INTEGBI C153: Ecology

Summary

Ecology is a scientific discipline that focuses on the interactions between organisms and their environment (including people). This class will provide an overview of core concepts and applications, and will also provide practice with writing, small-group work, critical thinking, and data analysis.

The class will cover principles of population ecology, illustrated with examples from marine, freshwater, and terrestrial habitats. It will also consider the roles of physical and biological processes in structuring natural communities and ecosystems. Observational, experimental, and theoretical approaches will be discussed. Topics will include quantitative approaches relying on algebra, visual analysis of graphs, and elementary calculus.

Prerequisites

Biology 1B or consent of instructor

Class meeting times and places

Lecture

Day & Time: Tuesdays & Thursdays, 09:30 - 10:59 AM
Location: Moffitt Library 101

Discussion - Group 1 (Section 101)

Day & Time: Tuesdays, 2:00 - 2:59 PM
Location: Wheeler 202

Discussion - Group 2 (Section 102)

Day & Time: Fridays, 9:00 - 9:59 AM
Location: Hearst Mining 310

For more information about physical access on campus, please visit the Disability Access and Compliance office's page of maps. For a map of gender-neutral/all-gender restrooms (including accessibility status) and restrooms with child changing equipment, please visit the Facilities Services inclusive restrooms map.

Faculty instructors

Dr. Benjamin Blonder (he/him)
Environmental Science, Policy, and Management
Office: Hilgard Hall, 309

Email: benjamin.blonder@berkeley.edu
Website: http://www.benjaminblonder.org
Drop-in hours: Fri 2-3 PM

Dr. Onja Razafindratsima (she/her)
Integrative Biology
Office: Valley Life Science Building, 5085

Email: onja@berkeley.edu
Website: https://www.razafindratsima.org/
Drop-in hours: Fri 2-3 PM

Each faculty instructor will have drop-in hours only during weeks when they are teaching (see detailed schedule below).

Graduate student instructor (GSI)

TBD

Getting help in-person
Drop-in hours are meant for you. Please visit the faculty or GSI to introduce yourself, get help on assignments, clarify course material, get advice on jobs/internships, or to talk about anything else!

Getting help online
You are encouraged to ask and answer questions. We will use Ed Discussion via a bCourses integration.

Email etiquette
The GSI is your first point of contact regarding course content, assignments, due dates, technical issues, grades, etc. The faculty and GSI can address questions around accommodations related to the course. Allow 48 hours (or, on weekends, until Monday morning) for a response to an email. Please do not wait until the last minute to ask a question, as we may be unavailable to reply. Please be courteous and professional in your writing, as we will be when contacting you.

Learning outcomes
- Apply concepts such as species, population, community, ecosystem, environment, landscape to model natural systems
- Identify the ecological and evolutionary factors that influence population dynamics and determine species' ranges / abundances across environments
- Identify the biophysical processes that determine organisms' relationship to their environment and the flow of energy in ecosystems
- Describe feedbacks between the earth / climate system, human activity, and natural systems
- Evaluate the importance of spatial and temporal scale for ecological patterns and processes
- Assess the role of ecology in making policy around human health, economics, natural resource, and global change issues

Skill set outcomes
- Use systems thinking approaches for conceptualizing models
- Analyze real-world datasets to generate hypotheses and conclusions about ecological pattern and process, using visual inspection or Microsoft Excel
- Evaluate evidence from primary sources
- Describe jobs available in ecology and where to find them
- Discover the natural history of at least one local ecosystem through repeated field observations
- Collaborate within a team to solve problems
- Communicate to a broader audience through written and oral methods
- Use ecological evidence to think critically about the news and about policy issues

The big messages you will learn from the class
- Most parts of an ecological system are interconnected and change after perturbations
- Ecology depends on spatial and temporal scales
- Physical laws limit ecological processes
- Mathematics and statistical models enable quantitative understandings of ecology
- Humans and nature are closely linked, even in apparently pristine environments
- Ecology is a key part of evidence-based decision making in human societies

