SOCIOLOGY 173X WATER AND SANITATION JUSTICE:
AN ONLINE UNIVERSITY OF CALIFORNIA COURSE

This online undergraduate course is suitable for majors in a wide range of disciplines - including Sociology, Geography, Environmental Studies, Politics, Economics, Anthropology - in the social sciences, in the Arts, Engineering, and the Humanities. It will explore the many manifestations of water and sanitation justice and injustice on multiple interlocking scales (i.e. local, national, transnational) while illustrating analytical ideas connecting to a range of social processes including urbanization and infrastructure development, deprivation and exclusion, privatization of land and water, and claims for human rights. Students will learn from a range of cases in the global south and the global north, and use key technical and social concepts to address rights, equity, and justice with respect to water and sanitation. This unique course was developed by an interdisciplinary team of scholars with varying methodological and place-based expertise. Each week was designed, and will be taught, by a different team member. Some weeks have multiple short readings that give different dimensions of the week's theme (e.g. newspaper articles) while other weeks have fewer academic papers. This diverse approach will acquaint you with theoretical and practical knowledge about water and sanitation justice.

Course Development Team:
Dr. Ben Crow, University of California-Santa Cruz, https://bcrow.sites.ucsc.edu
Dr. Isha Ray, University of California-Berkeley, https://erg.berkeley.edu/people/ray-isha
Dr. Carolina Balazs, University of California-Berkeley, http://www.switzernetwork.org/users/carolina-balazs
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Abigail Brown, University of California-Santa Cruz, http://www.abigailbrown.net

Instructor: Dr. Ben Crow, Professor
Office Hours: Mondays 1pm to 2:30; Thursdays 9:30am to 11am and by appointment* at https://ucsc.zoom.us/j/246610417
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Teaching Assistant: Kirsten Rudestam, PhD Candidate
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Teaching Assistant: Abigail Brown, PhD Student
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* Office hours will be held online in Zoom. Students will meet with their section lead for office hours (either Professor Crow, Kirsten, or Abigail). Some section leads require appointments for office hours. Please make sure to check Canvas to access the Zoom link and to schedule appointments for your section’s office hours.

COURSE OVERVIEW

Week 1: Water and Sanitation Justice
Week 2: Governing Water
Week 3: Water Justice in the Global North and South
Week 4: Sanitation Justice and Injustice
Week 5: Human Rights for Water and Sanitation
Week 6: Urban Water and Sanitation
Week 7: Climate Justice
Week 8: Irrigation and Water Justice
Week 9: Water, Sanitation, and Poverty
Week 10: Moving Toward Justice

ASSIGNMENTS AND EVALUATION

Course Components
The course content for each week comprises lectures, videos, readings, a quiz and either a portfolio essay (weeks 1, 3, 5, and 7) or a forum post (weeks 2, 4, 6, and 8). All course materials are available in Canvas (login.uconline.edu). You must complete each item for a week before moving on to the next week.

Grading
1. Bi-weekly portfolio essays (two pages) (revised for final portfolio in week 10) – 40% of grade
2. Bi-weekly forum posts (200 to 250 words) – 30% of grade
3. Weekly quizzes – 30% of grade

Technology Requirements
For this class you will need:
- A reliable computer
- A reliable internet connection
- A webcam and a microphone (built-in or peripheral)
- A modern web browser (Firefox, Safari, or Chrome)
- Word or similar word processing software

ACADEMIC HONESTY

You need to avoid presenting other people’s work (e.g. on websites) as your own. The university takes a dim view of plagiarism. It leads to hassle, failing grades, reports, remedial work and even suspension. We will be cross-checking writing assignments to ensure plagiarism is not occurring. This document gives information on how to avoid plagiarism: http://library.ucsc.edu/science/instruction/CitingSources.pdf.

