Syllabus BIEB 126 "Plant Ecology" Summer session 1 2023 Format: REMOTE
Lectures: MTuWTh 9:30a-10:50a (mostly asynchronous, all recorded and posted on Canvas)
Tests: <mark>**synchronous**</mark>, during lecture time
Final exam: Friday August 4th 8-10 a.m.
This syllabus is subject to change if necessary due to public health crises or other unforeseen events

Faculty:
Prof. Elsa Cleland (she/her) email: ecleland@ucsd.edu
Office hours: Tuesdays and Thursdays 10:30 a.m. on Zoom (except on days when there is a test or a holiday). I'm also available to meet in person or on Zoom office by appointment.

Instructional Assistants:

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Course Description: Ecology is the study of interactions between and among organisms, and between organisms and their environment. Plant Ecology focuses on the unique features of plants; all plant species require the same basic resources (water, carbon dioxide, light, nutrients) and yet plants have diversified to inhabit all of the Earth's biomes.

Attendance: As a remote course, synchronous attendance in lectures not required, although all tests and exams will be administered synchronously, only during the assigned lecture and/or final exam time.

Prerequisites: BILD 3

Textbook: Much of the lecture material is based on the recommended textbook, which is widely available for rent or purchase, from a variety of online sources as well as the UCSD Bookstore: "The Ecology of Plants" 3rd edition, published 2020. Authors: Jessica Gurevitch, Samuel Scheiner, and Gordon Fox. Note: there are earlier versions of the text but it has been substantially revised, and hence I can't be sure whether the earlier versions will cover all of the same material. You'll see that the textbook is recommended and not required. Most students find that having the material presented multiple ways helps them to absorb the concepts. I'm assuming that you're reading the chapter in the textbook to help you understand the lecture, and that this is part of the time you're budgeting for your coursework outside of lecture. If you're seeking greater detail and challenge, the textbook is an excellent resource.

Lectures: The second lecture on July 5th will be given synchronously on Zoom, so students can meet Prof. Cleland and ask any questions about course structure. The final lecture will also be a synchronous Zoom review session, in preparation for the final exam. All other lectures will be pre-recorded, and all will be available in the Media Gallery on Canvas. Material presented in the lectures will be the majority of what appears in exams, and will complement the reading from the textbook. There is considerably more detail in the textbook than will be presented in lectures; material from the text that is not discussed in lecture will not appear on exams. The course is designed so it could be taken remotely, however questions about the content of the lectures should be answered during Zoom discussion sections and office hours (see Communication section below).

Discussion sections: All discussion sections will be held on Zoom. **<u>You may attend any section, regardless of which one you are registered in.</u>** Discussion sections will not be recorded, to encourage open student participation. Discussion sections are designed so that students have the opportunity to think critically and creatively, communicate ideas both verbally and in writing, and learn through peer-peer

interactions. Although synchronous attendance in discussion sections is highly encouraged, attendance is not taken in discussion sections, nor are there points associated with participation.

Approximately 3-5 review questions will be assigned for each chapter in the textbook, posted on Canvas. They are designed to be answered in short paragraph form. The written questions must be submitted to Canvas *on time* (no credit given for late submissions; don't wait until the last minute to submit to avoid issues such as power outages, etc., note the lowest grade for discussion section questions will be dropped, to account for such unavoidable issues). The answers to discussion section questions *must be your own work, and may not be copied wholly or in part from the textbook, lecture slides, external sources (including AI) or other students*. An initial submitted assignment with evidence of plagiarism based on its TurnItIn score will receive a score of 0 points. Any subsequent submission of an assignment with plagiarized content will constitute a violation of UCSD's policy on Academic Integrity.

During section, students will discuss the assigned question in small groups, and will then present that answer to the larger group. Hence, it's important to come prepared. The submitted questions will be graded based on completeness (e.g. full sentences) and whether they address course content, but they will not receive individual feedback. Hence, it is the students' responsibility to make sure they understand the answers by participating in section discussion. A great way to do this is to "correct" your answers during the section.

Note that your IA keeps track of all discussion question points. If you have any questions about your grades for discussion questions, please direct them to your IA.

