

A photograph of two firefighters in full protective gear fighting a fire. They are using a yellow hose to spray water on a burning structure, likely a house, which is partially obscured by thick smoke and flames. The scene is set in a residential area with trees and a white fence in the foreground. The overall color palette is dominated by the orange and yellow of the fire and smoke.

**Anthro 25A**

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# **Environmental Injustice**

**UCI Anthropology**

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**Summer 2020**

# Teaching Team

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Email us for individual appointments:

## Professor

Kim Fortun, [kfortun@uci.edu](mailto:kfortun@uci.edu)

## Graduate Teaching Associates

Kaitlyn Rabach, [krabach@uci.edu](mailto:krabach@uci.edu)

Tim Schütz, [tschuetz@uci.edu](mailto:tschuetz@uci.edu)

# Quick Links

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Canvas Course Website



Networking and Publication Site



@environmental\_injustice

We acknowledge UC Irvine's location on ancestral homelands of the Tongva and Acjachemen nations.

# About the Course

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In this course, we'll study **environmental disasters, pollution**, and the causes and impacts of **climate change** -- and how these impact human health and worsen social inequalities. We'll also study how people have become **environmental activists** to find and advocate for solutions.

The course includes many **documentary films** to provide a sense of what environmental injustice looks like in everyday life. We'll analyze the films using techniques used when cultural anthropologists do field research. One goal of the course is to show you how anthropological research helps explain and can help solve environmental problems.

You'll learn to do collaborative, **case study research** -- focusing on environmentally stressed communities in California. You'll learn to research and identify solutions to environmental problems, refining your own ethical values and political positions.

The course examines many **different factors** that contribute to environmental problems (social, political, economic, biochemical, technological). It is designed to give students in different majors (in the social and natural sciences, public health, engineering, urban planning and the humanities) the opportunity to work together in interdisciplinary research teams, leveraging their different skills.

Through collaborative work with other students, engaging different points of view, you'll develop your own **environmental** and **professional ethics**. You'll also develop research skills that can be used in other courses, independent research and many job settings.

The course draws on the instructors's **research experience** at many sites of environmental injustice -- in the United States, India, China, Japan, and Taiwan.



# Grading

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You will build your course grade with the following assignments:

**Shared content quizzes and discussion posts** **20%**

5 quizzes + 5 discussion posts – all done individually

**Position Posts and Paper** **20%**

5 individual posts + 1 group paper

**Three Research Case Studies** **60%**

3 cases; 5 individual posts + group report for each case

**Exam** **0%**

Required but ungraded

This will be the **course grade scale**:

A: 90-100 | B: 80-90 | C: 70-80 | D: 60-70 9-71; D 60-69

## **Extra Credit Options**

up to 20% of overall grade

Film Reviews (1 film review = 2%) **up to 10%**

Media Stories (1 media story = 2-5%) **up to 10%**

# Grading Policy

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Each of the **three case studies** will contribute 20 points to your final grade, half based on individual and half based on group work. See the collaborative work flow below. Posts 1-3 will be worth 3 points. Post 4 will be worth 5 points. Post 5 will be worth 2 points. The compiled case study with appendices and bibliography and biosketches will be worth 10 points. Total 20 points, and 20% of your overall course grade.

**Five individual position posts** (one in Week 1; four in Week 5) will be worth 2 points each. The group position paper (Week 5) will be worth 10 points. Further details on graded assignment below.

If work is **late**, you'll lose 10% per day. You must take the final exam to exit the course. It won't be graded unless you opt-in to taking it for extra credit.

**Participation** will be graded in reverse. We'll assume that all students are in the course to learn and will demonstrate the highest standards of academic integrity and collegiality. Should these expectations not be met, we will reduce your grade as much as 20% per week.

