

## CCS 102 Research Perspectives on Climate Change

300-450pm Mondays || Nierenberg Hall 101 @ SIO Campus

### Instructor

bt werner b Werner@ucsd.edu

Professor of Environmental Physics and Complex Systems

Scripps Institution of Oceanography

Affiliate in Critical Gender Studies and Ethnic Studies

### Office Hours

(tentative – check web site for changes)

Mondays 11AM-NOON online

Tuesdays/Thursdays 1230-130PM Mandeville Cafe

or by appointment



<https://www.lowyinstitute.org>

*CCS 102 will be conducted on stolen, colonized, occupied, unceded Kumeyaay Land.*

**Course Web Site:** <https://courses.complex-systems-laboratory.org/ccs102>

### Synopsis

Research on climate change spans a broad range of disciplines, topics, approaches and methods – from the highly abstract, universal and theoretical to the intensely grounded, experimental, locally specific and practical, from scientific analyses to critical analyses, from western academic knowledge to Indigenous traditional knowledge, from research that benefits systems of concentrated power and wealth to research that promotes the diffusion of power and wealth. In CCS 102, we will sample this diversity of research, reading articles and meeting with academics and practitioners whose work gives us a window into some aspects of climate change research. We will discuss techniques for reading articles on climate change research, asking questions of seminar speakers and approaching academics as project advisors, all to help prepare you for your CCS minor applied project and for your climate-change-related work beyond UCSD.

\*\*\*\*Much of your work for CCS 102 will be done during class time. Especially because of the two Monday holidays this quarter, please plan to attend all eight Monday classes, if possible.\*\*\*\*

### Learning Objectives

- Explore the scope and diversity of climate change research and researchers.
- Collaboratively develop the skills to understand and critically read climate change research articles.
- Practice learning from seminar speakers and asking informational and probing questions.
- Refine skills for effectively approaching potential mentors, employers and collaborators.

CCS 102 will feature very cool speakers, and will have some assigned reading and straightforward assignments. No tests!

In CCS 102, you will be asked to

- attend and participate in eight Monday classes, seven of which will include seminars by very cool climate change researchers.
- fill out a brief form summarizing each seminar and answering a few questions about it.
- read six research articles about climate change as part of a group and, with your group, summarize the articles and come up with three questions about them. Each of the six groups will lead the discussion on one of the research articles.
- write a well-researched draft e-mail to a potential advisor for your CCS minor applied research project.

## Accountability

Instructor: I welcome constructive comments and suggestions about the class to better make it a space for productively working, learning and growing together. I will provide class time to receive those suggestions. I will provide timely feedback to the best of my ability.

Students: Please attend, actively engage with and participate in the eight class meetings. Please do the reading and complete the RAT with your group, and the SRs individually after seminar class meetings. Please accept responsibility for the learning of your classmates, your groupmates and yourself.

### Grading:

– Attendance and class participation. Please attend, be present, participate and assist others in learning. If illness, employment, childcare or caregiving responsibilities do not permit you to attend class, please advise bt, if possible ahead of class, and contact bt for details on how to earn credit for that class. This will involve attending a climate change seminar at UCSD and reporting on it.

**32% (4% per class meeting)**

– Seminar Report. Individually fill out a seminar report following each of the Seminars 1-7 (SR-1 to SR-7), including a summary of the seminar and answering a few questions. Download the Seminar Report form for each seminar from the Slides and Handouts Page on the course web site.

**21% (3% per SR)**

– Read the assigned articles and fill out the Reading Assignment Template (RAT) for Seminars 2-7 one week ahead of the seminar with your group (read and fill out the template together, submit the templates individually). Download the assigned articles and RATs from the Assigned Reading Page on the course web site. **18% (3% per RAT)**

-- With your group, lead the class discussion of the article assigned to your group one week before the corresponding seminar. Discuss potential questions to ask the seminar speaker. **20%**

-- Write a well-researched draft e-mail to send to a potential advisor for your CCS minor applied project (or substitute a potential mentor or employer). **9%**

