# ANS 3440 Principles of Animal Nutrition

## Instructor

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Office hours: I will be available in the classroom for a 15-minute period both before and after each lecture, and this is the preferred time to ask questions. If you are unable to meet during these times, please schedule an appointment by sending me a message through the Canvas Inbox.

<u>Email Policy</u>: Based on experience, the most effective way to reach me is to speak with me in person before or after class. For questions related to course material, I encourage you to use the *Canvas Discussion Board* so that other students can also benefit from the answers. If you are unable to meet in person or use the Discussion Board, you may contact me through the *Canvas Inbox*. I check messages Monday through Friday between 9:00 a.m. and 5:00 p.m. and typically reply within 2-3 business days. I appreciate your cooperation with this approach, as this is a large class and there are no teaching assistants to help manage Canvas Inbox messages.

### Course Description

This course is an introduction to animal nutrition with emphasis on both non-ruminant and ruminant species. The course covers the nutrients required by animals, their functions, interrelationships, and the processes of their utilization, as well as feedstuff composition.

<u>Course credits</u>: this is a 4-credit course, which means that we will be meeting 4 hours per week in class, and you are recommended to study 5-8 hours per week outside the classroom.

Course prerequisites: CHM 2045 and CHM 2045L, or equivalent.

### Meeting Days and Time, and Location

- Days: Tuesdays and Thursdays.
- Time: 7:25 09:20 am.
- Location: McCarty Hall C 0100 (1688 McCarty Dr)

## Course Objectives

- 1. Retrieve a basic vocabulary of terms important in animal nutrition.
- 2. Describe and contrast the anatomy, physiology, and microbiology of the gastrointestinal tract of ruminant and non-ruminant species.
- 3. Outline the six major nutrient classes and how they are digested and metabolized.
- 4. Explain the methods used to determine the chemical composition of feed ingredients.
- 5. Summarize how animals regulate feed intake.
- 6. Identify the factors affecting nutrient requirements of animals.

## Use of E-Learning/Canvas

- Canvas is the Learning Management System that we will use for the course. To access it, go to elearning and log in with your GatorLink username and password.
- If you are new to accessing Canvas, please review the <u>Canvas QuickStart guide</u> for students. For technical issues related to accessing Canvas, please contact the Computing Help Desk at 352-392-4357.
- All class materials, feedback comments, and grades will be posted on Canvas. To stay updated on new materials and announcements, please configure your <u>Canvas Notification Preferences</u> in Canvas.

### Course Resources

- No textbook is required, but we will use some chapters of the following book: Pond, Church, and Pond. Basic Animal Nutrition and Feeding. 1995.
- Also, key research papers will be posted on Canvas.

### **Evaluation Methods and Criteria**

The following evaluation methods and criteria will be used in this class:

Item	Points
Quiz 1	130
Quiz 2	130
Quiz 3	130
Quiz 4	130
Lecture summary 1	60
Lecture summary 2	60
Lecture summary 3	60
Lecture summary 4	60
In-class activities	240
Total	1000

- Quizzes: Quizzes will include short-answer, multiple-choice, and true/false questions covering lecture content, in-class discussions, and assigned readings. Graduate student quizzes will also include essay questions. No make-up quizzes will be offered, so you must complete them on the scheduled dates. Quizzes will be reviewed in class after grading. To promote reflection and reduce stress, questions with the lowest scores across the class will be added as extra credit (10 points) in the following quiz.
- Lecture Summaries: The purpose of lecture summaries is to help you retain key information, improve comprehension, and organize your knowledge. Each summary should address all learning objectives from the lecture. You are encouraged to complete your summaries soon after class. There is no required format—use the structure that best fits your learning style. To support this, I will provide a questionnaire to help you identify your learning style, along with example summaries designed for both verbal and visual learners.

In-Class Activities: Each class will include activities such as review questions from the previous lecture and real-life case scenarios related to the topic. At the end of each lecture, submit a photo of your completed activity on Canvas. There will be 21 activities in total, and the grades from your 15 highest-scoring submissions will count toward your final grade.

# Grade Scheme

The following grading standards will be used in this class:

Grade	Range	Points
Α	90.0 – 100%	900 - 1000
B+	85.0 - 89.9%	850 - 899
В	80.0 - 84.9%	800 - 849
C+	75.0 - 79.9%	750 - 799
С	70 - 74.9%	700 - 749
D+	65 - 69.9%	650 - 699
D	60 - 64.9%	600 - 649
Е	<59.9%	<599

# Tentative Course Schedule<sup>1,2</sup>

Date	Weekday	Topic	Deadlines/Notes
21-Aug	Thu	Syllabus & Concepts of Animal Nutrition	
26-Aug	Tue	Anatomy, microbiology and physiology of the gastrointestinal tract	
28-Aug	Thu	Anatomy, microbiology and physiology of the gastrointestinal tract	
2-Sep	Tue	Carbohydrates: classification	
4-Sep	Thu	Carbohydrates: digestion <sup>3</sup>	
9-Sep	Tue	Carbohydrates: metabolism	Sep 09 - Summary 1
11-Sep	Thu	Quiz 1	
16-Sep	Tue	Lipids: classification <sup>3</sup>	
18-Sep	Thu	Lipids: digestion <sup>3</sup>	
23-Sep	Tue	Lipids: metabolism	
25-Sep	Thu	Proteins: classification	
30-Sep	Tue	Proteins: digestion	
2-Oct	Thu	Proteins: metabolism	Oct 03 - Summary 2
7-Oct	Tue	Quiz 2	
9-Oct	Thu	Vitamins: classification and absorption	
14-Oct	Tue	Vitamins: metabolism	
16-Oct	Thu	Vitamins: metabolism	
21-Oct	Tue	Minerals: classification and absorption	
23-Oct	Thu	Minerals: metabolism	Oct 24 - Summary 3
28-Oct	Tue	Quiz 3	
30-Oct	Thu	Feed analyses	

