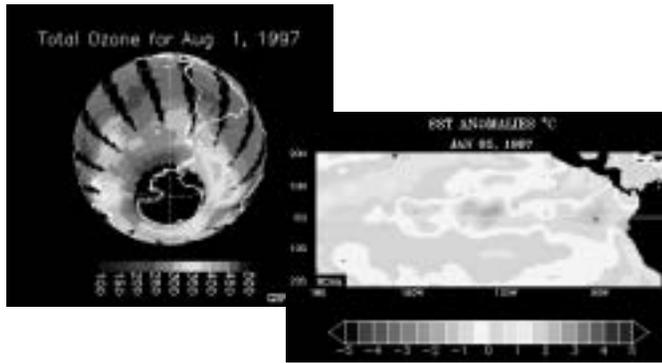


## Climate Change and Policy (ESS11)



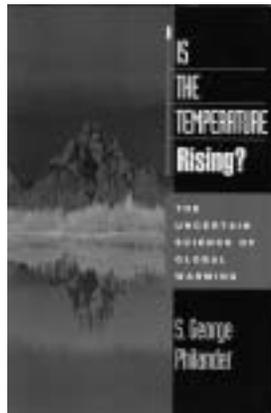
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## Climate Change and Policy (ESS11)

- **Course Time**  
Lectures: Tu, Th 8:00-9:20; PSCB140  
Discussion: Fri. 1:00-1:50; ICF103
- **Text Book**  
**George Philander, "Is the Temperature Rising?" (required)**  
The UN Framework Convention on Climate Change & Kyoto Protocol (2, posted)  
The IPCC Third Assessment Report 2001: Summary for Policymakers (4, posted)
- **Grades**  
Homework (30%), 2 Hour-Examinations (20%+20%), Final (30%)
- **Homework**  
Will be posted on the class website and is due every Thursday

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## Text Book



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## Course Description

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This course develops (1) an understanding of the physical basis behind global climate change, (2) examines how human activities cause it, (3) looks to future rates and impacts of global warming, and (4) reviews the international conventions, protocols and scientific assessments of climate change.

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## Two Major Parts

### (1) Understand physical basis behind global climate change

- Weeks 1-7 (instructed by Yu)
- Chapters 1-13 of Philander's Text Book
- Basic physics of the climate system (circulation, energy, water....)

### (2) Discuss International Policy on Climate Change

- Weeks 8-10 (instructed by Prather)
- Discuss U.N. Framework Convention on Climate Change
  - The Kyoto Protocols
  - IPCC's Summaries for Policy Makers



## Syllabus

Week 1	Is Our Planet Fragile or Robust? Light and Air	Ch.1 & 2 Ch.3
Week 2	Why the Peak of a Mountain is Cold Capricious Clouds	Ch.4 Ch.5
Week 3	The Climate Tapestry Weather: the Music of Our Sphere	Ch.6 Ch.7
Week 4	The Green in Motion Water exam (Chapters 1-7)	Ch.8
Week 5	El Niño, La Niña, and the Southern Oscillation Faint Sun Paradox / Why Summer is Warmer?	Ch.9 Ch.10 & 11
Week 6	The Ozone Hole, a Cautionary Tale The Ozone Hole - continued	Ch.12
Week 7	Global Warming, Risky Business Water exam (Chapters 8-13)	Ch.13
Week 8	The UN FCCC and the Kyoto Protocol both sides IPCC Third Assessment Report	WG1 SPM
Week 9	Scientific basis for Climate Change Impacts, Adaptation & Vulnerability in Clim.Ch.	WG1 SPM WG2 SPM
Week 10	Mitigation of Climate Change What are the key questions for policy makers?	WG3 SPM Synthesis Report SPM
Week 11	Final exam - Tuesday March 23 8-10 a.m.	

## What To Expect in the Exams?

Students will be tested on their basic knowledge of the science behind the Earth's climate system and current climate change, and also on their understanding of the current issues, including impacts, mitigation, and policy.

