversity and Evolution	• *Your Inner Fish* Chapters 1 & 2 • Textbook Chapter 2: Origin of Chordates • Textbook Chapter 3: Vertebrate Evolution **Due by Wednesday at 10 pm:** • Getting to Know You survey • Quiz #1: YIF: Chap 1 & 2
1B	Thurs, July 30	**Live lecture:** Vertebrate Evolution & current topics	• *Your Inner Fish* Chapters 3 & 4 • Textbook Chapter 3: Vertebrate Evolution **Due by Sunday at 10 pm:** • Practice exam on Chapter 2 and 3 • Quiz #2: YIF: Chap 3 & 4
2A	Tues, August 4	**Live lecture:** Skull Diversity and Feeding Guest Lecturer	• *Your Inner Fish* Chapters 5 & 6 • Textbook Chapter 7: The Skull **To-do: Start studying for midterm 1!** **Due by Wednesday at 10 pm:** • Quiz #3: YIF: Chap 5 & 6
2B	Thus, August 6	**Half day 9-10:30: Live lecture:** Finish Skull Diversity and Feeding **Midterm Exam # 1** Textbook Chapters 2, 3, 7 & *Your Inner Fish* (1-6)	Midterm will be available to take on Canvas between August 6 at 8 am and August 7 at midnight (40 hours). The exam is timed, with the base allotted time = 1.5 hours **Due by Friday at 10 pm:** • Midterm 1
3A	Tues, August 11	**Live lecture:** Axial Skeleton & Muscle Properties Guest Lecturer	• *Your Inner Fish* Chapters 7 & 8 • Textbook Chapter 8: Axial Skeleton
3B	Thurs, August 13	**Live lecture:** Locomotion	• *Your Inner Fish* Chapters 7 & 8 **To-do: Start studying for midterm 2!** **Due by Sunday at 10 pm:** • Quiz #4: YIF: Chap 7 & 8

Week	Date	Lecture	Readings/Assignments
4A	Tues, August 18	**Live lecture:** Axial Skeleton & Muscle Properties	• *Your Inner Fish* Chapters 9 & 10 **Due by Wednesday at 10 pm:** • Quiz #5: YIF: Chap 9 & 10
4B	Thurs, August 20	**Half day 9-10:30: Live lecture:** Water to Land Transition **Midterm Exam # 2** Textbook Chapter 8 Locomotion lectures *Your Inner Fish* (7-9)	• Read Standen et al. 2014 Midterm 2 will be available to take on Canvas between August 20 at 8 am and August 21 at midnight (40 hours). The exam is timed, with the base allotted time = 1.5 hours **Due by Friday at 10 pm:** • Midterm 2
5A	Tues, August 25	**Live lecture:** Water to Land Transition continued, Review of Standen et al. 2014 Guest Lecturer	• *Your Inner Fish* Chapter 10 • Read Standen et al. 2014 **Due by Wednesday at 10 pm:** • Standen *et al* pictoral guide • CVA Bingo
5B	Thurs, August 27	**Cumulative Final Lecture Exam** All lectures, including 5/26-5/28 Your Inner Fish (Chapters 1-11)	The final exam will be available to take on Canvas between August 27 at 8 am and August 28 at midnight (40 hours). The exam is timed, with the base allotted time = 1.5 hours **Due by Friday at midnight:** • Final exam

ETIQUETTE DURING LECTURES

To ensure that all students can benefit from online class sessions in an environment that is courteous, non-disruptive and conducive to learning, please follow these tips:

- Arrive on camera fully clothed and alert (no rolling out of bed last minute!)
- Sit upright in a chair (no lounging in bed!)
- Choose a quiet, private space (no coffee shops!)
- Be ready to join Zoom at the very start of the class time or even a few minutes early

- Allow a few minutes to connect to Zoom before the actual start of the class
- Wear headphones and mute yourself when you're not speaking
- Ask questions using the chat function – the TAs are ready to answer!

ACADEMIC INTEGRITY & THE HONOR CODE

- Your work on exams, quizzes, and projects should be original work. Worried your work might have plagiarism? Ask us to review it!
- We will do our best to make it clear what resources we expect you to use (or not use) for each project (your peers? Your textbook? The internet?). If you aren't sure, ask us to clarify!
- There is zero tolerance on infractions to the honor code. Check out this link to view university policies and regulations.

HOW TO LEARN ANATOMY

- Form study groups
- Review your notes every night
- Attend all live lectures and actively take notes

DRC ACCOMMODATIONS

Paperwork and arrangements must be emailed to the TAs (please CC Dr. Mehta). Evidence for accommodations should be provided before the first exam so arrangements for testing may be organized in a timely manner.