

Feed Science and Forage Production. HV0166 – March 24 to June 3, 2021

PRELIMINARY

Cells in light-blue: activities shared with BI1327 course. Activities in blue letters are pending on confirmation. O: mandatory

Month	Date	Day	Time	ON-LINE	Content	Responsible	
March	24	Wed	08:15-10:00	Zoom	Introduction, registration, roll-call, study advice	T. Eriksson, H. Gonda, N. Nilsson-Linde	O
			10:15-11:00	Zoom	Lecture: Feed analyses - an introduction	Torsten Eriksson	
			11:15-12:00	Zoom	Lecture: Feedstuff properties Multiple Choice Test (MCT) 1 opens in CANVAS	Torsten Eriksson	
March	25	Thu	08:15-12:00	Zoom	Lecture: Plant species utilised and their characteristics	Nilla Nilsson-Linde	
			13:15-15:00	Zoom	Introduction to group assignment 1: Formulating seed mixtures Work with group assignment 1	Nilla Nilsson-Linde	O
			15:15-17:00	Zoom	Lecture: Crop production and quality dynamics	Anne-Maj Gustavsson	
March	26	Fri	09:15-11:00	Zoom	Lecture: Combining forage species in a seeding mixture	Nilla Nilsson-Linde	
			11:15-12:00	Zoom	Lecture: Harvest strategy in a ley	Magnus Halling	
			13:15-16:00	Zoom-break-out rooms	Work with group assignment 1 + reading MCT 1	Nilla Nilsson-Linde	O
March	29	Mon	09:15-10:00	Zoom	Lecture: Nutrient balances on livestock farms	Eva Salomon	
			10:15-12:00	Zoom	Lecture: Organic manure	Eva Salomon	
			13:15-17:00		Work with group assignment 1 + reading MCT 1	Nilla Nilsson-Linde	O
March	30	Tue	10:15-12:00		Lecture and exercise: Ley fertilisation	Pernilla Kvarmo	
			13:15-17:00		Work with group assignment 1 + reading MCT 1		
March	31	Wed	08:15-10:00	Zoom	Lecture: Maize as a forage crop, Swedish experiences	Magnus Halling	
			10:15-12:00		Work with group assignment 1 + reading MCT 1		
			12:00		Group assignment 1 – formulating seeding mixture – deadline for reporting on Canvas		
April	1	Thu	9:15-10:00		Introducing laboratory videos and lab manuals	T. Eriksson, A-G. Haglund, H. Gonda	O
			10:00-12:00		Individual study		
April	2	Fri			Red day		
April	6-9				Individual study		
April	12	Mon	13:15-16:00	Zoom	Report of group assignment 1 MCT 1 closes at midnight	N. Nilsson-Linde, M. Halling	O
April	13	Tue	10:15-12:00	Zoom	Lecture: Silage making	Rolf Spörndly	
			13:15-16:00	Zoom	Lecture: Silage quality Multiple Choice Test (MCT) 2 opens in CANVAS	Rolf Spörndly	
April	14	Wed	09:15-12:00		Lecture: Malfermentations	Rolf Spörndly	
April	15	Thu	9:15-11:30	Zoom	Lecture: Sampling, preparation, DM, ash, <i>in vitro</i> digestibility of the organic matter (IVDOM)	Torsten Eriksson	

			13:15-14:00	Zoom	Lecture: Fiber analyses & digestibility methods	Torsten Eriksson	
			14:15-15:00		Introduce simulation Lab 1: Sampling, preparation, DM, ash, <i>in vitro</i> digestibility of the organic matter (IVDOM) and NDF	A-G. Haglund, T. Eriksson	
April	16	Fri	09:15-11:00	Zoom	Lecture: Carbohydrates	Horacio Gonda	
			11:15-12:00	Zoom	Lecture: Lignin and cell wall. How to improve the digestibility of plant fibre.	Kamyar Mogodiniyai Kasmaei	
April	19	Mon	10:15-12:00	Zoom	Discussion on sample preparation, DM, ash, IVDOM and NDF calculations and obtained results.	A-G. Haglund, T. Eriksson, H. Gonda	○
April	20	Tue	08:00-17:00		Self-study		
			13:15-15:00	Zoom	Complementary discussion on DM, ash, IVDOM and NDF. Hand in results on DM, ash, IVDOM and NDF.	A-G. Haglund	
April	21	Wed	10:00-12:00	Zoom	Introduction to <i>in sacco</i> incubation method and calculations	Horacio Gonda	○
April	22	Thu	9:15-11:00	Zoom	Lecture: Ruminant metabolism & research methods	Torsten Eriksson	
			11:15-12:00	Zoom	Introduce simulation Lab 2: crude protein and fat.	Torsten Eriksson	
April	23	Fri	08:00-17:00		Self-study MCT 2 close at midnight		
April	26	Mon	13:15-15:00		Summing up DM, ash, IVDOM and NDF. Discussion on crude protein and fat calculations and results. Multiple Choice Test (MCT) Lab opens in CANVAS	A-G. Haglund, T. Eriksson, H. Gonda	○
April	27	Tue	09:15-10:00	Zoom	Lecture: Fat analysis	Jorge André	
April	28	Wed	10:00-12:00	Zoom	Complementary discussion on DM, ash, IVDOM, NDF, CP and fat.	A-G. Haglund	
April	29	Thu	10:00-12:00	Zoom	Lecture: Nitrogen metabolism (ruminants)	Torsten Eriksson	
			13:15-15:00		Discussion on crude protein (CP) calculations and results	Torsten Eriksson	○
April	30	Thu			Free day		
May	3	Mon	08:00-17:00		Self-study		
May	4	Tue	10:15-11:00	Zoom	Summing up CP.	T. Eriksson, Anna-Greta Haglund	○
			10:15-12:00	Zoom	Summing up fat. Hand in results on CP and fat.	Torsten Eriksson, Jorge A	○
May	5	Wed	09:15-11:00	Zoom	Lecture: Forage for horses Introduction of group assignment on forage for horses	Cecilia Müller	
May	6	Thu	08:15-10:00	Zoom	Lecture: Feed processing in the industry	Aleksandar Vidakovic	
			10:15-12:00	Zoom	Lecture: Working in the feed industry	Camilla Knutstedt	
			13:15-17:00	Feed Sci. Lab/ Recorded	Pelleting and extrusion exercise Hand in results on NDF, CP, Fat	Aleksandar Vidakovic	○
May	7	Fri	08:15-10:00	Zoom	Lecture: Feed evaluation, diet formulation	Torsten Eriksson	
			10:15-12:00	Zoom	Feed optimization (Introduction/Excel-Solver)	H. Gonda, T. Eriksson	○
			13:15-15:00		Study visit feed factory (pending on confirmation)	Camilla Knutstedt, T. Eriksson, H. Gonda	

