ENVS 25:

Environmental Policy and Economics

Online Course Summer 2021 25 July- 26 August

Instructor: Prof. Sikina Jinnah

Office Hours: Tuesdays 11-12 on Zoom (drop in, no appointment needed)

Email: sjinnah@ucsc.edu

Teaching Assistants:

1. Sophie Trobitzsch

TA Office Hours: Mondays 10-11am on Zoom (email for an appointment)

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2. Emily Robertson

TA Office Hours: Wednesday 11-12 on Zoom (drop in, no appointment needed)

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All Zoom links are on Canvas.

Required Synchronous Discussion: Fridays 10-11am on Zoom

OUIZ 0.0 DUE Wednesday July 27th at 5pm

Course Description: This course introduces students to the policy and economic dimensions of some of the most pressing environmental challenges facing us today. The course will progress through 5 Modules. Module 0 will introduce you to the course and syllabus. You must complete Module 0 Wednesday, July 27th at 5pm. You can then move on to Module 1, which will lay the theoretical foundations of environmental policy, environmental justice, and environmental economics.

Modules 2-4 will each explore a case study - climate change, biodiversity loss, and waste. Each week we will look at an example of how the US addresses each of these environmental issues through a specific environmental policy/law, as well as one or more key international treaties that addresses the environmental issue. Each module will also explore some of the environmental justice and economic dimensions of the issue.

Module 5 will explore current events in the context of environmental policy and economics. For summer 2022, we will focus on COVID-19 and the intersections with climate change, biodiversity, and waste, especially as these connections relate to issues of equity and justice.

Effort: This is a 5 unit course, to be completed in a condensed format over 5 weeks. You will spend about 30 hours each week watching lectures/videos, reading course texts, completing

quizzes, writing reading responses, and/or working on projects individually or with your classmates.

Online Structure: The course is divided between asynchronous activities that you can complete on your own schedule and synchronous sessions that will take place at a set time. The majority of the course will be conducted asynchronously with a **required** 1 hour synchronous session each Friday with one or more of the instructors. These synchronous sessions will be held via Zoom on Fridays at 10-11am.

Each week 3-6 hours of lectures and/or other video content will be available online via Canvas. Students will be expected to watch these materials at a time that is convenient for them, but keep in mind that assignments related to those materials are due weekly on **Friday at 10am**. Each week on Friday, students will meet on Zoom together with the TAs for an engaged hands-on activity that builds on the pre-recorded video materials and the required readings.

Using Canvas to Navigate the Course: We will use Canvas to run all aspects of this course. Each week you should check the weekly "Module" on Canvas, which will provide links to all of the lectures and other videos that you should complete by 10am Friday each week. This is also where you will find links to complete and/or turn in all assessment activities, such as reading responses, mini-assignments and quizzes. Please look at this closely each week to ensure you don't miss anything and mark the assignment as complete once you are done.

Sometimes we will be watching live recordings of webinars and lectures. For these live recordings there are sometimes technical difficulties and glitches in the recording. Please just ignore these glitches and focus on the content. The Q&A at the end of these recordings is optional. Please do watch the core content and the Q&A only if your interest is piqued.

Using Zoom: Our Friday Zoom sessions will be in our course Zoom room. Please link to the Zoom room through Canvas by clicking on the "Zoom" link and finding the right meeting date.

If you need more guidance on how to use Zoom, please see https://its.ucsc.edu/zoom/index.html

Office Hours: You may sign up for office hours via the Canvas calendar. The Zoom link for office hours can be found under the Zoom link on Canvas.

Learning Outcomes: The ENVS major and combined majors have a set of Program Learning Outcomes (PLOs) that we hope each class will contribute to achieving. Here are those PLOs. This course will specifically strengthen your ability to achieve PLO #1 and #4.