## **Pass /not-pass grading option**

Due to the impacts of the COVID-19 pandemic, you can opt to pass courses this summer rather than receive a grade. You must have at least a C grade to pass. The last day to change your grading options (either letter grades or P/NP) for Summer Session I is Monday, July 27, Please read the Registrar's FAQs regarding P/NP grading to decide which grading option is best for you. [https://www.reg.uci.edu/addl/faq\\_covid\\_pnp.html](https://www.reg.uci.edu/addl/faq_covid_pnp.html)

## **Time expectations**

This is a four credit course so it is expected to require about 10 hours a week (including class time) during a regular quarter. During a short, summer session, this is *doubled*: the expectation is approximately 20 hours a week for a 4-credit summer course. We understand that this is very demanding, especially with all that is going on currently. Given this, we've designed the course in a way that expects about 15 hours of work a week. You may be able to move more quickly, but please plan on the time you need.

# Course Schedule

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You will have assignments due on **Monday, Tuesday, Wednesday and Thursday at 8pm**. Please plan in advance to meet these deadlines so that you don't get behind, lose points or get in the way of the collaborative work of your research group.

You will need to figure out how to communicate and work collaboratively with your research group. **Wednesdays and Thursdays will be the most collaboration-intensive.**

We will host Eij Topics Talks on Zoom every day, Monday-Thursday at 11am and hope you can join us. If you can't join, please listen to the recordings. The discussions will help you with your case study research and other course assignments. Recordings will be posted shortly following the Zoom sessions.

There is a required, final exam for the course that will be open over multiple days during exam week.

**The exam will not impact your grade unless you opt-in to having it graded for extra credit.**

# Online Expectations

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**Course Communication:** We will be using Canvas Announcements for all course communication. Please link your Canvas announcements to your UCI email so you receive our notifications in a timely fashion. We will be commenting on posts throughout the case study process. Please adjust your Canvas settings so you receive notifications when the teaching staff comments on your individual topic and case study posts.

**Recording:** Recording (audio or visual) of our topic talks and group meetings are prohibited unless you expressly receive or permission to do so. *However, the instructor will record these topic talks for documentation purposes.*

**Zoom Courtesy:** If you are able, turn on your cameras during both our course topics and group meetings, especially if you are the one speaking. When you are not speaking, MUTE yourself on Zoom so background noise does not distract from the meeting.

**Respectful Learning:** During all zoom calls, including any calls for group work, be (virtually) present and engaged. You are encouraged to share your insights during the discussion. *You are expected to do so in a professional, conscientious, and respectful manner toward both instructors and peers, in all course-related exchanges*

**Electronic Technology:** During our optional topic talks and group meetings, we trust you will be responsible and focused on course activities.

**Students with disabilities:** It is University policy to provide, on a flexible and individualized basis, reasonable accommodations to students who have disabilities that may affect their ability to participate in course activities or to meet course requirements. For more information on how the University might accommodate the diverse learning and participation needs of the study body, please contact the Disability Services Center ([www.disability.uci.edu](http://www.disability.uci.edu))

# Daily Schedule

Homo Toxicus		
Week 1  June 22	Monday	
	Tuesday	due: Course Orientation Module
	Wednesday	due: 1 Shared Reading/Watching Post + Quiz
	Thursday	due: 1 Position Post
Fast Disaster		
Week 2  June 29	Monday	due: 1 Shared Reading/Watching Post + Quiz
	Tuesday	due: 3 Case Study Posts (any case study questions)
	Wednesday	due: 1 Case Study Posts (assigned case study question)
	Thursday	due: 1 Case Study Post (evaluation) + Completed Case Study
Slow Disaster		
Week 3  June 29	Monday	due: 1 Shared Reading/Watching Post + Quiz
	Tuesday	due: 3 Case Study Posts (any case study questions)
	Wednesday	due: 1 Case Study Posts (assigned case study question)
	Thursday	due: 1 Case Study Post (evaluation) + Completed Case Study



Combo Disaster		
Week 4  July 6	Monday	due: 1 Shared Reading/Watching Post + Quiz
	Tuesday	due: 3 Case Study Posts (any case study questions)
	Wednesday	due: 1 Case Study Posts (assigned case study question)
	Thursday	due: 1 Case Study Post (evaluation) + Completed Case Study
Environmental Movements		
Week 5  July 13	Monday	due: 1 Shared Reading/Watching Post + Quiz
	Tuesday	due: 2 Position Posts
	Wednesday	due: 2 Responsive Posts
	Thursday	due: Position Papers
Exam: Week of July 27		

# Topics Overview

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**Week 1**, our focus will be on “Homo Toxicus” (watching a film by the same name), exploring the extent of toxic chemicals in our lives, impacts on human health and the problems people face when looking for solutions (including toxic political systems!). We’ll also discuss how anthropologists study environmental health problems and how you can develop your own political perspectives on environmental issues.

