

BI1233 Hydroponic systems in horticultural production and public environment
October 31st 2023 - January 14th 2024

W	Date	Time		Teacher	Rooms TBD	
44	Monday	30-okt		Last day of previous course		
	Tuesday	31-okt	08.15 - 9	Course introduction. Hand out - Case study 1	KJB	
	Wednesday	01-nov	09.15 - 10	Student presentation Case study 1.	KJB	
			10.15 -12	Presentations continue. Hand out case study 2	KJB	
	Thursday	02-nov	10.15 - 12	Hydroponic systems and technological solutions, Lecture	BA	
			Lunch			
			13.15-14	Introduction to Production system-lab	AKR	Greenhouse
	Friday	03-nov	8.15-12	Individual studies		
45	Monday	06-nov	13.15-15	Presentations case study 2	KJB	
			15.15-16.00	Possibility for questions regarding proposal for production lab	KJB	

		- 23.59	Proposal for production system to Anna Karin (in Canvas). One per group	AKR	
Tuesday	07-nov	8.15-10	Fertilizers in hydroponics and soilless systems, Lecture	KJB	
		10.15 - 12	Artificial light and light measurement, Lecture	KJB	
Wednesday	08-nov		Individual study		
Thursday	09-nov	08.15 - 12	Production lab. Building a small scale hydroponic system. Group a and b	AKR, KJB	Greenhouse
		13.15 - 17	Production lab. Building a small scale hydroponic system. Group c and d	AKR, KJB	Greenhouse
Friday	10-nov	09.15 - 11	Calculations of plant nutrient solutions, lecture	KJB	
		11.15-12	Introduction to literature report	AKR	

46	Monday	13-nov	09.00 - 11	Study visits	AKR	
			12.30 - 16	Study visits	AKR	
Tuesday	14-nov		Individual study			
Wednesday	15-nov	09.15 - 12	Production lab. Construction continues and planting. Group c and d	AKR	Greenhouse	
		13.15 - 16	Production lab. Construction continues and planting. Group a and b	AKR	Greenhouse	
Thursday	16-nov	09.15 - 12	Vertical farming and plant factories, Lecture	SK		

Friday	17-nov		Individual study		
		16.30-17	Send in suggestions and PP (one page, in Canvas) for literature report		

47	Monday	20-nov				
			09.15 - 10	Pitching - literature report, seminar	AKR	
			10.15 - 12	Aquaponics, Lecture	SK	
	Tuesday	21-nov	09.15 - 15	Water and growing media lab.	AKR KJB	Greenhouse
	Wednesday	22-nov	09.15-11	Control and monitoring of hydroponic systems	JMN	
			11.15-12	Measurements in the greenhouse	JMN	Greenhouse
	Thursday	23-nov	8.15 - 10	Growing media, Lecture.	BA	
			10.15 - 12	Sampling techniques, discussion in greenhouse	BA	Greenhouse
				Water and growing media lab. Weigh samples	AKR	
Friday	24-nov	8.15 - 10	Plant diseases and disease control in hydroponic systems, Lecture	BA		
		10.15 - 12	Desinfestation of nutrient solutions. Lecture	BA		

48	Monday	27-nov				
			09.15 - 12	Water and growing media lab. finalizing	AKR	Greenhouse
	Tuesday	28-nov	10.15 - 12	Microbiota in hydroponic systems. Microbiological methods Lecture	SK	

Wednesday	29-nov		Individual study		
Thursday	30-nov		Individual studies		
Friday	01-dec	09.15 - 12	Literature exam		

49	Monday	04-dec	09.15 - 12	Biological lab. - analyses of roots and nutrient solutions. Group a and b	SK	
			13.15 - 16	Biological lab. - analyses of roots and nutrient solutions. Group c and d	SK	
	Tuesday	05-dec		Individual study		
	Wednesday	06-dec		General Re-exam day		
Thursday	07-dec	09.15 - 11	Biological lab. Counting bacterial colonies	SK	Greenhouse	
Friday	08-dec	09.15 - 11	Biological lab. Counting fungal colonies	SK	Greenhouse	

50	Monday	11-dec	09.15 - 12	Finalizing the Production lab. Measures and restoration and cleaning	AKR	Greenhouse
			13.15 -	Continue if necessary	AKR	Greenhouse
	Tuesday	12-dec	08.15 - 10	Soilless cultivation in Asia and Australia: updates and new perspectives,	JY	
			10.15 - 12	Hydroculture in Architecture, Lecture	MCD	
	Wednesday	13-dec	09.15 - 12	Hydroponics in public areas, Lecture	CV	zoom
			13.15-13.30	Production lab. Dry weights. Someone from each group	AKR	Greenhouse
	Thursday	14-dec		Individual study		
	Friday	15-dec				

51	Monday	18-dec		Individual study		
	Tuesday	19-dec		Individual study		
Wednesday	20-dec	9.15 - 12	Re-exam			

Thursday	21-dec		Submission of lab reports		
Friday	22-dec		Individual study		

52	Monday	25-dec		Christmas break until January 2nd		
	Tuesday	26-dec				
	Wednesday	27-dec				
	Thursday	28-dec				
Friday	29-dec					

1	Monday	01-jan				
	Tuesday	02-jan		Individual study		
	Wednesday	03-jan	9.15 - 10	Presentation microbiology reports	SK	zoom
			10.15 - 12	Student presentation - Production lab, Seminar	AKR	zoom
			12.00	Last day to send in the literature report for comments		
	Thursday	04-jan		Individual study		
Friday	05-jan		Individual study			
2	Monday	08-jan	8.15-17	Study visit	AKR	
				Written feed back of literature report from your supervisor		
	Tuesday	09-jan		Individual study		
	Wednesday	10-jan		Individual study		

Thursday	11-jan	08.15 - 12	Literature report - Student presentations, Seminar	AKR KJB	
Friday	12-jan	08.15 - 10	Literature report - Student presentations, Seminar	AKR KJB	
		10.15 - 12	Presentations continue + course evaluation	AKR KJB	
		13 - 15	Individual study. Finalizing literature report. January 14 last day to hand in		

Teachers BI1233

AKR	Anna Karin Rosberg	SLU
KJB	Karl-Johan Bergstrand	SLU
BA	Beatrix Alsanius	SLU
SK	Samar Khalil	SLU
JY	Jean Yong	SLU
MCD	Marie-Claude Dubois	SLU
CV	Christine Volm	Consulting enterprise, Germany
JMN	Jonas Möller Nielsen	Cascada AB