

Senior
UCSB Geog 134

COURSE DESCRIPTION

Geography 134: Earth System Science

Description of various components of Earth system: climate and hydrologic systems, biogeochemical dynamics, ecological dynamics. Human interaction and global change. Observation and modeling of Earth system.

F. 10

GEOGRAPHY 134
Earth System Science
Professor: Catherine Gautier
Spring 1994

Course description

March 29 - Earth System Science and Global Change: Introduction - C. Gautier
Reading: Book Chapter 1

Physical Climate System

March 31 - Earth and Its driving Forces - C. Gautier
Reading: Book Chapter 2

April 5 - The Atmospheric Radiation Budget - D. Schweizer
Reading: Book Chapter 3

April 7 - Atmosphere Circulation- W. O'Hirok
Reading: Book Chapter 4

April 12 - Aerosols and Hydrosols - C. Gautier
Reading: Book Chapter 5

April 14 -The Water Cycle and Climate - C. Gautier
Reading: Book Chapter 6

April 19 - Surface and Atmosphere Exchange Processes - C. Gautier
Reading: Distribution

April 21 - Interannual Variability of Climate System- C. Gautier
Reading: Distribution

April 26 - Exam

Biogeochemical Cycles

April 28 - Global Scale Budgets - C. Gautier
Reading: Book Chapter 14 + Distribution

May 3 - Global Cycles - C. Gautier
Reading: Book Chapter 14 + Distribution

May 5 - The Chemistry of Atmosphere - C. Gautier
Reading: Book Chapter 8 + Distribution

May 10 - Climate Vegetation Interactions - D. Roberts
Reading: Reader + Distribution

May 12 - Marine Biogeochemistry - A. Alldredge
Reading: Reader

May 17 - Biogeochemistry of Inland Waters - J. Melack
Reading: Book Chapter 9

May 19 - Exam

Climate and Biogeochemical Cycles Interaction

May 24 - Global Change: the Last Few Centuries - **W. O'Hirok**

Reading: Book Chapter 12

May 26 - Global Change: The Last Several Decades - **C. Gautier**

Reading: Book Chapter 13 + Reader

May 31 - Global Futures- **C. Gautier**

Reading: Book Chapter 17 + Reader

June 2 - Final - Status Report

Reading: WRI

June 3 - Final - Panel Discussions

Reading: WRI