What the course will not cover
This is an introductory class that must survey a wide set of topics. As such, it will not be able to cover several areas that are important parts of the field of ecology, including

- Ecological economics
- Ecological genetics

- Evolutionary ecology
- Animal behavior
- Ecophysiology

Overall structure of the class

Lecture*:* The class will be focused on facilitating your learning through active approaches. You will read a set of textbook materials before class, then will get to work in small groups with your peers during classes to synthesize and extend this information. Your active participation will be critical to your success in the class. Class time will include a range of participatory activities designed to check and extend your understanding, including interactive questions and small readings/discussions/projects. These small projects will be completed in small groups and will be the main type of 'homework', though we believe you can largely complete them during class time. Small projects will be due the week after their material is covered in lecture, so you will have time to get support from the GSI or faculty in their drop-in hours if you want it.

Practice/review: Each week a set of practice quiz questions and answers will be posted to bCourses and covering material from the prior week. These will be at approximately the same difficulty level as on the section quizzes. Solutions to weekly group assignments will also be posted after assignments are due to facilitate review. Using these resources will not impact your grade.

Discussion: Discussion section will provide an opportunity to apply and deepen concepts learned in lecture. Sessions will provide practice reading, understanding, and criticizing peer-reviewed scientific journal articles. Articles are selected from foundational studies that have greatly influenced the field.

bCourses

This course will be administered through bCourses. Each time you log into bCourses, check for Announcements about the course. Announcements will also be sent to your Berkeley email; if you use a different email account you must check your Berkeley email regularly.

Required class materials

Readings are from Relyea, R. *Ecology: The Economy of Nature* (9th Edition). You can also purchase the 7th or 8th Edition, which has different authors (Ricklefs & Relyea). eBook or paperback versions are less expensive and work just as well. The book also contains sample questions and other review resources to help you practice.

Please bring a laptop or tablet to class if possible - this will let you submit work on bCourses, and work on interactive simulations / data analyses with your group. The screen on a smartphone is probably too small to be useful. Please let us know confidentially by email if you are unable to bring a computer and we will make other arrangements for you. You can also contact the **Student Technology Equity Program:** the Student Technology Equity Program (STEP) which provides needs-based loans of technology hardware to students. Laptops, internet hotspots, drawing tablets, microphones, webcams, and headphones are available.

Class schedule

Quizzes/final project dates are shown in **bold red**. Assignment deadlines are shown underlined.

Day	Date	Topic	Pre-class reading (9th ed.)	(8th ed.)	Instructor
Tue	17-Jan	0: Introduction to the class, scope of ecology, meeting classmates			Blonder, Razafindratsima
Organisms					
Thu	19-Jan	1: Adaptations to terrestrial environments (in-class work due next Tuesday)	Ch 1.1, 1.2, 1.3, Ch 4	3	Blonder
Tue	24-Jan	2: Adaptations to variable environments	Ch 5	4	Blonder
Thu	26-Jan	3: Life histories (in-class work due next Tuesday)	Ch 7	8	Blonder
Tue	31-Jan	4: Reproductive strategies	Ch 8	9	Blonder
Populations					
Thu	02-Feb	5: Population distributions (in-class work due next Tuesday)	Ch 10	11	Blonder
Tue	07-Feb	**Section Quiz 1 - Organisms (Lec 0-4)**	-	-	Blonder
Thu	09-Feb	6: Population growth and regulation I (in-class work due next Tuesday)	Ch 11.1, 11.2	12	Blonder
Tue	14-Feb	7: Population growth and regulation II (Mock job search due)	Ch 11.3	12	Blonder
Thu	16-Feb	8: Populations over space and time I (in-class work due next Tuesday)	Ch 12.1, 12.2	13	Blonder
Tue	21-Feb	9: Populations over space and time II	Ch 12.3, 12.4	13	Blonder