Students graduating with a B.A. in Environmental Studies should be able to:

- 1. Identify the societal (social, political, economic, cultural and ethical) agents and structures that contribute to environmental change. (social science competency)
- 2. Describe the structure and functioning of major physical and ecological components of the earth's systems. (natural science competency)
- 3. Access and analyze a complex literature addressing specific topics in environmental

studies, and evaluate the usefulness and limitations of individual sources of information. (analytic thinking)

4. Demonstrate effective oral and written communication skills. (communication skills)

Academic Integrity: Students are expected to adhere to the UCSC policy on academic integrity: http://www.ucsc.edu/academics/academic_integrity/. Unless otherwise stated in writing, all assignments should be written individually and be original works for this class. All academic integrity violations (e.g. plagiarism, cheating, multiple submissions, facilitating dishonesty) will be reported if encountered.

Accessibility and Disabilities: If you qualify for accommodations because of a disability, please submit an Accommodation Authorization from the Disability Resource Center (DRC) to Prof. Jinnah within the first week of the summer session. You may submit these via email. Contact DRC at 831-459-2089 (voice), 831-459-4806 (TTY), or http://drc.ucsc.edu for more information on the requirements or process.

Other Support Services: Other support services on campus that you should be aware of include:

Campus Resources, Advocacy and Education: https://care.ucsc.edu/who-we-are/about-care.html

Title IX Office: https://titleix.ucsc.edu/resources/syllabi-disclosure-statement.html

ASSIGNMENTS AND GRADING

Grading will be based on the following:

Weekly Responses - 20% Weekly Quizzes - 20% Midterm - 20% Weekly Zoom Assessments - 20% Final Assessment - 20%

1. Weekly Responses (20%)

Each week there is a *Response Prompt* listed on the syllabus, which requires students to draw on weekly readings and lecture materials. Students should submit their response via Canvas each week by **10am Friday**.

Weekly Responses will be graded on a scale of 0-4 according to the following scale:

0: No submission or submissions more than 2 days late (Sunday)

1: Incomplete or does not demonstrate engagement with course readings and lecture materials

- 2: Posted after 10:01am on Friday but answers all questions posed
- 3: Posted on time that answers all questions, and CLEARLY and engages (e.g. through citations to these materials, identifying authors, speakers etc.) either readings or lecture materials but not both.
- 4: Reserved only for particularly thoughtful responses that demonstrate *superior* understanding and engagement with the course material, and CLEARLY engages (e.g. through citations to these materials, identifying authors, speakers etc.) BOTH readings and lecture materials.

2. Quizzes (20%)

Quizzes will cover material from weekly readings, lectures and other videos. There is typically one quiz for each required lecture/video. This means that each week you will have 8-9 quizzes to complete each week. All quizzes that must be completed week by **Friday at 10am** or will be considered late. All quizzes can be accessed on Canvas and most of them are multiple choice format.

There will be no make ups for quizzes but we will drop your lowest two grades when calculating your final grade.

3. Midterm Exam (20%)

You will have the week of August 8-12th to complete the midterm exam. It will be available on Canvas at 7am on Saturday August 6th and will be due *to Canvas by Friday August 12th at 11:59pm*. Each student must submit their own exam. The midterm is open book.

4. Friday Zoom Assessments (20%)

Each Friday, students will meet with the teaching team in our Zoom classroom for 1 hour. The teaching team will lead students in various types of hands-on activities in these sessions, including discussing weekly responses, and/or completing other types of assessment activities individually or in smaller groups.

You must attend these at the scheduled time. This is the only portion of the class that will take place synchronously (i.e. all together at the same time). All other elements can be done whenever you choose during the week *before* attending our weekly Zoom session.

Important Reminder: All weekly assignments (e.g. mini-assignments, quizzes etc.) are due by 7am before attending Friday Zoom Sessions each week. Please plan ahead each week, don't leave everything until Thursday night or you will become overwhelmed quickly.