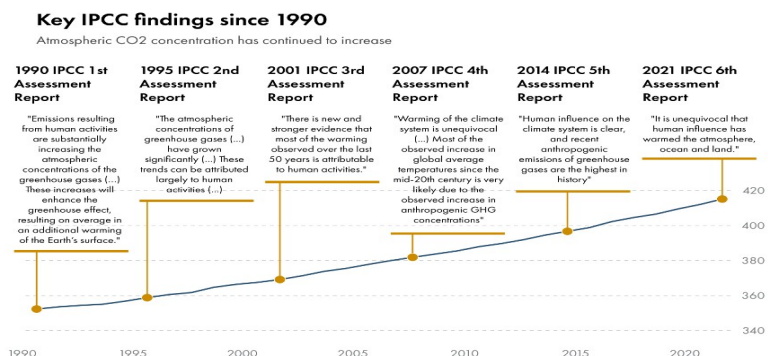
All assignments should be submitted to the course web site

<https://courses.complex-systems-laboratory.org/ccs102>.

Following seminar classes, interested students are welcome to join me and possibly our seminar speakers, if they are able to, to continue the discussion at the Muir College Cafe, and possibly to dinner thereafter. I want to emphasize that this is entirely optional and that participation or lack thereof in these extra discussions will have no impact on your grade.

## Attendance and Participation

Learning in this class depends heavily on class seminars, class discussions and working with and talking in groups, and attendance is strongly encouraged. Please actively participate verbally or with written comments during class. If illness, employment, childcare or caregiving responsibilities do not permit you to attend class in-person, please contact bt so we can work out a plan to make up for your absence.



Here are some principles for participation in CCS 102:

- Be physically and mentally present for yourself, for your classmates and for seminar speakers.
- Respect is key. Respect yourself, your classmates, seminars and the academic goals of the course. Please do not interrupt others while they are speaking.
- Participation is not just speaking/typing but also active listening/reading – we are coming from different perspectives, backgrounds, and positionalities and we all have something to contribute to how we understand the readings and concepts.
- Step Up, Step Back: if you are participating more than others, step back and let others contribute; if you are participating less than others and have something to contribute, step up and participate more.
- Commit yourself to critically engage the material. Be an active participant in your education.
- Take initiative in your learning. Act with integrity.
- Commit yourself to arriving on time and coming prepared to learn.
- Although electronic devices make it easy for us to multi-task, please don't.
- The number one ground rule which we will all follow is to engage in respectful critical analysis and discussion in the classroom. Abusive and harsh language will not be tolerated.

### **Sexual Violence and Sexual Harassment**

The climate crisis intersects with topics of oppression and violence in ways that many will find difficult, painful and triggering. I invite you to relate your personal experiences where relevant to the academic discussion. However, I want you to be aware that UCSD requires instructors to file a report with the University's Title IX Officer if any students relate experiences with sexual harassment or sexual violence in class discussions, e-mail or written assignments, whether or not that occurred on campus. This could result in an investigation without that student's participation or consent.

Campus Advocacy, Resources, and Education at the Sexual Assault Resource Center (CARE at SARC) -- CARE at SARC is an independent confidential campus resource for individuals impacted by sexual assault, relationship violence, and stalking. CARE at SARC also provides comprehensive prevention education and trainings for UC San Diego students, staff, faculty, organizations, and departments. CARE at SARC provides free and confidential services for students, staff and faculty who are survivors, or those supporting survivors. CARE at SARC serves as the primary point of contact for victims and survivors who need advocacy, support services and/or assistance with reporting options. CARE at SARC is on-call 24 hours a day and on weekends throughout the year. If you are in need of urgent support during non-business hours, weekends, or holidays, please call them at (858) 534-5793. <https://care.ucsd.edu/>

### **Academic Integrity**

Plagiarism is not acceptable. Please refer to the "UCSD Policy on Integrity of Scholarship."

### **Communications with Instructor**

Please let me know if you go by a different name than what is on your UCSD record. If you would like, I am happy to adjust your login to your preferred name.

### **Office Hours**

If you have any questions regarding the readings and or assignments please connect with bt during office hours. If you cannot attend the scheduled office hours I also am available to connect by appointment. Please email me with your availability to request an appointment.



