

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

"Every adversity, every failure, and every heartache carries with it the seed of an equivalent or greater benefit." – Napoleon Hill.









Instructor

Fernanda Batistel

Assistant Professor of Ruminant Nutrition

Office location: Bldg. 499, Room 204E (2250 Shealy Drive)

Email: fernandabatistel@ufl.edu

Phone: 352-294-1005

Office hours: You are welcome to send me an email via Canvas (Inbox) to set up an appointment. Email Policy: Please use Canvas Inbox for all course-related communications. I will be checking it every

weekday at 10 am.

Teaching Assistants

Graduate students:

Daniel de Oliveira: danieldeoliveira@ufl.edu

Derick Rosler: <u>derickrosler@ufl.edu</u>
 Taylor Jackson: taylor.jackson1@ufl.edu

Undergraduate Students:

o Danielle Rhodes: <u>rhodes.danielle@ufl.edu</u>

Melanie Zamora: <u>m.zamora@ufl.edu</u>

Both Danielle and Melanie took my ANS3440 course last Fall semester.

<u>Note</u>: Daniel, Derick, and Taylor are available via Zoom and in-person, while Danielle and Melanie are available only via Zoom. Please email the TA you would like to meet to make an appointment. Use your <u>GatorMail account</u> to communicate with them and add to the email subject <u>ANS3440</u>. They will get back to you within two days (Monday – Friday, 8:30 am – 5:00 pm). Please be respectful with the TA and arrive/log in at the scheduled time.

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 and their use in the diet and diet formulation.

<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 <u>study 5-8 hours per week outside the classroom</u>.

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

Meeting Days and Time, and Location

Days: Mondays, Tuesdays, Wednesdays, and Thursdays.

Time: 8:30 - 09:20 am.

Location: Little Hall 0101 (1400 Stadium Road)

Use of E-Learning/Canvas

Canvas is the Learning Management System that we will use for our course. You can log in to Canvas here https://elearning.ufl.edu/. Log in with your GatorLink Username and password.

You can find a Quickstart guide for students here 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 and grades will be posted on Canvas during the course. Please set up the "Notification Preferences" on Canvas to be alerted when new material and additional information are posted on the web. Follow these instructions to change Canvas Notification Preferences https://community.canvaslms.com/t5/Student-Guide/How-do-I-manage-my-Canvas-notification-settings-as-a-student/ta-p/434.

Course Objectives

- 1. Have a basic vocabulary of terms important in the area of animal nutrition.
- 2. Understand the anatomy, physiology, and microbiology of the gastrointestinal tract of ruminant and non-ruminant species.
- 3. Understand the six major nutrient classes and how they are digested and metabolized.
- 4. Understand various methods used to determine feed ingredients' chemical composition and biological value.
- 5. Understand how animals regulate feed intake.
- 6. Understand how animal diets are formulated to meet requirements for maintenance and production.

Course Resources

No textbook is required, but we will use some chapters of the book listed below.

- Pond, Church, and Pond. Basic Animal Nutrition and Feeding. 1995.
- Also, key research papers will be posted on Canvas.

Evaluation Methods and Criteria

The total number of points for this course is 1000. There will be 8 quizzes and 8 summaries. The grade of the 6 highest quizzes is worth a total of 600 points (100 points each) and will be used to calculate your final grade (in this way, you can eliminate the 2 lowest quiz scores). The summaries are worth 400 points (50 points each).

<u>Final grade</u>: sum of the 6 highest quizzes + sum of 8 summaries

<u>Comprehensive Final Exam</u> (200 points) is <u>optional</u>. It can be used to improve your grade by replacing the third and fourth lowest quizzes' scores. However, <u>if you decide to take it, it will count</u> and automatically will eliminate the two lowest quizzes scores.

<u>There will be no make-up quizzes</u>. You are expected to take the quizzes on the scheduled days. If you miss two quizzes, you can take the comprehensive final exam.