**Week 2**, we’ll focus on fast, explosive disasters (when chemical or nuclear plants blow up, for example), starting with the story of the 1984 chemical plant disaster in Bhopal, India. You’ll work in a group to document potential for “worst case scenarios” in a community in California.

**Week 3**, we’ll work on the slow disasters caused by everyday air, water and soil pollution -- in places like Flint, Michigan and East Los Angeles (where a battery recycling plant contaminated the surrounding community). You’ll work in a group case to build a case study about slow pollution disasters in different communities in California.

**Weeks 4**, we’ll study the causes, impacts and efforts to respond to climate change. We’ll learn how global warming punishes the

world’s poorest people and about bumbled responses by government, especially in the United States. We’ll also study how powerful corporations have shaped (and undermined) response to climate change. You’ll build case studies about climate change impacts and planning in California.

**Week 5**, we’ll zoom back out to think about the history and future of environmental movements, thinking together about the kinds of environmental education, organizing and governance we’ll need in the future. You’ll work in a group on a Position Paper that explains where your group stands on different issues (access to environmental risk information, investment in renewable energy, or plans to relocate people living near high risk industrial facilities for example).

**Week 6** is exam week. The final exam will focus on key concepts that you can take away from the course to help you analyze a wide array of environmental problems and political issues. You must take the exam to exit the course, but the exam will be extra credit.

# Course Schedule

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See below description of assignment clusters for this class:

Shared Reading/Watching Posts and Quizzes

Environmental Injustice Case Studies

Position Posts and Paper

More assignment details are available on our [CANVAS site](#).

Questions about the course can be posted on the [“Course Workings” Discussion Board.](#)

All citations in assignments should use [The Chicago Manual of Style author-date system](#)

# Reading, Watching, Quizzing

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We've chosen readings, talks and films for this course that will teach you about different kinds of environmental health threats and how they are impacting different communities. Throughout, we want you to consider these questions:

*Why is it hard so far to reduce environmental health threats? Why are environmental health threats worse in poor communities, especially communities of color? How are environmental health threats unjust? What can be done?*

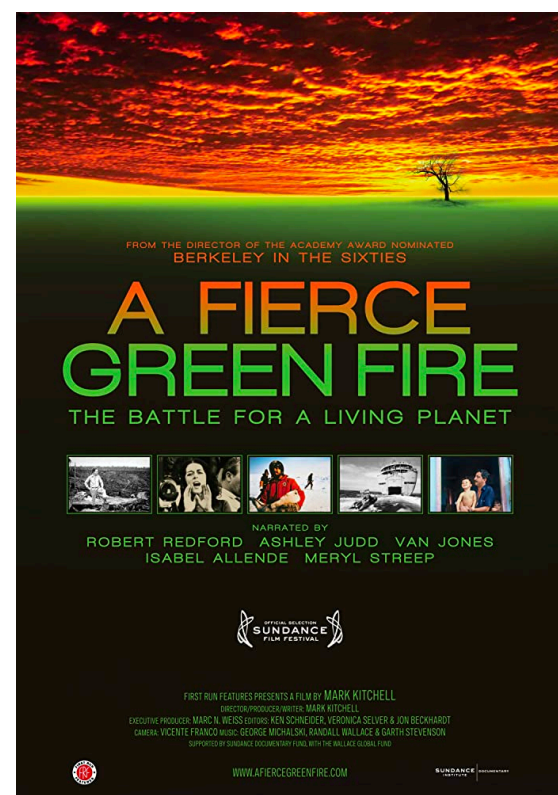
Our goal is to strengthen your capacity to *analyze* environmental health problems. We want you to pay attention to the details of the cases you learn about but we won't expect you to memorize them. We do want you to learn and remember *concepts* that will help you analyze these cases. The exam at the end of the course will focus on these concepts.