Thu	23-Feb	**Section Quiz 2 - Populations (Lec 5-9)**	-	-	Blonder
Species interactions					
Tue	28-Feb	10: Predation and herbivory	Ch 13	14	Razafindratsima
Thu	02-Mar	11: Competition (in-class work due next Tuesday)	Ch 15	16	Razafindratsima
Tue	07-Mar	12: Mutualisms	Ch 16	17	Razafindratsima
Thu	9-Mar	13: Parasitism (in-class work due next Wednesday)	Ch 14	15	Razafindratsima
Communities					
Tue	14-Mar	14: Community structure I (optional group swap)	Ch 17.1, 17.2	18	Razafindratsima
Thu	16-Mar	15: Community structure II (in-class work due next Wednesday)	Ch 17.3, 17.4	18	Razafindratsima
Tue	21-Mar	16: Community succession	Ch 18	19	Razafindratsima
Thu	23-Mar	**Section Quiz 3 - Species interactions & communities (Lec 10-16)** (journal draft due next day)	-	-	Razafindratsima
Tue	28-Mar	Spring break			-
Thu	30-Mar	Spring break			-

Ecosystems					
Tue	04-Apr	17: Climate system and biomes	Ch 2	5,6	Blonder
Thu	06-Apr	18: Movement of elements in ecosystems (in-class work due next Wednesday)	Ch 20	21	Blonder
Tue	11-Apr	19: Movement of energy in ecosystems	Ch 19	20	Razafindratsima
Global ecology					
Thu	13-Apr	20: Landscape ecology and global biodiversity (in-class work due next Wednesday)	Ch 21	22	Razafindratsima
Tue	18-Apr	21: Conservation of global biodiversity	Ch 22	23	Razafindratsima
Thu	20-Apr	22: Global change: community & ecosystem effects (in-class work due next Wednesday)	-	-	Razafindratsima
Tue	25-Apr	**Section Quiz 4 - Ecosystems and global ecology (Lec 17-22)**	-	-	Razafindratsima
Thu	27-Apr	Summaries, feedback, Final project intro (final journal due next day). Final project made available on bCourses.	-	-	Razafindratsima, Blonder
Mon	8-May	**(Final project due)**	-	-	-

Grading policy

Your grade will be based on the percentage of points you earn through the semester.

Percentages	Grade
97-100%	A+
93-97%	A
90-93%	A
87-90%	B+
83-87%	B
80-83%	B

77-80%	C+
70-77%	C
60-70%	D
0-60%	F (fail)

All grades are final. If you feel you have received a grade in error, you may explain the situation to the instructors. We may choose to take no action (most likely), re-grade your work, or repeat the assessment in an oral examination. You could receive either a higher or a lower score if we re-assess your work.

There are **1025 total points** available for you to earn, **plus 3 'free' points** (in green text). You can get 'free' points for completing your group's team contract, a field safety agreement, and the anonymous mid-semester feedback survey–these are graded for completion only.

Assignment	**# of**	**# lowest dropped**	**Max. points each**	**Max. total points**	**Work type**	**Date due**	**How to submit**
Reading participation	13	3	18	180	Individual	Friday at 11:59 PM each week	Submit on bCourses
In-class activities	11	1	25	250	Group, but submit as Individual	Tuesday at 11:59 PM the next week it is assigned (see detailed schedule)	Submit on bCourses
Mock job search	1	0	25	25	Individual	14-Feb at 11:59 PM	Submit on bCourses
Natural history journal - draft (at least 2 entries)	1	0	50	50	Individual	Friday after last class before spring recess (24-Mar at 11:59 PM)	Submit on bCourses
Natural history journal - final	1	0	100	100	Individual	Friday after last day of class (28-Apr at 11:59 PM)	Submit on bCourses
Section Quizzes	4	1	70	210	Individual	Online (07-Feb, 23-Feb, 23-Mar, 25-Apr)	Multiple choice quizzes

