Course syllabus 2026 (updated 1/6/2026)

ANS 3251 - Biology and Management of Dairy Cattle

Class #10297

Tuesday 4th and 5th period (10:40 AM – 12:35 PM)
Thursday, 4th period (10:40 – 11:30 AM), classroom 151 (ANS Bldg.), 3 credits

Instructor

Dr. Albert De Vries, Room 104F in the Larson Dairy Science building. Office hours are the hour after class, or when mutually convenient. Email only through e-Learning. I will try to respond within 2 days, but I do not respond to email on the weekends. The instructor decides in all cases not covered in this syllabus.

Teaching Assistant

Sophia Beatriz Obeso. Office hours are the hour after class, or when mutually convenient. Email only through E-learning.

Course Description

Biology of dairy cattle and the interrelationship between biology and management. Topics include anatomy and physiology, nutrition, reproduction, genetics, behavior, diseases, dairy products, housing, management, economics, and the environmental impact of dairy production.

Course Prerequisite

ANS 3006 Introduction to Animal Science

Course Learning Objectives

Upon completion of this course, students will be able to

- Describe the life cycle of dairy animals, including the major metrics that are important to dairy farmers
- Discuss the important concepts in reproduction, nutrition, lactation, genetics, facilities, and environmental sustainability as it relates to dairy cattle
- Critique articles published in the dairy popular press
- Propose ways to improve dairy production efficiency

Class Attendance

Make-ups need to be requested within one week of the original due date. Class attendance is highly encouraged but not required. All material assigned or discussed in class is subject for examination, but not all discussed material will have posted materials on the course website. We will use a combination of PowerPoint slides, videos, assigned readings, and the black/white board as aids. We will also use a

combination of active learning methods throughout the course. Class time will also be used to give feedback on student performance in quizzes and assignments. Use of cell phones is not allowed during in-class time unless we give you permission. These policies are in place to make learning as successful and pleasant as possible for everybody.

Course Website and Communication

The course website is through http://elearning.ufl.edu. We will use the website to post materials, on-line quizzes, exams, assignments, and grades. We'll bring printed copies of the slides to class whenever we first use the slide set, but they may not be available later. Slides will also be posted on the course website. Slides may be complete or incomplete where you should fill in the blanks. Make sure you set your http://elearning.ufl.edu settings to receive emails and announcements related to this course as soon as possible. All electronic communication between students and instructors needs to occur through http://elearning.ufl.edu.

Textbooks, Learning Materials, and Supply Fees

No Textbook is assigned. Materials will be posted on e-learning. All material presented in class is subject for grading.

Technical Support

UF Computing Help Desk & Ticket Number: All technical issues require a UF Helpdesk Ticket Number. The UF Helpdesk is available 24 hours a day, 7 days a week. https://helpdesk.ufl.edu/ | 352-392-4357

Grading Policy

Course grading is consistent with UF grading policies.

Course Grading Structure (101% maximum)

- 1% Student introductions. One assignment to introduce yourself to all class members.
- 15% Seven assignments, including "Dairy Detective". Each assignment is weighted equally. The lowest score will be dropped for the calculation of your final grade.
- 15% "Follow my herd" assignment. Each student will follow and report weekly on the changes that your herd of real dairy animals experiences throughout the semester. Detailed instructions and a rubric will be given early in the semester.
- 45% Quizzes: Six quizzes will be given. Quizzes consist mostly of open-ended short answer questions. Each quiz is weighted equally. Material for the quiz is all new material since the previous quiz. The lowest quiz score will be dropped for the calculation of your final grade. Further details about quizzes will be announced on http://elearning.ufl.edu.
- 25% Final exam. Comprehensive. The final exam consists mostly of open-ended short answer questions. Correct English grammar in your answers is part of the grading.
- Scores can be appealed within 1 week of returning the score. We will regrade the whole quiz/assignment/exam. However, short-answer questions have the possibility of some unintended bias in the score you receive. We are therefore reluctant to change scores. There

are plenty of opportunities to receive scores, so sometimes you may get too much, sometimes too little. Your final course grade will be fair. If you have difficulty dealing with short answer questions and their grading, then this course is maybe not for you. Historically, many students receive A-s and B-s in this course.

Grading Scale

Grade Score			Grade Score		
A	≥92%		C	≥74%	<77%
A-	≥89%	<92%	C-	≥71%	<74%
B+	≥86%	<89%	D+	≥68%	<71%
B	≥83%	<86%	D	≥65%	<68%
B-	≥80%	<83%	D-	≥62%	<65%
C+	≥77%	<80%	E	<62%	

Standard Syllabus Statements

Academic Policies and Resources

Academic policies for this course are consistent with university policies. See https://syllabus.ufl.edu/syllabus-policy/uf-syllabus-policy-links/

Campus Health and Wellness Resources

Visit https://one.uf.edu/whole-gator/topics for resources that are designed to help you thrive physically, mentally, and emotionally at UF. Please contact UMatterWeCare for additional and immediate support.

Software Use

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

Privacy and Accessibility Policies

- Instructure (Canvas)
  - Instructure Privacy Policy
  - Instructure Accessibility
- Zoom
  - Zoom Privacy Policy
  - Zoom Accessibility

Classroom 151 in the Animal Science building

The schedule may change during the semester. Check ELEARNING.UFL.EDU for the latest changes.

Week	Grade	Date	Day	Topic	Guest Instructor
1		**1/13**	**T**	Introduction to course, history of dairy production	
1		1/15	R	Dairy production cycle	
2	A1	**1/20**	**T**	Dairy production cycle (recorded lecture)	
2		1/22	R	Lactation physiology	
3	Q1	**1/27**	**T**	Follow-My-Cow, Vaccinations, Milk production	
3		1/29	R	Milk production	
4	A2	**2/3**	**T**	Milking equipment	
4		2/5	R	Mastitis, milk quality	
5	Q2	**2/10**	**T**	Nutrition and management: calves and heifers	
5		2/12	R	Nutrition: calves, heifers, cows	
6	A3	**2/17**	**T**	Nutrition: cows, metabolic diseases	
6		2/19	R	Metabolic diseases	
7	Q3	**2/24**	**T**	Environmental physiology, heat stress	Hansen
7		2/26	R	Heat abatement facilities	Hansen
8	A4	**3/2**	**T**	Facilities	
8		3/5	R	Other dairy diseases	
9	Q4	**3/10**	**T**	Welfare, lameness	
9		3/12	R	Dystocia, metritis, RP, estrus cycle, hormones	
10				*Spring Break, March 14-22*	
11	A5	**3/24**	**T**	Estrus detection, bulls, AI	
11		3/26	R	Estrus synchronization programs	
12	Q5	**3/31**	**T**	Genetics, heritability, traits, PTA	
12		4/2	R	Genetics, heritability, traits, PTA	
13	A6	**4/7**	**T**	Selection index, genomics, economics	
13		4/9	R	Sexed semen, embryo transfer, economics	
14	Q6	**4/14**	**T**	Grazing, organic production	
14		4/16	R	Environmental sustainability	
15	A7	**4/21**	**T**	Wrap-up	
		TBA		Review	
	Exam	4/28	T	Final Exam: 4/28/2026 @ 3:00 PM - 5:00 PM	

Q: Quiz in the classroom at start of class. Material covered since the previous quiz.

A: Assignment posted: Due Monday 11:59 PM after the week of posting.