Following the Zoom session each week, you will complete and turn in a Zoom Assessment. Zoom Assessments will be straightforward and relatively simple to complete as long as you have

attended and participated in the weekly Zoom session. **Zoom Assessments will be due by 11:59pm each Friday.**

Each assessment will be worth 10 points. You must clearly demonstrate that you participated in the Zoom session in completing your assessment. You will not be able to complete the assessments if you do not attend the Zoom session and there is no way of making up these assessments b/c they rely on group work and discussion.

You can bump up your grade by demonstrating strong engagement in each Friday's Zoom session. You can demonstrate strong *engagement* in various ways, including: actively participating in small and large group discussions as well as in various other in-class assessments/activities, drawing on the readings and your weekly reading responses to support your interventions in class, participating in the "chat" by asking and answering questions, demonstrating leadership (without overpowering others in the group), helping group members understand course material, providing thoughtful answers to questions posed by others, and otherwise contributing to an positive learning environment through thoughtfulness, professionalism and preparedness.

5. Final Assessment

The final assessment will take place during the regular class time during Week 5 on Friday August 26th. You will have the option to conduct the final assessment individually or with a small group in section. If you choose the small group option, your group will be randomly assigned. *Either option, the final assessment prompt will be available on Canvas at 7am on Friday August 26th and it will be due to Canvas by 11:59pm on this day*. Each student must submit their own assessment. Your choice of individual or group work will no impact your grade.

If you choose to work individually you do not need to show up to the Zoom session this day. If you wish to work in a small group you should show up as normal. You do not need to decide ahead of time but if you wish to work in a small group I strongly suggest you arrive on time to class this day.

The engagement will be a similar format as the weekly Zoom prompts but will cover multiple weeks of material and will be slightly longer. It will require you to respond to a prompt that we will provide in *1-page max*. It will be open book.

Late Policy: You are strongly urged to hand in work on time. Most assignments will be due to Canvas at 10am on Friday before your weekly Zoom session. The only exception to this are your weekly Zoom Assessments, which are due by 11:59pm each Friday.

Late assignments will incur a **25% grade drop per day starting immediately after the due date/time**. So if an assignment is due at 10am it will drop from a 4 to a 3 at 10:01am.

That said, I recognize that things come up, and despite the best of intentions, you may not be able to make a deadline due to a medical or family emergency. If this happens, please see me in my office virtual hours to explain the situation and I will coordinate an appropriate make-up assignment for you. Please do not email these requests. See me in office hours.

READINGS

Readings for each Module are listed below in the "Weekly Schedule." All readings should be completed (and responses submitted via Canvas) before coming to the Zoom session each Friday.

All readings can be found on Canvas under Files \rightarrow Readings in the appropriate Module folder. They can also be found in the weekly module.

WEEKLY SCHEDULE

Module 0 - July 25-27 - Introduction to Course and Syllabus

Lecture/Videos:

None this week

Readings:

0. Syllabus

Assignments due to Canvas by 5pm Wednesday July 27th:

0. Syllabus Quiz

Module 1 – July 27-29 - Conceptual Foundations in Environmental Policy & Economics

Lecture/Videos:

- 1.1 Drivers of Environmental Problems (30min)(Prof. Jinnah)
- How is US Environmental Law and Policy Made? (25 min) (Dr. Douglas Bushey, US EPA)
- 1.2b Federalism and Common Law (5min)(Dr. Douglas Bushey, US EPA)
- 1.3 What is International Environmental Law? (20min) (Prof. Jinnah)
- 1.4 Intro to Env. Justice (14min) (Prof. Jinnah)
- 1.5 Intro to Env. Economics (53min)(Prof. Juan Moreno-Cruz, U of Waterloo)
- 1.6 Into to Ecological Economics (30min) (Prof. Dick Norgaard, UC Berkeley)
- 1.7 Using Citations Correctly (15min)(Prof. Jinnah)

Readings (~50 pages):

Note #1-3 below are all from the book, "Lessons in Environmental Justice" edited by Michael Mascarenhas. The entire book is available on Canvas. However, you are only required to read the chapters listed in 1-3 below. 4-5 are also available on Canvas, as usual

