

Bio20c Ecology & Evolution Summer Session 2024

Instructor: Baldo Marinovic bbmarino@ucsc.edu Office Hours: M W 11:45-12:45

Teaching Assistant: Arshia Kapil akapil@ucsc.edu Office Hours: TBA

LSS Tutor: Juliana Marcinek (she/her) jmarcine@ucsc.edu

Course Structure:

This course introduces students to fundamental concepts relating to Evolution and Ecology. Each topic will be covered through a series of thematic modules that are sequential and build on previously presented content. These modules will consist of several components including lectures, videos, worksheets, and in-class participation activities. There will be 4 modules each for the Evolution and Ecology components of the class. The modules will run 1-2 Lectures in length, and new modules will be posted 1-2 days before they start. In addition to these components, students will also be required to participate in a weekly discussion section which involves lecture material review, structured activities, and quizzes. The time of the section will be determined during the first class meeting.

Text: There is no required text for the class, however it is highly recommended that students obtain this text: Life: The Science of Biology 12th ed by Sadava et al. The publisher has created a special subscription for the chapters that will be used in this course that will allow students access for 180 days at a cost of \$49.99. The etext can be obtained right now at the following location:

Custom eBook URL: vitalsource.com/custom/9781319486686

Tutoring Support: Learning Support Services (LSS) will be providing tutoring support for this class

What is Learning Support Services? Learning Support Services (LSS) is UCSC's undergraduate tutoring center. They effectively serve 3000+ students per year and employ undergraduate students as tutors. LSS will provide small group tutoring for this class. The class tutor is Juliana Marcinek and her contact information is provided above.

Students can sign-up for tutoring on Monday June 24th at 12pm on Tutor Hub on the LSS site and begin Wednesday, June 26th.

Worksheets: Each module will include one canvas based worksheet that will be posted towards the end of the module and due typically 4-5 days after posting. In addition there will be an extra credit worksheet available during the last week of the quarter. The lowest worksheet score will be dropped from each student's worksheet average. Worksheets will make up 25% of a student's grade.

Sections: Students must be enrolled and attend one of the weekly discussion sections. There are two sections which both meet on Thursdays. Each section will consist of an activity and a related quiz. Sections will meet at the Coastal Campus (Coastal Bio Bldg Rm 115 for Sec A and Rm 110 for Sec B) during weeks 1, 2 and 4 and up on main campus at the Thimann Greenhouse for Weeks 3 and 5). Section quizzes will make up 15% of a student's grade.

In class activities: Each lecture will typically feature 2 in-class activities that will include a canvas based quiz (there will be no in class activities for the first lecture on Jun 24). In class activity quizzes will make up 10% of a student's grade. The lowest 2 in-class activities will be dropped from a student's grade.

Exams and grades: There will be two exams – the midterm will cover the evolution component of the course and the final will cover the ecology component of the course. Exams will be online and administered through the class CANVAS platform. The midterm and final will each be worth 25% of a student's grade

Late/Missed work policy: Students will have the opportunity to submit worksheets, section quizzes, and in-class activities for 3 days after the due date but a late penalty of 10% per day will automatically be assessed.

Here is a list of the topics scheduled for each lecture.

Date	Lecture Topic
Week 1	
24-Jun	Intro: Science Before Darwin/Darwin
26-Jun	Evidence for Evolution/Micro-Evolutionary Processes
28-Jun	Microevolutionary Processes/Speciation
Week 2	
1-Jul	Speciation/Macroevolution
3-Jul	Macro Evolution/Phylogenies
5-Jul	Phylogenies
Week 3	
8-Jul	Evolutionary History of Life on Earth/Review
10-Jul	Midterm
12-Jul	Intro to Ecology/Biomes
Week 4	
15-Jul	Behavioral Ecology
17-Jul	Population Ecology
19-Jul	Community Ecology
Week 5	
22-Jul	Community Ecology/Ecosystem Ecology
24-Jul	Ecosystem Ecology/Review
26-Jul	Final Exam