Final comprehensive project	1	0	150	150	Group	Monday at start of final week (8-May @ 11:59 PM)	Submit on bCourses
Activities in the discussion section	13	3	6	60	Individual	(Refer to the syllabus for Discussion)	(Refer to the syllabus for Discussion)
Team contract	1	0	1	1	Group	27-Jan at 11:59 PM	Submit on bCourses
Field safety agreement	1	0	1	1	Individual	17-Mar at 11:59 PM	Submit on bCourses
Mid-semester survey (anonymous)	1	0	1	1	Individual	24-Feb at 11:59 PM	Submit on bCourses

Assignment details

1. Pre-class reading quiz

You are expected to complete the full set of pre-class readings and answer up to 3 questions about the reading before class. You will receive points for completion, not for correct answers.

Rubric

Per quiz: did not start or partially complete (0%); fully complete (+100%).

2. In-class group activities

Each week you will work with your group on a set of activities that may include analysis of data, interpretation of case studies, etc. Exact assignments will be available on bCourses starting during class time. You will be responsible for submitting a group response the following week, which may take the form of a completed analysis, short paragraph response, or other written document. We anticipate that you should be able to mostly or fully complete each assignment in available class time but are welcome to work on it after class as well.

Solutions to these activities will be posted to bCourses after the due date as written documents and/or video explanations, to facilitate studying.

Rubric

Per assignment: did not participate (0%); some but incomplete effort (50%); complete effort but mostly incorrect answer (75%); complete effort and mostly correct answer (100%). Note that there may be multiple correct answers to an open-ended assignment.

3. Mock job search

This assignment is intended to make you more aware of job and career opportunities related to ecology, as well as identify topic areas and skills that may interest you. This assignment is due relatively early in the semester because many summer internships have closing dates in January and February. You may find a

great opportunity via completion of this assignment. Starting early may help you identify more available summer opportunities.

You will search available jobs via sites such as:

- the ECOLOG mailing list (create a free account following instructions at https://www.esa.org/membership/ecolog/ and then look in the message archive) - one of the most well-used and general mailing lists for ecological jobs and internships.
- the NSF Research Experiences for Undergraduates (https://www.nsf.gov/crssprgm/reu/list_result.jsp?unitid=5047) program list – funded summer research opportunities across all disciplines. A community list of ecology REUs is at https://docs.google.com/spreadsheets/d/1Si6WCt-teQ-3J5MKmmT7BNgkVacnkDH_E0Tc9l3IVp0/edit#gid=0.
- the USAJOBS portal (https://www.usajobs.gov) listing all federal positions available in e.g. in land management agencies, research agencies, and research centers.
- The TAMU wildlife/conservation job board (https://wfscjobs.tamu.edu/job-board/)
- Marine ecology aggregator (scroll down to the second section at https://hopkinsmarinestation.stanford.edu/graduate-programgraduate-life-hopkins/careers)
- Conservation job board (https://www.conservationjobboard.com/)
- State of California, CalCareers (https://www.calcareers.ca.gov/) ● University of California Jobs (https://jobs.universityofcalifornia.edu/)
- ● For those about to graduate:
    - https://www.neonscience.org/get-involved/work-opportunities/seasonal-fieldwork
    - https://www.fs.usda.gov/working-with-us/jobs/students-and-recent-graduates (see recent graduates)
    - https://www.usgs.gov/human-capital/pathways-recent-graduates-program
    - https://www.nps.gov/aboutus/pathways.htm
    - https://orise.orau.gov/internships-fellowships/recent-graduates.html
    - https://www.pathwaystoscience.org/programs.aspx?u=Postbacc_Post-Baccalaureate&submit=y
- ● or any other job listing sites that are of interest to you based on your particular interests

Please spend at least 1 hour browsing through listings on at least 2 different job sites. You will need to identify one job/internship listing that requires skills relevant to ecology *and* that are interesting to you personally–you can pick whether you are searching for your immediate future, post-graduation future, or long-term future. You may want to use various keywords to narrow down your search. Once you have identified a job, write a document (1-2 pages, single-spaced, 12 pt font, 1" margins) providing answers to the following questions:

