

Communication Studies/Environmental Studies/Geology/Humanities/Meteorology
(CEGHM) 168A,B: **Global Climate Change, Fall 2015-Spring 2016**

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Instructor:	Bettina Brockmann, Communication Studies HGH 257, 924-5533, bettina.brockmann@sjsu.edu Office Hours: T/TH 11:45-12:45 or by appointment
Class Days/Time:	T/TH 1330-1615
Classroom:	WSQ 207
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 at least some 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 developing nations and poor. In this course, we will study global climate change from an interdisciplinary perspective, incorporating scientific and social scientific approaches to understanding processes and effects. We will study the socioeconomic contexts of environmental effects and how globally diverse cultural perspectives influence strategies to mitigate climate change.

A note about this course (Team SJSU Studies): This is a year-long course: 6 units (CEGHM 168A) in Fall and 3 units (CEGHM 168B) in Spring. 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.** If you receive a grade of C- or lower in 168A, you will not be able to enroll in 168B. A grade of C- or lower in 168A will not earn any GE credit.

This course 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 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 four 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 in the greensheet by Area and SLO number (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.

The Area R (Earth and Environment) General Education learning objectives are:

- A student should be able to demonstrate an understanding of the methods and limits of scientific investigation.
- A student should be able to distinguish science from pseudo-science.
- A student should be able to apply a scientific approach to answer questions about the earth and environment.

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

- To develop an understanding of the fundamental processes responsible for past and present climate change.
- To understand and be able to articulate the implications and uncertainties related to our changing climate.
- To understand the connection between consumption, energy use, and global climate change.
- To be able to discuss and evaluate various climate change mitigation strategies.
- To be able to understand and evaluate the evidence for past and present climate change.

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

- To be able to describe how identities (i.e. religious, gender, ethnic, racial, class, sexual orientation, disability, and/or age) are shaped by cultural and societal influences within contexts of equality and inequality.
- To be able to describe historical, social, political, and economic processes producing diversity, equality, and structured inequalities in the U.S.
- To be able to describe social actions which have led to greater equality and social justice in the U.S. (i.e. religious, gender, ethnic, racial, class, sexual orientation, disability, and/or age).
- To recognize and appreciate constructive interactions between people from different cultural, racial, and ethnic groups within the U.S.

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:

- To be able to compare systematically the ideas, values, images, cultural artifacts, economic structures, technological developments, and/or attitudes of people from more than one culture outside the U.S.
- To be able to identify the historical context of ideas and cultural traditions outside the U.S. and how they have influenced American culture.
- To be able to explain how a culture outside the U.S. has changed in response to internal and external pressures.

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.

Team SJSU Studies Integrated Learning Goals

Team SJSU course sequences include GE Areas R, S, and V and are structured to foster integrative learning in a rich multi-disciplinary academic environment. Students should develop an understanding that builds across the curriculum (and co-curriculum), from making simple connections among ideas and experiences to synthesizing and transferring learning to new, complex situations within and beyond the campus. Students will develop habits of intentional learning through reflection and self-assessment.

Students shall be able to:

1. Demonstrate understanding of the connection of academic knowledge to experiences outside the classroom;
2. Demonstrate understanding of the connection of knowledge from two or more fields of study or disciplinary perspectives by independently relating examples, facts, or theories;
3. Adapt and apply, independently, skills, abilities, theories, or methodologies gained in one situation to new situations to solve problems or explore issues, ideally in original ways;
4. Communicate integrative understanding in ways that enhance the presentation of the connections between/among information from different domains of knowledge.

Required Texts/Readings

Textbook

Dessler, A.E. (2012). *Introduction to Modern Climate Change*. New York, NY: Cambridge University Press. [ISBN: 978-0-521-17315-5]

A free ebook is available for SJSU students at the SJSU library (<http://library.sjsu.edu>).

Kirszner, L. & Mandell, S. (2008). *The Pocket Handbook (4th Ed.)*. Wadsworth. ISBN: 978-1439081815.

Other Readings

Other readings will be assigned in class and via the course web site. It is your responsibility to know what assignments are due when, and to complete them on time.

Clickers

Personal response devices ('clickers') help make the course interactive, allowing the opportunity to better gauge student understanding during class, and thus enhance student learning. Clickers will be used throughout the year-long course, both informally for opinion polling and for graded in-class activities. It is important to purchase your clicker as soon as possible; clicker points will begin accumulating in the 3rd week of class. You need to **bring your clicker to every class** in order to be eligible for these points.

The clickers we are using are Turning Point ResponseCard NXT Keypad; Product ID: NXT-BX, and are available either at the campus bookstore, or directly through the distributor at a special SJSU price. To purchase directly from the distributor, visit: <https://store.turningtechnologies.com/> and enter SJSU for the school code. For a \$15 rebate, go to rebates.turningtechnologies.com; Code: RSJSU. You have to register your clicker at <http://webreg.turningtechnologies.com>. You'll find detailed directions on our canvas website.

