Communication Studies/Environmental Studies/Meteorology 168A,B:

**Climate Action & Leadership, Fall 2023-Spring 2024**

**Instructor:** Alejandro Artiga-Purcell, Communication Studies, alejandro.artiga-purcell@sjsu.edu
Office Hours: TH 2:00pm-4:00pm, HGH 203 or by appointment

**Instructor:** Eugene Cordero, Meteorology and Climate Science, eugene.cordero@sjsu.edu
Office Hours: TH 9:30am-10:15am, Clark Hall 227 or by appointment

**Instructor:** Costanza Rampini, Environmental Studies, costanza.rampini@sjsu.edu
Office Hours: Wed., 12:15PM-1:15PM in WSQ 111C or by appointment

**Class Days/Time:** T/TH 10:30AM-1:15PM

**Classroom:** DMH 227

**Prerequisites:** Passage of the Writing Skills Test (WST), upper-division standing, and completion of Core GE.

**GE/SJSU Studies Category:** R, S, V

**Course Description**

Many different scientific observations and measurements indicate that Earth is experiencing global-scale changes in climate, i.e., in the long-term distributions of temperature, cloud cover, precipitation, and extreme weather events. Scientific consensus considers most of these changes to be caused or accelerated by human activities. The economic, ecological, social, and cultural challenges caused by global climate change will affect everyone on the planet and are very likely to have disproportionate impacts on poorer nations and people. In this course, we will study global climate change from an interdisciplinary perspective, incorporating natural and social science approaches to understand its processes and effects. We will study the socioeconomic contexts of climate change impacts, and how globally diverse cultural perspectives influence strategies to mitigate and adapt to climate change.

**A note about this course:** This is a year-long course: 6 units (CEGHM 168A) in Fall and 3 units (CEGHM
168B) in Spring. You must pass 168A with a grade of C- or higher in order to enroll in 168B. If you receive a grade lower than C- in 168A, you will not be able to enroll in 168B. You will receive credit for GE Areas R, S, and V after you have successfully completed the entire year-long sequence. In order to receive GE credit, you must receive a grade of C- or higher in both semesters.

Team-Taught Course: This course is unique because it is team-taught. We meet for extended class periods. We will cover a lot of material on numerous topics and engage in various activities related to global climate change and the SJSU Studies GE learning objectives. Assignments, readings, class activities and discussions are designed to help you recognize connections among concepts from many different disciplines, and to critically evaluate and integrate them as part of a life-long learning process about global climate change and related issues. This course will help students to develop abilities to address complex issues using disciplined analytical skills and creative techniques.

Course Goals and Student Learning Objectives

Learning objectives are developed to assist students in understanding the main goals and expectations of the course. Teaching and learning activities are designed with these objectives in mind while assessment activities help us measure student achievement of these objectives. This course will incorporate writing assignments throughout the two semesters, and will meet the requisite 9,000 words required of the three SJSU Studies areas. Some written assignments will be adaptable to students’ specific disciplines.

Assessment is designed to determine how well students have achieved the goals of the learning objectives and thus form an important component of the course. Each student will be assessed through a combination of writing assignments, exams, and course projects. Each assignment is linked to the student learning objectives (SLO) noted below (ex: Riii). Students will complete diagnostic, midterm, and summative assessment rubrics each semester in addition to written reflection and evaluation of their own work.

Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of forty-five hours over the length of the course (normally 3 hours per unit per week with 1 of the hours used for lecture) for instruction or preparation/studying or course related activities including but not limited to internships, labs, clinical practica. Other course structures will have equivalent workload expectations as described in the syllabus.

Science (R): Earth, Environment, and Sustainability

In Area R courses, students apply knowledge of scientific theories and concepts as well as quantitative reasoning to explore the relationship between humans and the natural environment. Students achieve an understanding of the role that science plays in addressing complex issues, as well as the potential limits of scientific endeavors and the value systems and ethics associated with scientific inquiry.