- 1. Bullard, Robert D. 2020. From "From Civil Rights to Black Lives Matter" pp. 3-14, in *Lessons in Environmental Justice: From Civil Rights to Black Lives Matter to Idle No More*. Michael Mascarenhas (ed.) Los Angeles, CA: Sage Publishing
- 2. Harrison, Jill Lindsey. 2020. "Regulatory Culture: Racial Ideologies and the Fight for Environmental Justice within Government Agencies" Pp. 129-143. in *Lessons in Environmental Justice: From Civil Rights to Black Lives Matter to Idle No More*. Michael Mascarenhas (ed.) Los Angeles, CA: Sage Publishing.
- 3. Oday, Salim. 2020. "Environmental Justice and the Law" pp. 165-179. in *Lessons in Environmental Justice: From Civil Rights to Black Lives Matter to Idle No More*. Michael Mascarenhas (ed.) Los Angeles, CA: Sage Publishing.
- 4. Hanley, N. et al. 2019. "Introduction: Economics for the Environment" pp. 1-10, in *Introduction to Environmental Economics*. Oxford, UK: Oxford University Press.
- 5. House Resolution 109 "Green New Deal" February 7, 2019

Assignments due to Canvas by 10am Friday:

- 1. Weekly Response #1 Prompt (4pts):
 - Identify and explain the three dimensions of environmental justice. (1paragraph)
 - What are the benefits of examining environmental issues through an environmental justice lens? (1 para)
 - How can economics help us to think about and address environmental problems?
 (1para)
- 2. Weekly Quizzes #1-7

Assignments due to Canvas by 11:59pm Friday:

1. Zoom Assessment

Module 2 - August 1-5 – Climate Change: Carbon Markets and Climate Justice

Lectures/Videos:

- 2.1 What is Climate Change? 4 short videos
 - i. What is Climate? Lines of Evidence (4min) (US National Academies of Science)
 - ii. Why I must speak out about climate change (16min) (James Hanson)
 - iii. The Disarming Case to Act Right now on Climate Change (10min)(Greta Thunberg)
 - iv. The most important thing you can do to fight climate change: talk about it (13min) (Prof. Katharyne Hayhoe)
- 2.2 US Federal Climate Change Policy (11min) (Dr. Douglas Bushey)
- 2.3 International Climate Change Law (15min) (Prof. Jinnah)
- 2.4 Introduction to Climate Justice (7min) (Prof. Gareth Edwards, U of East Anglia)
- 2.5 Climate Justice 3 short videos on Canvas
 - v. Climate Change and Vulnerable Communities (5min) (Talia Buford, ProPublica, PBS)
 - vi. Falling through the Cracks (5min)(Environmental Justice Foundation)
 - vii. Environmental Justice: What can we do about the disproportionate impact of climate change on low-income communities? (~50min) (Van Jones, Dream Corp)
- 2.6 Value Judgements in Climate Policy (40min) (Dr. David Morrow, American U.)
- 2.7 The Story of Cap & Trade (10min) (Annie Leonard)
- 2.8 ENROADS Simulation Introduction (20min) (Climate Interactive)

Readings (80 pages):

- 1. Kashwan, Prakash. 2021. "Climate Justice in the Global North: An Introduction" *Case Studies in Environment*. 5(1): 1125003.
- 2. Whyte, Kyle Powys. 2020. Too Late for Indigenous Climate Justice: Ecological and Relational Tipping Points. *WIRE's Climate Change*. 11(603): 1-7.
- 3. Carbon Market Watch. 2020. Carbon Markets 101: The Ultimate Guide to Global Offsetting Mechanisms. Carbon Market Watch. Pp. 1-8. Available at www. Carbonmarketwatch.org
- 4. Lejano, Raul, Wing Shan Kan, and Ching Chit Chau. 2020. "The Hidden Disequities of Carbon Trading: Carbon Emissions, Air Toxics, and Environmental Justice" *Frontiers in Environmental Science*. 8(59304): 1-6.

