

Lecture Dates for A ATM405 "Water and Climate Change" by Prof. Dai in Fall 2024
 Class Time and Room: TuTh 3:00-4:20PM ETEC 480

Meeting#	Date	Lecture Topic
Part I The Role of Water on Earth: 3 Lectures		
1	Tue 8/27	An Overview of Water-related Issues
2	Thu 8/29	The Global Water Cycle
3	Tue 9/03	Water's Role in Earth's Climate System
Part II Introduction to Climate Change		
4	Thu 9/05	Introduction to Earth's Climate
5	Tue 9/10	Greenhouse effect and global warming
6	Thu 9/12	Climate modeling
7	Tue 9/17	Climate Projections
Part III Observed and Model-projected Water-related Climate Changes		
8	Thu 9/19	Climate Data & Observations
9	Tue 9/24	Changes in water vapor and clouds
10	Thu 9/26	Changes in precipitation and evaporation
11	Tue 10/01	Changes in soil moisture and ground water
12	Thu 10/03	Changes in runoff, discharge and freshwater resources
13	Tue 10/08	Changes in the cryosphere: snow cover, sea-ice, and glaciers
14	Thu 10/10	Review for mid-term exam
Mon-Tue, 10/14-15: Fall break, no classes		
15	Thu 10/17	Mid-term exam
Part IV Impacts of Water-related Climate Changes		
16	Tue 10/22	Sea-level rise
17	Thu 10/24	Drought - increased water stress
18	Tue 10/29	Other Impacts: freshwater resources, health, etc.
Part V Regional Analysis of Climate Change and Water Resources		
19	Thu 10/31	North America
20	Tue 11/05	Latin America
21	Thu 11/07	Eurasia
22	Tue 11/11	Africa and Australia
23	Thu 11/14	
Part VI Climate Change Mitigation Measures and Water		
23	Thu 11/14	Mitigation: Renewable Energy
24	Tue 11/19	Hydropower
25	Thu 11/21	Student oral presentations - Group 1
26	Tue 11/26	Student oral presentations - Group 2
Wed-Sun 11/27-12/01: Thanksgiving break, no classes		
27	Tue 12/03	Student oral presentations - Group 3
28	Thu 12/05	Student oral presentations - Group 4
Mon 12/09 Last day of classes		
Mon 12/16 Final term paper due		

Fri, 12/20

Final grade due