1. What job sites did you search? (1 sentence)
2. How long did you spend looking, and approximately how many jobs did you look through? (1 sentence)
3. What is the job opportunity you found? In your own words, what is the position about? What skills would you need to be successful in it? (1 paragraph)
4. How does the job relate to ecology? (1 paragraph)
5. Why is the job interesting to you? (1 paragraph)
6. Are you currently qualified for the job, and if not, what might you do to become qualified for it? (1 paragraph)

7. Do you think the compensation is appropriate and fair? Was the job advertised in an equitable manner? (1 paragraph)

Rubric: weighted based on adequate self-reported search time (12.5%), identification of a job that is relevant to topics in ecology (12.5%), answers to questions 4-7 are thoughtful and compelling (75%).

4. Natural history journal

We are asking you to complete a semester-long independent journal chronicling your repeated observations of a particular community or ecosystem. The intent of this exercise is to encourage your powers of observation, and to connect you to the field in a way we cannot achieve in an indoor-only class.

You will find an outdoor site that is safe and convenient for you to regularly visit over the course of the semester. Examples might include a nearby park, a wash, the landscaping in front of an apartment complex, your backyard, or even the UC Berkeley main campus. Semi-natural and human-modified ecosystems are fine. Students with disabilities that may prevent them from doing this activity should get in touch with the instructors for an alternative activity.

We are asking you to make at least **5 total entries over the semester**, each representing a visit of approximately one hour in length. You should write while you are visiting your site. During each visit, we would like you to make an entry in your natural history journal, including the following information:

1. The date and time you were at the site;
2. A 2-3 sentence description of the weather (you choose what variables you think are important, and try to report the same variables across visits)
3. A photo (phone camera OK) or drawing documenting your visit;
4. A response (double spaced, 12 pt. Times New Roman font, 1" margins, at least one double-spaced page [answers to 1-3 above do NOT count towards the limit)) to one of the following prompts (*please indicate on the submission which prompt you have chosen*):
    - Describe an aspect of the environment at the site.
    - Identify (to genus and species) and describe an organism at the site, focusing on e.g. its habitat, behavior, or life history. You can use iNaturalist (https://www.inaturalist.org/) or any other resource to get help with identification.
    - Describe an interaction between two or more organisms that you have observed (also identify the species to genus and species).
    - Make a drawing of a particular organism that you have identified (to genus and species), labeling parts with ecologically relevant terms.
    - Make a drawing of the entire site, labeling parts with ecologically relevant terms.
    - Describe a change in the site that you noticed between visits.
    - Write about how something you noticed is linked to a concept covered in class.
    - Describe how you have observed human activities influencing the ecology of the site.
    - Describe how you think the weather affects the organisms at the site, comparing between visits.
    - Describe how you could modify the site, so it becomes more inhabitable for some of its current occupants, and how this would negatively affect other species.
    - Describe how you think global change will affect the site, with and/or without human interventions.
    - Write down a few ecology-related questions you are curious about related to this site.

- (A possible final journal entry) How has your thinking about this site changed over your visits?

You can answer the same prompt more than once (e.g., if the organisms at the site change from visit to visit). You can also choose your own prompt so long as it is broadly related to interpreting your observations about the organisms and environment at the site. If you include drawings, you can take a phone camera picture and submit the image in a word processor document.

We welcome creative and thoughtful approaches to this project. You will get as much out of this journal as you put in. We are hoping you will also learn to observe, and to reflect.
The final submission should be a Word document, with one entry per section. There are examples of high-quality submissions on bCourses.

Rubric
First draft – no site chosen, or minimal effort put into entries (+0%); site chosen and reasonable effort put into at least 2 entries (+100%).

Final submission – contains at least 5 one-page entries following the requested format (+50%); quality of observation skills (+20%); entries linked to class concepts (+10%); entries creative and thoughtful (+10%); grammar and language accurate and precise (+10%).