ACCOMMODATIONS

UC Santa Cruz is committed to creating an academic environment that supports its diverse student body. If you are a student with a disability who requires accommodations to achieve equal access in this course, please submit your Accommodation Authorization Letter from the Disability Resource Center (DRC) to me privately during my office hours or by appointment, preferably within the first two weeks of the quarter. At this time, I would also like us to discuss ways we can ensure your full participation in the course. I encourage all students who may benefit from learning more about DRC services to contact DRC by phone at 831-459-2089 or by email at drc@ucsc.edu.

COURSE SCHEDULE

1. Water and Sanitation Justice - 4/3/17
   Lecturer: Ben Crow
Why do we want justice? Why should water and sanitation access be considered questions of justice? What ideas of justice are most useful in consideration of water and sanitation? This week introduces a discussion of ideas of justice, a *declaration* about water justice, and how ideas of justice may relate to water and struggles over water.

- **Lectures:** 1: Technology, Society and Water 2: Approaches to Justice, 3: Water Use and Justice, 4: Understanding Struggles for Water Justice
- **Video:** Al Jazeera [Global Water Scarcity](https://www.aljazeera.com)
- **Activities:** Portfolio Essay 1, Wk 1 Quiz

### Readings:


### 2. Governing Water - 4/10/17

**Lecturer:** Kirsten Rudestam

This week introduces contemporary modes of water governance. We look at mainstream and grassroots approaches such as Integrated Water Resources Management (IWRM) and Environmental Justice (EJ). We utilize case studies to better understand these divergent management practices and ways of understanding and working with water. We also become familiar with some of the idioms that geographers, sociologists and others have used to describe the movement of water through human-modified landscapes including the hydrosocial cycle, the network, and the waterscape.

- **Videos:** Interview with Peter Mollinga, [Water Matters](https://watermatters.org), David Schlosberg at UCSC
- **Activities:** Forum post, quiz

### Readings:


### 3. Water Justice in the Global North and South - 4/17/17

**Lecturer:** Dr. Carolina Balazs

Across the globe, communities struggle to access clean water and adequate sanitation. In many instances
inequities arise in the ability of communities to obtain these basic resources. This week, we explore these topics by looking at water justice issues across the global south (e.g. southeast Asia, Latin America) and the global north (e.g. United States).

- **Videos**: Water and Justice: Peri-urban pathways in Delhi, Water contamination in the Central Valley: Switzer Foundation
- **Activities**: Portfolio essay, quiz

**Readings**:

4. **Sanitation Justice and Injustice - 4/24/17**

**Lecturer**: Dr. Isha Ray

This week provides an overview of sanitation justice and injustice. We will cover: why poor-quality sanitation is a public and environmental health problem; what the SDGs have to say about sanitation for all; low-cost sanitation technologies; gender equality and sanitation; sanitation workers and justice; and innovative ways ahead for encouraging households to accept and pay for sanitation, waste removal and treatment, and a range of ways to pay for sanitation services.

- **Lectures**: 1: Sanitation, Health, and Justice, 2: Low-cost Sanitation and Financing Sanitation Access, 3: Sanitation Workers and Sanitation Justice, 4: Innovative ongoing efforts: how do they serve sanitation justice?
- **Videos**: Gender Equality and Sanitation By Isha Ray TEDx, What is sanitation? By Sharada Prasad and Rachel Sklar, Community Led Total Sanitation in Ethiopia, David Kuria and Iko Toilets, Meet Mr. Toilet
- **Activities**: Forum post, quiz

**Readings**:
a community led approach could fix that.”

- Bill and Melinda Gates Foundation. Strategy Overview of Reinvent-the-Toilet (check out the main page and a couple of winning examples).
- Mimi Jenkins and Beth Scott. (2007). Behavioral indicators of household decision-making and demand for sanitation and potential gains from social marketing in Ghana. Social Science and Medicine, 64: 2427-2442.

