

SCHEDULE for ATMS 111: Global Warming, Spring, 2008					
Day	Date	Topics	In-class activity	Handouts	Assignments DUE
Week 1: Overview					
M	31-Mar	Science: Global Warming Theory defined	pers surv	Syllabus, HW #1, Study Guide #1	
W	2-Apr	Science: Evidence for recent warming and human causation	undeniable perturbation		
F	4-Apr	Policy: Principles of international action	define sustainable		
T/Th	discuss	<i>global warming survey, Houghton text analysis</i>			
T/Th	quiz	<i>tutorial: math/chem</i>			
Week 2: Should we be concerned? Impacts of climate change					
M	7-Apr	Impact on Humans	Human Impacts, ice sheets, BAU range	HW #2, Study Guide #2	HW #1 due
W	9-Apr	Impacts on Nature	Value of Nature		
F	11-Apr	Impacts in the Pacific NW (Eric Salathe, Clim. Impacts Group, UW)	Questions for Speaker		
T/Th	discuss	<i>IPCC WG II research</i>			
T/Th	quiz	<i>tutorial: math/chem</i>			
Week 3: The audacious theory of human-induced planetary warming					
M	14-Apr	Greenhouse effect and planetary temperature	Climate sensitivity	HW #3	HW #2 due
W	16-Apr	History of global warming science	Questions for Speaker		
F	18-Apr	responsible and irresponsible counter-arguments	CO2 change to energy balance		
T/Th	discuss	<i>albedo/IR radiation demo, anthro. aer. forcing, crazy bedroom</i>			
T/Th	quiz	<i>review</i>			
Week 4: Causes of climate change					
M	21-Apr	Context: A brief history of planet Earth	Paleo	HW #4	HW #3 due
W	23-Apr	Carbon dioxide and other industrial-era drivers of climate change	Breathing of Biosphere		
F	25-Apr	Natural changes: sun, volcanoes, internal variability	Volcano signal in temperature record		
T/Th	discuss	<i>carbon cycle exercises</i>			
T/Th	quiz	<i>review</i>			
Week 5: Climate models					
M	28-Apr	Earth as a coupled system	Climate model components		HW #4 due
W	30-Apr	Climate feedbacks, Regional climate modeling	Ice-albedo feedback		
F	2-May	** MIDTERM **	---		
T/Th	discuss	<i>climate model simulation from 1981</i>			
T/Th	quiz	<i>review for midterm</i>			
Week 6: Climate forecasts					
M	5-May	Business-as-usual emission scenarios	T.B.D.	HW #5	
W	7-May	Slow processes: the oceans and the carbon cycle	T.B.D.		
F	9-May	The potential for extreme climate change	T.B.D.		
T/Th	discuss	<i>climate change forecast</i>			
T/Th	quiz	<i>midterm debriefing</i>			
Week 7: Weighing the uncertainty					
M	12-May	Contingent knowledge: the nature of science (and scientists)	T.B.D.		
W	14-May	Causes of uncertainty	T.B.D.		
F	16-May	Principles for action in the face of uncertainty	T.B.D.		
T/Th	discuss	<i>Poster topic sign-up; poster preparation</i>			
T/Th	quiz	<i>Review and Poster Preparation</i>			
Week 8: The global warming debate					
M	19-May	Arguments of the skeptics and alarmists	T.B.D.	HW #6	HW #5 due
W	21-May	Science and society: toward a healthy synergy	T.B.D.		
F	23-May	Wrap-up	T.B.D.		Paper due (first draft)*
T/Th	discuss	<i>Poster Presentation (both sections)</i>			Poster due (Tues AA)
T/Th	quiz	<i>Poster Presentation (both sections)</i>			Poster due (Thurs AB)
Week 9: Energy and transport for the future					
M	26-May	HOLIDAY (Memorial Day)	---	---	---
W	28-May	World energy projections	T.B.D.		
F	30-May	World energy options	T.B.D.		
T/Th	discuss	<i>stabilization wedges</i>			
T/Th	quiz	<i>review</i>			
Week 10: The challenge of climate stabilization					
M	2-Jun	Geo-engineering: the ultimate technical fix	T.B.D.		HW #6 due
W	4-Jun	Embracing the challenge: new Apollo program, stabilization wedges	T.B.D.		
F	6-Jun	Efforts underway in the Pacific NW	T.B.D.		
T/Th	discuss	<i>recent and/or pending legislation</i>			
T/Th	quiz	<i>review for final</i>			
Finals week					
W	11-Jun	** FINAL ** 2:30-4:30pm Rm ____ Bldg ____			
F	13-Jun				Paper due (final version)*
* applies only to students getting Writing credit					