

UMN CVM  
Advanced Dairy Production Medicine  
Sample Schedule

**Week I Main Topics: Nutrition & Transition Management**

	Monday	Tuesday	Wednesday	Thursday	Friday
8:00	Dairy Education Center Orientation	Review of transition physiology & disease	Lecture & Lab: TMR Audit	Managing people for transition success	Nutrition topics: Student's present and discuss their rations
9:00	Advanced nutrient requirements			Herd Visits - groups prepare reports and presentations	
10:00		Review Records (DC305) for Herd Visits			
11:00	Intro to ration-balancing software	Capstone projects - review herds and plan work	Review partial budgets	Capstone project work time	
noon	Lunch	Lunch	Lunch	Lunch	
1:00	Ration evaluation exercise	Approach to transition cow rations/ monitoring	Herd Visits, Focus: Nutrition & Transition Evaluation (6-8 students/group)	Dairy records and partial budgets exercise	Herd Presentations
2:00					
3:00	Intro to ration formulation (lecture & assignment)				
4:00					

UMN Faculty: Sandra Godden, Luciano Caixeta, Gerard Cramer (all faculty present for Capstone work and student presentations)

Guest Presenters: Barry Visser (Vita Plus), Tom Oelberg (Diamond V), Tom Jinkinson (Davis Family Dairies)

**Week II Main Topics: Youngstock & Reproduction, Capstone Visits**

	Monday	Tuesday	Wednesday	Thursday	Friday
8:00	Intro to youngstock nutrition	Literature Eval: Calf Pneumonia	Capstone herd visits (3-4 students/group)	Literature Eval: Metritis	Estrus detection wet-lab
9:00		Youngstock housing & ventilation assessment		Assessing & troubleshooting repro using data	Alternative to synchronization protocols
10:00	Pasteurized milk feeding				
11:00	Weaning programs	Lunch	Lunch	Lunch	
1:00	Youngstock housing & welfare	On-farm lab: calf housing assessment	ET for genetic gains	Repro Hot Topics	
2:00		Capstone work time	Genomics		
3:00	Disease detection & treatment		Capstone work time	Review repro, YS records for herd visits (next Weds)	
4:00	Youngstock Records				

UMN Faculty: Sandra Godden, Whitney Knauer, Jeremy Schefers, Luciano Caixeta, Gerard Cramer (all faculty present for Capstone work and student presentations)

Guest Presenters: Rafael Bisinotto (University of FL CVM), Matthew Boyle (Zoetis)

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**Week III Main Topics: Mastitis & Milk Quality**

	<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>
8:00	Review mastitis knowledge quiz results	Review mastitis cases	Herd Visits, Focus: Youngstock, Repro & Milk Quality Evaluation (6-8 students/group)	Work time	Work time
9:00	Mastitis testing & control programs	Milking parlor management & evaluation		Milk Lab: cow and bulk milk culture, bedding/towel culture, SCC and antibiotic residue testing, PCR demo	Capstone faculty check-in
10:00		Understanding Dairy Cost of Production (Hadrich)			
11:00	Mastitis troubleshooting			Lunch	Lunch
noon	Lunch	Lunch			
1:00	Mastitis cases	Dairy Disinfection & Sanitation: CIP, Teat Dips & Other Cleaning Applications (Koerth)	Herd Visits - groups prepare reports and presentations	Review mastitis & milk quality issues in herd projects	Herd Visit Presentations
2:00					
3:00	Mastitis records in DC305	Prep for Herd Visits		Work time	Capstone work time
4:00					

UMN Faculty: Erin Royster, Joleen Hadrich (Applied Economics), Jennifer Timmerman (Lab for Udder Health) (all faculty present for Capstone work and student presentations)

Guest Presenters: Pat Gorden (ISU CVM), Jason Koerth (Ecolab)

**Week IV Main Topics: Food Armor, Advanced Economics and Records Analysis, Capstone Projects**

	<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>
8:00	Food Armor Phase II Training (MrDutt)	Capstone Herd Visits	Estimating the cost of disease (Overton)	Advanced Records (Overton)	Capstone work time
9:00			Culling and Cow Value (Overton)		Feedback Session
10:00				Lunch	Capstone Presentations
11:00				Lunch	
noon	Lunch				
1:00	Food Armor Phase II Training continued		Economics Activity (Overton)	Capstone work time	
2:00			Capstone Work Time		
3:00					
4:00					

UMN Faculty: Gerard Cramer (all faculty present for Capstone work and student presentations)

Guest Presenters: Katie MrDutt (Food Armor), Mike Overton (Elanco)