

BIEB 176 - Conservation and the Human Predicament

Course Syllabus

Instructor: Dr. Shermin de Silva

Email: shdesilva@ucsd.edu

Office and hours: Muir Biology Room 2266, Tuesdays 10:00am-11:00am or by appointment*

*Note that Dr. de Silva is usually off campus. If you need to meet in person outside of office hours, please email to schedule an appointment.

Lecture times and room: Tu/Th 2:00pm-3:20pm, Center Hall 216

Course website: <http://tritoned.ucsd.edu> **Tweet:** #BIEB176

IA's:

Jeremy Warner: jwarner@ucsd.edu

Andrea Liu: akl018@ucsd.edu

Section times:

A01 M 08:00 A 08:50 A

A02 M 10:00 A 10:50 A

A03 M 01:00 P 01:50 P

A04 W 08:00 A 08:50 A

Course Description

This course will engage you in an interdisciplinary discussion of the human predicament, the biodiversity crisis, and the importance of biological conservation. Examines issues from biological, cultural, historical, economic, social, political, and ethical perspectives emphasizing new approaches and new techniques for safeguarding the future of humans and other biosphere inhabitants.

Discussion section attendance for this course is REQUIRED. This is where you will have the opportunity to engage more deeply with class contents through various activities and ask questions. You will receive 1 point for attendance and up to 2 points for participation each week.

Prerequisites: BILD 3 or ANTH 2 or consent of instructor*

*This course does not rely on prior knowledge. Non-biology majors who have not had the prerequisites are encouraged to talk to Dr. de Silva about taking the course.

Learning Outcomes

Upon completion of this course you should be able to:

- 1) Appreciate the history and variety of life on earth, and interaction between biotic and abiotic variables.

- 2) Connect biodiversity to your everyday lives, and vice versa, the impact of human activities on biodiversity.
- 3) Differentiate biological, economic, social drivers of change and appreciate the complexity of interactions.
- 4) Critically examine, challenge, and articulate your own preconceptions, assumptions, social dogmas and paradigms etc.
- 5) Envision how you can become active participants in solving problems.
- 6) Imagine pathways to solutions.

Course Philosophy & Grading

This course encourages deep critical thinking about the relationships between concepts and active engagement rather than fact-recall. Accordingly, there will be no midterms or final exams. Your grade will instead be based on section participation, online engagement, brief quizzes in lecture, and weekly individual assignments as well as two major group assignments. Grading rubrics will be provided for each assignment so that assessments are as transparent and non-subjective as possible. **Quizzes will be returned to you in your sections, so be sure to write your section time and IA's name on your quiz!**

Required Learning Materials

All required materials can be found on the course website. Readings will be uploaded in advance, lectures and videos will be uploaded after the relevant lecture. Please consult the website regularly for weekly discussion topics and assignments that will count toward the final grade. Assignments will not always be announced in lecture, you will be responsible for keeping up with them. Also keep an eye out for extra credit opportunities.

Accessibility, Diversity and Equity

Our goal is to make this course as accessible as possible. Students requesting accommodations and services due to a disability for this course need to provide a current Authorization for Accommodation (AFA) letter issued by the Office for Students with Disabilities (OSD), prior to eligibility for requests. Receipt of AFAs in advance is necessary for appropriate planning for the provision of reasonable accommodations. For more information, contact the OSD at (858) 534-4382 (voice), osd@ucsd.edu, or visit disabilities.ucsd.edu.

Students with disabilities are encouraged to get in touch with me early regarding their needs so that we can try to accommodate them, and provide alternative assignments if necessary. If you have any concerns related to accessibility, diversity and equity, please contact the instructor.

Assessment Policies

Item	Percent
a. Participation in discussion sections	15%
b. Participation online	5%

c. Quizzes	5%
d. Take-home assignments	25%
e. Group assignment 1	25%
f. Group assignment 2	25%
g. Extra credit	5%

The class will be graded on an absolute scale rather than a curve, with the following breakdown (in percent):

$\geq 96.66 = A+$ $96.65-93.33 = A$ $93.32-90 = A-$	$89.99-89.66 = B+$ $86.65-83.33 = B$ $83.32-80 = B-$	$79.99-79.66 = C+$ $76.65-73.33 = C$ $73.32-70 = C-$	$69.99-60 = D$ $<60 = F$
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Grade calculation

The **total weighted percent of points** possible in the course is calculated as follows:

$$0.15(\% \text{ from a}) + 0.05(\% \text{ from b}) + 0.05(\% \text{ from c}) + 0.25(\% \text{ from d}) + 0.25(\% \text{ from e}) + 0.25(\% \text{ from f}) = 100\%$$

To calculate **your weighted percentage total**, you may use the following formula:

$$0.15(\% \text{ from a}) + 0.05(\% \text{ from b}) + 0.05(\% \text{ from c}) + 0.25(\% \text{ from d}) + 0.25(\% \text{ from e}) + 0.25(\% \text{ from f}) + 0.05(\% \text{ from g}) = \text{Your percent total}$$

If you are taking the course pass/fail, the threshold for passing is **70%**.

