

COURSE NAME; NUMBER; SEMESTER; MEETING DAYS, TIMES, AND PLACE.

Online Animal Nutrition, 11:067:330:90, 3 credits, Summer 2024 Session C

This course will be offered in an Asynchronous format.

Office Hours: Mondays from 12-1pm EST and Thursdays from 8:30-9:30am EST via zoom. These meetings are not mandatory but will give students the opportunity to ask questions and get to know the professor and fellow students in the course. These meetings are a chance for you to ask questions and get to know your fellow online students. If dates and times are changed, I will notify you via canvas announcements. Additional office hours are by appointment and are encouraged.

CONTACT INFORMATION:

Instructor and Course Coordinator: Professor Henry Bignell

Office Location: 120 Bartlett Hall

Phone: 848-932-9404 Email: h.bignell@rutgers.edu

Office Hours: Mondays from 12-1pm EST, Thursdays from 8:30-9:30am EST, and by appointment via zoom.

PREREQUISITES: 2 semesters and general biology and 2 semesters of general chemistry

COURSE WEBSITE, RESOURCES AND MATERIALS:

- We will be using Canvas for this course. You will log into the site (<https://Canvas.rutgers.edu>) using your net id and password. This will take you to the course homepage. On this page, you will find links to all the modules, announcements, document sharing, and zoom meetings. For tech help with Canvas please visit <https://it.rutgers.edu/help-support>. If you cannot access the Canvas website, please call the Canvas IT department at 877-361-1134 or you can email them at: help@canvas.rutgers.edu. If you are new to the Canvas system, you can access the following website for an overview of the program: <https://canvas.rutgers.edu/students/getting-started-in-canvas-students/>
- The required textbook for the course is “Animal Feed, Feeding, and Nutrition and Ration Evaluation by David Tisch. I will be assigning readings from the text that will complement and supplement the material from the online modules that can be found on the course homepage. Many of the concepts that are discussed and presented in the text complement the material in the modules. In addition, this is a solid reference text that you can keep for a long time. The book is available online from the Rutgers bookstore. Go to the following website: www.rutgers.bncollege.com. Input spring for the term, 067 for the department, and 90 for the section. If you are in the New Brunswick area, you can also purchase it from the main Barnes and Noble bookstore. You can also purchase the book online at www.amazon.com.
- Technology requirements
 - Computer (Macintosh – OS X or newer, or PC – Windows 8 or newer) with high-speed internet connection
 - Speakers
 - Built-in or external webcam
 - Built-in or external microphone
 - More information on [Canvas Basic Computer Specifications](#) and [Supported Browsers](#).

COURSE DESCRIPTION:

Animal nutrition is designed to provide the student with a basic background of the variety of factors that must be considered when feeding any animal. Regardless of whether the student is feeding a cow, horse, dog, elephant or even a snake, there is a set of basic questions that need to be answered. This course will spend a large amount of time discussing the domestic species because the most is known about these animals, but it is important to think about how that information applies more broadly.

The course is divided into three sections. The first section deals with anatomy and physiology (modules 1 -7 and corresponding chapters), the second with metabolism and biochemistry (modules 8 through 14 and corresponding textbook chapters), and the third on how to feed specific physiological states and species (modules 15 through 25 and corresponding chapters)

This is an asynchronous course. You will log into the Canvass course site (canvas.rutgers.edu) using your net id and password. The on-line component will consist of you covering the course material through a series of on line modules and corresponding textbook chapters. The site provides you with due dates for the assigned readings as well as the other activities such as quizzes, homework, exams, and additional readings. If you follow the recommended dates for the reading material, this will keep you on track for the exams. I also encourage you to contact me as soon as possible with any questions/comments that you have.

