BEHAVIOR & WELFARE

UF | IFAS Extension
UNIVERSITY *of* FLORIDA

FLORIDA INTERNATIONAL DAIRY ACADEMY

DEPARTMENT OF ANIMAL SCIENCES

Instructors:

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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 the latest science and considerations surrounding the assessment and improvement of dairy cattle welfare. Course content will include 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:

- Define key welfare challenges for dairy cattle in terms of their impact on animal behavioral expression, performance, and subjective experience;
- Discuss the role of society in animal welfare conversations, and approaches to consider different viewpoints;
- Consider the behavioral expression of dairy cattle, with a focus on feeding and social behavior, with respect to various management factors;
- Develop solutions and management recommendations to improve dairy cattle welfare through application of basic understanding of dairy cattle behavior.

Learning Outcomes

Students will know the reasons and recommendations for inclusion of each the vitamins and minerals required by dairy cows. Students also will have an appreciation of factors to consider in sources and formulations of vitamin and mineral supplements. Students will be equipped with knowledge to make reasonable cost to benefit assumptions for vitamin and mineral supplements on a given farm.

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.

Weekly Discussions: A valuable component of the course is the weekly one hour discussions that will be held via Zoom. The major objective of the discussions is to help the students develop a practical working knowledge of the lecture and reading materials. Therefore students should be prepared for the discussion by watching lectures and reading ahead of time and come up with questions relevant to application of the course content. Questions from practical field experience are strongly encouraged. To also facilitate discussion, the instructors will post two or three questions in Canvas ahead of time that you should come prepared to discuss. It is expected that some students may not be able to attend the discussions because of time zone or work schedule conflicts. Students are encouraged to submit questions via Canvas in advance if they cannot attend the discussion. Please be considerate of others by being prepared and staying on topic.

Course Schedule

Module	Overview	Topics
1	Introduction to animal welfare	Defining animal welfare Assessing animal welfare Societal perspectives on animal welfare
2	Housing, behavior, and welfare	Dairy cattle social behavior Calf housing and welfare considerations Cattle housing and welfare considerations
3	Nutrition, behavior, and welfare	Dairy cattle feeding behavior Calf feeding and welfare considerations Cattle feeding and welfare considerations
4	Painful procedures and human handling	Approaches to assess and mitigate pain Human-animal interactions and animal welfare considerations

Grading Policy

Pass/Fail – A cumulative score of 70% or greater is required to pass.

Scores are based on assessments (75%) and participation in weekly discussions (25%).

Assessments: Short assessments will be take place after each lecture followed by a final assessment at the end of the course. Each of the assessments will be conducted via the Canvas course system and will consist of fill in the blank, T/F, or multiple choice style of questions.

Participation: Weekly discussions will be held via Zoom to discuss readings and lectures. Considering that students may not be available for the weekly scheduled meetings because of time zone or work schedule conflicts students may submit discussion questions in leu of attending the virtual meeting.

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.