5. Human Rights for Water and Sanitation - 5/1/17

Lecturer: Abigail Brown

Do human rights to water and sanitation equal water and sanitation justice? Despite being previously assumed as embedded in other basic rights, water and sanitation were not officially acknowledged in international human rights conventions until 2010. This week outlines the evolution of the human rights to water and sanitation and critically examines linkages between human rights discourse and water and sanitation justice.

- Lectures: 1: Introduction to Human Rights to Water and Sanitation, 2: Movements for Human Rights to Water and Sanitation, 3: Critiques and Alternatives
- Activities: Portfolio essay, quiz

Readings:
- Short timeline on PBS Frontline World on Cochabamba, Bolivia.
- “Water Justice City Profile: Cochabamba” by University College London. PAGES 6-13.


Lecturer: Kirsten Rudestam

We narrow our attention to one particular site this week - the urban environment. In examining urban water and sanitation networks, we look at how the plumbing of cities contributes to contemporary deprivations of access for inhabitants. We look specifically at inequality with respect to gender. We also use contemporary case studies to examine how urban water systems vary worldwide.

- Videos: Cadillac Desert, Interview with Ben Crow, Interview with Betty Okero, Translocal learning for water justice, Water and Sanitation for the Urban Poor
- Activities: Forum post, quiz

Readings:
7. **Climate Justice - 5/15/17**  
**Lecturer:** Abigail Brown  
Climate change is an overarching concern of the twenty-first century. Humans, animals, and landscapes can be impacted by climate change in unequal and unjust ways. Such inequalities are apparent when looking at climate change, water, and sanitation. We will evaluate linkages between environmental and climate justice movements, and also examine distributional and procedural aspects of climate justice through two case studies.

- **Lectures:** 1: Climate Change, Water, and Sanitation, 2: Environmental Justice and Climate Justice  
- **Videos:** Navroz Dubash and Distributional Justice in Climate Change, Tracy Perkins and Procedural Justice in Climate Change  
- **Activities:** Portfolio essay, quiz

**Readings:**

8. **Irrigation and Water Justice - 5/22/17**  
**Lecturer:** Dr. Isha Ray  
This week provides an overview of irrigation and equity. Irrigation is the single biggest reason for freshwater withdrawals around the world. We will cover: the need for irrigation around the world, projections of water demand for irrigation in the future, benefits and controversies around irrigation practices; the inherently political nature of water allocation; “Big Irrigation” and water justice; low cost irrigation options for smaller farmers; irrigation through multiple use systems; and irrigation through participation.

Videos: Is the Three Gorges a Ticking Time Bomb?, The Miracle Water Village

Activities: Forum post, quiz

Readings:

- Sandra Postel’s classic work: Pillar of Sand. EXCERPTS.
- Attwood, Donald. (2005). Big is Ugly? How Large-Scale Institutions Prevent Famine in Western India. World Development.
- Postel, Sandra. (2012). The power of a radically affordable irrigation pump. National Geographic Voices
- An entrepreneur creating chances at a better life. (September 26, 2011) New York Times


Lecturer: Ben Crow

As we have seen throughout this class, there are substantial connections between getting water and using sanitation and the making of poverty, wealth and inequality. The control of irrigation water, for example, may enable some to get rich. Or everyday access to sanitation and water may reproduce poverty, indignity, powerlessness and an allocation of homemaker’s time precluding more valued activities. This week looks at these connections between water, sanitation and poverty.

- Videos: Interview
- Activities: Portfolio Essay Review, Quiz

Readings:


10. Moving Toward Justice - 6/5/15

Panelists: Dr. Ben Crow, Dr. Isha Ray, Dr. Carolina Balazs, Kirsten Rudestam, Abigail Brown

This final week we will review concepts covered throughout the course and the panel will tackle some of the most relevant questions that you send in.

- Lectures: Live Panel with Course Creators
- Videos: None
Activities: Portfolio Essay Revisions

11. Finals Week - 6/12/17

All portfolio essays need to be uploaded to Canvas.