Optional:

1. Morrow, David. 2019. Chapter 2 (The Economics of Climate Change), pp. 31-56, in *Value Judgements in Climate Policy*. Rowman and Littlefield: London, UK.

Assignments due to Canvas by 10am Friday:

- 1. Weekly Response #2 Prompt (4pts):
 - Why is climate change an environmental justice issue? (1-2 paragraphs); and
 - What are the benefits and critiques of using market mechanisms for addressing climate change (1-2 paragraphs);?
- 2. Weekly Quizzes # 1-8

Assignments due to Canvas by 11:59pm Friday:

1. Zoom Assessment

Module 3 - August 8-12 - Waste: International Trade and Distributional Impacts

MIDTERM WEEK

Lectures/Videos:

- 3.1 The Story of Stuff (21min) (Annie Leonard, Canvas)
- 3.2 Virtual Field Trip, Santa Cruz County Dump (70min) (Prof. Jinnah and O'Neill)
- 3.3 US Hazardous Waste Policy (14min) (Douglas Bushey, Canvas)
- 3.4 International Hazardous Waste Law (11min)(Professor Jinnah, Canvas)
- 3.5 The New Global Politics of Waste (20 min) (Prof. Kate O'Neill, UC Berkeley)
- 3.6 Waste Workers (11 min)(Prof. Kate O'Neill, UC Berkeley)
- 3.7 The Global and Local Afterlife of Recyclables (35min) (Kate O'Neill, NPR)
- 3.8 All your e-waste goes to China (13 min) (60 min)
- 3.9 The Economic Injustice of Plastics (12min)(Van Jones, TedTalk)
- 3.10 Plastic China (2 hours)(film)

Readings (~95 pages):

- 1. O'Neill, Kate. 2019. Chapters 1 (The Global Political Economy of Waste), pp. 1-24, Chapter 2 (Understanding Wastes), pp. 25-51, and choose one additional chapter to read that interests you (Chapter 3,4,5, or 6) in *Waste*. Polity Press
- 2. Pellow, David. 2007. Environment, Modernity, Inequality in *Resisting Global Toxics: Transnational Movements for Environmental Justice*. pp. 1-36

Assignments due Friday by 10am to Canvas:

1. Weekly Response #3 Prompt (4pts):

Drawing on the various readings, lecture materials and films, write a 2-3 paragraph analysis of the main issues surrounding e-waste trade between developed and developing countries. Why is this an important issue? How are issues of equity and economics embedded in this issue?

2. Weekly Quizzes # 1-10

Assignments due to Canvas by 11:59pm Friday:

- 1. Zoom Assessment
- 2. MIDTERM

Module 4 - August 15-19 - Biodiversity: Wildlife Trade and Community Impacts

Lectures/Videos:

- 4.1 What is biodiversity and why is it important? (8min)(CISRO)
- 4.2 The US Biodiversity Law (9min) (Dr. Douglas Bushey)
- 4.3 International Biodiversity Law (10-15min)(Prof. Jinnah)
- 4.4 Wildlife Trade 2 short videos (*Warning:* these videos include some intense images)
 - i. Big Game, Big Money: Inside the Illegal Wildlife Trade (23min) (Financial Times)
 - ii. Laws of the Wild: A Strategic Approach Against Wildlife Trafficking (15min)(Onkuri Majumdar)
- 4.5 How Community Conservation can Save Wildlife (5min) (Moreangels Mbizah, TedTalk)
- 4.6 How Poachers became Caretakers (18min) (John Kasaona, TedTalk)
- 4.7 An Economic Case for Protecting the Planet (15min) (Naoko Ishii, TedTalk)
- 4.8 River of Gold (63min) (film)

Readings (32 pgs):

