

Oceans and Global Climate Change
GLY 3074
Schedule- Spring 2020

Week	Date	Topic	Assignments Due	Reading
1	Jan. 6	Introduction		
	Jan. 8	Climate		Ch.1: pp. 1-3
	Jan. 10	Climate System	GW Opinion	Ch. 2: pp. 21-26, skim pp. 26-33
2	Jan. 13	Climate System		Ch. 3
	Jan. 15	Earth's Energy Balance	Systems	
	Jan. 17	Earth's Energy Balance		
3	Jan. 20	MLK Day- no class		
	Jan. 22	Earth's Energy Balance	Black Body Problem	
	Jan. 24	Forcing		Ch.1: pp. 3-19
4	Jan. 27	Atmospheric Circ	Atm Circ Problem	Ch. 4
	Jan. 29	Atmospheric Circ		
	Jan. 31	Atmospheric Circ		
5	Feb. 3	EXAM 1		
	Feb. 5	Surface Circ Lab	Pre lab	
	Feb. 7	Surface Ocean Circ		Ch.5: pp. 84-92
6	Feb. 10	Surface Ocean Circ		
	Feb. 12	Surface/Deep Circ	Surface lab due	Ch. 5: pp. 96-106
	Feb. 14	Deep Ocean Circ		
7	Feb. 17	Deep Ocean Circ	Follow up	
	Feb. 19	Deep Ocean Circ		
	Feb. 21	Deep Ocean Circ	Deep water lab due	
8	Feb. 24	ENSO		Ch. 5: pp. 92-96
	Feb. 26	EXAM 2		
	Feb. 28	ENSO		
9	Mar. 2-6	Spring Break!!		

10	Mar. 9	Oceanic Productivity		Ch.8: pp. 154-159
	Mar. 11	Oceanic Productivity		
	Mar. 13	Carbon Cycle		Ch. 8: pp. 149-154
11	Mar. 16	Carbon Cycle		Ch. 8: pp. 159-173
	Mar. 18	Carbon Cycle		Ch.7: pp. 130-147 plate tectonics /rock cycle review
	Mar. 20	Carbon Cycle	CO2 uptake	
12	Mar. 23	Carbon Cycle/Global Change		Ch. 15
	Mar. 25	Global Change	Carbon calculator	Ch. 16
	Mar. 27	Global Change		
13	Mar. 30	Global Change		
	Apr. 1	Global Change	Up-goer 5	
	Apr. 3	Paleoclimate		Ch.12: 240-253
14	Apr. 6	Paleoclimate		Ch. 14
	Apr. 8	Paleoclimate		
	Apr. 10	EXAM 3		
15	Apr. 13	Sustainability or Politics of Climate Change	Overview paper	
	Apr. 15	Alt Energy Presentations*		
	Apr. 17	Alt Energy Presentations*		
16	Apr. 20	Stabilization Triangle	You need to be in class both days	
	Apr. 22	Stabilization Triangle	Group presentation and worksheet	

* Part of your grade is based on attending these presentations and filling out evaluation forms for each group.

Readings from Kump, Kasting and Crane, 3rd edition