Upon successful completion of an Area R course, students should be able to:

1. Apply scientific principles and the scientific method to answer questions about earth, the environment, and sustainability while recognizing the limits of both the method and principles;
2. Apply mathematical or quantitative reasoning concepts to the analysis and generation of solutions to issues of earth, the environment, and sustainability;
3. Communicate a scientific finding, assertion, or theory to a general audience with the integrity and rigor of the underlying science; and

4. Explain ethical, social, and civic dimensions of scientific inquiry.

R: The specific learning objectives in this area for this course are:
   i. A student should be able to demonstrate an understanding of the fundamental processes responsible for past and present climate change.
   ii. A student should be able to design quantified personal and community scale climate change solutions.
   iii. A student should be able to create effective messages for communicating climate science topics to a particular audience.

The Area S (Self, Society & Equality in the U.S.) General Education learning objectives are:

In Area S courses, students study the interrelationships of individuals, racial groups, and cultural groups to understand and appreciate issues of equality, structured inequality and justice in the United States. By exploring different perspectives and helping students articulate and discuss their own values, Area S courses prepare students to live and work responsibly and cooperatively in a multicultural society.

Upon successful completion of an Area S course, students should be able to:

1. describe how identities are shaped by cultural and societal influences within contexts of equality and inequality. Examples include, but are not limited to, race, ethnicity, gender identity, gender expression, sexual orientation, religion, disability status, age, generation, regional origin, national identity, language, intersectionalities;
2. Analyze historical, economic, political, or social processes that shape diversity, equality, and structured inequalities in the U.S. and reflect on one’s own identities and positions within these structures;
3. Evaluate social actions which have or have not led to greater equality and social justice in the U.S.; and
4. Engage in constructive interactions about social issues in the U.S. within the framework of equality and inequalities.

S: The specific learning objectives in this area for this course are:

i. To be able to describe how cultural and societal effects of climate change shape the identities of individuals and communities.
ii. To be able to describe the processes of the fossil fuel economy that creates structured inequalities in the United States.
iii. To be able to identify climate change mitigation strategies and describe actions that can lead to environmental justice in the U.S.
iv. To recognize and appreciate constructive interactions between people from different cultural, racial, and ethnic groups in the U.S., and to apply this knowledge to conduct a community needs assessment and develop a community outreach strategy regarding climate change.

The Area V (Culture, Civilization & Global Understanding) General Education learning objectives are:

Courses in Cultures and Global Understanding examine multiple aspects of human expression in cultures
and societies outside the United States, including how such cultures develop and influence one another as well as U.S. cultures and societies.

Upon successful completion of an Area V course, students should be able to:

1. Analyze historical, social, and/or cultural significance of creative works of human expression (examples include, but are not limited to, written works, images, media, music, dance, technologies, designs), from at least one cultural tradition outside the United States;
2. Examine how creative works of human expression [as defined in #1] outside the United States have influenced the United States’ cultures;
3. Explain how a culture outside the U.S. has changed in response to internal and external influences; and
4. Appraise how the study of creative works of human expression from outside the United States shapes one’s own understanding of cultural experiences and practices.

V. The specific learning objectives in this area for this course are:
   i. To be able to compare international policy responses and cultural perceptions of climate change.
   ii. To be able to compare policy mechanisms, economic development patterns, and governance structures that influence national and cultural responses toward international efforts to mitigate adverse impacts of climate change.
   iii. To be able to identify how international policy actions are affected by historical, cultural, and economic contexts of developed and developing countries, with emphasis on how international cultural perspectives affect the United States’ response.
   iv. To be able to explain how the cultures of developing countries have responded to international negotiations of climate change.

Required Texts/Readings


The book is available as an ebook in the MLK University Library. You need to sign in at the library site with your SJSU ID in order to get access to the book.


Other readings and viewings will be assigned and available via the class Canvas website. Please skip to the end of this document to see a complete list of readings for the class. It is your responsibility to know what assignments are due when, and to complete them on time.

Clickers

We will be using iClicker/REEF Polling as a student response system in class this term. This software helps us to understand what you know and gives everyone a chance to participate in class.

You will have several options available to participate in clicker sessions, all options are available to you at NO COST. iClicker/REEF Polling allows you to use your smartphone, tablet or laptop as a clicker to
participate. On your smartphone or tablet go to Mac App Store or Google Play and download Reef Polling by iClicker If using a laptop, go to https://app.reef-education.com/#/login.

