

**Instructors:**

Dr. Carly Kenkel      TAs:  
(she/her)

Office Hrs: [By Appt](#)

Location: AHF 231A

Email: [ckenkel@usc.edu](mailto:ckenkel@usc.edu)

**Lecture times & Location: Tue/Thu 930-1050am, THH 301**

**Textbooks:** Materials provided by instructors

**Websites/Links:** Assignments & Grades: <https://brightspace.usc.edu/>  
General Q&A: Brightspace Discussion Forum

**Zoom:** Recordings will be made available in the event of an excused absence, remote attendance is not generally permitted

**Course Description**

This one semester course introduces major aspects of general biology and focuses specifically on the ecological tug of war between humans and their physical and biological environment. We will explore major topics in agriculture, biodiversity, ecosystem structure and function, pollution, and population dynamics from both historical and contemporary perspectives. The overarching aim of this course is to provide students with background knowledge sufficient to understand major challenges facing human societies today, including how to feed the world, control disease outbreaks, and sustainably manage ecosystems in the face of climate change. Please note that this course satisfies the GE-D, Life Sciences requirement and is not designed for those majoring in biology or health sciences. For students wishing to major or minor in Environmental Studies, ENST 100 is the required entry-level course.

Prerequisites: None, although a working knowledge of high school biology is recommended.

**Specific learning objectives. By the end of this course,** students will be able to:

- 1) Explain basic concepts in biology and ecology.
- 2) Outline major biological challenges facing contemporary human societies.
- 3) Compare and contrast proposed solutions to major biological challenges.
- 4) Demonstrate basic public speaking skills.
- 5) Demonstrate critical thinking when evaluating scientific literature.

**Schedule of lecture and lab topics.** *Note that the schedule is subject to change.* Any schedule changes will be discussed in class and posted on Brightspace. Readings should be completed before each class.

Date	Lecture	Readings/Assignments	Lab
Aug 26	1. Course Introduction Nature vs Nurture	<i>She Has Her Mother's Laugh</i> excerpt	No Labs this Week
Aug 28	2. Let's talk about sex	Scientific American Article	
Sep 02	3. Psychedelic	Popular Science Article	1. Prove It!

Sep 04	4. Cancer	Science Article	Review of Term Project
Sep 09	5. Darwin and Evolution	Selections from Campbell Biology 7 <sup>th</sup> Ed.	2. Becoming Human Lab
Sep 11	6. Human Evolution	Smithsonian Article	
Sep 16	7. CSI Bisc 102	Atlantic Article and Blog Post	3. Field Trip: NHMLA
Sep 18	8. Infectious Disease Dynamics	National Geographic Article <b>Term project topic must be submitted by today</b>	
Sep 23	9. Biotech & Disease Control	World Economic Forum & Medium Articles	4. ST How Diseases Spread 1,2,3,5
Sep 25	10. COVID: A Case Study	Atlantic Article	
Sep 30	<b>MIDTERM 1</b> Lec 1-10		5. Term Project Workshop 1: Annotated Bibliographies
Oct 02	11. Feeding the world	National Geographic Article	
Oct 07	12. Worlds within	Harvard School of Public Health Article	NO labs this week
Oct 09	FALL BREAK		
Oct 14	13. Seafood	Canadian Geographic Article Science Article	6. Term Project Workshop 2: Outlines
Oct 16	14. GMOs OMG!	Scientific American Article	
Oct 21	15. Golden Rice	Johns Hopkins Blog Science Article	7. Term Project Workshop 3: Scoping
Oct 23	16. Invasive Species	Smithsonian Article	
Oct 28	17. Biocontrol	Smithsonian Article	8. Field Trip: Cal Sci Ctr
Oct 30	<b>MIDTERM 2</b> Lec 11-17		
Nov 04	18. Earth	Atlantic Article	9. Presentation of Research Topic
Nov 06	19. Wind	Clean Cars 4 All	
Nov 11	20. Fire	Williams et al. 2019	10. Presentation of Research Topic
Nov 13	21. Water 1	NY Times Article	
Nov 18	22. Water 2	NY Times Articles; WRI blog	11. Water Quality Lab
Nov 20	23. Climate change 1: What do we really know?	IPCC Summary for Policymakers: SPMA	
Nov 25	24. Climate change 2: What does it really mean?	<b>Term Project Due</b> via Turnitin	NO labs this week
Nov 27	THANKSGIVING BREAK		