You'll watch many films. We want you to watch these films like a film critic, thinking about how they deliver their message, how effective they are, and what you would change about them.

We also want you to watch these films like an anthropologist -- identifying different stakeholders, noting how they perceive the problems they face, thinking about what shapes their perceptions and ability to act on their problems.

Finally, we want you to watch the films like an environmental activist, looking for ways to reduce environmental health threats.

For each topical section of the course (every week), you'll take a quiz about course readings, talks and films. You'll also post to a Discussion Board. Each post will be given points for the following: 1) adequate length (approximately 200 words) 2) clarity and good writing 3) including a specific example 4) including a reference (to either assigned or extra material) 5) including a question that you are left with.



*The documentary A Fierce Green Fire (2014) will introduce you to the history of the global environmental movement.*

# Interdisciplinary Environmental Injustice Case Studies

Case study analysis is used in many different kinds of research so the methods and analytic skills you learn in this course are likely to be useful in your later work. In groups, you'll develop **three case study reports**: the first focused on environmental threats from "worst case scenarios" (when chemical plants explode, for example), the second focused on routine air, water and soil pollution, and the third focused on climate change.

In case study analysis, a key challenge is to develop a **set of questions** that can be used to examine different cases. See below the questions we'll use to develop environmental injustice case studies focused on communities in California.



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## EIJ FALL 2019: FAST DISASTER CASE STUDY TORRANCE (GROUP 1)

### PDF DOCUMENT



**Authors:**  
Kushal Dave, Patrick Yang, Brandon Shamoo, Christine Voong, Alicia Martinez, Edgar Santana, & Dominic Al-Shamari

### CONTRIBUTORS

Tim Schütz  
Kaitlyn Rabach  
Kim Fortun

### CONTRIBUTED DATE

November 4, 2019 - 12:31am

### CRITICAL COMMENTARY

This case study was produced by students in UCI Anthropology 25A Fall 2019, Environmental Injustice. Kim Fortun, Tim Schütz and Kaitlyn Rabach were course instructors.

### SOURCE

Stimpson, N., G. Baroi, X. Dong, Cesar Maldonado, Candace Tang, Yiting Wang, Christabel Ukomadu. 2019. Fast Disaster Case Study: Long Beach. UCI Anthropology 25A

*Students are welcome to publish their finished case studies on the Disaster STS Research Network, a platform to share their work with other researches and affected communities.*



# Position Posts and Papers

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This course is designed to give you the opportunity to think through and develop perspectives on difficult ethical and political questions. Our focus is environmental health and injustice but what you learn about yourself and ways to refine your thinking about issues (partly through research; partly through reflection on your own values) will be relevant in a wide array of topical domains (in your personal and professional lives). We will ask you to *develop* positions on particular issues -- knowing that you may not have a strong or any position on the issues to start with. You'll need to do a little research and reading, and are encouraged to talk through the issues with your classmates, friends and family.

You'll write individual position posts and (in the last section of the course) contribute to a group Position Paper. You will *not* be graded on which position you take. You *will* be graded on the quality of your arguments and supporting evidence

## **Each individual position post will be given points for**

- 1) answering the question posed
- 2) reasoning
- 3) including a specific example
- 4) clarity and good writing
- 5) adequate length (approximately 200 words)
- 6) including a reference in Chicago author-date style
- 7) include an author bio statement (see [example](#)).

# Case Study Questions

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1. What is the **setting** of this case?
2. What **environmental threats** (from worst case scenarios, pollution and climate change) are there in this setting?
3. What **intersecting factors** -- social, cultural, political, technological, ecological -- contribute to environmental health vulnerability and injustice in this setting?
4. Who are **stakeholders**, what are their characteristics, and what are their perceptions of the problems?
5. What have different stakeholder groups done (or not done) in **response** to the problems in this case?
6. How have **big media outlets** and **environmental organizations** covered environmental problems in this setting?
7. What **local actions** would reduce environmental vulnerability and injustice in this setting?
8. What **extra-local actions** (at state, national or international levels) would reduce environmental vulnerability and injustice in this setting and similar settings?
9. What kinds of **data and research** would be useful in efforts to characterize and address environmental threats in this setting and similar settings?
10. What, in your view, is **ethically wrong** or unjust in this case?