Classroom Protocol

* Students are expected to attend every class, as this is a participation-intensive course that relies on your consistent and active engagement. Classroom activities will often be assigned and collected during class, and there are no ways to make up this work.

* Assignments will not be accepted late, except with a valid excuse. Late work will be marked down 20% per day (including weekends), and will receive a zero if turned in one week or more after the due date.

* We will regularly use the course’s Canvas course site: http://sjsu.instructure.com for announcements, readings, assignments, uploads of instructor presentations. You are responsible for setting up Canvas so you are notified when we have posted an announcement or assignments. To locate your Canvas login name and password, follow the instructions posted here: http://www.sjsu.edu/at/ec/canvas/index.html.

* Personal electronic devices: Outside of their use for classroom activities and for iClicker responses, the use of personal electronic devices are not allowed. Their use is distracting to other students, and may compromise the educational value of the classroom experience that all students pay for.

* Cell phones and all instant-messaging programs must be turned off prior to class. NO text messaging or phone use is permitted in the classroom and laptops may only be used for class purposes. This will be strictly enforced.

* Common courtesy and professional behavior dictate that you notify someone when you are recording them. You must obtain the instructor’s permission to make audio or video recordings in this class. Such permission allows the recordings to be used for your private, study purposes only. The recordings are the intellectual property of the instructor; you have not been given any rights to reproduce or distribute the material.

* Course material developed by the instructors is the intellectual property of the respective instructor and cannot be shared publicly without their approval. You may not publicly share or upload instructor generated material for this course such as exam questions, lecture notes, or homework solutions without instructor consent.

* Email to a professor should be treated like a business letter. Please follow these tips when emailing your professor: http://web.wellesley.edu/SocialComputing/Netiquette/netiquetteprofessor.html. Emails that do not follow this “netiquette” will not receive a response.

Dropping and Adding

Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness, etc., and should be aware of the deadlines and penalties for dropping classes. Refer to the current semester’s Catalog Policies at: http://info.sjsu.edu/static/catalog/policies.html. Add/drop deadlines can be found on the current academic calendar web page located at http://www.sjsu.edu/academic_programs/calendars/academic_calendar/. The Late Drop Policy is available at http://www.sjsu.edu/aars/policies/latedrops/policy/. Information about the latest changes is available at the Advising Hub at http://www.sjsu.edu/advising/.
Assignments and Grading Policy

There will be spontaneous in-class writing activities throughout the course, which all students are expected to complete as part of the revision and feedback process of larger writing assignments.

Letter grades will be assigned according to the following point scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
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<tbody>
<tr>
<td>A</td>
<td>92.5 to 100</td>
</tr>
<tr>
<td>A-</td>
<td>89.5 to 92.4</td>
</tr>
<tr>
<td>A+</td>
<td>86.5 to 89.4</td>
</tr>
<tr>
<td>B</td>
<td>82.5 to 86.4</td>
</tr>
<tr>
<td>B-</td>
<td>79.5 to 82.4</td>
</tr>
<tr>
<td>B+</td>
<td>76.5 to 79.4</td>
</tr>
<tr>
<td>C</td>
<td>72.5 to 76.4</td>
</tr>
<tr>
<td>C+</td>
<td>69.5 to 72.4</td>
</tr>
<tr>
<td>D</td>
<td>66.5 to 69.4</td>
</tr>
<tr>
<td>D+</td>
<td>62.5 to 66.4</td>
</tr>
<tr>
<td>D-</td>
<td>59.5 to 62.4</td>
</tr>
<tr>
<td>F</td>
<td>0 to 59.4</td>
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</tbody>
</table>

FALL ASSIGNMENTS

Short Paper #1 (Artiga-Purcell) 15%. 1000 words final paper (SLO: S1, S3). We live in a heavily mediated society, which influences our thoughts, behaviors, preferences, beliefs, relationships, and activities. Keeping that in mind, reflect on the media you grew up consuming (news, video games, cartoons, vloggers, social media, movies, TV shows, podcasts, music, etc…) and think about how that has influenced your understanding—or lack thereof—of climate change and its myriad intersecting issues. Identify one of these media sources and be prepared to write about its impact on you, your friends, family, community, and society at large by applying concepts discussed in class and covered in your readings. More details will be posted on Canvas and discussed during class when the paper is assigned.

