COMPARATIVE VERTEBRATE ANATOMY

SCHEDULE
9am-12:30pm TTH: Lectures via Zoom
ID: 962 7212 6595
Password: bioe134
Registration required before attending first class

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.

YOUR TEACHING TEAM
Dr. Rita Mehta
Ana Valenzuela Toro (TA)

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
Pictorial overview of Standen 2014

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

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<th>Grade Range</th>
<th>Letter Grade</th>
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<tbody>
<tr>
<td>97-100</td>
<td>A+</td>
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<tr>
<td>94-96</td>
<td>A</td>
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<tr>
<td>90-93</td>
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<td>74-76</td>
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<td>70-73</td>
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<td>60-69</td>
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<td>&lt; 60</td>
<td>F (no course credit); Late work will be marked down by 10% of total points for each 24-hr period it is late.</td>
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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.
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<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Lecture</th>
<th>Readings/Assignments</th>
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| 1A   | Tues, July 28       | Live lecture: Syllabus/introduction/taking notes   | - 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          | - 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 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   | - 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 |
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<th>Lecture</th>
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| 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* pictorial 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.