

AOS/NIES 171
Global Change: Atmospheric Issues and Problems
Schedule of Topics, Chapters, and Assignments
Spring 2018

- T 1/23 L1 - The earth system and global change (Chapter 1)
R 1/25 L2 - Changes in atmospheric composition (Chapter 1)
T 1/30 L3 - Evolution of the earth system (Chapter 1)
R 2/1 L4 - Nuts and bolts of the climate system (Chapter 2); *Oral assignment 1*
T 2/6 L5 - Radiative equilibrium (Chapter 2); *Written assignment 1 due*
R 2/8 L6 - The natural atmospheric greenhouse effect (Chapter 2)
T 2/13 L7 - General circulation of the atmosphere and ocean - I (Chapter 3)
R 2/15 L8 - General circulation of the atmosphere and ocean - II (Chapter 3)
T 2/20 L9 - Role of the ocean in the climate system (Ch. 3); *Revised written assignment 1 due*
R 2/22 L10 - Interannual variability (Chapter 3)
T 2/27 *In-class review*
R 3/1 *Exam 1*
T 3/6 L11 - Paleoclimate - I (Chapter 4)
R 3/8 L12 - Paleoclimate - II (Chapter 4); *Written assignment 2 due*
T 3/13 L13 - Volcanoes and climate (Chapter 4)
R 3/15 L14 - The stratospheric ozone layer (Chapter 5)
T 3/20 L15 - The ozone hole (Chapter 5); *Revised written assignment 2 due*
R 3/22 L16 - Tropospheric Pollution - I (Chapter 6); *Meet to talk about term paper topic*
March 24 – April 1 Spring Break
T 4/3 L17 - Tropospheric Pollution - II (Chapter 6)
R 4/5 L18 - Biodiversity (Chapter 10)
T 4/10 L19 - Land, food, energy; Water cycle; Desertification; Coral bleaching; (Chapter 7)
Written assignment 3 due
R 4/12 L20 - Carbon cycle; Vegetation and climate; Ocean acidification (Chapters 8 and 9)
T 4/17 *In-class review*
R 4/19 *Exam 2*
T 4/24 L21 - Environmental Engineering; Alternative energy (Chapter 11);
Revised written assignment 3 due
R 4/26 L22 - Value systems and strategies (Ch. 13); *Term paper due; Student presentations;*
Select debate topics; Teaching evaluations
T 5/1 *Oral Assignment 2: Global Change Debates*
R 5/3 *Oral Assignment 2: Global Change Debates*