

MV0216. Soil Water Processes in Agro-ecosystems, 15 hp

Preliminary schedule, autumn 2021 (HT2021)

W	Day	Date	Time	Room	Subject	Teachers	
35	Monday	30-Aug	9.00-11.00		Roll call Master program 'Soil and Environment'		
			13.00-15.00*		Introduction to the course	NJ	
	Tuesday	31-Aug	10.00-12.00		Lecture 1: What is soil and why is it important?		
			13.00-15.00		Lecture 2: Phase relations & Water potentials (Chaps. 1-6)	NJ	
	Wednesday	1-Sept	10.00-12.00		Lecture 3: Soil water flow Part 1 (Chaps. 6-8)	NJ	
			13.00-14.00*		Calculation examples with water potentials, phase relations and water contents: Introduction	NJ	
	Thursday	2-Sept	10.00-11.00		Calculation examples with water potentials, phase relations and water contents: questions	NJ	
Friday	3-Sept	Home study ** Complete Quiz1 on water potentials and water flows** ** Upload calculation examples**					
36	Monday	6-Sept	10.00-12.00		Lecture 4: Soil water flow Part 2 (Chap.8)	NJ	
			13.00-15.00		Lecture 5: Soil water flow Part 3 (Chap.8, 14-15,17)	NJ	
	Tuesday	7-Sept	10.00-12.00		Lecture 6: Introduction to simulation models	NJ	
			13.30-17.30*		Introduction to Stella modelling software	NJ, KM	
	Wednesday	8-Sept	10.30-17.30*		Stella ex. 1: Capillary rise (Chaps. 8, 18)	NJ, JF	
	Thursday	9-Sept	10.30-15.00*		Stella ex. 2: Steady infiltration (Chaps. 8, 14)	NJ, JF	
	Friday	10-Sept	Home study **Complete STELLA quiz 1**				
37	Monday	13-Sept	11.00-12.00		Lecture 7: Potential evapotranspiration Water/energy balances and (Chap. 20)	NJ	
		13-Sept	13.00-15.00		Lecture 8: Plant water uptake and plant response to drought (Chaps. 19- 21)	NJ	
	Tuesday	14-Sept	Home study ** Complete Quiz2 on PET & water and energy balance**				
	Wednesday	15-Sept	10.30-17.30*		Stella ex. 3: Plant water uptake (Chap. 19)	NJ, KM	
	Thursday	16-Sept	10.30-17.30*		Stella ex. 4: Water balance of a soil profile (Chaps. 8, 19-20)	NJ, KM	
	Friday	17-Sept	Home study ** Complete STELLA quizzes 2 and 3**				

W	Day	Date	Time	Room	Subject	Teachers
38	Monday	20-Sept	10.00-12.00		Lecture 9: Solute transport I (Chap.9)	NJ
			13.00-15.00		Lecture 10: Solute transport II (Chap.9)	NJ
	Tuesday	21-Sept	Home study ** Complete Quiz3 on solute transport**			
	Wednesday	22-Sept	10.30-17.30*		Stella ex. 5: Solute transport I (Chap.9)	NJ, JF
	Thursday	23-Sept	10.30-17.30*		Stella ex. 6: Solute transport II (Chap.9)	NJ, JF
	Friday	24-Sept	Home study ** Complete STELLA quiz 4**			
39	Monday	27-Sept	10.30-17.30*		Exercise: model uncertainty and sensitivity analysis	NJ
	Tuesday	28-Sept	10.00-12.00	zoom	Invited lecture: water management and sustainable agriculture	JB
		28-Sept	13.30-15.00*		Introduction Mini-workshop on agroecosystems and climate change	KM
	Wednesday	29-Sept	**Mini-workshop 1- Preparation individual: scientific publication reading **			
	Thursday	30-Sept	**Mini-workshop 1- Preparation individual: scientific publication reading ** Submit individual report at 16.00			
	Friday	1-Oct	**Mini-workshop 2- group discussion and preparation of oral presentation**			
40	Monday	4-Oct	10.30-15.00*		Mini-workshop3 - Group presentations and discussion	KM, NJ
	Tuesday	5-Oct	10.30-15.00		Teachers presentations on current research	All
	Wednesday	6-Oct	10.30-12.30*		Introduction to mini-projects; contact with supervisors	NJ, KM, OA, ML, JK
	Thursday	7-Oct	Mini-projects, continued			
	Friday	8-Oct	“ “			
41	Monday	11-Oct	“ “			
	Tuesday	12-Oct	“ “			
	Wednesday	13-Oct	“ “			
	Thursday	14-Oct	“ “			
	Friday	15-Oct	“ “			
42	Monday	18-Oct	“ “			
	Tuesday	19-Oct	Final version of Mini-project report to supervisors at 15.00			
	Wednesday	20-Oct	**Group Preparation – presentation and opposition Mini-project**			
	Thursday	21-Oct	**Group Preparation – presentation and opposition Mini-project**			
	Friday	22-Oct	10.30-17.30*		Presentation of Mini-projects and opposition	NJ, KM, OA, ML, JK
43	Monday	25-Oct	Home study			
	Tuesday	26-Oct	Home study			
	Wednesday	27-Oct	10.30-12.30		Questions to teachers before Exam	NJ
	Thursday	28-Oct	Home study			
	Friday	29-Oct	9-12*		Written Examination	