

CLASS MEETS: T Th from 9:30 to 10:45 “in the cloud”

PROFESSOR: [Scott Denning](#), [Atmospheric Science](#)

CONTENT:

The course is intended to answer the three most important questions about climate change.

I call it the Three S’s of Climate Change:

- **SIMPLE:** How does it work?
- **SERIOUS:** How bad will it get?
- **SOLVABLE:** What are we going to do about it?

Most of the material you’ve seen is probably focused on the middle S (Serious). The middle S could be called “Scary.” And it *is* deadly serious! But there’s no point just beating you about the head and shoulders with how bad things could get, so I cleverly sandwich the middle S between two other critical pieces, and I give them all roughly equal time and attention. We will spend about 5 weeks on each S.

FORMAT:

Because of COVID, the class is 100% virtual. I am creating a Canvas page (not done yet, don’t check!) that will contain everything you need for the course. There are no textbooks or anything else that’s not on Canvas. I will provide access to video presentations instead of lecturing during class periods on Zoom.

It’s all in the cloud, Man.

BUT YOU STILL HAVE TO COME TO CLASS!!!

I will do Zoom classes every Tuesday and Thursday morning from 9:30 to 10:15. You are *required* to attend 100% of the time!

The course is composed of 14 MODULES available on CANVAS
Each module contains video lectures, lecture slides, readings, and problem sets

We’ll use a “Flipped Classroom” model in which you’re responsible to do all the video lectures, readings, and review notes on your own time. During the class periods we’ll work through problem sets together, discuss the lecture material and readings, talk about climate change, and generally process as a group.

SLACK:

Download the *Slack* app. We will use this for online discussion. You will receive an invitation to join the group on Slack via your CSU email

GRADING:

Your semester grade will be computed as follows:

- 10% Participation (active presence & engaged discussion online)
- 50% Assignments (weekly exercises that we will do together)
- 20% Midterm Exam (week of March 16)
- 20% Final Exam (during Finals Week)

SCHEDULE:

Week	Module	Topic
19-Jan	1	How the World Works
26-Jan	2	Greenhouse Effect
2-Feb	3	Earth's Energy Budget
9-Feb	4	Climate Sensitivity
23-Feb	5	Past Climate
2-Mar	6	Climate Modeling
9-Mar	7	Past Climate Impacts (observations)
16-Mar		SPRING BREAK
23-Mar	8	Future Climate Impacts (Modeling)
30-Mar	9	Climate Economics
6-Apr	10	Emissions Pathways
13-Apr	11	Energy System
20-Apr	12	Negative Emissions
27-Apr	13	Climate Policy
4-May	14	Wrap-Up
11-May		FINALS WEEK

ACADEMIC INTEGRITY:

This course will adhere to the CSU Academic Integrity Policy as found on the Student Responsibilities page of the [CSU General Catalog](#) and in the [Student Conduct Code](#).

At a minimum, violations will result in a grading penalty in this course and a report to the Office of Student Resolution Center.

CSU Student Honor Code, approved by ASCSU and CSU faculty and staff in 2009:

As a student at Colorado State University, I recognize my active role in building a Campus of Character. This includes my commitment to honesty, integrity, and responsibility within the campus community. As such, I will refrain from acts of academic misconduct.