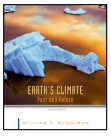
Paleoceanography and Marine Geology 7.5 hp (GG4078) Yr 3, Period 2C: Tue 3/11 to Mon 2/12 2026

Kursansvarig: Prof. Helen Coxall, IGV Room R233 F = Lecture (Föreläsning), Ö = Exercise (Övning), S = Seminar (Seminarium), SS = self study

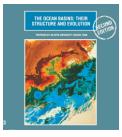
Week/reading	Date	Time		Subject	Type	Teacher	Room
v.45	November			***Marine Geology basics***			
Ch. 2, p. 40-48	tue 3.11	10:00	10:45	Course introduction: marine geology & the importance of marine paleo records (Ch.1-5, p. 98-107	F	HKC	U13
O.U. Ch. 1-4		11:00	11:45	Ocean geology and morphology: plate tectonics, ocean gateways & importance for climate	F	HKC	U13
		13:00	15:00	Oceanography for Marine Geologists and palaeoceanographers:	F	HKC	U13
Appendix 1 O-isotopes, p. 413		Self study		Recorded materials. Register for the exam on-line	SS		
Ch. 3, p. 55-57	wed 4.11	10:00	12:00	Palaeo. proxies 1. the d18O curve: broad patterns of ocean climate change	F	HKC	U13
Ch. 3, p. 64-68		13:00	15:00	Deep sea drilling and intro to the 'Core Assignment': Google Earth & IODP resources on line	F	HKC	U13
Ch. 7		Self study		Readings (Athena) Zachos et al., 2001; ODP Greatest Hits (1 & 2),	SS		
				IODP Science plan (Flag Ship Initiatives)			
Ch. 3, p. 55-57	thu 5.11	10:00	10:45	Deep marine sediments: sedimentology, modern distribution patterns	F	HKC	U13
				and connection to the ocean system			
							
O.U. Ch. 6		11:00	11:45	Marine carbonate sedimentation and the CCD:	F	HKC	U13
		13:00	16:00	Exercise: ground truthing the seafloor sediment map	Ö	HKC	U28
				Decide on your ocean climate event- discuss in class			
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),			
O.U. Ch. 5				IODP Science plan (Flag Ship Initiatives)	Ö	IP	U13
v.46				***Tools and case studies***			
	Mon 9.11	10:00	12:00	Marine microfossils: tracers and signal carriers	F	HKC	U13
		13:00	16:00	Exercise: Microfossils & the CCD Lab	Ö	HKC	U28
	tue 10.11	10:00	12:00	Deep sea drilling resources on line: navigating the archives	S	HKC	U13
Ch. 7		Self study		Google Earth Exploration of your driling target: Describe your Site & Ocean climate event	SS		
				Submit your intial description to Helen, same day DEADLINE (see project guidelines).			
Ch. 2, p. 48-51	Wed 11.11	10:00	12:00	Palaeo. proxies 2. ocean temperature, terrestrial ice volume, and sea ice	F	HKC	U13
Ch. 3, p. 64-68		13:00	15:00	Palaeo. proxies 3 Ocean circulation, marine primary production & carbon cycling: papers seminar	F	HKC	U13
Appendix 2 C-isotopes,							
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	16:00	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	16:00	Exercise-obligatory (pass/fail):: Dating using biostratigraphy and calculating sedimentation rates	Ö	MO	U13
v.47				***Tools and case studies***			
Ch.7	mo 16.11	10:00	12:00	Climate reconstructions: greenhouse to icehouse..to greenhouse. The late Paleozoic ice age,	F	MJ	U13
		15:00	16:30	Skill building: Stratigraphic logs, plotting & manipulating paleoceanographic data in EXCEL	Ö	MJ	U13
				BRING LAPTOPS. Deadline Core assignment initial description 16th November 12.00 midnight			
	tue 17.11	10:00	12:00	DEEP TIME CASE STUDY: LIPS and climate - Mesozoic focus	F	MJ	U13
		13:00	16:00	Exercise	Ö	MJ	U13
Chs, 4, 5, 6, 7, 8	wed 18.11	Self study		Revision for exam			
	thu 19.11	Self study		Revision for exam			
		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/JB	U28
v.48							
	mo 23.11	09:00	12:00	Core Assignment lab work: Sediment description: Microscope sand fraction/micropalaeo	Ö	HKC/MK	U28
				analysis, your core			
		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	17:00	Seminar: Proxy papers bring your papers to class (feedback opportunity)	S	HKC/MJ	U13
Ch. 8, key: p.159-166	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
	Tue 2.12	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