CLASS MEETS: T Th from 9:30 to 10:45 in Wagar 232 on CSU Main Campus

[Click here for a campus map showing the location](http://denning.atmos.colostate.edu/ats150/Images/CSU.map.png) of the Wagar Building

OPTIONAL TEXTBOOK: *Global Warming, Understanding the Forecast*, (2nd Edition) by David Archer.   
Other readings will be distributed each week through the class website

PROFESSOR: [Scott Denning](http://biocycle.atmos.colostate.edu/people/scott-denning/), [Atmospheric Science](http://www.atmos.colostate.edu)

My office is 5 miles away on the CSU Foothills Campus, but I’m happy to meet with students after class, or at the Student Center or wherever. You can email me anytime ([scott.denning@colostate.edu](mailto:scott.denning@colostate.edu)) and I’ll try to answer quickly. You can also call me at 970-491-8359, which forwards to my cell. If I don’t pick up, leave me a message.

CLASS WEBSITE: <http://ats150.atmos.colostate.edu>

(Note that this is ***not a RAM-CT site.*** You can’t get to this site through the regular RAM-CT system).

Please ***visit the website now, and bookmark it for later***. You will use the website a lot! I will distribute the notes for every lecture on there ahead of time. This is where homework will be assigned and I’ve put a ton of [readings](http://ats150.atmos.colostate.edu/readings/) and [videos](http://ats150.atmos.colostate.edu/videos/) on there for you to use. Please take a few minutes to browse through the site this week so you know what’s on there and where to find things.

The [Schedule page on the class website](http://ats150.atmos.colostate.edu/schedule/) shows what will be covered each week for the whole semester. Please check this schedule each week and print the lecture notes to bring with you to class. You don’t have to bring the book (ever), but I make ***printable handouts of all the notes with four slides to a page so you can make notes*** in the margins.

GRADING:

Your semester grade will be computed as follows:

* 1/4 Exam #1 (in class Mar 7)
* 1/4 Exam #1 (in class Apr 23)
* 1/4 Final Exam (during Finals Week)
* 1/4 Homework (average of 4 assignments plus weekly readings)

CLASSROOM DEMONSTRATIONS:

About once a week, I will do some kind of lab or demo in class to show how physical climate principles work

TEACHING ASSISTANT:

Justin Whitaker (jwwhit@atmos.colostate.edu) is the TA for this class. He will have office hours on Thursdays from 11-1 in room 102F of the Engineering Building.

SCHEDULE:

|  |  |  |
| --- | --- | --- |
| Week | Notes | Readings |
| 1/22 | Simple, Serious, Solvable |  |
|  |  |  |
| 1/29 | Earth System Overview | Chapter 1 |
| 2/5 | Energy & Electromagnetic Radiation | Chapter 2 |
| 2/12 | Layer Model of the Greenhouse Effect | Chapter 3 |
| 2/19 | Greenhouse Gases, Lapse Rate | Chapter 4 |
| 2/26 | Energy Budget of the Earth | Chapter 5 |
|  |  |  |
| 3/7 | EXAM #1 (in class) |  |
|  |  |  |
| 3/12 | Climate Sensitivity & Feedback | Chapter 7 |
| 3/26 | Climates of the Past | Chapter 8 |
| 4/2 | Future Climate Change | Chapter 11 |
| 4/9 | Climate Change Impacts | Chapter 12 |
| 4/16 | Fossil Fuel & Carbon Cycle | Chapter 9 |
| 4/23 | EXAM #2 (in class) |  |
| 4/25 | Economics |  |
| 4/30 | Energy |  |
| 5/7 | Climate Change Policy |  |
|  |  |  |
| 5/13 | FINAL EXAM |  |
|  |  |  |
| **Academic Integrity** |  |  |

This course will adhere to the CSU Academic Integrity Policy as found on the Student' Responsibilities page of the [**CSU General Catalog**](http://catalog.colostate.edu/general-catalog/policies/students-responsibilities/#academic-integrity) and in the [**Student Conduct Code.**](http://resolutioncenter.colostate.edu/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.