Take-Home Assignments

There will be five short take-home assignments. They should be turned in via email to the instructor, and copied to your Section TA. You will receive your score via the Grade Center on TritonEd by the end of the following week, and comments/corrections will be returned either via email or in sections. You are encouraged to discuss any questions with your instructor and/or TA.

Late turn-ins: Late assignments will not be accepted without verified reason for exemptions.

Make-ups and regrades: There will be no make-ups for missed assignments, but you may substitute extra credit. Note however that extra credit may entail more effort for fewer points than the actual assignment.

Group Assignments

Science and even the humanities are by now highly collaborative endeavors. Solving problems requires cultivating the ability to work together. You will work on these skills via two major group assignments. The first will be a review paper. The second will be a case study and presentation

to be done the final week of class. For both assignments grades will be broken into two components: 50% of your score will depend on the quality of the final product, as assessed by the instructor; 50% of your score will be based on the peer evaluation score confidentially assigned by your teammates based on your contribution.

Group assignment 1

Many academic papers today are written by multiple authors. Students will choose a group to work with and write a well-researched review paper on one of the topics from a topic list provided by the instructor. Groups may propose an alternate topic, but these will need instructor approval. Students will model their papers on any of the review papers in their assigned readings. Students will sign up online via a Google spreadsheet, the link to which will be posted on TritonEd. Group sizes are limited to AT MOST 5 people, and can consist of individuals from any section.

Group assignment 2

Clear communication and public speaking is an invaluable skill in any profession, and especially so for conservation. Academic conferences are one way in which academics engage with one another, and even with the public. Students will choose a problem to analyze deeply, and present their analysis along with proposed solutions to the class at large at an end-of-term conference-style setting during the last week of class, along with a written report. As with assignment 1, further details and sign-ups will be posted online. Groups are encouraged to sign up early and start thinking about their projects well in advance to allow sufficient time to put together a polished final product. Grading for this assignment will be the same as for assignment 1. Group sizes are limited to AT MOST 5 people, all members must be from the same discussion section, and group composition cannot be the same as in group assignment 1.

Out of fairness to all, there will be no extensions granted for group assignment submission.

Quizzes

Quizzes will be given as hand-outs in lecture and will not be announced in advance. Any content from the required reading or lectures in preceding weeks are fair game for quizzes. They will be designed to test your reasoning rather than pure recall. Supplemental material will not be tested. There are no make-ups for missed quizzes, although you may substitute extra credit. Note, however, that extra credit assignments will require more time investment than simply keeping up with lectures and assignments as we go.

In-lecture Participation & Student Response Systems

Every TUESDAY at the start of class you will spend 5 minutes discussing a fresh conservation news story. Be prepared to be cold-called to recount your news item. There will also frequently be question prompts, polls, and other interactive methods used in lecture. In-lecture participation will not be graded, they are simply intended to facilitate thinking and engagement with each other and the content, break up monotony, as well as provide on-the-fly feedback on your understanding. So relax, enjoy, and try to pay attention so that you can interact honestly.

Extra Credit

Opportunities for extra credit will be announced as we go. These include documentary film screenings, an optional naturalist-guided nature hike, bonus assignments, or something else. With the exception of the hike, you will not know in advance how many possibilities there will be, or what the assignment might entail. Keep a lookout on the course website.

Conduct & Integrity

An IMPORTANT note on civil conduct: Conservation is inherently political and sometimes deeply personal. This should be a safe space for anyone to express their views and opinions. **Please be respectful of your peers and instructors**, even if you disagree - an important life skill to have when tackling the problems of the world. Failure to uphold a civil standard of conduct will be reflected in your participation scores and/or other disciplinary measures.

Cheating and plagiarism will not be tolerated. Such action may result in failure for that assignment, or failure from the course and reporting to the UCSD Academic Integrity Review Board. Consequences for cheating can be severe, including possible suspension. Please think twice before risking your academic future.