4-Nov	Tue	Feed analyses	
6-Nov	Thu	Regulation of feed intake	
11-Nov	Tue	Holiday	
13-Nov	Thu	Regulation of feed intake <sup>3</sup>	
18-Nov	Tue	Digestibility measurements	
20-Nov	Thu	Digestibility measurements	Nov 21 - Summary 3
25-Nov	Tue	Thanksgiving	
27-Nov	Thu	Thanksgiving	
2-Dec	Tue	Quiz 4	

<sup>&</sup>lt;sup>1</sup>I reserve the right to adjust this schedule as needed throughout the semester.

#### Course Policies

## **Tips for Success:**

- Attend Lectures: Regularly attend all lectures to stay up to date.
- <u>Punctuality is Key</u>: Be on time. The initial minutes of each lecture are for reviewing previous content. This is an ideal time for clarifications and questions.
- Effective Notetaking: Take comprehensive notes, as not all material will be on the slides.
- <u>Do Not Hesitate to Ask</u>: Feel free to ask questions. You can inquire in class, via email, or during office hours.
- Review Regularly: After each class, revise the lecture materials to reinforce your understanding.
- <u>Focus on the Learning Objectives</u>: Keep the lecture objectives in mind while studying. This will help align your efforts with the course goals.
- Engage with Readings: Prioritize reading materials to deepen your understanding.
- <u>Study Partner</u>: Consider studying with a buddy. It can provide motivation and offer a fresh perspective on the course material.
- <u>Prioritize Well-being</u>: Stay active, eat nutritiously, ensure sufficient sleep, and cherish time with loved ones.

By adhering to these guidelines, you'll set yourself up for a successful and enriching learning experience.

**Student Feedback:** ALL types of feedback are welcome. You can email me or place a note in the "Comments & Questions Envelope", which will be circulated in the classroom.

*Late work:* Late work will be accepted; however, there will be a deduction of 5 points for every hour the assignment is overdue.

*Cellphone*: Please don't use your cellphone during the class period and ensure it is in silent mode.

## **Grade Concerns? Here is your step-by-step resolution guide:**

- Review the exam's rubric and check your responses.
- Double-check the lecture materials.

<sup>&</sup>lt;sup>2</sup>In the event of hurricanes or other weather-related disruptions, we will follow the University of Florida's guidelines and approach.

<sup>&</sup>lt;sup>3</sup>Indicates lectures that will be recorded and made available on Canvas because I will be out of town for conference or symposium presentations.

- Take notes on any aspects you believe were inaccurately graded.
- Wait 24 hours.
- Reassess the rubric and your answers.
- If you still think your exam was not graded accurately, send me an email via Canvas. I will be glad to address your grade concerns.
- Note: After grades are posted on Canvas, you have a window of 7 business days to request a grade revision.

## Attendance Policy and Make-Up Policy

Requirements for class attendance and make-up exams, assignments, and other work in the course are consistent with university policies. See <u>UF Academic Regulations and Policies</u> for more information regarding the University Attendance Policies.

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the <u>Disability Resource Center</u>. See the "Get Started With the DRC" webpage on the Disability Resource Center site. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Information on current UF grading policies for assigning grade points. This may be achieved by including a link to the University grades and grading policies.

#### Online Course Evaluation

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online. Students can complete evaluations in three ways: 1) through the email sent by GatorEvals, 2) via the Canvas course menu under GatorEvals, or 3) through the central portal. Guidance on giving constructive feedback is available. Students will be notified when the evaluation period opens, and Summaries of course evaluation results will be available to students.

## The University's Honesty Policy Regarding Cheating, Plagiarism, etc.

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 Conduct Code specifies a number of behaviors that are in violation of this code and the possible sanctions. See the UF Conduct Code website for more information. If you have any questions or concerns, please consult with the instructor in this class.

### In-Class Recording

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal education use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor. A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any

instructor-led discussions that form part of the presentation, and deliver by an instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course.

A class lecture does not include lab sessions, student presentations, clinical presentation such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or guest lecturer during a class session.

Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless, of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third-party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

#### Academic Resources

E-learning technical support: Contact the UF Computing Help Desk at 352-392-4357 or via e-mail at helpdesk@ufl.edu.

Career Connections Center: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.

Library Support: Various ways to receive assistance with respect to using the libraries or finding resources. Call 866-281-6309 or email ask@ufl.libanswers.com for more information.

Academic Resources: 1317 Turlington Hall, Call 352-392-2010, or to make a private appointment: 352-392-6420. Email contact: teaching-center@ufl.edu. General study skills and tutoring.

Writing Studio: Daytime (9:30am-3:30pm): 2215 Turlington Hall, 352-846-1138 | Evening (5:00pm-7:00pm): 1545 W University Avenue.