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/Note
24-Aug	Wed	Syllabus	
25-Aug	Thu	Concepts of animal nutrition	
29-Aug	Mon	Concepts of animal nutrition	
30-Aug	Tue	Anatomy, microbiology, and physiology of the GIT	
31-Aug	Wed	Anatomy, microbiology, and physiology of the GIT	
1-Sep	Thu	Anatomy, microbiology, and physiology of the GIT	
5-Sep	Mon	No class - Labor Day	
6-Sep	Tue	Anatomy, microbiology, and physiology of the GIT	Summary - Concepts of Animal Nutrition & Anatomy, microbiology, and physiology of the GIT
7-Sep	Wed	Quiz 1	
8-Sep	Thu	Carbohydrates: nutrition and metabolism	
12-Sep	Mon	Carbohydrates: nutrition and metabolism	
13-Sep	Tue	Carbohydrates: nutrition and metabolism	
14-Sep	Wed	Carbohydrates: nutrition and metabolism	
15-Sep	Thu	Carbohydrates: nutrition and metabolism	
19-Sep	Mon	Carbohydrates: nutrition and metabolism	Summary - Carbohydrates: nutrition and metabolism
20-Sep	Tue	Quiz 2	
21-Sep	Wed	Lipids: nutrition and metabolism	
22-Sep	Thu	Lipids: nutrition and metabolism	
26-Sep	Mon	Lipids: nutrition and metabolism	
27-Sep	Tue	Lipids: nutrition and metabolism	
28-Sep	Wed	Lipids: nutrition and metabolism	
29-Sep	Thu	Lipids: nutrition and metabolism	Summary - Lipids: nutrition and metabolism
3-Oct	Mon	Quiz 3	
4-Oct	Tue	Proteins: nutrition and metabolism	

6-Dec	Tue	Quiz 8	
5-Dec	Mon	Nutritional requirements for maintenance and production	Summary - Digestibility measurements & Nutritional requirements for maintenance and production
1-Dec	Thu	Nutritional requirements for maintenance and production	
30-Nov	Wed	Digestibility measurements	
29-Nov	Tue	Digestibility measurements	
28-Nov	Mon	Digestibility measurements	
24-Nov	Thu	No class - Thanksgiving	
23-Nov	Wed	No class - Thanksgiving	
22-Nov	Tue	No class - Thanksgiving	
21-Nov	Mon	No class - Thanksgiving	
17-Nov	Thu	Quiz 7	-0. Asset of the second
16-Nov	Wed	Regulation of feed intake	Summary - Feed additives & Feed analyses & Regulation of feed intake
15-Nov	Tue	Regulation of feed intake	
14-Nov	Mon	Regulation of feed intake	
10-Nov	Thu	Feed analyses	
9-Nov	Wed	Feed analyses	
8-Nov	Tue	Feed analyses	
7-Nov	Mon	Quiz 6	
3-Nov	Thu	Water	Summary - Vitamins: nutrition and metabolism & Water
2-Nov	Wed	Vitamins: nutrition and metabolism	
1-Nov	Tue	Vitamins: nutrition and metabolism	
31-Oct	Mon	Vitamins: nutrition and metabolism	
27-Oct	Thu	Vitamins: nutrition and metabolism	
26-Oct	Wed	Vitamins: nutrition and metabolism	
25-Oct	Tue	Quiz 5	
24-Oct	Mon	Minerals: nutrition and metabolism	Summary - Minerals: nutrition and metabolism
20-Oct	Thu	Minerals: nutrition and metabolism	
19-Oct	Wed	Minerals: nutrition and metabolism	
18-Oct	Tue	Minerals: nutrition and metabolism	
17-Oct	Mon	Minerals: nutrition and metabolism	
12-Oct 13-Oct	Thu	Quiz 4	metabolism
	Wed	Proteins: nutrition and metabolism	Summary - Proteins: nutrition and
11-Oct	Tue	Proteins: nutrition and metabolism	
10-Oct	Mon	Proteins: nutrition and metabolism	
6-Oct	Thu	Proteins: nutrition and metabolism	
5-Oct	Wed	Proteins: nutrition and metabolism	

^{*}I reserve the right to alter this schedule during the semester.