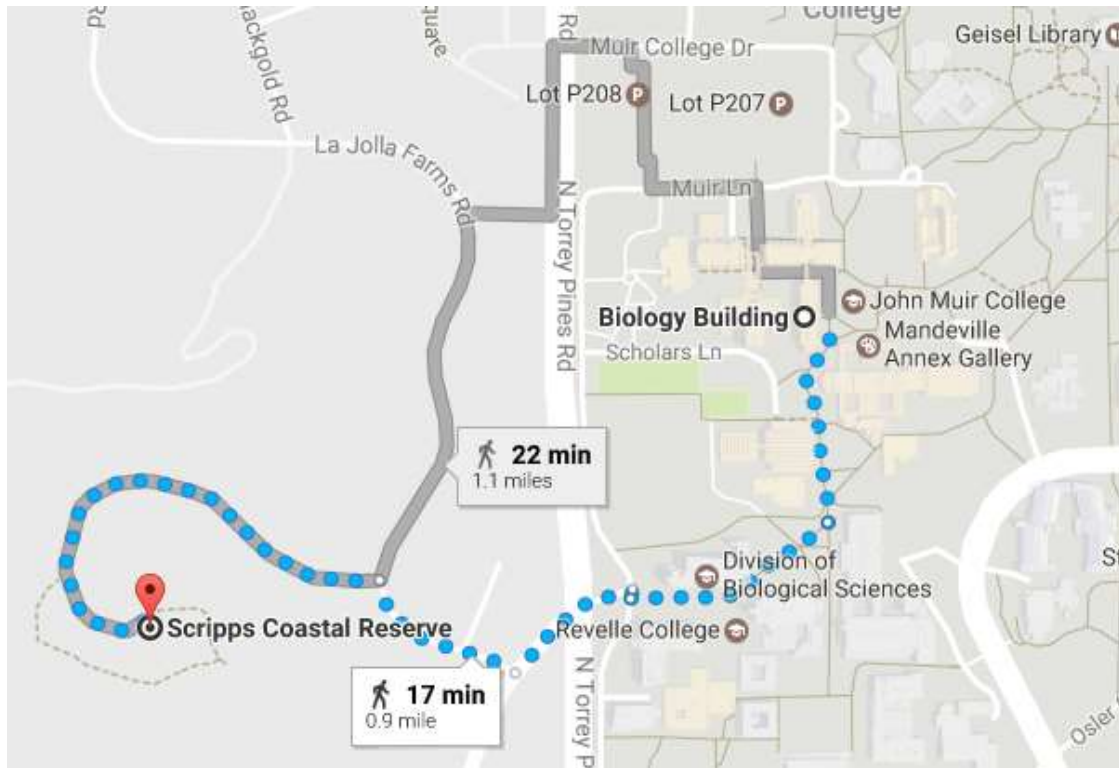
Course Schedule & Target dates*

*These are subject to change. Changes will be posted on the course website.

Course Content	Activities
Week 1, 4/2 – 4/8: Biodiversity in space and time	Become familiar with course website, respond to discussion prompt, start weekly journal. Prepare for debates during sections. Optional: join a working group for discussing assignments.
Week 2, 4/9 – 4/15: Conservation ethics	Sections: Debate. 1. Ethics assignment (Due 4/17).
Week 3, 4/16 – 4/22: Biological Processes I – From Genes To Populations April 22 nd is Earth Day! San Diego March For Science https://www.facebook.com/SDMarchforScience/	Sections: Start on assignment. 2. Population dynamics assignment (Due 4/24). OPTIONAL: Apr. 22 4-6pm - Los Peñasquitos Canyon Preserve Hike with the NAT. Details: http://www.sdnhm.org/calendar/public-programs/canyoneer-hikes/canyoneer-hike-list/
Week 4, 4/23 – 4/29: Biological Processes II – From Populations To Ecosystems <i>4/28: Deadline to drop the course without a "W"</i>	Sections: Start on assignment. 3. GIS assignment (Due 5/1). Group assignments 1 & 2 posted online. All EXCEPT those who are dropping the course should sign up for a group.

Week 5, 4/30 – 5/6: Human Population, Human-Nature Interactions 5/1 – 20 min guest lecture – Georgia Kayser, UCSD	Sections: Work on Group Assignment 1 4. Supply chain assignment posted (Due 5/15).
Week 6, 5/7 – 5/13: Consumption I - Food systems 5/9 – 20 min guest lecture - Suzanne Hall, San Diego Zoo Global	Sections: Film Work on supply chain assignment & group assignments.
Week 7, 5/16 – 5/20: Consumption II - Land, Air, Water	Sections: California water case studies. Group assignment 1 and peer evaluations due by 8am Monday 5/22. No weekly assignment, work in groups.
Week 8, 5/21 – 5/27: Energy, Global Change	Sections: Meet at Scripps Coastal Reserve. 5. Global change & ecosys. services assignment (Due 5/29).
Week 9, 5/28 – 6/3: Economics & Valuing Ecosystems <i>5/29 is Memorial Day.</i>	** No sections ** No weekly assignment, work in groups.
Week 10, 6/4 – 6/10: Mini-Conference	Sections: Group presentations. Group assignment 2 and peer evaluations due by 8am Monday 6/5.

How to get to Scripps Coastal Reserve (Week 8 sections):



Further Resources

Learning:

Watch an archetypal little professor with a beard and British accent tell you how to write a good essay (with cartoons):

<https://www.youtube.com/watch?v=liyFKUFCQno>

Websites:

Nature News (often bad):

Mongabay.com

When things get a bit too much, good news & fun things:

Treehugger.com

April 1-30 is Earth Month at UCSD. Find calendar of events at:

<http://sustain.ucsd.edu/>

Film:

Planet Earth series I and II

Food Inc.

Reading:

Aldo Leopold - A Sand County Almanac & Thinking Like A Mountain

Rachel Carson - Silent Spring

Jane Goodall - A Reason For Hope

Michael Pollan - The Omnivore's Dilemma

Please share your own findings relevant to the course at:

https://docs.google.com/document/d/1K5pRhxmckmVRKJGGiPUtDHAspbLRtrAdevEBI-iy_2o/edit?usp=sharing