

Course syllabus 2025 (updated 1/8/2025)

ANS 3251 - Biology and Management of Dairy Cattle

Class #10318

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. The instructor decides in all cases not covered in this syllabus. Guest instructors may present some of the material. Email only through e-Learning. I will try to respond within 2 days, but I do not respond to email on the weekends.



Teaching Assistant

Carlos Niño de Guzmán Cerna. Office hours are the hour after class, or when mutually convenient. Email only through E-learning.

Course Description

This survey course offers a deeper understanding of the biology of dairy cattle and the interrelationship between biology and management in a systems context as it relates to dairy production in Florida and the USA. Topics: dairy sector, nutrition, reproduction, genetics, behavior, welfare, diseases, young stock, facilities, lactation, milking procedures, milk quality, management, economics, and environmental impact of dairy production. It is appropriate for upper-level undergraduate students seeking to improve their knowledge of dairy cattle, biology, and management. The focus is on integrating the material that is taught into higher level learning and thinking.

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>.

Text and Material Covered

Readings will be assigned and posted on e-learning. All required readings and materials presented and discussed in class are subject for evaluation in quizzes and the final exam.

Grading (101% maximum)

- 1% Student introductions. One assignment to introduce yourself to all class members.
- 10% Seven assignments consisting of readings, podcasts, or other assignments. Each assignment is weighted equally. The lowest score will be dropped for the calculation of your final grade.
- 15% "Follow my herd" assignment. Teams of two students will follow and report weekly on the changes that your assigned herd of dairy animals experience throughout the semester. Detailed instructions and a rubric will be given early in the semester.
- 50% 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. We'll use the grade book in e-Learning for final grades if possible.

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

Grades and Grade Points

For information on current UF policies for assigning grade points, see <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>

Attendance and Make-Up Work

Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at:

<https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>

For online course with recorded materials a statement informing students of privacy related issues such as: Our class sessions may be audio visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

Online Course Evaluation Process

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this

course using a standard set of university and college criteria. Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at: <https://gatorevals.aa.ufl.edu/students/> . Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/> . Summaries of course evaluation results are available to students at: <https://gatorevals.aa.ufl.edu/public-results/>.

Academic Honesty

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: *"We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity."* You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g., assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: <http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code> .

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.

Services for Students with Disabilities

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation. Information: 0001 Reid Hall, 352-392-8565, <https://disability.ufl.edu/>

Campus Helping Resources

Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

- University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, <http://www.counseling.ufl.edu/>
 - Counseling Services, Groups and Workshops, Outreach and Consultation, Self-Help Library, Wellness Coaching.
- U Matter We Care, www.umatter.ufl.edu
- *Career Connections Center*, First Floor JWRU, 392-1601, <https://career.ufl.edu/> .
- Student Success Initiative, <http://studentsuccess.ufl.edu> .

Student Complaints:

- Residential Course: <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>
- Online Course: <https://pfs.tnt.aa.ufl.edu/state-authorization-status/#student-complaint>

ANS 3251 – Biology and Management of Dairy Cattle – Spring 2025 (schedule as of 1/8/2025)

T = Periods 4-5 (10:40 AM - 12:35 PM), R = Period 4 (10:40 AM - 11:30 AM)

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		1/14	T	Introduction to course, history of dairy production	
1		1/16	R	Dairy production cycle	
2	A1	1/21	T	Dairy production cycle	
2		1/23	R	Lactation physiology	
3	Q1	1/28	T	Follow-My-Cow, Vaccinations, Milk production	
3		1/30	R	Milk production	
4	A2	2/4	T	Milking equipment	
4		2/6	R	Mastitis, milk quality	
5	Q2	2/11	T	Nutrition and management: calves and heifers	
5		2/13	R	Nutrition: calves, heifers, cows	
6	A3	2/18	T	Nutrition: cows, metabolic diseases	
6		2/20	R	Metabolic diseases	
7	Q3	2/25	T	Other dairy diseases	
7		2/27	R	Facilities	
8	A4	3/4	T	Environmental physiology, heat stress	Hansen
8		3/6	R	Heat abatement facilities	Hansen
9	Q4	3/11	T	Welfare, lameness	
9		3/13	R	Dystocia, metritis, RP, estrus cycle, hormones	
10				<i>Spring Break, March 15-22</i>	
11	A5	3/25	T	Estrus detection, bulls, AI	
11		3/27	R	Estrus synchronization programs	
12	Q5	4/1	T	Genetics, heritability, traits, PTA	
12		4/3	R	Genetics, heritability, traits, PTA	
13	A6	4/8	T	Selection index, genomics, economics	
13		4/10	R	Sexed semen, embryo transfer, economics	
14	Q6	4/15	T	Grazing, organic production	
14		4/17	R	Environmental sustainability	
15	A7	4/22	T	Wrap-up	
		TBA		Review	
	Exam	4/28	M	Final Exam: 4/28/2025 @ 10:00 AM - 12:00 PM	

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

A: Assignment posted: Due Sunday 11:59 PM online at the end of the week of posting.