Short Paper #2 (Cordero): 15%. 1000 words (SLO: R1, R2, R3) Designing effective climate change solutions can be challenging to implement at any scale (small or large). In this assignment, you’ll participate in a design exercise where you create and implement a plan to reduce energy use in your own home, where the success of the plan will be documented using smart meter technology. More details will be posted on Canvas and discussed during class when the paper is assigned.

Climate Advocacy Project: 10%, 1200 words. The goal of your Climate Advocacy Project (CAP) is to implement a public engagement campaign focused on one of the drivers OR impacts of climate change. You will develop and launch your own evidence-informed climate campaign to try to influence people, institutions or laws.

1. Project Proposal: 75 points, 500 words (SLO: R2, R3, S3, S4). As a group, you will write a proposal for your CAP project explaining the cause/solution that you will tackle, your campaigns goals and action plan, and your intended audience. A detailed assignment sheet will be shared on canvas.
2. Revised Proposal: 100 points, 700 words (SLO: R2, R3, S3, S4). Based on the feedback received on your proposal, your CAP group will submit a revised and detailed proposal for your CAP project that addresses the various concerns raised by your instructors. A detailed assignment sheet will be shared on canvas.

Participation and Activities: 25%. 1000 words; (SLO: R1-4, S1-4, V1-4). Participation will be evaluated by your engagement in class discussions and activities. Student participation will be evaluated during and after class by, amongst other things, using iClicker and grading write-ups submitted in response to discussion prompts. Detail guidelines will be provided during class each time.
Exam #1: 10%. 500 words (SLO: R1-4, S1-4, V1-4). Exams test the students’ understanding of class materials, including lectures and readings, and consist of a mix of multiple choice and short answer questions.

Exam #2: 10%. 500 words (SLO: R1-4, S1-4, V1-4). Exams test the students’ understanding of class materials, including lectures and readings, and consist of a mix of multiple choice and short answer questions.

Exam #3: (Final): 15%. 500 words (SLO: R1-4, S1-4, V1-4). Exams test the students’ understanding of class materials, including lectures and readings, and consist of a mix of multiple choice and short answer questions.

SPRING ASSIGNMENTS

Short Paper #3 (Rampini): 15%. 500 words draft; 300 words peer review; 750 words final paper (SLO: S2, S4). Write a letter to one of your federal representatives urging them to take climate action and reduce greenhouse gas emissions. In your letter you should explain why you think climate change is an important issue, using specific and concrete examples, why it is key that the United States reduce its own emissions as a country and lead international efforts to transition to renewable energy sources, and discuss the co-benefits of climate change mitigation efforts. A detailed assignment sheet and grading rubric will be discussed in class.

Climate Advocacy Project: 35%. 2000 words; (SLO: R2, R3, S3, S4). You will work with a group of your peers to engage a specific audience (policymakers, community members, etc.) on some aspect of climate change. As a group, you will submit a public service announcement and accompanying script (500 words), a final report (1500 words), and a final presentation that will be judged by your peers, and an external panel of judges who will award prizes to the winning teams. Your final CAP grade will be a combination of individual and group grades.

Participation, In-class and Online Activities 20%. 1000 words; (SLO: R1-4, S1-4, V1-4). Participation will be evaluated by your engagement in class discussions and activities. Student participation will be evaluated during and after class by, amongst other things, using iClicker and grading write-ups submitted in response to discussion prompts. Detail guidelines will be provided during class each time.

Exams 1 & 2: 15% each; 500 words each. (SLO: R1-4, S1-4, V1-4). Exams test the students’ understanding of class materials, including lectures and readings, and consist of a mix of multiple choice and short answer questions.

University Policies

Per University Policy S16-9, university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc. will be available on Office of Graduate and Undergraduate Programs’ Syllabus Information web page at http://www.sjsu.edu/gup/syllabusinfo/’
168A, Fall 2023 - Course Schedule

This schedule may be amended, with fair notice, to accommodate guest lectures & current events.

