BIODIVERSITY (BIEB 140) Tu/Th: 3:30 - 4:50 PM, on Zoom

Professor Kaustuv Roy

Date	Lecture Topic	Tasks/Assignments
Tu March 30	Introduction, defining and measuring biodiversity Reading: Costello et al. 2013	
Th April 1	Phylogenies and the tree of life Readings: Gould 1992 & Omland 2014	No assignments this week
Tu April 6	A very short history of biological diversity Reading: Simpson & Kiessling 2010	Mini -assignment: "Animal of the week"
Th April 8	Early History of Animals Readings: Fox 2016 & Droser & Gehling 2015	Paper summary: Costello et al. 2013
Tu April 13	Invertebrates I Readings: None	
Th April 15	Reefs, past, present and (?)future Reading: Knowlton & Jackson 2013	Quiz 1: lectures 1-4
Tu April 20	Invertebrates II Readings: Labandeira & Sepkoski 1993 & Brown 2001	Mini -assignment: "Plant of the week"
Th April 22	Plants Reading: Enquist et al. 2001	Paper summary: Knowlton & Jackson 2013
Tu April 27	Fishes, Amphibians and Reptiles Reading: Seehausen 2015	
Th April 29	Birds – the feathered dinosaurs Reading: Xu et al. 2014	Quiz 2: lectures 5 - 8
Tu May 4	The mammalian radiation Reading: Jones & Safi 2011	Mini -assignment: "Biodiversity news of the week"
Th May 6	Deep Sea Biodiversity – the final frontier Readings: Canganella & Kato 2014; Van Dover et al. 2002	Paper summary: Jones & Safi 2011
Tu May 11	Biogeography & Macroecology Readings: Gaston 1996; Gaston 2000	
Th May 13	Global climate change & Biodiversity I Readings: None	Quiz 3: lectures 9-12
Tu May 18	Global climate change & Biodiversity II Readings: Moritz et al. 2008	Mini -assignment: "My favorite animal"
Th May 20	Exploitation of Biodiversity and its consequences Readings: Fenberg & Roy 2008; Pauly & Watson 2003	Paper summary: Moritz et al. 2008
Tu May 25	Extinctions I Reading: Jablonski 2008	
Th May 27	Extinctions II Reading: Barnosky et al. 2011	Quiz 4: Lectures 13-16
Tu June 1	Why Biodiversity matters and the future Reading: None	Paper summary: Barnosky et al. 2011
Th June 3	Open Discussion	Mini -assignment: "My favorite plant"
Mon June 7	"FINAL" 3 PM - 6 PM	Quiz 5: Lectures 17-19

All course content available at: http://canvas.ucsd.edu/

Class Logistics and Policies - Please read carefully

Office hours for Professor Roy:

Tuesday 10:30 - 11:30 AM (Zoom link available on Canvas). Or by appointment.

<u>Course expectations</u>: This is an upper division EBE class that builds on the knowledge gained in the introductory and lower division EBE classes. Without such background, you are unlikely to do well in this class.

<u>Course Website</u>: The BIEB 140 course site on Canvas should provide you with recorded video lectures, recorded discussion sections, required readings (i.e. primary research articles), assignments, and quizzes. All of the necessary Zoom links will also be available through this site.

Lectures: I highly recommend attending the lectures. This class does not have a textbook and so the lecture materials are the primary content and the focus of exams. Also, data show that, on average, students who attend the lectures tend to do better in this class. The lectures will be recorded and posted on Canvas. So if you cannot attend lectures synchronously, the recordings can be viewed asynchronously.

<u>Readings</u>: This class has no textbook but everyone is expected to read and understand the scientific papers assigned to each lecture. These papers were chosen to supplement the material that can be covered in a lecture. Required readings for individual lectures are in the "Readings" folder on Canvas either as pdf files. The copyright of each of these articles is with their respective publishers/authors. By downloading an article, you agree to limit the use of the pdf file to printing of single copies for personal study. You may not modify the files in any way, or to use them for commercial purposes.

<u>Guide to the Readings</u>: The assigned readings for this class are either review papers that provide a broad overview of a topic or primary research paper. In either case, you don't need to "memorize" all the details. What is important is to understand the general conclusions and the main points of the paper, not the details of methods or associated information. In other words, please focus on the big picture as it pertains to the lectures.

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Discussion Section Times (Zoom links available on Canvas)

Section	Section ID	Time	IA
A01	44129	Wed 9:00-9:50AM	M. Tanda
A02	44130	Wed 11:00-11:50AM	M. Tanda
A03	44131	Wed 12:00-12:50PM	Joshua Allen
A04	44132	Wed 5:00-5:50PM	Sarah Villar

Discussion Sections: The IAs will be available to answer your questions about the lectures and reading materials. Attendance is not mandatory but previous experience shows that regularly attending discussion sections helps students do well in this class. We will also make recordings of some of the discussion sections available on Canvas. If you absolutely can't attend synchronously, make sure to look at the recordings.

