Coastal Biogeochemical Cycles in a Changing World:

Environmental Sciences 11:375:474 and Marine and Coastal Sciences 11:628:474

Date	Lect. #	Assignment	Lecturer	Topic	Reading 0
Region I Estuaries and salt marshes					
	1 W		Liz	The water: Geochemical gradients and tidal mixing, Nutrients	
	2 M	HW #1	both	Project #1 introduction	
	3 W		Liz	Eutrophication and Carbonate weather	
	4 M		Kat	Carbon cycle in marshes& estuaries	
	5 W		Liz	Anoxia, methane EH pH Redox Chemistry and diagenesis in coastal marine Sediments	
	6 M		both	Project #1 work-up	
	7 W		both	**Presentations wrap up**	
Region II Carbonate platforms and coral reefs					
	8 M		Kat	The water: Carbonate System Alkalinity, TCO_2	
	9 W	HW #2	both t	Project #2 introduction	
	10 M		Kat	Corals, calcifying algae,	
	11 W		Liz	Carbonate extremes, sulfates, salt precipitation microbial mats stromatolites	
	12 M		both	Project #2 work-up	
	13 W		Kat	Redox Chemistry and diagenesis in Marine Sediments	
	14 Mo		both	**Exam**	
13- and 16-Mar				SPRING BREAK	

Date	Lect. #	Assignment	Lecturer	Topic	Reading *(s)*
Region III Upwelling and ocean dominated coasts					
	15 W		Liz	Upwelling, carbonate weather, HNLC	
	16 Mo	HW #3	both	Project #3 introduction	
	17 W		Kat	Oxygen minimum and the nitrogen cycle	
	18 Mo		Liz	Multidecadal and anthropodgenic influences	
	19 W		Kat	CO_2 atmosphere, ocean exchange and climate	
	20 Mo		both	Project #3 work-up	
	21 W		both	**Presentations /wrap up**	
Region IV Arctic and glacier dominated coasts					
	22 Mo		Liz	Peat, Permafrost, ancient carbon and warming climate	
	23 W	HW #4	both	Project #4 introduction	
	24 Mo		Liz	River dominated coasts oxic and and anoxic diagenesis	
	25 W		Liz	Fjords, circulation and melting glaciers	
	26 Mo		both	Project #4 work-up	
	27 W		Kat	Long term view of a warming world	
	28 Mo		both	**Presentations /wrap up**	
				FINAL EXAM	