Dec 02	25. Restoration Ecology	Mission Iconic Reefs (p1-18); NY Times Op-Ed	12. Coral Bleaching Lab
Dec 04	26. Geoengineering	IPCC Summary for Policymakers: SPMB Science Article	
Dec 11	<b>MIDTERM 3</b> Lec 18-26	11am-1pm	

### Description of Assessments and Assignments

**Discussion Boards.** Short, in-class activities will occur in class throughout the semester based on the assigned readings and lecture materials and must be completed by the end of that class period. Your lowest score will be dropped to accommodate one unplanned absence.

**Term Project.** You will undertake a research project on a topic of your choosing within the scope of Human-Environment interactions with the goal of producing a substantive product educating others about your topic of choice. Products can be in the format of your choosing - written (e.g. term paper, review, Op-Ed article, other creative writing), oral (e.g. song or spoken piece), visual (e.g. short film) or other, but must reflect a substantial effort. You must submit a brief description of your selected topic and project format for approval by September 19. Prior to submitting the final product (Due November 26), as part of your weekly labs you will create an annotated bibliography (Due week of October 1<sup>st</sup>) and an outline for your project (Due week of October 15<sup>th</sup>) and have the opportunity to refine the scope of your final project with feedback from your lab-mates (week of October 22<sup>nd</sup>). Guidelines and submission links can be found on Brightspace under the *Term Project* page and will be discussed in your lab sections during the week of August 29<sup>th</sup>.

**Term Presentation.** You will present an overview of your term project in the form of a conference-style presentation to share the findings of your research topic with your classmates. Note this presentation is different from your actual term project. Feedback from these presentations can be used to improve your final product. Specific directions will be provided in your lab section and additional guides and rubrics can be found under the *Term Project* page.

**Midterm Exams.** There will be three midterm exams consisting of 25-30 multiple choice/true-false/fill in the blank/short answer questions (worth 70 points) and two essay questions (select 2 out of 4 prompts to respond to, worth 15 points each). Material will primarily be drawn from lectures and readings. Exams will be taken through Brightspace. The tests are open note/open book but they will be timed. Additional details will be provided in lecture.

**Lab Assignments.** Although you have registered for an individual lab section, you will only receive one grade for this 4-credit course reflecting your work in both lab and lecture. You will be required to complete in-lab exercises using the guidelines and resources provided and following instructions given by your TA. Specific rubrics and due dates will be specified by your TA at each lab meeting.

### On-line Resources

Additional readings for specific lectures and/or links to on-line resources will be posted on Brightspace during the semester.

## General Course Policies

**COMMUNICATION:** For general questions the Brightspace discussion forum is the preferred form of communication. For personal or private questions, please email your specific instructors. Responses can be expected within 48 hours, although there may be an additional delay over weekends/holidays. If a one on one meeting is desired, please utilize office hours or email a request to set up an alternate meeting time. Dr. Kenkel's office hours are by appointment. Bookings can be made at <https://drcarlykenkel-bisc102.youcanbook.me/>.

Students are responsible for logging onto Brightspace (<https://brightspace.usc.edu>) on a regular basis. Brightspace will be the official source for announcements, course materials, lecture notes, and score postings. The discussion board will be used as a forum for general discussions and questions. Mid-term exam and lecture quiz scores will be posted under your LECTURE SECTION. Lab grades will be posted in your individual lab sections and summed periodically in the lecture section page. It is the student's responsibility to notify the instructors in the event of any mistakes as soon as possible, so please check scores weekly.

### **TECHNOLOGY:**

Students will need an internet-enabled device with browser capabilities. Students who require a laptop can check one out through the *Laptop Loaner Program* <https://itservices.usc.edu/spaces/laptoploaner>.