PROGRAM LEARNING GOALS:

<https://animalsciences.rutgers.edu/undergraduate/mission.htm>

Students will:

- Critically evaluate different methods and models that are used to determine feed quality (PLG 2)
 - Assessment: Quizzes, Homework assignments and exams
- Develop an understanding of the various digestive processes and strategies used by different species (PLG 3)
 - Assessment: Quizzes, Homework assignments and exams
- Gain an appreciation of the major nutrients and how they are utilized by various types of animals (PLG 2)
 - Assessment: Quizzes, Homework assignments and exams
- Evaluate various types of diets that are used during and animal's different life stages and production as well as the appropriate diets that are fed to the major animal species (PLGs 1 and 3)
 - Assessment: Quizzes, Homework assignments and exams

ASSIGNMENTS & GRADING:

Grading will be assigned based on the results of the following:

- | | |
|--|-----------|
| • Ten 15-minute quizzes (10 points each – 100 points total) | 20% total |
| • Three homework assignments (various points – 150 points total) | 30% total |
| • Two online hourly exams (75 points each – 150 points total) | 30% total |
| • Online final exam (100 points) | 20% total |

The 3 exams will be online and will be based on material covered every 7 to 10 modules (including corresponding textbook chapters and additional readings). You will have 60 minutes to complete the first two exams and 100 minutes for the final. The exam format will consist of a combination of short answers, multiple choice, and true/false questions. The 3 online exams will be available on the dates listed below. **There are NO make - up exams.** You have already received the times and dates of the exams so you can schedule your activities accordingly. No excuses will be accepted after the exam dates have passed. The exams are opened book and notes, but it is recommended that you have read and studied the material before taking the exam so you will have time to finish it. **The exam is to be done individually and not with other students.**

There will be 10 quizzes given roughly twice a week. (Please see the modules section of the Canvas site and the end of this syllabus for the exact weeks.) The quizzes will be available on the Canvas site for 3 days and be due at 11:59pm on the deadline date. Once you access the quiz, it will be available for 15 minutes. If you access the quiz at 11:50pm you will not have the full 15 minutes to complete the quiz. The quizzes will cover the material noted on the end of the syllabus. **There are NO make-up quizzes.**

The final portion of your grade will be based on the timely completion of 3 homework assignments. One homework assignment will be posted and due during each section of the course. The homework assignments will be available on the course web page within the appropriate module on a Monday and you will have approximately 10 days to complete the questions. Homework assignments will be due back to me by 11:59 pm on the date listed in your syllabus. Late submissions will not be accepted.

The maximum number of points that can be accumulated is 500. Your grade will be based on the accumulation of total points from the above activities: (3 exams, 10 quizzes and 3 homework assignments)

A = 450 to 500 points

B+ = 425 to 449.9

B = 400 to 424.9

C+ = 375 to 399.9

C = 350 – 374.9

D = 300 – 349.9

F = 299.9 and below

ACADEMIC INTEGRITY

The university's policy on Academic Integrity is available at <http://academicintegrity.rutgers.edu/academic-integrity-policy>. The principles of academic integrity require that a student:

- properly acknowledge and cite all use of the ideas, results, or words of others.
- properly acknowledge all contributors to a given piece of work.
- make sure that all work submitted as his or her own in a course or other academic activity is produced without the aid of impermissible materials or impermissible collaboration.
- obtain all data or results by ethical means and report them accurately without suppressing any results inconsistent with his or her interpretation or conclusions.
- treat all other students in an ethical manner, respecting their integrity and right to pursue their educational goals without interference. This requires that a student neither facilitate academic dishonesty by others nor obstruct their academic progress.
- uphold the canons of the ethical or professional code of the profession for which he or she is preparing.

Adherence to these principles is necessary in order to ensure that

- everyone is given proper credit for his or her ideas, words, results, and other scholarly accomplishments.
- all student work is fairly evaluated and no student has an inappropriate advantage over others.

- the academic and ethical development of all students is fostered.
- the reputation of the University for integrity in its teaching, research, and scholarship is maintained and enhanced.

Failure to uphold these principles of academic integrity threatens both the reputation of the University and the value of the degrees awarded to its students. Every member of the University community therefore bears a responsibility for ensuring that the highest standards of academic integrity are upheld.