Communication: There will time in discussion sections and office hours to answer all of your questions. Please note**, *we cannot answer content questions via email*;** this policy is based on years of experience - often times if students have a question, their understanding of a topic is "muddy," making the question unclear, and it's hard for us to know if we've addressed your question via email. Much better to just ask us directly, either by raising your hand in the Zoom session, or submitting your question in the chat.

If you need to have a confidential discussion about circumstances that are impacting your learning, or you'd like to discuss graduate school pathways etc., please email Prof. Cleland to set up an individual Zoom meeting.

Schedule of lectures, readings and assessments:

July 3: Pre-recorded lecture introducing the course, syllabus and assignments
July 4: Holiday, no lecture
July 5: Lecture on chapter 2 (skip Box 2C & 2D) Photosynthesis and Light ==synchronous Zoom== (will be posted in the Media Gallery as well, but come say hello and ask your questions)
July 6: Lecture on chapters 3 (only pages 53-74) & 4, Water and Soil

July 10: Lecture on chapter 5 (skip Box 5B) Ecosystem Processes
July 11: Lecture on chapter 6 Growth and Reproduction, and introduction to population biology (Ch. 8)
July 12: Test 1, covering chapters 2-6
July 13: Lecture on chapter 7 Plant Life Histories (guest lecture pre-recorded by Prof. Josh Kohn)

July 17: Lecture on chapter 10 Competition and Other Plant Interactions
July 18: Lecture on chapter 14 Local Abundance, Diversity, Rarity & Invasive Species
July 19: Lecture on chapter 11 Herbivory and Other Trophic Interactions
July 20: no lecture, time to work on projects
Friday July 21: independent project due

July 24: Test 2, covering chapters 7, 10, 11 & 14
July 25: Lecture on chapter 12 Community Diversity, Structure, and influence of diversity on ecosystem processes

July 26: Lecture on chapter 13 Community Dynamics and Succession
July 27: Lecture on chapter 16 &18 Climate Change and Plants, Biomes
Friday July 28th, group presentations due

July 31: Lecture on chapter 19 Global Biodiversity Patterns & Conservation
Aug 1: no lecture, day to watch & comment on student presentations
Aug 2: Test 3, covering chapters 12, 13, 16, 18 & 19
Aug 3: ==synchronous Zoom review session== for the final exam
Aug 4: 8 a.m. final exam, cumulative across the course

Grading & Assessment: Assessment reinforces the ideas presented over the quarter, and allows students to gauge their progress in the subject. Grading will be based proportionally on the following assessments:

<u>10% individual project</u> – digital species collection
        Students will create a digital collection of 20 plant species found in a natural area. This assignment is meant to encourage you to observe and learn about plants where you live. See details on Canvas.

<u>10% group project</u> – presentation on a San Diego plant species
        Students will be assigned to group (five students per group) to work on a collaborative recorded presentation, focused on a plant species found in San Diego county. All students must present in order to receive credit. Watching other student's presentations, commenting, and asking questions in the Canvas discussion forum is part of the grade.

<u>50% tests</u>
        The course will have four tests (three midterms and a final) each equally weighted. Students will be able to ***drop their lowest*** of the four (so each of the remaining tests will be worth 20%). There will be ***<u>no make-up exams</u>***; the option to drop the lowest test score is meant to account for issues such as illness, emergencies, and other unavoidable issues. The tests will focus on material presented both in lectures and in the reading. We do not distribute "practice tests," ***because the lecture follow-up assessments and discussion section questions are meant to help you prepare for tests*** (see below).

<u>15% lecture follow-up assessments</u>
        After each lecture students will answer a series of practice test questions, there are unlimited attempts so all students should have the opportunity to get full credit. These questions are meant to be answered immediately after the lecture, to solidify the learning from the lecture. Hence, the lecture follow-up assessments are due the day after each lecture. Late submissions are allowed (until Aug 3rd), but students are encouraged to stay up to date, since they really help you study for the midterms. Note: you're welcome to repeat these assessments to study for the final exam (in this case, Canvas will mark the repeated submission as late but don't worry, you still receive full credit).