Classroom Protocol

* This is a participation-intensive course that relies on your consistent and active engagement. In case of an emergency, please do everything in your power to contact us prior to missing class or work. We will only accept late work in cases of extreme medical or family emergency. Otherwise, late work will be subject to a 10% grade penalty per calendar day.

* 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 regularly (daily, perhaps) checking the course's web page. 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: Turn off your cell phones, iPods, media player, and any other electronic device, or put them on silent mode while class in session. Do not answer your phone or text during class. Of course you will be expected to use your clicker. Violation of these policies will result in the loss of participation points, and repeated violations will be referred to the SJSU's Judicial Affairs Officer.

* Computers in the classroom: You may apply to use a computer during this class only for class-related activities. You must apply in writing to explain that you want to use a computer, and pledge that you will only use it for taking notes on an in-progress class lecture or discussion, following the lecture on downloaded presentations or readings. Students who use their computers for ANY other activities (email, facebook, surfing, etc.) will, at a minimum, lose 50% of participation points for the semester, and lose computer privileges for the rest of the course; at a maximum, they will be referred to SJSU's Judicial Affairs Officer for disrupting the course (and can lead to suspension from the University).

Computer use for non-class activities is disrupting to you, the people around you, and the instructors.

* Common courtesy and professional behavior dictate that you notify someone when you are recording him/her. 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 either of the instructors is the intellectual property of the respective instructor and cannot be shared publicly without his/her 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

Dropping and Adding

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

Assignments and Grading Policy

For some written assignments, "on-time" completion includes not only submission of a hard copy in class, but also submission of a computer file to canvas by the assigned deadline. Refer to individual assignments for submission guidelines to make sure you turn it in to the right place.

Late assignments will be assessed a penalty of -10% per calendar day unless you have made arrangements with an instructor prior to the due date.

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:

A	925-1000 points	B-	795-824 points	D+	665-694 points
A-	895-924 points	C+	765-794 points	D	625-664 points
B+	865-894 points	C	725-764 points	D-	595-624 points
B	825-864 points	C-	695-724 points	F	0-594 points

FALL ASSIGNMENTS

Short Paper #1: 15%. 500 words draft; 250 words peer review; 1000 words final paper (SLO: Si). Brockmann

Compose an essay about the importance of climate change for your specific discipline. You should consult at least two sources from your field to articulate why the issue of climate change is important to your field. *A detailed assignment sheet and grading rubric will be discussed in class.*

Short Paper #2: 15%. 1000 words; (SLO: Riii, Riv). Murphy: Students will compute their carbon footprint based on their personal lifestyle and then answer questions about their footprint and ways to reduce it. Students will then be required to reduce their carbon footprint for a short period of time and reflect on this experience. *A detailed assignment sheet and grading rubric will be handed out and discussed in class.*

Homework/Small Writing Assignments 15 %. 1000 words: A number of small writing assignments will be assigned as homework. Instructions for each assignment will be discussed in class.

Participation and in class/online activities: 15%, 500 words. Your participation in this course will be evaluated by your engagement in daily class discussion and participation in in-class activities.

Exam #1: 12.5%. 100 words (SLO: Ri, Rii, Riii, Riv, Rv)

Exam #2: 12.5%. 100 words (SLO: Ri, Rii, Riii, Riv, Rv)

Exam #3: (Final): 15%. 100 words (SLO: Ri, Rii, Riii, Riv)

SPRING ASSIGNMENTS

Short Paper #3: 15%. 1000 words, required revision: 1000 words (SLO: Riv, Sii, Siii, Vii, Viii). Gershenson. Students will examine the evolution of ideas and the legislative progress of climate change policy in the U.S. *A detailed assignment sheet and grading rubric will be discussed in class.*

Community Project: 30%. 2000 words. This assignment is designed to encourage your interaction with a community regarding climate change. You will work with a group of your peers to engage the community on some aspect of climate change. As a group, you will submit a proposal, a report, and a presentation. Your final community project grade will be a combination of individual and group grades. (SLO: Riii, Riv, Si, Sii, Siii, Siv, Vi, Vii, Viii).

Homework/Small Writing Assignments 10 %. 500 words: A number of small writing assignments will be assigned as homework. Instructions for each assignment will be discussed in class.

Participation and in class/online activities: 10%. 500 words.

Exams 1 & 2: 35% 100 words each (SLO: Ri, Rii, Riii, Riv, Rv, Si, Sii, Siii, Siv, Vi, Vii, Viii, Viv).

University Policies

SJSU Writing Center

The SJSU Writing Center is located in Room 126 in Clark Hall and is staffed by professional instructors and upper-division or graduate-level writing specialists from each of the seven SJSU colleges. Writing specialists have met a rigorous GPA requirement, and are well trained to assist all students at all levels become better writers. The [Writing Center website](http://www.sjsu.edu/writingcenter) is www.sjsu.edu/writingcenter.