<https://www.flickr.com/photos/theworldfishcenter/>



## Email Policy

Please do not hesitate to e-mail me with any questions and or concerns. I check email during normal university hours and will respond within 48 hours, however, I might not respond to emails over weekends.

Email is a good way for you to ask short, logistical questions and general inquiries about assignments. If you have questions that require an in-depth answer or conversation, please connect with me during office hours. Finally, I strongly encourage you to ask syllabus and assignment related questions in class. If you have a question it is likely that others also have the same question. **When emailing include CCS 102 as part of the subject line or header.**

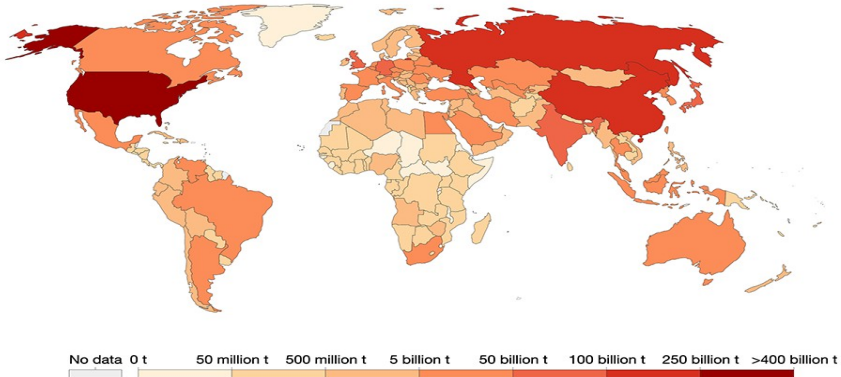
## Grade Disputes

If you have questions regarding the grades or written comments you receive, I would be happy to address them during office hours or by appointment at least 24 hours after you have received your feedback. Make sure to see me no later than one-week after the assignment has been returned. A re-grade means re-grading the entire assignment and could result in an overall lower grade for that assignment.

### Cumulative CO<sub>2</sub> emissions

Cumulative carbon dioxide (CO<sub>2</sub>) emissions represents the total sum of CO<sub>2</sub> emissions produced from fossil fuels and cement since 1750, and is measured in tonnes. This measures CO<sub>2</sub> emissions from fossil fuels and cement production only – land use change is not included.

Our World  
in Data



Source: Our World in Data based on the Global Carbon Project

OurWorldInData.org/co2-and-other-greenhouse-gas-emissions/ · CC BY

## Resources

This is a particularly difficult, stressful time. In my view, taking care of ourselves and supporting those around us, our friends and our family and our classmates and colleagues is more important than anything else. To that end, we will spend time in class checking in to the extent possible given our limited class time, and endeavor to form a supportive community, despite the alienation of our isolation at a neoliberal university. If you need assistance in locating additional resources for disability accommodations, health, food, stress, transitional support, well-being, mental health, financial aid, job preparation, and community building do not hesitate to consult your instructor.

## Accommodations

If you need any accommodations for disability, illness, or any other reason please contact me so I can create an accommodation plan for your success. If you have a disability or other condition that compromises your ability to complete the requirements of this course, please inform me asap of your needs. I will make all reasonable efforts to accommodate you. Everyone should be able to take and thrive in CCS 102!



<https://media.greenpeace.org/>

## Writing Support

Some students will need to utilize office hours in order to get extra background and direction on the material. ELL students are highly encouraged to consult the resources at the OASIS center (858-534-3760). <https://oasis.ucsd.edu>

## Email Exchange

If you ever miss a class, contact your peers for support! Collaboration with your peers is a part of learning--this is **NOT** a competition! You can also check out the shared documents and forums on the course web site.

new friend: \_\_\_\_\_ new friend's e-mail: \_\_\_\_\_

new friend: \_\_\_\_\_ new friend's e-mail: \_\_\_\_\_

new friend: \_\_\_\_\_ new friend's e-mail: \_\_\_\_\_

## Tech Stuff

To download course materials or upload assignments, you must be logged in to the course web site: <https://courses.complex-systems-laboratory.org/ccs102>

You will receive an e-mail from bt with login information soon. If you have not received an e-mail by the first day of class, please e-mail bt at [bwerner@ucsd.edu](mailto:bwerner@ucsd.edu).