In this course, I encourage you to use artificial intelligence (AI)-powered programs to help you with assignments that indicate the permitted use of AI. Note this DOES NOT include your term project final deliverable – your term project should be entirely of your own creation, although you are permitted to use AI-powered programs to help you research your topic of choice. That being said, please be aware that AI text generation tools may present incorrect information, biased responses, and incomplete analyses; thus, they are not yet prepared to produce text that meets the standards of this course. To adhere to our university values, you must cite any AI-generated material (e.g., text, images, etc.) included or referenced in your work and provide the prompts used to generate the content. Using an AI tool to generate content without proper attribution will be treated as plagiarism and reported to the Office of Academic Integrity.

**GRADES:** Any document associated with grading may be photocopied by the instructional staff. The final letter grade will be determined by the total number of points earned for assignments and assessments relative to the total as laid out in the following table. Letter grades will be assigned based on the overall percentage of points accrued for lecture and lab assignments and exams using the following scale: A (93-100%), A- (90-92%), B+ (87-89%), B (83-86%), B- (80-82%), C+ (77-79%), C (73-77%), C- (70-72%), D+ (67-69%), D (60-67%), F (<60%). I reserve the option to apply a curve at the end of the semester based on the overall class score distribution but note that this is not typically necessary and should not be expected. I will not reply to individual emails requesting a final grade change.

	Points possible	Percent
Midterm Exam x 3 (100 points ea.)	300	35%
Discussion Board x 10 (10 points ea.)	100	12%
Presentation Peer Reviews x 2 (20 points ea.)	40	5%
Lab Assignments x 10 (30 points ea.)	300	35%
Term Project Approval	10	1%
Final Project	50	6%
Presentation	50	6%
<b>TOTAL</b>	<b>850</b>	<b>100%</b>

**EXAM RE-GRADING:** All assignments will be graded in the context of expectations set by an initial evaluation of student responses. If you feel that an error was made in the grading of an examination or lab activity, you need to do the following: 1) Prepare a statement explaining why you feel your grade was incorrect, and 2) print out and staple this to your exam and return the documents to your instructor within one week of the time the examination or assignment was returned to you. Your entire exam or assignment may be re-graded and, as a result, your grade may increase or decrease from a requested re-grade. No frivolous reasons will be accepted for requesting grade changes; stated reasons for a grade change must be legitimate (e.g., error in totaling the score).

**EXTRA CREDIT:** There are no extra credit opportunities and no exceptions to this policy.

**LATE WORK:** You have an account of 6 unexcused late days which you may spend on lecture or lab assignments EXCEPT the midterm exams, in-class discussion board activities, and in-lab presentations for labs 9/10. All late assignments must be uploaded to Brightspace or to your TA personally and will be time stamped. A late submission incurs an automatic time charge but will be eligible for full credit during grading. The time difference will be deducted from your account and tracked in the Brightspace grade center in the ‘late days bank’ column. Once all days are used unexcused late work will no longer be accepted.

**Policy on Absences:**

**EMERGENCY ABSENCES:** You may be excused in the event of a documented illness or emergency as outlined by university policy, with notification to the TA or Instructor team **within 48 hours**. An invalid excuse, or the excuse turned in late, will result in the standard late work policy for the activity missed. Late days cannot be applied to exams or lab presentations. If you miss the final examination and have provided a valid medical excuse within 72 hours of the examination time, a final course grade of incomplete (IN) will be recorded, and you will be permitted to take a make-up final examination during the following semester.

**PLANNED ABSENCES:** Students who must miss an examination or lab activity for observance of a religious holy day should be aware of the University’s policy on such absences, published at <https://orl.usc.edu/life/calendar/absences/>. If the absence is approved as determined by the USC Office of Religious Life, a reasonable accommodation will be provided. If you have any anticipated exam date conflicts due to athletic schedules, job interviews, religious holidays, etc. make an appointment for Dr. Kenkel’s office hours by WEEK 3 of the course to set up a plan for alternate due dates.

## **Statement on Academic Conduct and Support Systems**

### **Academic Integrity:**

The University of Southern California is a learning community committed to developing successful scholars and researchers dedicated to the pursuit of knowledge and the dissemination of ideas. Academic misconduct, which includes any act of dishonesty in the production or submission of academic work, compromises the integrity of the person who commits the act and can impugn the perceived integrity of the entire university community. It stands in opposition to the university’s mission to research, educate, and contribute productively to our community and the world.

