













ANS3440 - Principles of Animal Nutrition

Welcome to Principles of Animal Nutrition! I am excited to be working with you this semester! Feel free to contact me if you have any questions regarding the syllabus. I am looking forward to a fun and productive semester! Dr. Batistel

"Education is the most powerful weapon which you can use to change the world." – Nelson Mandela









Instructor

Fernanda Batistel

Assistant Professor of Ruminant Nutrition

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Office hours: I will be available in the classroom for a 15-minute window both before and after each lecture, and you are welcome to initiate an appointment by sending me an email via Canvas (Inbox).

<u>Email Policy</u>: Please use Canvas Inbox for all course-related communications. I will be checking it every weekday at noon.

Teaching Assistants

Graduate students:

o Daniel de Oliveira: <u>danieldeoliveira@ufl.edu</u>

o Taylor Jackson: <u>taylor.jackson1@ufl.edu</u>

■ Teaching assistants are available via Zoom. To arrange a meeting, kindly send an email to the teaching assistant you wish to meet with. Please use your GatorMail account for communication and include "ANS3440" in the email subject. They will get back to you within two days (Monday – Friday, 8:30 am – 5:00 pm).

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 credits 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 A G186 (1692 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 Canvas, please visit https://elearning.ufl.edu/ and use your GatorLink Username and password for logging in.
- You can find a Canvas Quickstart guide for students at https://elearning.ufl.edu/student-help/keep-learning/quickstart-guide-for-students/. For any technical problems with your computer 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 informed about new materials and additional information posted on the platform, please configure your "Notification Preferences" on Canvas. You can modify your Canvas Notification Preferences by following the instructions available at https://community.canvaslms.com/t5/Student-Guide/How-do-I-manage-my-Canvas-notification-settings-as-a-student/ta-p/434.

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:

ltem	Points
Exam 1	180
Exam 2	180
Exam 3	180
Lecture summary 1	70
Lecture summary 2	70
Lecture summary 3	70
In-class activities	250
Total	1000

The exams will consist of a mix of short-answer, multiple-choice, and true/false questions. Questions will cover lecture materials, in-class discussions, and reading materials. There will be no make-up exams, and you are expected to take the exams on the scheduled days. Following grading, exams will be reviewed in class. As part of our effort to encourage reflection and alleviate stress, questions from the exam with the lowest scores across the class will be included as extra credit points in the next exam.

- The objective of the lecture summaries is to assist you in retaining key information, enhancing comprehension, and effectively organizing your knowledge. You are expected to address all learning objectives from the lectures within your summaries. Students are strongly encouraged to work in the summaries promptly after each lecture. There is no specified summary format; feel free to structure it in a way that aligns with your learning style. I will supply a questionnaire to help you identify your learning style, and I will also present examples of summaries customized for both verbal and visual learners to provide guidance.
- The in-class activities will consist of discussions of real-life situations and scientific articles. At the conclusion of each lecture, students are expected to submit the key takeaways from the discussions on Canvas. We will have an in-class activity during each lecture, resulting in a total of 25 activities. The grades for the 20 highest-scoring in-class activities will contribute a total of 250 points (12.5 points each) towards your final grade calculation.

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
E	<59.9%	<599

Tentative Course Schedule/Outline

Date	Weekday	Topic	Deadlines/Notes
24-Aug	Thu	Syllabus & Concepts of Animal Nutrition	
29-Aug	Tue	Anatomy, microbiology, and physiology of the gastrointestinal tract	
31-Aug	Thu	Anatomy, microbiology, and physiology of the gastrointestinal tract	
5-Sep	Tue	Carbohydrates: classification, digestion, and metabolism	
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7-Sep	Thu	metabolism	
12-Sep	Tue	Carbohydrates: classification, digestion, and metabolism	
14-Sep	Thu	Lipids: classification, digestion, and metabolism	
19-Sep	Tue	Lipids: classification, digestion, and metabolism	Recorded lecture.
			Recorded lecture.
21-Sep	Thu	Lipids: classification, digestion, and metabolism	22-Sep: Lecture summary 1
26-Sep	Tue	Review and Exam 1	

		Proteins: classification, digestion, and	
28-Sep	Thu	metabolism	
		Proteins: classification, digestion, and	
3-Oct	Tue	metabolism	
		Proteins: classification, digestion, and	
5-Oct	Thu	metabolism	
		Vitamins: classification, digestion, and	
10-Oct	Tue	metabolism	
		Vitamins: classification, digestion, and	
12-Oct	Thu	metabolism	
		Vitamins: classification, digestion, and	
17-Oct	Tue	metabolism	
		Minerals: classification, digestion, and	
19-Oct	Thu	metabolism	
		Minerals: classification, digestion, and	
24-Oct	Tue	metabolism	
		Minerals: classification, digestion, and	
26-Oct	Thu	metabolism	27-Oct: Lecture summary 2
31-Oct	Tue	Review and Exam 2	
2-Nov	Thu	Feed analyses	
7-Nov	Tue	Feed analyses	
9-Nov	Thu	Regulation of feed intake	
14-Nov	Tue	Regulation of feed intake	
16-Nov	Thu	Digestibility measurements	
21-Nov	Tue	Digestibility measurements	
23-Nov	Thu	Thanksgiving	No class.
28-Nov	Tue	Nutritional requirements	
30-Nov	Thu	Nutritional requirements	1-Dec: Lectures summary 3
5-Dec	Tue	Review and Exam 3	, ,

^{*}I reserve the right to make necessary changes to this schedule throughout the semester.

Other Course Policies

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.
- 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.

Tips for Success:

- Attend Lectures: Regularly attend all lectures to stay up to date.
- Punctuality is Key: Be on time. The initial minutes of each lecture are for reviewing previous content. This is an ideal time for clarifications and questions.
- Effective Note-Taking: Take comprehensive notes as not all material will be on the slides.
- Do Not Hesitate to Ask: 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.
- Focus on the Learning Objectives: 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.
- Study Partner: Consider studying with a buddy. It can provide motivation and offer a fresh perspective on the course material.
- Prioritize Well-being: 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.

Professionalism and Respect: I value diversity and aim to foster an inclusive learning environment that respects various perspectives, identities, and experiences. To achieve this:

- I prioritize universal learning, ensuring an inclusive classroom and interactions. Respect, active participation, and attentive listening contribute to our productive engagement.
- Professional courtesy and sensitivity are essential, especially regarding topics related to differences in various aspects of identity.
- If your preferred name or pronouns differ from official records, please inform me for necessary adjustments.
- Feel free to discuss any external factors impacting your performance; I'm here to support you.
- If something said in class makes you uncomfortable, please communicate with me.
- Treat all course participants respectfully. Constructive, factual comments are encouraged, while harassment is not tolerated.

Attendance Policy and Make-Up Policy

Class attendance is not mandatory but strongly encouraged. Requirements for class attendance, assignments and other work are consistent with university policies that can be found at https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/.

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 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 ufl.edu/public-results/. Summaries of course evaluation results are available to students at 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 0001 Reid Hall, 352-392-8565, https://disability.ufl.edu/.

Campus Resources

Students experiencing crises or personal problems that interfere with their general wellbeing 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, www.counseling.ufl.edu
 - Counseling Services
 - Groups and Workshops
 - Outreach and Consultation
 - Self-Help Library
 - Wellness Coaching
- U Matter We Care, <u>www.umatter.ufl.edu/</u>
- 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-studentconduct-code/
 - o Online Course: https://pfs.tnt.aa.ufl.edu/state-authorization-status/#student-complaint