WELFARE & BEHAVIOR

Instructor:
Emily Miller-Cushon, Ph.D.
Associate Professor of Animal Behavior
Department of Animal Sciences
University of Florida
emillerc@ufl.edu

Course Description

With increasing societal concern for animal care, the sustainability of animal agriculture depends on refining livestock systems to address animal welfare concerns. This course explores principles of animal behavior and the latest science and considerations surrounding the assessment and improvement of dairy cattle welfare. Course content will address behavioral principles and natural behavior of cattle and provide an overview of the scientific literature describing key factors challenging the welfare of dairy cattle, including aspects of housing, feeding, and pain management, with a focus on the role of animal behavior in understanding animal welfare. Discussion will also encompass societal perspectives on dairy cattle welfare, as well as practical solutions to improve animal welfare using science-based approaches.

Course Objectives

This course will provide background and discussion opportunities to allow students to develop the ability to:

- Understand the basic principles underlying animal behavior science, to be able to read and interpret scientific literature Broadly understand natural expression of behavior in dairy cattle
- Define key welfare challenges for dairy cattle in terms of their impact on animal behavioral expression, performance, and subjective experience
- Consider the behavioral expression of dairy cattle and implications for their welfare, with a focus on feeding and social behavior, with respect to various management factors
- Discuss the role of society in animal welfare conversations, and current major issues of concern for the dairy industry

Learning Outcomes

Students will understand principles behind assessing dairy cattle welfare and understand how accommodating behavioral expression and alleviating negative emotional states is critical for welfare. Students will also learn the principles of measuring animal welfare and appreciate the natural behavior of cattle and how it interacts with modern management to affect welfare.

Course Format and Expectations

Lectures and Readings: The course will be delivered via the Canvas course system. The major course topics will be separated into 4 separate modules according to the schedule below. Within each module there will be a series of recorded lectures that are approximately 15-20 minutes each. There will be a short assessment that you will be required to complete after completion of each lecture. There also will be recommended readings and exercises to complete each module. You will be required to complete the module before moving to the next.

Course Schedule

Module	Overview	Topics
1	Introduction to animal behavior	Measuring animal behavior Basic principles of animal behavior Natural behavior of cattle
2	Principles of animal welfare	Defining animal welfare Principles of assessing animal welfare
3	Improving dairy cattle welfare (part 1)	Assessing pain Behavioral needs and dairy cattle welfare Feeding behavior and welfare
4	Improving dairy cattle welfare (part 2)	Social behavior and welfare Human-animal interaction Society and animal welfare

Honesty and Conduct Policy

Students in the course are expected to adhere to the University of Florida honesty policy. UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students 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." The Honor Code (https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class. Students in this course also are expected to treat each other with fairness and respect. Harassment or rude behavior towards the instructors and other students will not be tolerated. The instructors have the right to dismiss a student from the course for violation of the Honesty and Conduct Policy.

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. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Certificate of Completion

A Certificate of Completion will be awarded upon successful completion of all modules and viewing of all required videos. This course is designed for self-paced learning, allowing students to progress through the material at their own speed. Students will have indefinite access to the course, enabling them to revisit the content at any time for continued learning and reference. We encourage students to engage with the material thoroughly to maximize their understanding of information provided.

Dairy AdvanCE Continuing Education

Students earning continuing education credit through Dairy AdvanCE will be awarded credit only after course has been 100% completed. Please allow time for processing. Contact fida@ifas.ufl.edu for any questions or concerns.

This course will award 8 CEUs.