Atmospheric Sciences 111 - Winter 2010

Global Warming

http://www.atmos.washington.edu/2010Q1/111

Instructor: Professor Cecilia Bitz email: bitz@atmos.washington.edu

Phone: (206) 543-1339

Office: ATG 502

Office hours: Mondays 1:30-2:30, or by appointment.

TA: Beth Friedman

email: beth.globalwarmingta@gmail.com

Office: ATG 420

Office hours: Mondays 1:30-2:30, Tuesdays 9:30-10:30

TA: Tyler Thorsen

email: tyler.globalwarmingta@gmail.com

Office: ATG 420

Office hours: Mondays 10:30-11:30 and 12:30-1:30

Class Meeting Times and Location

Lectures TTh 11:30-1:20 in Kane Hall 220

Discussion Sections

10585 AG QZ	Z Th	930-1020 EEB 105	Tyler
10582 AD QZ	? Th	130-220 EEB 045	Tyler
10584 AF QZ	Th	130-220 JHN 102	Beth
10581 AC QZ	Z F	930-1020 EEB 026	Beth
10579 AA QZ	. F	1030-1120 MGH 389	Beth
10580 AB QZ	. F	1030-1120 JHN 022	Tyler
10583 AE QZ	. F	1230-120 BAG 154	Tyler
10586 AH QZ	. F	1230-120 JHN 026	Beth

Course Description

Human-induced climate change - popularly known as "global warming" - is emerging as one of the great challenges facing society in the 21st century. If we ignore the problem, by the end of this century the climate changes due to increased greenhouse gases will be large enough to have significant consequences on the environment and on civilization. To avoid these changes will require either (i) a wholesale change in the sources of energy used by humans, (ii) yet to be developed methods to sequester carbon on an unprecedented scale, or (iii) intentional human modification of the earth's energy budget to partially cancel the warming that will result from the increased greenhouse gases due to human activity (so-called geoengineering solutions to global warming). At stake are deeply felt values as well as entrenched economic interests. When these are combined with scientific uncertainty, it is not surprising that global warming has sparked a raging, often passionate debate.

Textbook: The Rough Guide to Climate Change, 2nd ed., by Rob Henson, Rough Guides, 2008. This short non-technical book summarizes the current science.

Other Course Material: You will need a TurningPoint Clicker for this course. They are available at the bookstore. Please bring yours to every lecture. See the class web page for information about registering your clicker.

Grading policy
Comprehensive Final Exam 25%
Quizzes 40%
Homework 20%
In-class activities 15%
Extra Credit will be offered and explained in lecture

Makeup quizzes and exam by prior arrangement only. Homework will be done on line, and no late homework can be allowed. The class web site has a detailed schedule with reading assignments, information about homework, and quiz dates.

In-class Activities

There will be regular in-class activities, which will vary from answering clicker questions to class discussion and work in small groups. You will be asked to draw connections between the course material and current societal issues.

Strategies for Success

Read the textbook and keep up. Check the web site often for current course information.

Attend lectures. The lectures indicate the topics the instructor believes are most challenging and important. Valuable example problems will be discussed in class and in discussion sections. Material will be given in lecture and discussion sections that is not in the textbook or readings and you will be expected to know it.

Hash out questions with your classmates outside of class. Go to office hours or email the TAs when you need help. Don't be afraid to ask questions in class. Use the anonymous email from the homepage if you feel uncomfortable asking a question or wish to anonymously communicate some helpful feedback to the instructor.