Click on the login link at the top/left and fill in the login name and password that bt sent you. If it doesn't work, e-mail bt to reset the login/password or diagnose the problem. Note the automatic e-mail link for forgetting your password does not work. You must have cookies enabled, All web site features have been tested with Safari and Firefox.



<https://phys.org>

The CCS 102 Research Perspectives on Climate Change syllabus is subject to change as needed. Office hours' location and times might vary throughout the quarter to best meet the needs of all students. :) Check the course web site for updates!

## Course Flow

-->RAT is the Reading Assignment Template, which you will use to summarize and ask questions about the articles in collaboration with your group, due one week before the corresponding seminar. (no article, no RAT-1 for the first seminar on 1/22)

-->SR is the brief Seminar Report you will fill out individually after each seminar, due that evening at midnight.

-->Check the Assigned Reading Page on the course web site for each week's Article and RAT

-->Check the Handouts and Slides Page on the course web site for each week's SR

**Week One 1/8: Course and People Introductions, Group Formation, Critical Reading, Critical Listening, The Art of Asking Questions, The Scope of Climate Change Research**  
(No Assigned Reading)

**Week Two 1/15: Martin Luther King Day – No Class**  
(No Assigned Reading)

**Week Three 1/22: Seminar 1 – Is Earth F\*\*ked? The Science Behind Solidarity with Earth**  
Speaker: BT Werner

-->RAT-2 Due before class || Group 2 Presents

-->SR-1 Due Monday evening midnight

### **Week Four 1/29: Seminar 2 – No Comemos Baterías: Against Colonizing Climate Change Solutions**

Speakers: Center for Interdisciplinary Environmental Justice: Professor Marlene Brito-Millán, School of Environmental Sustainability, Loyola University Chicago, Dr. Janin Guzman-Morales, Department of Geography, University of California – Santa Barbara, Dr. Emma Harrison, Department of Oceanography, Dalhousie University, Professor Amrah Salomón J, Department of English, University of California – Santa Barbara, Dr. Jessica Ng, High Meadows Environmental Institute, Princeton University and Professor Leslie Quintanilla, Department of Women and Gender Studies, San Francisco State University.

-->RAT-3 Due before class || Group 3 Presents, Group 2 Asks Questions

-->SR-2 Due Monday evening midnight

### **Week Five 2/5: Seminar 3 – The Commons and The Climate Crisis**

Speaker: Professor Cathy Gere, Department of History, University of California – San Diego

-->RAT-4 Due before class || Group 4 Presents, Group 3 Asks Questions

-->SR-3 Due Monday evening midnight

### **Week Six 2/12: Seminar 4 – Biomass Burning, Aerosols and the Dynamics of Clouds in West Africa**

Speaker: Professor Osinachi Ajoku, Atmospheric Science, Howard University

-->RAT-5 Due before class || Group 5 Presents

-->SR-4 Due Monday evening midnight

### **Week Seven 2/19: Holiday – No Class**

(No Assigned Reading)

### **Week Eight 2/26: Seminar 5 – Climate Change Action, Mitigation and Adaptation through the Lens of Indigenous Communities**

Speaker: Dr. Heather Ponchetti Daly, Iipay Nation of Santa Ysabel and Muir College Environmental Studies, University of California – San Diego

-->RAT-6 Due before class || Group 6 Presents, Group 5 Asks Questions

-->SR-5 Due Monday evening midnight

### **Week Nine 3/4: Seminar 6 – The Human Health Impacts of Wildfire Smoke in a Changing Climate and Environmental Justice Implications**

Speaker: Professor Tarik Benmarhnia, Scripps Institution of Oceanography, University of California – San Diego

-->RAT-7 Due before class || Group 7 Presents, Group 6 Asks Questions

-->SR-6 Due Monday evening midnight

### **Week Ten 3/11: Seminar 7 – Soils and Carbon Sink Farming**

Speakers: **Bea Alvarez, Sarah Solis and Ellee Igoe, Foodshed Cooperative and Solidarity Farm**

--<No RAT Due, Group 7 Asks Questions

-->SR-7 Due Monday evening midnight

-->Draft E-mail Assignment Due Thursday evening midnight