5. Online individual section quizzes
There will be four sets of section quizzes, each occurring in-class after we complete a major section of the course. They will cover material primarily from the course section, but may also require you to demonstrate mastery of material covered in prior sections, as concepts in the class are all interlinked. Format will be 20 multiple-choice questions (2.5 points each) and 2 short answer questions (10 points each). Some questions will have basic factual answers, while others will require more critical thinking. If you have mastered the class and textbook material, you should do well on these quizzes. These quizzes will be available on bCourses and can be completed during a fixed time interval at a time of your choice on the quiz date. The instructors will be in lecture during regular class times to answer questions you may have but will not be available to respond to queries after 5PM the day of the quiz.

Rubric
Evenly-weighted per multiple choice question: for single answer questions, incorrect (+0%); correct (+100%); for multiple-answer questions, weighted based on the balance of correct and incorrect responses.

6. Final comprehensive project
Your group will work collaboratively on a written project. You will be given background information on a contemporary issue related to ecology, and then sent several questions meant to test your understanding of the subject.

You will work with your group to answer several questions related to this issue using the concepts you have learned in the class. You will be expected to provide answers in paragraph form using precise language and appropriate grammar. You are not expected to find or cite scholarly references in your answers. Some questions may have factual answers while others will be open-ended.

You are permitted to consult any materials (including course materials, websites, library books) but are **NOT** allowed to discuss the project with people outside of your group, e.g. other students in the class, professors in your other classes, or internet mailing lists / discussion groups. We expect that you can successfully answer all questions using ONLY knowledge obtained in class.

The project will be made available on bCourses on the last day of class.

Rubric
Evenly weighted per question: arguments based on concepts learned in class (+30%); Answers factually correct or in case of open-ended questions, plausibly could be supported by evidence (+50%); Writing clear and precise, and of appropriate length (+20%).

7. Discussion section activities
Please refer to the Discussion section syllabus for grading details.

Attendance policy
You are expected to be present for all class meetings in person. Arriving on time is important because the majority of your learning will occur through participation in individual and group exercises during class. There are also graded assignments related to this class work that you will not receive credit for if you miss class.
If you need to miss class because of personal circumstances (e.g. illness, jury duty, religious / military obligations, family emergency), please let one of the instructors know, and an alternate deadline for work can be arranged. It is your responsibility to contact the instructors or the GSI to obtain any missed course materials. Please also make sure to let your group know you will be absent.

We are NOT providing a Zoom simulcast because we believe it is important for teams to work together in-person. However, you are welcome to record or stream the class sessions for a peer who is unable to attend.

Late work policy
If you have a personal circumstance that prevents you from handing in work on time, please let one of the instructors know. An alternate due date can be arranged.

You have three passes, with no question asked and no excuse required, for turning in late assignments but not more than three days after the due date. Late work outside these passes will lose 10% of the total point value per day. In the case of group assignments handed in late, all group members will be penalized similarly.

Technical issues with bCourses are not a valid excuse for late assignments. If you are unable to submit your work through the course website, you must instead email it to the GSI or instructors before the due date.

The **final project must be handed in on time, with no exceptions**, due to grade submission deadlines.

Missed work policy
We will automatically drop your lowest score on several assignments, as indicated in the point totals section. This policy is intended to give you some flexibility if you have personal circumstances that prevent you from attending class. You do not need to provide an excuse or reason to drop/skip one of

these assignments. However, we will **not** accept non-emergency excuses for missed deadlines beyond these limits.

There are NO make-up assignments except in cases of religious obligations. Vacations, sports, other exams, and work conflicts are not considered valid emergencies. You can contact the instructors if you want to discuss rescheduling an assignment for these reasons. Late assignments will be penalized, as described above; otherwise, missed assignments will be given a zero score.