TU Aug 22
Intro to Course
Realities of Managing Climate Change (CR)

TH Aug 24
Introduction to Climate Science I (EC)
Land Use and Climate Change (CR)

TU Aug 29
Introducing Climate Change Communication (AAP)
Influence of Climate Change on Non-Human Species (CR)

TH Aug 31
Greenhouse Effect (EC)
The Politics of Persuasion (AAP)

TU Sept 5
Paper #1 Assigned
Communicating Risk (AAP)
“One Degree Factor” (in-class movie and quiz) (CR)

TH Sept 7
Energy Balance (EC)
Climate change vulnerability (CR)

TU Sept 12
Science Communication (AAP)
Feedbacks (EC)

TH Sept 14
Climate Change Evidence (EC)
Climate change in the Himalayas (CR)

TU Sept 19
Food and Climate (EC)
Climate Change and Media (AAP)

TH Sept 21
Introduction to Mitigation (CR)
Colonial Climate Changes (AAP)
TU Sept 26
Exam #1 Review
Climate Change Grief, Eco-anxiety, and Radical Hope (AAP)

TH Sept 28
Exam #1

TU Oct 3
Climate Change & Christianity (CR)
Embodied Energy (EC)

TH Oct 5
Introduction to Climate Advocacy Project (CAP) & Group Formation

TU Oct 10
Merchants of Doubt (movie) + in-class quiz & discussion (CR/AAP) - Paper #1 Due

TH Oct 12
Energy and the Home - Paper 2 (EC)
Misinformation & Disinformation (AAP)

TU Oct 17
Brainstorming Climate Solutions (EC)
California & Climate Change (CR)

TH Oct 19
Carbon Cycle (EC)
Climate Advocacy Project - Local Organizations (CR)

TU Oct 24
Climate Models (EC)
Apocalyptic Rhetoric (AAP)

TH Oct 26
Introduction to Climate Change Adaptation (CR)
Exam #2 Review

TU Oct 31
Exam #2

TH Nov 2
Adapting Agriculture (CR)
Visualizing Climate Change (AAP)

TU Nov 7
Dale Martin Guest Lecture - “Where will the wildfire arena be in 15 years?”
Climate Change Career Panel

TH Nov 9
**Paper #2 Due**
Climate Advocacy Project - Topic Selection
Creative Climate Communication (AAP) (**In-class Art Show**)

TU Nov 14
Story-telling and Climate Change (AAP)
Adapting Cities (CR)

TH Nov 16
*Climate Change Fieldtrip to Coyote Creek with Keep Coyote Creek Beautiful meet at Selma Olinder dog park in San José*
**CAP Proposals due on Canvas at 11:59pm**

TU Nov 21
*Inside the Mega Fires (online movie & quiz) (EC)*

TH Nov 23  **Thanksgiving: No Class**

TU Nov 28
Climate Advocacy Project - Revising CAP Proposal

TH Nov 30
Transportation (EC)
Adapting conservation (CR)

TU Dec 5
Wrap-up & Catch-up
Final Exam Review
**CAP Revised Proposals due on Canvas on Friday, December 8th at 11:59pm**

**Final Exam: Wednesday, December 13, 9:45 AM-12:00 PM**
List of Readings for 168A

These articles will be used to supplement readings from the books listed in the syllabus. Readings may be amended, with fair notice, to accommodate guest lectures & current events.

For Professor Artiga-Purcell:
Solnit, R. (2023). Difficult is not the same as impossible. In R. Solnit and TY Lutunatabua (Eds), Not Too Late: Changing the Climate Story from Despair to Possibility (pp. 3-10). Chicago: Haymarket Books.
Supran, G., and Oreskes, N. (Nov. 18, 2021) “The forgotten oil ads that told us climate change was nothing.” The Guardian. Available at: https://www.theguardian.com/environment/2021/nov/18/the-forgotten-oil-ads-that-told-us-climate-change-was-nothing

For Professor Cordero:


For Professor Rampini:


For Professor Artiga-Purcell:


Supran, G., and Oreskes, N. (Nov. 18, 2021) “The forgotten oil ads that told us climate change was nothing.” The Guardian. Available at: https://www.theguardian.com/environment/2021/nov/18/the-forgotten-oil-ads-that-told-us-climate-change-was-nothing