May	10	Mon	09:55-10:00	Zoom	Lecture: Monogastric diet formulation	Emma Ivarsson	
			10:15-12:00	Zoom	Feed optimization project	T. Eriksson, H. Gonda	
			13:15-14:00	Zoom	Lecture: Plant defence mechanisms	Horacio Gonda	
			14:15-15:00	Zoom	Lecture: Carnivore metabolism & research methods	Hanna Palmquist	
May	11	Tue	08:00-17:00		Time for work on the Feed optimization project		
May	12	Wed	09:15-11:00	Zoom	Time for questions on feed optimization	H. Gonda, T. Eriksson	
May	13	Thu			Ascension day		
May	14	Fri			Free		
May	17	Mon	09:15-11:00	Zoom	Lecture: Monogastric metabolism & research methods Hand in individual discussion on feed analysis	Jan Erik Lindberg	
			11:15-12:00	Zoom	Lecture: Feed ethics	Mikaela Lindberg	
			13:15-15:00		Hand in feed optimization report		
May	18	Tue	09:15-12:00	Zoom	Presentation of group assignment: Forages for horses	Cecilia Müller	O
May	19	Wed	09:15-12:00	Zoom	Time for demo-labs (gross energy + on demand)	A-G Haglund	
May	20	Thu	08:15-08:30	Demo area	Introduction of species characteristics	Nilla Nilsdotter-Linde	O
			08:30-12:00	Demo area	Field exercises: Species characteristics	Nilla Nilsdotter-Linde	O
			13:15-15:00	Zoom	Lecture: Determination of botanical composition - weaknesses and possibilities	David Parsons	
			15:15-17:00		Discussion of feed analyses results		
May	21	Fri	10:15-12:00	Zoom	Presentation of feed optimization	T. Eriksson, H. Gonda	O
					MCT Lab close at midnight		
May	24	Mon	09:00-12:00	AgriLab, Gunsta	Study visit commercial lab (pending on confirmation)	T. Eriksson, H. Gonda	
			13:15-17:00	Demo area	Individual study on Species characteristics		
			14:15-15:00	Zoom	Time for questions	T. Eriksson, H. Gonda	
May	25	Tue	09:15-10:45	Recorded	Farm visit, Östanå Farm - organic milk production		O
			11:00-12:00	Zoom	Farm visit, Östanå Farm - organic milk production- discussion with the farmer	Henrik Johansson, T. E., N. N-L, H. G.	O
			13:15-14:00	Zoom	Course evaluation	H. Gonda, T. Eriksson	
May	26	Wed	09:15-10:30	Demo area	Species characteristics – Test in the field-Group A	Nilla Nilsdotter-Linde	O
			10:45-12:00	Demo area	Species characteristics – Test in the field-Group B	Nilla Nilsdotter-Linde	O
May	27	Thu	09:00-10:30	Feed Sci. Lab	Exercise on forage quality Group A	Rolf Spörndly	O
			10:30-12:00	Feed Sci. Lab	Exercise on forage quality Group B	Rolf Spörndly	O
			13:15-15:00	Zoom	Discussion on silage making and big bale silage.	Rolf Spörndly	O
					Scientific writing – scientific papers (BI1327) available for all students		
May	28	Fri			Individual study		
May	31	Mon	09:15-10:00	Zoom	Time for questions (individual study)	H. Gonda, T. Eriksson	

June	1	Tue	09:15-12:00	Zoom	<i>Presentation of Scientific Papers by BI1327 with prepared discussions by HV0166</i>	Nilla Nilsson-Linde & Magnus Halling	O
June	2	Wed			Individual study		
June	3	Thu	8:00-12:00	at Campus	Final examination		