STUDENT CODE OF CONDUCT

Students are required to adhere to the [university student code of conduct](http://studentconduct.rutgers.edu/student-conduct-processes/university-code-of-student-conduct/#1495568095620-2f5ce77d-17dd) delineated in the Rutgers student affairs website [student conduct](http://studentconduct.rutgers.edu/student-conduct-processes/university-code-of-student-conduct/#1495568095620-2f5ce77d-17dd) page: <http://studentconduct.rutgers.edu/student-conduct-processes/university-code-of-student-conduct/#1495568095620-2f5ce77d-17dd>

SEBS DEI STATEMENT

It is our intention that students of all backgrounds will be well served by this course. We will work to create an environment of inclusion which respects and affirms the inherent dignity, value, and uniqueness of all individuals, communities and perspectives. We are lucky to have a diverse university. Diverse voices and life experiences enhance the learning process and we welcome students to share their personal experiences. We will not tolerate disrespectful language or behavior against any individual or group. If you feel as though you have been disrespected or treated unfairly by the instructors or any other individual please let us know. You may speak with the instructors in person, over email or report anonymously via the Office of Academic Programs. In addition, you may also report bias to the Rutgers Diversity and Inclusion initiative using this link: <http://inclusion.rutgers.edu/report-bias-incident/>.

STUDENT WELLNESS SERVICES

Counseling, ADAP & Psychiatric Services (CAPS)

(848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901/ www.rhscaps.rutgers.edu/

CAPS is a University mental health support service that includes counseling, alcohol and other drug assistance, and psychiatric services staffed by a team of professional within Rutgers Health services to support students' efforts to succeed at Rutgers University. CAPS offers a variety of services that include individual therapy, group therapy and workshops, crisis intervention, referral to specialists in the community and consultation and collaboration with campus partners.

Violence Prevention & Victim Assistance (VPVA)

(848) 932-1181 / 3 Bartlett Street, New Brunswick, NJ 08901 / www.vpva.rutgers.edu/

The Office for Violence Prevention and Victim Assistance provides confidential crisis intervention, counseling and advocacy for victims of sexual and relationship violence and stalking to students, staff and faculty. To reach staff during office hours when the university is open or to reach an advocate after hours, call 848-932-1181.

Disability Services

(848) 445-6800 / Lucy Stone Hall, Suite A145, Livingston Campus, 54 Joyce Kilmer Avenue, Piscataway, NJ 08854 / <https://ods.rutgers.edu/>

Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: <https://ods.rutgers.edu/students/documentation-guidelines>. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the

accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: <https://webapps.rutgers.edu/student-ods/forms/registration>.

DoSomething button through Rutgers Dean of Students office:

<http://health.rutgers.edu/do-something-to-help/>

Wellness Coaching through Rutgers HOPE:

<http://health.rutgers.edu/education/hope/wellness-coaching/>

Self-Help Apps found on the Rutgers Student Health website:

<http://health.rutgers.edu/education/self-help/self-help-apps/>

NJ Hopeline - (1-855-654-6735) | **National Suicide Hotline** - (1-800-273-8255)

BASIC NEEDS RESOURCES

Any student who has difficulty affording groceries or accessing sufficient food, or who lacks a safe and stable place to live, is urged to contact the Rutgers Student Food Pantry and/or the Dean of Students (details below). Furthermore, please notify the professor if you are comfortable doing so, as they may be able to provide additional support.

Rutgers Student Food Pantry

848-932-5500 / College Ave Student Center, Room 115 (126 College Ave) /

<http://ruoffcampus.rutgers.edu/food/>

Check their website for hours and additional locations. The Rutgers Student Food Pantry is dedicated to helping all Rutgers students in need of food, no questions asked. Students will be provided with groceries that typically last about one week.

Dean of Students Office

848-932-2300 / 88 College Avenue, New Brunswick, NJ 08901 / <https://deanofstudents.rutgers.edu/>

Mon-Fri, 8:30am-5:00pm

The Dean of Students Office at Rutgers University-New Brunswick provides solutions, services, and support to help students navigate Rutgers University. The Office serves as a student support network by providing advocacy, problem resolution, and critical incident intervention for those times when additional assistance is needed. Please call to schedule an appointment to meet with a representative from the Dean's office.