All students are expected to submit assignments that represent their own original work, and that have been prepared specifically for the course or section for which they have been submitted. You may not submit work written by others or “recycle” work prepared for other courses without obtaining written permission from the instructor(s).

Other violations of academic integrity include, but are not limited to, cheating, plagiarism, fabrication (e.g., falsifying data), collusion, knowingly assisting others in acts of academic dishonesty, and any act that gains or is intended to gain an unfair academic advantage.

The impact of academic dishonesty is far-reaching and is considered a serious offense against the university. All incidences of academic misconduct will be reported to the Office of Academic Integrity and could result in outcomes such as failure on the assignment, failure in the course, suspension, or even expulsion from the university.

For more information about academic integrity see [the student handbook](#) or the [Office of Academic Integrity's website](#), and university policies on [Research and Scholarship Misconduct](#).

Please ask your instructor if you are unsure what constitutes unauthorized assistance on an exam or assignment, or what information requires citation and/or attribution.

### **Students and Disability Accommodations:**

USC welcomes students with disabilities into all of the University's educational programs. [The Office of Student Accessibility Services](#) (OSAS) is responsible for the determination of appropriate accommodations for students who encounter disability-related barriers. Once a student has completed the OSAS process (registration, initial appointment, and submitted documentation) and accommodations are determined to be reasonable and appropriate, a Letter of Accommodation (LOA) will be available to generate for each course. The LOA must be given to each course instructor by the student and followed up with a discussion. This should be done as early in the semester as possible as accommodations are not retroactive. More information can be found at [osas.usc.edu](https://osas.usc.edu). You may contact OSAS at (213) 740-0776 or via email at [osasfrontdesk@usc.edu](mailto:osasfrontdesk@usc.edu).

### **Support Systems:**

[Counseling and Mental Health](#) - (213) 740-9355 – 24/7 on call

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

[988 Suicide and Crisis Lifeline](#) - 988 for both calls and text messages – 24/7 on call

The 988 Suicide and Crisis Lifeline (formerly known as the National Suicide Prevention Lifeline) provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week, across the United States. The Lifeline is comprised of a national network of over 200 local crisis centers, combining custom local care and resources with national standards and best practices. The new, shorter phone number makes it easier for people to remember and access mental health crisis services (though the previous 1 (800) 273-8255 number will continue to function indefinitely) and represents a continued commitment to those in crisis.

[Relationship and Sexual Violence Prevention Services \(RSVP\)](#) - (213) 740-9355(WELL) – 24/7 on call

Free and confidential therapy services, workshops, and training for situations related to gender- and power-based harm (including sexual assault, intimate partner violence, and stalking).

[Office for Equity, Equal Opportunity, and Title IX \(EEO-TIX\)](#) - (213) 740-5086

Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

[Reporting Incidents of Bias or Harassment](#) - (213) 740-5086 or (213) 821-8298

Avenue to report incidents of bias, hate crimes, and microaggressions to the Office for Equity, Equal Opportunity, and Title for appropriate investigation, supportive measures, and response.

[The Office of Student Accessibility Services \(OSAS\)](#) - (213) 740-0776

OSAS ensures equal access for students with disabilities through providing academic accommodations and auxiliary aids in accordance with federal laws and university policy.

[USC Campus Support and Intervention](#) - (213) 740-0411

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

[Diversity, Equity and Inclusion](#) - (213) 740-2101

Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

[USC Emergency](#) - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

[USC Department of Public Safety](#) - UPC: (213) 740-6000, HSC: (323) 442-1200 – 24/7 on call

Non-emergency assistance or information.

[Office of the Ombuds](#) - (213) 821-9556 (UPC) / (323-442-0382 (HSC)

A safe and confidential place to share your USC-related issues with a University Ombuds who will work with you to explore options or paths to manage your concern.

[Occupational Therapy Faculty Practice](#) - (323) 442-2850 or [otfp@med.usc.edu](mailto:otfp@med.usc.edu)

Confidential Lifestyle Redesign services for USC students to support health promoting habits and routines that enhance quality of life and academic performance.