# Sample Discussion Post

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## **Question: Should the United States require individuals to reduce their carbon footprint?**

In my view, the United States should pass laws that require individuals to restrict activities that produce carbon pollution. While some people may think this would undermine constitutionally-protected liberties, there is a clear precedent and reasons for laws that prevent people from doing things that harm others. We are required to stop at stop signs, for example, and there are bans on smoking in most public places. Failing to curb carbon pollution also harms others, though sometimes across great distances or time. The activities of people living in the United States create disproportionately large amounts of carbon pollution, with particularly harsh impacts on people living in the Arctic, on islands, and on low-lying coastlines. In the United States, carbon pollution is contributing to extreme weather events, and is expected to create increasing water scarcity -- negatively impacting current populations as well as future generations. Course materials documenting the impacts of climate change on Bangladesh influenced our thinking on this question. It seems particularly unfair for people who are already among the poorest in the world to be impacted by pollution caused by people living much better and very far away. Sea level rise and melting glaciers (both associated with climate change) are already causing regular, sometimes permanent, catastrophic floods in Bangladesh, for example, and conditions are expected to worsen in coming years. Robert Glennon (2017), writing in *Scientific American*, highlights that the people of Bangladesh are greatly affected by such changes while not being significant contributors to the cause of the problem. The country as a whole emits just 0.3% of global greenhouse gas emissions (Glennon 2017). “ (270 words)

### Reference

Glennon, Robert. 2017. “The Unfolding Tragedy of Climate Change in Bangladesh.” *Scientific American Blog Network*. April 21, 2017. <https://blogs.scientificamerican.com/guest-blog/the-unfolding-tragedy-of-climate-change-in-bangladesh/>

### Biostatement

Deepa Sarkar is a third year civil engineering student at University of California Irvine. She is interested in climate change mitigation and plans a career focused on transportation alternatives to private vehicles.

# Cumulative Exam

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Your final exam will include multiple choice and short answer questions. The exam won't be graded unless you opt-in to have it graded for extra credit. If you don't take the exam, you'll lose 10 points off your final grade.

Like the quizzes in the course, you'll be able to see the questions in advance and are free to review with your peers. You are also free to refer to readings and use your notes during quizzes and the exam. Once you open the exam for final submission, you should work on it on your own.

# Academic Integrity

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We are teaching this course to give you the **opportunity to learn**. We are dedicated to helping you refine your analytic skills and advance the sophistication of your thinking -- in general, and about environmental problems in particular. If you cheat, you won't learn.

There are many ways to **cheat** in a college course, especially when taught online. Academic integrity thus depends on your **values**, goals, and practices. Academic integrity is not just a set of rules to follow but a way of thinking about yourself, your education and what you want in the future.

But please remember: **cheating is against UCI rules and will lead to failure in your courses and possibly expulsion from UCI.**

Here is a link to [UCI's Academic Integrity Policy](#). This is the core of it:

*"Academic misconduct, in its most basic form, is gaining or attempting to gain a grade, degree, or other academic accomplishment by any means other than through your own work. No student shall engage in any activity that involves attempting to receive a grade by means other than honest effort, and shall not aid another student who is attempting to do so."*

Here are [UCI's responses to Frequently Asked Questions about Academic Dishonesty](#), mostly focused on what happens after a charge is made.

Here is a [quiz](#) you can take to test and develop your understanding of academic dishonesty (in our course specifically).



# Learning Outcomes

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By the end of this course, you will be able to:

1. Analyze different types of environmental **health threats** and factors that make it difficult to reduce these threats.
2. Analyze different **stakeholders** in environmental health, recognizing how poverty, racism and other social factors contribute to environmental vulnerability.
3. Analyze different **types of injustice** that occur along with environmental health hazards.
4. Identify ways to reduce **environmental health threats** and injustice.
5. Better articulate your own **ethical values**, professional commitments, and political perspectives.
6. Work **collaboratively** to rapidly produce case study research.
7. Use diverse **digital tools** supporting research and collaboration.