Grading:

This year we will not be using Mid-term and Final exams. Instead your final grade for the class will be based on:

Quizzes: There will be a total of 5 quizzes throughout the quarter, given every other week. Each quiz will be worth 50 points but only your four highest scoring quizzes (total of 200 points) will count towards your final grade. You are free to skip a quiz or not take the final quiz if by then you are satisfied with your score. Quizzes will include T/F, multiple choice and short answer questions from the lectures and assigned readings. The quizzes will be given asynchronously in Canvas. **No late/makeup quizzes**.

Quizzes will be available on alternate Thursdays (dates below) from 10 AM - 10 PM Pacific Time. Only exception is the last quiz, which will be during the scheduled Final exam for this class. Quizzes will be timed in Canvas and once you start taking a quiz you will need to finish it within the assigned time. Quiz dates: April 15, April 29, May 13, May 27 and **Monday June 7 (3-6PM)**.

Paper summaries: In addition to the quizzes, there will be an assignment every other week that involves writing a short summary (about 1 page, single spaced) of an assigned paper. For these assignments, you are expected to carefully read the paper assigned for that week and write brief responses to the questions in the assignment. These assignments will be available from 10 AM Pacific time on Monday to 8PM Pacific on Friday. You need to finish and upload the assignment during this time period. **No late submissions will be accepted**.

Mini-assignments: Throughout the quarter there will be a total of five mini-assignments. For each of these you will need to do some research online and very briefly answer (3- 4 sentences) the questions. These should not take you more than 20-30 minutes to complete. There are no right or wrong answers for these so if you complete an assignment on time, you will get full credit! These assignments will be posted every other week at 10AM Pacific on Wednesday and you will have until 10AM Pacific on Friday to complete them. **No late submissions will be accepted**.

	Points	% of grade
Quizzes (4)	200	70%
Paper reviews (5)	100	20%
Mini-assignments (5)	50	10%
	350	100%

Your final letter grade will be based on the total number of points you receive using the e-grades scheme below. The class will not be graded on a curve UNLESS that would benefit the entire class. We will review the collective scores on week 8 and determine if grading on a curve will be beneficial.

A+	100%	to	97%
Α	< 97%	to	94%
A-	< 94%	to	90%
B+	< 90%	to	87%
В	< 87%	to	84%
B-	< 84%	to	80%
C+	< 80%	to	77%
С	< 77%	to	74%
C-	< 74%	to	70%
D	< 70%	to	60%
F	< 60%	to	0%

<u>Make up Policy</u>: All quizzes, paper summaries and mini-assignments need to be completed by the specified data and time. Late submissions will not be accepted and there will be no makeups for any assignments for his class. We will only consider exceptions in the case of documented illness or emergency.

To prepare for the quizzes:

- 1. Attend the lectures or watch the recorded versions! I would recommend taking your own notes during the lectures. ALL questions will come directly from the lectures and assigned papers.
- 2. Read the papers! Quizzes will have questions about the papers; these questions will require that you understand the material covered in each paper and the conclusions of the study.
- 3. Attend section regularly there you will be able to ask questions about the lectures and papers, which should help you better understand the material.
- 4. Do not cheat! Disciplinary steps will be taken when cheating is discovered. These steps may include failing the class and being reported to the appropriate authorities.

***A MESSAGE FROM THE UCSD ACADEMIC INTEGRITY OFFICE:

Statement of Academic Integrity:

Students are expected to do their own work, as outlined in the UCSD Policy on Integrity of Scholarship <http://wwwsenate.ucsd.edu/manual/appendices/app2.htm>. Academic misconduct will not be tolerated. Any student who engages in suspicious conduct will be confronted and subjected to the disciplinary process. Cheaters will receive a failing grade on the exam, and/or in the course. They may also be suspended from UCSD pursuant to University guidelines. (Translation: just don't do it!)

Academic misconduct includes but is not limited to:

1. <u>Cheating</u>, such as using "crib notes" or copying answers from another student during the exam.

- 2. <u>Plagiarism</u>, such as using the writings or ideas of another person, either in whole or in part, without proper attribution to the author of the source.
- 3. <u>Collusion</u>, such as engaging in unauthorized collaboration on exams, completing for another student any part or the whole of an exam, or procuring, providing or accepting materials that contain questions or answers to an exam or assignment to be given at a subsequent time