

MV0218 Environmental geochemistry, 15 HEC

Teachers

Anna-Karin Dahlberg	(AKD)	Department of Aquatic Science and Assessment
Dan Berggren Kleja	(DBK)	Department of Soil and Environment
Geert Cornelis	(GC)	Department of Soil and Environment
Gulaim Seisenbaeva	(GS)	Department of Chemistry and Biotechnology
Jon-Petter Gustafsson	(JPG)	Department of Soil and Environment
Karin Wiberg	(KW)	Department of Aquatic Science and Assessment
Lutz Ahrens	(LA)	Department of Aquatic Science and Assessment
Marius Tyushime	(MT)	Department of Soil and Environment
Mark Elert	(ME)	Kemakta konsult AB
Vadim Kessler	(VK)	Department of Chemistry and Biotechnology
Wiebke Mareile Heinze	(WMH)	Department of Soil and Environment

Moment types

F	Lecture (föreläsning)
E	Exercises
S	Self-study
se	Seminar
L	Laboratory exercises

Course period = 2 Nov 2021 - 13 Jan 2022

Course moments indicated in bold are mandatory

Week	Date	Day	Time	Course moment	Room	Type	Teacher
45	01/11/2021	Mo		No scheduled courses			
	02/11/2021	Tu	08.00 - 09.45	Practical Intro	Ulls Hus Sal Y	F	JPG
			10.00 - 12.00	Introduction to chemical concepts	Ulls Hus Sal Y	F	VK
			13.00 - 15.00	Minerals in soils and waters	Ulls Hus Sal Y	F	VK
	03/11/2021	We	08.00 - 09.45	Complex formation	Ulls Hus Sal Y	F	GC
			10.00 - 12.00	The carbonate system	Ulls Hus Sal Y	F	JPG
	04/11/2021	Thu	10.00 - 12.00	Exercises inorganic equilibria: water chemistry & carbonate system	Ulls Hus Sal Y	E	JPG
			13.00 - 15.00	Solubility	Ulls Hus Sal Y	F	JPG
			15.00 - 17.00	Exercises: self-study			
	05/11/2021	Fri	08.00 - 09.45	Mineral weathering	Ulls Hus Sal Y	F	VK
10.00 - 12.00			Exercises inorganic equilibria: water chemistry & carbonate system	Ulls Hus Sal Y	E	JPG	
46	08/11/2021	Mo	10.00 - 12.00	Exercises inorganic equilibria: solubility	Ulls Hus Sal Y	E	JPG
			13.00 - 17.00	Exercises: self-study		S	

47	09/11/2021	Tu	08.00 - 09.45	Soil formation	Ulls Hus Sal Y	F	MS
			10.00 - 12.00	Organic matter	Ulls Hus Sal Y	F	DBK
			13.00 - 15.00	Exercises inorganic equilibria: solubility	Ulls Hus Sal Y	E	JPG
	10/11/2021	We	08.00 - 09.45	Adsorption	Ulls Hus Sal Y	F	GC
			10.00 - 12.00	Adsorption	Ulls Hus Sal Y	F	GC
	11/11/2021	Thu	08.00 - 09.45	Exercises adsorption	Ulls Hus Sal Y	E	GC
			10.00 - 12.00	Sources and fate of organic pollutants	Ulls Hus Sal Y	F	Karin W
			13.00 - 17.00	Exercises: self-study		S	
	12/11/2021	Fri	08.00 - 09.45	Exercises adsorption	Ulls Hus Sal Y	E	GC
			10.00 - 12.00	ion exchange	Ulls Hus Sal Y	F	DBK
			13.00 - 15.00	Exercises ion exchange	Ulls Hus Sal Y	E	DBK
			15.00 - 17.00	Exercises: self-study		S	
	15/11/2021	Mo	10.00 - 12.00	Exercises: self-study		S	
			13.00 - 15.00	Exercises ion exchange	Ulls Hus Sal Y	E	DBK
	16/11/2021	Tu	08.00 - 09.45	Fugacity concept	Ulls Hus Sal Y	F	AKD
			10.00 - 12.00	Introduction Visual Minteq	MVM Computer room 1	F	JPG
17/11/2021	We	08.00 - 10.00	Exercises Fugacity	MVM Computer room 1	E	AKD	
		10.00 - 12.00	Exercises: self-study		S		
18/11/2021	Thu	08.00 - 10.00	Exercises: self-study		S		
		10.00 - 12.00	Redox	Ulls Hus Sal Y	F	DBK	
		13.00 - 15.00	Redox	Ulls Hus Sal Y	F	DBK	
19/11/2021	Fri	08.00 - 09.45	Exercises Fugacity	MVM Computer room 1	E	AKD	
		10.00 - 12.00	Exercises redox	Ulls Hus Sal Y	E	DBK	
		13.00 - 15.00	Exercises: self-study		S		
22/11/2021	Mo	10.00 - 12.00	Exercises: self-study		S		
		13.00 - 15.00	Exercises redox	Ulls Hus Sal Y	E	DBK	
23/11/2021	Tu	10.00 - 12.00	Phosphate: yield versus eutrophication	Ulls Hus Sal Y	F	JPG	
		13.00 - 15.00	Exercises Visual Minteq	MVM Computer room 1	E	JPG	
		15.00 - 17.00	Exercises: self-study		S		
24/11/2021	We	08.00 - 09.45	Introduction laboratory	Ulls Hus Sal Y	L	MT & WMH	
		10.00 - 12.00	Remediation of contaminated soils	Ulls Hus Sal Y	F	DBK	
25/11/2021	Thu	10.00 - 12.00	Exercises: self-study		S		