Other Course Policies

Student Feedback: ALL types of feedback are welcome. You can email me or drop a note into the "ANS3440 Suggestion envelope" I will keep at my office door (Bldg. 499, Room 204E).

Late work: Late work will be accepted, but 5 points will be deducted for each 1 hour that the assignment is late.

Cellphone: please don't use your cellphone during the class period. Keep your phone in silent mode.

Unhappy with the grades that you received? Please follow the steps below in order:

- Revise the quiz's rubric and check what you have answered.
- Check the lecture materials.
- Make notes of what you think was not properly graded.
- Wait 24 hours.
- Recheck the rubric and your answers.
- If you still think your quiz was not properly graded, send me an email via Canvas, and I will be happy to discuss your grade with you!

Advice for Success:

- Attend the lectures.
- Arrive in class on time. The first 5-7 minutes of each lecture will be used to revise the key points of the previous lecture. This is an excellent time to clarified concepts and ask questions.
- Take notes. Not all the information will be listed on the slides because I expect you to pay attention to the class and make some notes.
- Ask your questions! You can ask them in the classroom, by email, or in my office.
- Revise, revise, and revise! Revise the lecture materials after each class.
- When studying, keep in mind the lecture objectives.
- Find a buddy to study with you. It can keep you motivated and gives you another level of insight into course materials.
- Be active. Eat well. Get enough sleep. Enjoy your loved ones.

Professionalism and Respect: I value our diverse identities and viewpoints. I would like to create a learning environment for my students that supports a diversity of thoughts, perspectives, and experiences, and honors your identities (including race, gender, class, sexuality, religion, ability, etc.). To help accomplish this:

- I am committed to the principle of universal learning. This means that our classroom, virtual spaces, and interactions are as inclusive as possible. Mutual respect, civility, and the ability to listen and observe others carefully are crucial to universal learning. Active, thoughtful, and respectful participation in all aspects of the course will make our time together as productive and engaging as possible.
- Professional courtesy and sensitivity are crucial for individuals and topics dealing with differences in race, culture, religion, politics, sexual orientation, gender, gender variance, and nationalities.
- If you have a name and/or set of pronouns that differ from those that appear in your official records, please let me know, and I will make changes to my records.

- If you feel like your performance in the class is being impacted by your experiences outside of course, please do not hesitate to come and talk with me. I want to be a resource for you.
- I (like many people) am still in the process of learning about diverse perspectives and identities. If something was said in class (by anyone) that made you feel uncomfortable, please talk to me about it.
- You are expected to treat your instructor, teaching assistants, and all other participants in the course
 with courtesy and respect. Your comments to others should be factual, constructive, and free from
 harassing statements. You are encouraged to disagree with other students, but such disagreements
 need to be based upon facts and documentation (rather than prejudices and personalities).

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

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/students/. Summaries of course evaluation results are available to students at gatorevals.aa.ufl.edu/public-results/.

Students Requiring Accommodations

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting https://disability.ufl.edu/students/get-started/. 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.

University 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.

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

Student Privacy

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see http://registrar.ufl.edu/catalog0910/policies/regulationferpa.html.

Campus Resources

Health and Wellness

U Matter, We Care:

If you or a friend is in distress, please contact <u>umatter@ufl.edu</u> or 352 392-1575 so that a team member can reach out to the student.

Counseling and Wellness Center: http://www.counseling.ufl.edu/cwc, and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Sexual Assault Recovery Services (SARS)

Student Health Care Center, 392-1161.

University Police Department at 392-1111 (or 9-1-1 for emergencies), or http://www.police.ufl.edu/.

Academic Resources

E-learning technical support, 352-392-4357 (select option 2) or email to Learning-support@ufl.edu. https://lss.at.ufl.edu/help.shtml.

Career Resource Center, Reitz Union, 392-1601. Career assistance and counseling. https://www.crc.ufl.edu/.

Library Support, http://cms.uflib.ufl.edu/ask. Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. https://teachingcenter.ufl.edu/.

Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. https://writing.ufl.edu/writing-studio/.

Student Complaints Campus: https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf.

On-Line Students Complaints: http://www.distance.ufl.edu/student-complaint-process