<u>15% Discussion section questions</u>
        To receive credit discussion section questions must be turned in ***on time*** and ***fully completed***. Questions are due before each section, because they will be discussed in section, and they will be the basis for your participation. Submissions will be graded on a scale of 0 to 2. Full credit requires answers to be complete, logical, and based on the material presented in class. Submissions that are incomplete, not based on course material, or display minimal effort will receive between 0 and 1. Note that the questions will not be graded for accuracy; it's your responsibility to check that your answers are correct when they are discussed in section. This is a good idea, since material in discussion section questions usually appears on tests. There are six sets of discussion questions due during summer session, ***the lowest grade will be dropped***, to allow for the inevitable cases where you forget to turn in an assignment, there's power outage, etc. Hence each of the remaining five sets of questions will be worth 4% of your final grade.

Note that the course is designed to have discussion sections on Here's a schedule of questions due, and/or activities for each section:

Note that all assignments are due on Tuesdays and Thursdays, if you are in a M/W section, this is the day after your assigned section. You may find it is more convenient to attend T/Th sections given this schedule, remember you can attend any section.

July 3rd & 4th *Holiday, no section*
July 6th questions due for chapters 2-4
July 11th questions due for chapters 5-6
July 13th no section assignment due, open time for questions
July 18th questions due for chapters 7&10
July 20th questions due for chapters 11&14
July 25th no section assignment due, open time for questions
July 27th questions due for chapters 12 & 13
August 1st, question due for chapters 16, 18 & 19
August 3rd, no assignment due, review for final

Grading scale: We will use the default grading scale in Canvas to calculate final grades.

Creating a learning community: Discussing course material with fellow students, either in discussion sections or in study groups, is a great way to practice productive professional relationships. You should treat your fellow students in the same way that you would want to be treated in a future job. Treat everyone with respect, and ask questions rather than make assumptions about shared views or experience. Listen to everyone's perspectives and ideas. By entering into the class you have agreed to abide by UCSD's Principles of Community: https://ucsd.edu/about/principles.html

Students with disabilities: Students requesting accommodations and services due to a disability for this course must 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, email the OSD at osd@ucsd.edu, visit their office at University Center, or go online at http://disabilities.ucsd.edu/about/index.html

Resources for student support: A college education teaches you to identify solutions to tough problems. These are skills that future employers will value. University students often encounter non-academic issues that can impact student success, and UC San Diego has invested in a variety of resources to help students. You can and should use these resources to ensure your success, here's a partial list that may be useful to you:

Academic Success, including advising, tutoring, mentoring, research opportunities etc: https://ucsd.edu/academics/academic-success.html

Basic Needs refers to the most essential resources required to thrive as a student, which includes access to nutritious food, stable housing, and financial wellness resources. The Hub is a new UC San Diego space that offers students the opportunity to engage in and link to Basic Needs resources. This includes the Triton Food Pantry: https://basicneeds.ucsd.edu/

The Campus Community Centers at UC San Diego build community among our diverse population of students, faculty and staff members. Each provides a forum to increase awareness of social issues, encourage dialogue, build community, improve retention, increase outreach and yield, and foster academic success. For a list of the many campus community centers, as well as other resources to support students, go to: https://diversity.ucsd.edu/centers/index.html

Counseling and Psychological Services (CAPS) provides free, confidential, psychological counseling and crisis services for registered UCSD students. CAPS also provides a variety of groups,

workshops, and drop-in forums. For more information, please visit our Counseling Services page: https://caps.ucsd.edu/

CARE at the Sexual Assault Resource Center is the UC San Diego confidential advocacy and education office for sexual violence and gender-based violence (dating violence, domestic violence, stalking). CARE provides free and confidential services for students, staff and faculty impacted by sexual assault, relationship violence and stalking.

The Undocumented Student Services Center is committed to serving our undocumented students and their families through holistic services. We also advocate for generating a sense of community for all students that are undocumented or come from mixed immigration-status families. https://students.ucsd.edu/sponsor/undoc/

Resources for Students with Dependents: https://students.ucsd.edu/well-being/wellness-resources/student-parents/index.html

The Student Veterans Resource Center (SVRC) is committed to ensuring that military affiliated students successfully make the transition from the military environment to campus life, and are assisted in their progress toward completing their academic degree. In collaboration with other University partners, the SVRC seeks to identify and mitigate the barriers to academic success that are specific to the military affiliated student community. https://students.ucsd.edu/sponsor/veterans/index.html