STUDENT SUPPORT SERVICES

Academic Services:

- For academic support visit [rutgers academics student support](https://www.rutgers.edu/academics/student-support) at <https://www.rutgers.edu/academics/student-support>
- Any student can obtain tutoring and other help at the [learning centers](https://rlc.rutgers.edu/) on each campus. Check the website at <https://rlc.rutgers.edu/>
- For coaching help with writing skills and assignments visit the [writing coaching](https://rlc.rutgers.edu/student-services/writing-coaching) webpage at <https://rlc.rutgers.edu/student-services/writing-coaching>
- Many library resources are available online. Assistance is available through phone, email, and chat. For information, check the [rutgers libraries](https://www.libraries.rutgers.edu/) website at <https://www.libraries.rutgers.edu/>

RUTGERS STUDENT HEALTH SERVICES:

Rutgers student health services is dedicated to health for the whole student body, mind and spirit. It accomplishes this through a staff of qualified clinicians and support staff. Services are available at several locations throughout the New Brunswick-Piscataway area. For more information visit: <http://health.rutgers.edu/>

VETERAN SERVICES:

Rutgers is proud to support veterans. If you are a veteran of the armed forces, please visit the office of veteran and military programs and services website for more information: <https://veterans.rutgers.edu/>

COURSE SCHEDULE:

Week	Date	Lecture Topic	Textbook Chapter	Homework (HW) Assignments, Quizzes & Exams Schedule
1a	5/28	Introduction	1	HW 1: Open
1a	5/29	Module 1: Feeds and Feedstuff	3	
1b	5/30	Module 2: Assessing Nutritive Value	4	
1b	5/31	Module 3: Comparative Anatomy	2	Quiz 1 Due @ 11:59pm (Week 1a)
2a	6/3	Module 4: Rumen Fermentation		Quiz 2 Due @ 11:59pm (Week 1b)
2a	6/4	Module 5: Nutrient Digestion		
2b	6/5	Module 6: Energy Balance	5	Quiz 3 Due @ 11:59pm (Week 2a)
2b	6/6	Module 7: Introduction to Nutrients	11	HW 1 Due @ 11:59pm
2	6/7-6/10	Exam 1 Modules 1-7 and Textbook Chapters 1-4		Open: June 7 @ 5:00pm Closed: June 10 @ 11:59pm 60 minutes- 1 submission on Canvas
3a	6/10	Module 8: Bioenergetics		HW 2: Open
3a	6/11	Module 9: Carbohydrates and Textbook Chapter 6	6	
3b	6/12	Module 10: Volatile Fatty Acids		Quiz 4 Due @ 11:59pm (Week 3a)
3b	6/13	Module 11: Lipids	8	
4a	6/17	Module 12: Proteins	7	Quiz 5 Due @ 11:59pm (Week 3b)
4a	6/18	Module 13: Vitamins	9	
4b	6/19	Module 14: Minerals	10	Quiz 6 Due @ 11:59pm (Week 4a) HW 2 Due @ 11:59pm
4	6/20-6/24	Exam 2 Modules 8-14 and Textbook Chapters 5-10		Open: June 20 @ 5:00pm Closed: June 24 @ 11:59pm 60 minutes- 1 submission on Canvas
5a	6/24	Module 15: Practical Nutrition	12	HW 3: Open

Week	Date	Lecture Topic	Textbook Chapter	Homework (HW) Assignments, Quizzes & Exams Schedule
5a	6/25	Module 16 and 17: Maintenance and Reproduction		
5b	6/26	Module 18: Lactation	18	
5b	6/27	Module 19: Growth		Quiz 7 Due @ 11:59pm (Week 5a)
6	6/28	Module 20: Beef Cattle Nutrition	16	
6	7/1	Module 21: Poultry Nutrition and Textbook Chapter 26	26	Quiz 8 Due @ 11:59pm (Week 5b)
7a	7/2	Module 22: Swine Nutrition and Textbook Chapter 14	14	
7a	7/8	Module 23: Equine Nutrition and Textbook Chapter 24	24	Quiz 9 Due @ 11:59pm (Week 6)
7b	7/9	Module 24: Cats and Dog Nutrition and Textbook Chapters 28 and 30	28	
7b	7/10	Module 24: Cats and Dog Nutrition and Textbook Chapters 28 and 30	30	Quiz 10 Due @ 11:59pm (Week 7a)
8	7/11	Module 25: Sheep and Goats Nutrition and Textbook Chapter 20 and 22	20,22	HW 3 Due @ 11:59pm
8	7/12-7/17	Final Exam Modules 15-25 and Textbook Chapters 12-30		Open: July 12 @ 5:00pm Closed: July 17 @ 11:59pm 100 minutes- 1 submission on Canvas