- 1. Elliot, Lorraine. 2012. Fighting Transnational Environmental Crime. *Journal of International Affairs*. 6(1):87-104
- 2. Biggs, D., Cooney, R. & Roe, D. et al. (2016). Developing a theory of change for a community-based response to illegal wildlife trade. *Conservation Biology*. pp 1-8

3. Duffy, R., Massé, F., Smidt, E., Marijnen, E., Büscher, B., Verweijen, J., Ramutsindela, M., Simlai, T., Joanny, L. and Lunstrum, E., 2019. Why we must question the militarisation of conservation. *Biological Conservation*, 232, pp.66-73

Assignments due to Canvas by 10am Friday:

- 1. Weekly Response #4 Prompt(4 pts):
- Why is biodiversity important? What are the main threats to biodiversity?
- How can local communities be involved in addressing illegal wildlife trade? Why is this involvement important?(1 para);
- How do issues of biodiversity conservation intersect with those of justice and economics? (1 para)?
- 2. Weekly Quizzes # 1-8

Assignments due to Canvas by 11:59pm Friday:

1. Zoom Assessment

Module 5 – August 22-26 COVID-19: Environmental, Economic and Equity Implications

Lectures/Videos:

- What the corona virus teaches us about climate change? (9min) (Our Changing Climate)
- 5.2 How wildlife trade is linked to corona virus (8min) (Vox)
- 5.3 What it's like to be a sanitation worker during the corona virus outbreak (6min) (Washington Post)
- Pandemic-resistant economies (80 min) (Webinar with Andy Revkin, Herman Daly and Kate Rawworth)
- 5.5 Climate change and COVID-19: Can this crisis shift the paradigm? (Kate O'Neill, Dan Kammen, Valeri Vasquez)

Readings:

1. *Chaudhuri, S. (2020, Mar 30). Trash industry braces for potential deluge of coronavirus waste; medical-waste processors are handling more masks and

- gowns, while collectors worry about infected recycling and garbage. Wall Street Journal
- 2. *Sahagun, Louis. 2020. "Medical Waste Industry Braces for Flood of Virus-Contaminated Trash" *LA Times*. 30 March 2020.
- 3. *Kunreuther, Howard and Paul Slovic. 2020. "What the Corona Virus Teaches us about Climate Change." *Politico*. 30 March 2020.
- 4. *Dolsak, Nives and Aseem Prakash. 2020. "Here's why corona virus and climate change are different sorts of policy problems" *Forbes*. 15 March 2020.
- 5. *Wittemeyer, George. 2020. "The new coronavirus emerged from global wildlife trade and may be devastating enough to end it." *The Conversation*. 1 April 2020.
- 6. *Vidal, John. 2020. "Destroyed Habitat Creates Perfect Conditions for Coronavirus to Emerge" *Scientific American*. 18 March 2020.
- 7. *Scott, John. 2020. How Biodiversity Loss is Hurting our Ability to Combat Pandemics." World Economic Forum. 9 March 2020.
- *Basso, Larisa. "Why a 17% Emission Drop Does Not Mean we Are Addressing Climate Change." The Conversation. 21 May 2020.
- 9. After reading the three articles above, choose 3-5 more recent articles (published after April 2020) to read on the intersection between COVID-19 and climate, biodiversity, and/or waste. Post full citations of the articles you choose on Canvas (see below) and come to class on Friday ready to discuss what you read. You can find a wealth of resources here:

 https://www.genevaenvironmentnetwork.org/covid19.html

Assignments due to Canvas by 10am Friday:

- 1. Weekly Response Prompt (4 pts):
- How does COVID-19 intersect with issues of climate change, waste, AND biodiversity?;
- How does the COVID-19 crisis intersect with issues of justice and economics?;
- How has the COVID-19 crisis shifted what is possible in terms of how we address environmental issues?; and
- Post full citations of the 3-5 articles you choose to read and come to class on Friday ready to discuss what you read. APA style.
- 2. Weekly Ouizzes # 1-5

Assignments due to Canvas by 11:59pm Friday:

1. Final Assessment