If you miss one of the sets of section quizzes due to an emergency, you must contact the instructors immediately. In these cases, the instructor will determine whether you will drop your score for that activity or take an alternate activity at a later date, which may be an in-person oral examination.

Name tags

We expect that every day of class you bring a name tag with you and place it on your table in front of you. This should be a folded piece of paper with your name written out in full. We will use these so that everyone, especially the instructors, can learn each other's name. We will provide you with extra scrap paper if you lose or forget your name tag.

Feel free to use a name and/or set of pronouns that differ from those that appear in your official university records.

Group work policy

You will be working in small groups throughout the semester. To ensure you get to know your peers, and to expose you to a diverse set of viewpoints, **we will be assigning group membership randomly at the beginning of the second week of class (Lecture #3).** We expect that you will sit with your group during class times - we will provide a seating chart to facilitate this. We hope that working with the same peer group will help give this large class a more interactive, seminar-style feel.

After each group has been determined, you will develop and sign a team contract with your peers to clarify expectations, preferred method of being contacted, and other related topics.

You will be expected to work with your peers during class and potentially outside of class, in case you do not finish your in-class contributions during class time.

You will optionally be able to elect to change to a new group after the first two modules of the class. More information on this will be provided at the start of the Communities module.

You must include a short author contribution statement at the end of each submitted group assignment (< 1 paragraph; a few sentences are more than sufficient). **You will lose 10% of the assignment grade if you do not include an author contribution statement.** This statement should clarify which people contributed to each component of the project. For example: “PersonA ran the simulation. PersonB made the graph. PersonC wrote the response. Everyone discussed the question together.” or “PersonA and PersonB contributed equally but PersonC did not participate”.

We will also seek your confidential feedback on your own contribution to the group, as well as the contributions of your peers. If any group member is clearly not contributing, we will intervene, and if necessary, mediate the situation and/or move the student to another group (possibly with no other group members to work with).

In the case of an isolated situation where a group member misses contributing to an assignment, notify the GSI by email (cc'ing all group members) detailing the situation. If a group member has clearly not participated, they will receive no points for the assignment but all other group members will.

If a group is unable to work together productively over the course of the semester, we will meet with all students in the group together. Outcomes may include a plan to improve group dynamics, separation of one or more students from the group (e.g. a student who does not contribute is put in a group of one and no longer has peers to share work with), or combination of multiple groups. We strongly hope to resolve conflicts through improvements in existing groups rather than splitting of groups and usually have been able to do so in the past.

Classroom behavior policy

We expect you to come to class having completed the pre-class readings. Class will not be a review of material covered by the textbook, but rather will involve activities designed to test and extend your understanding of the material. We will also spend some time revising material and will always take time to address questions around understanding. Your active participation in the out-of-class work is key to your success with the in-class work.
We expect that you will participate in discussions and will ask questions and share opinions. If you don't understand, someone else may not either. You will get as much out of the class as you invest.

We are all responsible for creating a learning environment that is welcoming, inclusive, equitable, and respectful. The expectation in this class is that we all live up to this responsibility, even during vigorous debate or disagreement, and that we will intervene if exclusionary or harassing behavior occurs. If you feel that these expectations are not being met, you can consult your instructors or seek assistance from campus resources.

Disability resources

UC Berkeley is committed to creating a learning environment that meets the needs of its diverse student body including students with disabilities.

The purpose of academic accommodations is to ensure that all students have a fair chance at academic success. Disability, or hardships such as basic needs insecurity, uncertain documentation and immigration status, medical and mental health concerns, pregnancy and parenting, significant familial distress, and experiencing sexual violence or harassment, can affect a student's ability to satisfy particular course requirements. Students have the right to reasonable academic accommodations, without having to disclose personal information to instructors. For more information about accommodations, scheduling conflicts related to religious creed or extracurricular activities, please see the Academic Accommodations hub website:
https://evcp.berkeley.edu/programs-resources/academic-accommodations-hub#accommodations. This website also provides a range of helpful campus resources.