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			13.00 - 15.00	Exercises visual Minteq	MVM Computer room 1	E	JPG
	26/11/2021	Fri	08.00 - 12.00	Self-prep lab		S	
49	29/11/2021	Mo	08.00 - 17.00	Laboratory day	MVM Lab K1	L	MT & WMH
	30/11/2021	Tu	08.00 - 17.00	Laboratory day	MVM Lab K1	L	MT & WMH
	01/12/2021	We	10.00 - 12.00	Microplastic fate in environmental systems	Ulls Hus Sal Y	F	GC
	02/12/2021	Thu	10.00 - 12.00	Exercises visual Minteq	MVM Computer room 1	E	JPG
			13.00 - 14.45	Help with Laboratory reports	Ulls Hus Sal Y	E	MT & WMH
			15.00 - 17.00	Help with Laboratory reports	Ulls Hus Sal Y	E	MT & WMH
	03/12/2021	Fri	09.15 - 12.00	Risk assessment: theory and practice	MVM Computer room 1	E	ME
			13.15 - 16.00	Risk assessment: theory and practice	MVM Computer room 1	E	ME
50	06/12/2021	Mo	10.00 - 12.00	PFAS in drinking water	Ulls Hus Sal Y	F	LA
	07/12/2021	Tu	09.00 - 12.00	Visit to Bäcklösa drinking water plant	Ulls Hus Sal Y	L	LA
			13.00 - 15.00	Exercises PFAS	MVM Computer room 1	E	LA
			15.00 - 17.00	Exercises: self-study		S	
	08/12/2021	We	08.00 - 10.00	Effects of climate change on mineral weathering	Ulls Hus Sal Y	F	VK
			10.00 - 12.00	Exercises: self-study		S	
	09/12/2021	Thu	08.00 - 10.00	Exercises PFAS	Ulls Hus Sal Y	E	LA
			10.00 - 12.00	Soil acidity and countermeasures	Ulls Hus Sal Y	F	DBK
			12.55 - 15.00	Exercises soil acidity	Ulls Hus Sal Y	E	DBK
	10/12/2021	Fri	10.00 - 12.00	Lab: seminar	Ulls Hus Sal Y	se	MT & WMH
13.00 - 15.00			Lab: seminar	Ulls Hus Sal Y	se	MT & WMH	
51	13/12/2021	Mo		No scheduled courses			
	14/12/2021	Tu		No scheduled courses			
	15/12/2021	We	10.00 - 12.00	Seminar	Ulls Hus Sal Y	se	JPG
			13.00 - 15.00	Seminar	Ulls Hus Sal Y	se	JPG
	16/12/2021	Thu		No scheduled courses			
	17/12/2021	Fri		No scheduled courses			

3	13/01/2022	Thu	09.00 - 14.00	Written exam	MVM Framtiden		GC
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