

PHY237/ATM237 CURRENT TOPICS IN WORLD CLIMATE

Spring Semester, 2008

Tuesday, Thursday 11:20 - 12:40 Harriman Rm. 137

This course is approved as a core curriculum course and may be used to satisfy the Natural Sciences H requirement. Prerequisites are college entry-level math and any Natural Science A course.

We will discuss multiple aspects of climate change, its consequences and atmospheric alteration by man.

Major Topics:

The Greenhouse Effect

Climate Changes in Earth's History

20th Century Climate Change

21st Century Climate Change

Effects on Freshwater systems

Effects on Terrestrial Ecosystems

Climate Change and Agriculture

Climate Change and the Marine Environment

Impact on Human Infrastructure

Effects of Climate Change on Human Health

Mitigation of Climate Change

Policy, Politics and Economics of Climate Change

Teaching Staff:

Lecturer: Sultan Hameed, Professor of Atmospheric Science; Endeavor Hall, Rm. 135; phone 2-8319; Office hours: Tues, Fri 2:00 - 3:00 pm.

Teaching Assistants: Jae Lee and Keyi Chen

Please contact a TA by e-mail to make an appointment.

TA office hours will be held in GEO Rm. 104

Text

CLIMATE CHANGE: Causes, Effects, and Solutions by John T. Hardy

Grading

Weekly Homework: 40%;

Exam I (end of February) 20%.

Exam II (end of March) 20 %.

Exam III (May 20) 20%

The Grade Scale is:

A : 90.0 or above

A-: 85.0---89.9

B+: 80.0---84.9

B: 75.0---79.9

B- : 70.0---74.9

C+: 65.0---69.9

C : 60.0---64.9

C- : 55.0---59.9

D+: 50.0---54.9

D : 45.0---49.9

D- : 40.0---44.9

F : less than 40.0

Extra Credit

You can earn extra credit by reading one or more of the following books related to the class:

- 1) THE REVENGE OF GAIA: EARTH'S CLIMATE CRISIS AND THE FATE OF HUMANITY by James Lovelock
- 2) THE GRAPES OF WRATH by John Steinbeck
- 3) SHATTERED CONSENSUS: THE TRUE STATE OF GLOBAL WARMING by Patrick J. Michaels
- 4) THE SECRET LIFE OF DUST by Hannah Holmes

Extra Credit Rules:

- 1) You will be given a multiple choice exam on the book you read. If you score 70% or better 0.33 will be added to your average.
- 2) You can take the test twice for a particular book.
- 3) You can earn credit for more than one book.
- 4) Extra credit exams can be taken after the spring break and before the final exam.
- 5) Please make an appointment with one of the TAs to take the extra credit exam.

Make-up Exams

A make-up Exam can be given in case of personal emergency only if the student informs the instructor or one of the TAs within 3 days of the exam and brings documentary evidence for the emergency.