If you anticipate or experience any barriers to learning in this course, please feel welcome to discuss your concerns with us. If you have a disability, or think you may have a disability, you can work with the Disabled Students' Program (DSP) to request an official accommodation. The Disabled Students' Program (DSP) is the campus office responsible for authorizing disability-related academic accommodations, in cooperation with the students themselves and their instructors. You can find more information about DSP, including contact information and the application process here: http://dsp.berkeley.edu/. If you have

already been approved for accommodations through DSP, we will contact you to confidentially discuss implementation.

You can contact DSP with any questions by:

- Visiting the DSP office at 260 César Chávez Student Center
- Calling 510-642-0518 (voice) or 510-642-6376 (TTY)
- Emailing dsp@berkeley.edu

If you have engaged with DSP to begin the accommodations process but are meeting delays in acquiring medical documentation and/or specialist appointments, please come talk to us about interim accommodations we can provide. In any conversation with an instructor, you are not required to disclose the nature or details of your disability, only the accommodations that would empower you in our classroom.

Additional learning resources

- ***Student Learning Center:*** the Student Learning Center supports undergraduates in Berkeley's classrooms and beyond. They offer a variety of academic support programs centered around skills and disciplines. In each program, workshops, drop-in conversations with staff, study groups, and individual tutoring appointments are available to support you in acquiring skills and structuring your academic work.
    - Writing
    - Natural sciences
    - Strategic learning (methods for engaging in class, taking notes, studying, preparing for assessments, etc.)
- ***Cal TRiO***: students enrolled in the Disabled Students Program can access Cal TRiO Disability Student Support Services for individualized academic coaching. TRiO also offers workshops and peer coaching. Participating in TRiO requires that you engage fully with the services offered.
- ***Educational Opportunity Program (EOP):*** the Educational Opportunity Program provides academic support, counseling, campus service referrals, and community for students who are low-income (Pell Grant or Dream Act eligible), first-generation, and/or historically underrepresented (Black/African American, Native American, and/or Chicano/Latinx/Latine).
    - Academic counseling
    - Peer counseling
    - STEM major support and career advising services
- ***Transfer Center:*** the Transfer Center supports students who transfer into UC Berkeley. Academic counseling, community spaces and peer advocacy, and transition courses are available to support your academic success if you are a transfer student.
- ***Centers for Educational Justice and Community Engagement:*** the Centers for Educational Justice and Community Engagement provide student development centers, support services, and affinity spaces for students oriented around racial identity, sexual orientation, and gender identity.
    - African American Student Development
    - Asian Pacific American Student Development
    - Chicanx Latinx Student Development
    - Gender Equity Resource Center
    - Multicultural Community Center
    - Native American Student Development

- ***Berkeley Underground Scholars:*** Berkeley Underground Scholars supports formerly incarcerated and/or system-impacted students. Underground Scholars offers community space, peer support, financial aid advising, and tutoring.

Academic integrity policy

Class assignments are structured around critical examination of your own ideas and synthesizing ideas and skills within your group. Please use this opportunity to develop your thinking. All assignments also will be automatically checked for plagiarism. You must be original in composing the writing assignments in this class. To copy text or ideas from another source (including your own previously, or concurrently, submitted course work) without appropriate reference is plagiarism and will result in a failing grade for your assignment and usually further disciplinary action. For additional information on plagiarism, self-plagiarism, and how to avoid it, see, for example:
http://www.lib.berkeley.edu/instruct/guides/citations.html#Plagiarism

UC Berkeley's honor code states, "As a member of the UC Berkeley community, I act with honesty, integrity, and respect for others." Anyone caught cheating will receive a failing grade and will also be referred to the University Office of Student Conduct.

Classroom climate

We are all responsible for creating a learning environment that is welcoming, inclusive, equitable, and respectful. If you feel that these expectations are not being met, you can consult the instructor(s) or seek assistance from campus resources (see https://evcp.berkeley.edu/programs-resources/academic-accommodations-hub#accommodations).