Academic integrity

Your commitment as a student to learning is evidenced by your enrollment at San Jose State University. The [University's Academic Integrity policy](http://www.sjsu.edu/senate/S07-2.htm), located at <http://www.sjsu.edu/senate/S07-2.htm>, requires you to be honest in all your academic course work. Faculty members are required to report all infractions to the office of Student Conduct and Ethical Development. The [Student Conduct and Ethical Development website](http://www.sa.sjsu.edu/judicial_affairs/index.html) is available at http://www.sa.sjsu.edu/judicial_affairs/index.html.

Instances of academic dishonesty will not be tolerated. Cheating on exams or plagiarism (presenting the work of another as your own, or the use of another person's ideas without giving proper credit) will result in a failing grade and sanctions by the University. For this class, all assignments are to be completed by the individual student unless otherwise specified. If you would like to include your assignment or any material you have submitted, or plan to submit for another class, please note that SJSU's Academic Policy S07-2 requires approval of instructors.

Campus Policy in Compliance with the American Disabilities Act

If you need course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 requires that students with disabilities requesting accommodations must register with the [Disability Resource Center](http://www.drc.sjsu.edu/) (DRC) at <http://www.drc.sjsu.edu/> to establish a record of their disability.

Learning Assistance Resource Center

The Learning Assistance Resource Center (LARC) is located in Room 600 in the Student Services Center. It is designed to assist students in the development of their full academic potential and to inspire them to become independent learners. The Center's tutors are trained and nationally certified to provide content-based tutoring in many lower division courses (some upper division) as well as writing and study skills assistance. Small group, individual, and drop-in tutoring is available. Visit [the LARC website](http://www.sjsu.edu/larc/) for more information: www.sjsu.edu/larc/.

Grading Rubrics for Written Assignments

All take-home writing assignments will be graded according to rubrics handed out in class. As specified in the guidelines for GE courses, we will assess not only the content but also the quality and clarity of your writing. Note that the two components are equally weighted. Every major writing assignment requires a substantial revision in which you are expected to address improvement in content and writing. Over the year, you will be expected to make continuing progress in your writing.

CEGHM 168A, Fall 2015 Course Schedule

Reading assignments are posted on the website. **It is your responsibility to do the assigned reading before class.** Course calendar is subject to change via notice in class or online.

TH Aug 20
Intro to Course

TU Aug 25
Realities of managing climate change
Sustainability & Writing for your Discipline

TH Aug 27
Earth, Mars and Venus: A Comparison
Introduction to Environmental Communication

TU Sept 1
Respiration, Photosynthesis, Carbon Cycle
The Challenges of Climate Change Communication

TH Sept 3
Earth's Energy Balance I
The Writing Process

TU Sept 8
Earth's Energy Balance II
Clouds and Climate

TH Sept 10
Paper 1 Draft Due
Natural Climate Forcing
"One Degree Factor"

TU Sept 15
Guest Speaker: Deb Kramer-Keep Coyote Creek Beautiful
Natural Climate Forcing

TH Sept 17
Influence of Climate on Biological Processes
Biosphere: Biomes and Ecosystems

TU Sept 22
Paper 1 Peer Review Due
Land Use and Climate Change
Climate Feedbacks

TH Sept 24
Frames in Climate Change Communication (CCC)
Exam #1 Review

TU Sept 29
Exam #1

TH Oct 1
Oceans and Climate
Climate Change Records I

TU Oct 6
Paper #1 Due
Use of Language in CCC
Introduction to Community Action Projects (CAP)

TH Oct 8
Global Warming's Six Americas
Managing Differences and Climate Change (a dialogue)

TU Oct 13
Climate Media
Projected Impacts

TH Oct 15
Projected Impacts II
Climate Change Records II

TU Oct 20
Risk Communication
Climate Models

TH Oct 22
Paper #2 Assigned
PETM (BM)
California and Climate Change

TU Oct 27
Food Systems & Climate
Communicating Behavior Change & Mindfulness

TH Oct 29
Simulation Activity
Exam #2 Review

TU Nov 3
Exam #2

TH Nov 5
Intro to adaptation/mitigation/loss and damage
Energy and Mitigation

TU Nov 10
California II
CAP group meeting

TH Nov 12
Paper #2 Due
Livelihoods and Migration
Transportation

TU Nov 17
Mitigation options
Climate Advocacy

TH Nov 19
Research Methods
CAP Group meeting

TU Nov 24
CAP Group meeting
Instructor research highlights

TH 26 Thanksgiving: No Class

TU Dec 1
Thanksgiving Extra Credit due
Climate Change Denial
“Cool It”

TH Dec 3
Community Project Proposals due
California Delta
Wrap-up & Catch-up

TU Dec 8 - Last day of class
Final Exam Review

Final Exam:

Thursday, December 10	1215-1430
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