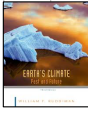
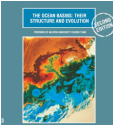
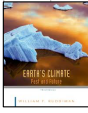


Week/reading	Date	Time	Subject	Type	Teacher	Room
v.45						
Appendix 1 O-isotopes, p.413  Appendix 2 C-isotopes, p. 	November Marine Geology basics					
	Ch. 2, p. 40-48 O.U. Ch. 1-4	tue 3.11	10:00 10:45	Course introduction: marine geology & the importance of marine paleo records (Ch.1-5, p. 98-107)	F	HKC U13
			11:00 11:45	Ocean geology and morphology: plate tectonics, ocean gateways & importance for climate	F	HKC U13
			13:00 15:00	Oceanography for Marine Geologists and palaeoceanographers:	F	HKC U13
		Self study		Recorded materials. Register for the exam on-line	SS	
	Ch. 3, p. 55-57 Ch. 3, p. 64-68 Ch. 7	wed 4.11	10:00 12:00	Palaeo. proxies 1. the d18O curve: broad patterns of ocean climate change	F	HKC U13
			13:00 15:00	Deep sea drilling and intro to the 'Core Assignment': Google Earth & IODP resources on line	F	HKC U13
		Self study		Readings (Athena) Zachos et al., 2001; ODP Greatest Hits (1 & 2), IODP Science plan (Flag Ship Initiatives)	SS	
	Ch. 3, p. 55-57 O.U. Ch. 6	thu 5.11	10:00 10:45	Deep marine sediments: sedimentology, modern distribution patterns and connection to the ocean system	F	HKC U13
			11:00 11:45	Marine carbonate sedimentation and the CCD:	F	HKC U13
			13:00 16:30	Exercise: ground truthing the seafloor sediment map Decide on your ocean climate event- discuss in class	Ö	HKC U28
	O.U. Ch. 5 O.U. Ch. 5	Fri 6.11	09:00 12:00	Ocean crust and hydrothermal systems: Exercise (bring lap tops)	F	IP U13
		Self study		Readings (Athena) Zachos et al., 2001; ODP Greatest Hits (1 & 2), IODP Science plan (Flag Ship Initiatives)	SS	
v.46						
Tools and case studies						
Appendix 2 C-isotopes, p. 		Mon 9.11	10:00 12:00	Marine microfossils: tracers and signal carriers	F	HKC U13
			13:00 15:30	Exercise: Microfossils & the CCD Lab	Ö	HKC U28
	Ch. 7	tue 10.11	10:00 12:00	Discussion: Zachos et al., 2001; Deep sea drilling resources on line: navigating the archives	S	HKC U13
		Self study		Google Earth Exploration of your drilling target: Describe your Site & Ocean climate event Submit your initial description to Helen, same day DEADLINE (see project guidelines).	SS	
	Ch. 2, p. 48-51 Ch. 3, p. 64-68	Wed 11.11	10:00 12:00	Palaeo. proxies 2. ocean temperature, terrestrial ice volume, and sea ice	F	HKC U13
			13:00 15:00	Palaeo. proxies 3 Ocean circulation, marine primary production & carbon cycling:	F	HKC U13
	Ch. 3, p. 60-64	thu 12.11	10:00 12:00	Chronostratigraphy and age models in the marine realm	F	MO U13
			13:00 15:00	Exercise-obligatory (pass/fail): Dating using biostratigraphy and calculating sedimentation rates	Ö	MO U13
		fri 13.11	10:00 12:00	Chronostratigraphy and age models in the marine realm	F	MO U13
			13:00 15:00	Exercise-obligatory (pass/fail): Dating using biostratigraphy and calculating sedimentation rates	Ö	MO U13
v.47						
Tools and case studies						
Ch.7 Chs. 4, 5, 6, 7, 8		mo 16.11	10:00 12:00	Climate reconstructions: greenhouse to icehouse..to greenhouse. The late Paleozoic ice age,	F	MJ U13
			13:00 15:00	Skill building: Stratigraphic logs, plotting & manipulating data in EXCEL BRING LAPTOPS Deadline Core assignment initial description 16th November 12.00 midnight	Ö	MJ U13
		SS				
		tue 17.11	10:00 12:00	DEEP TIME CASE STUDY: LIPS and climate - Mesozoic focus	F	MJ U13
			13:00 15:00	Exercise	Ö	MJ U13
		wed 18.11	Self study	Revision for exam	SS	
		thu 19.11	Self study	Revision for exam	SS	
			13:00 17:00	EXAM-onsite		U13
		fri 20.11	10:00 12:30	Core Assignment lab work: Sediment description: Microscope smear slide analysis, your core	Ö	HKC/UB U28
v.48						
Ch. 8, key: p.159-166		mo 23.11	09:00 12:00	Core Assignment lab work: Sediment description: Microscope sand fraction/micropalaeo analysis, your core	Ö	HKC/MK U28
		Self study		Literature search: find minimum 2 x published proxy data sets for your site and 'event'	SS	
		tue 24.11	Self study	Literature search: find minimum 2 x published proxy data sets for your site and 'event'	SS	
			13:00 16:00	Seminar: Proxy papers bring your papers to class (feedback opportunity)	S	HKC U13
		wed 25.11	Self study	Core assignment writing and completion	SS	
		thu 26.11	Self study	Core assignment writing and completion, prepare final presentation	SS	
		fri 27.11	09:00 12:00	Core assignment final presentation	SS	HKC U13
		Self study		Core assignment writing (integrate feedback)	SS	
v.49						
The PETM global warming event: a glimpse of the future?						
		mon 1.12	09:30 12:00	PETM exercise & discussion: Cumpolsary	Ö / S	HKC U13
			13:00 17:00	Finish Core Assignment Report, Deadline for submitting final report and self feedback	SS	

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Support text book:
W.F. Ruddiman, 2014
Earth's Climate: Past & Future
W.H. Freeman, 3rd ed
ISBN: 9781429255257



Support text book:
Open University Team, 1998
The Ocean Basins: their structure
& evolution, 2nd ed.
ISBN: 07506 39830
e-chapters will be provided

Marks	%
Exam	40
Chronostrat	Pass/fail
Project PPT	20
Report	40
TOTAL	100