

ANS 2002: The Meat We Eat

I. General Information

Class Meetings

- Spring 2024
- Class Time: Monday, Wednesday, and Friday (8:30am-9:20am Period 2)
- Class Location: Room MB086
- Three Credit Hours

Instructor

- Kyle Mendes
- Office: Animal Science (Bldg 459) Room 212
- Email: kmendes15@ufl.edu
- Cell phone: (209)556-7499
- Office Hours: MWF 11:35-12:35

Course Description

ANS 2002- This three-hour course fulfills the core curriculum requirement for biological sciences (B). Courses in the biological sciences introduce students to the basic concepts of science and the scientific method and enhance awareness of scientific developments and their impact on society and the environment. This class provides students with an understanding of scientific terms, concepts and theories involving animals and the products they produce. This will allow students to formulate empirically testable hypotheses relative to the safety, quality, humaneness and sustainability of muscle food production. The Meat We Eat is a non-ANS major lecture course designed to create a more informed consumer of animal muscle products and address current issues in animal agriculture. The lectures will cover all aspects of animal protein production, processing and retailing, as well as the role of animal muscle protein in the diet. Students will understand proper selection, preparation, cooking and storage of animal protein products and their influence on food safety and palatability. Students will develop an appreciation for meat and muscle chemistry and composition, muscle growth and contraction.

Course grading: There will be no makeup questions of the day or examinations. Points of the day will be assessed on at least 20 days. For students with an authorized excuse, the grade for a missed major examination will be determined by averaging the scores for the major examinations that were taken.

General Education

Biological Sciences

This course accomplishes the [General Education](#) objectives of the subject areas listed above. A minimum grade of C is required for General Education credit. Courses intended to satisfy General Education requirements cannot be taken S-U.

Course Objectives

- Know the basic concepts, theories and terminology of animal, meat, and food science and apply the scientific method to meat animal production.
- Know the major scientific developments within animal, meat, and food science and the impacts on society and the environment.
- Know relevant processes of physiology and biochemistry within animal, meat, and food science which impact food safety and quality.
- Know the role of muscle foods in a balanced diet.
- Know the role of meat animal production and muscle foods in feeding a growing world population.
- Students will develop the ability to formulate empirically testable hypotheses relative to the safety, quality, humaneness and sustainability of muscle food production.
- Students will be asked to take facts presented in class and synthesize a written answer for real world questions.
- Students will learn the chain of production, including grading, processing and merchandising for major meat animal species

Required Readings and Works

- Links to all required reading material are available in the schedule of the syllabus and will be made available in each module on canvas
- Materials and Supplies Fees: n/a

II. Graded Work

Description of Graded Work

Grading Scale

<u>Work</u>	<u>Description</u>	<u>Notes</u>	<u>Points</u>
<u>Introductory Biography</u>	Students will submit a 300-word personal biography to introduce themselves to the course instructor. Required content includes self-introduction, background, interests, major, goals upon graduation, and what may help them succeed in this class.		<u>50</u>
<u>Opinion Video</u>	After the first week of class students will be required to create a video of themselves reacting to question about modern livestock production practices as well as meat and milk's role in the diet. At the conclusion of the semester students will create a follow up video reacting to same questions. In the follow up video students will be expected to have developed will thought out opinions and answers to these questions referencing scholarly articles and credible sources to support their answers. This assignment is meant to a deep reflection on the students role as both a consumer of food products and their role in feeding an ever growing society.		<u>100</u>
<u>Preparing a meat dish</u>	Students will be require to select a meat or meat substitute based dish that they have never consumed and create a video preparing and cooking the dish and write a short reflection paper highlighting the history and origin of the dish. And their experience preparing and consuming it.		<u>100</u>
<u>Two Exams</u>	The exams will test the students' understanding of the concepts taught through 10 weeks of class. The exams will be taken in class and consist of ~100 questions. The		<u>200</u>

	questions will consist of fill-in-the-blank, multiple choice and short and long answer.		
<u>Experiential Learning Self Reflection Paper</u>	<p>Living at Poverty Level Challenge and Design a Weekly Grocery Calendar</p> <p>Students will be assigned a country and will to need to design a week long diet for a family of 4 leveling at poverty level in their assigned country. With one day including a completely vegan menu. Students will then be challenged to pick one meal they designed and prepare and consume it.</p> <p>Students are required to submit a 1,000-word self-reflection report designed to promote critical thinking on a topic of societal interest. They should reflect on</p> <ul style="list-style-type: none"> • Ensuring the diet meets minimum nutritional standards • how accessible it is in the developed and developing world, • Reflect on the ability to include animal source foods in the diet • how concepts in the experiential learning activities affect important issues such as household income, level of college education, etc. • and how the topics are relevant to their intellectual, personal, and professional development. <p>The report should follow MLA style, double-spaced, size 12 Times New Roman with 1 inch-margin. The references, if any, should be from primary literature. The references must be in ASAS style. The written reports are due by 11:59 pm of the due date. All written assignments must be uploaded to Canvas for grading. Written assignments will be evaluated using a rubric provided in Canvas.</p>	<u>1,000 words</u>	<u>100</u>
<u>Experiential Skill Building Activities</u>	We will visit the swine, beef and meat facilities within the animal science	<u>3 activities</u>	<u>50 points each</u>

	<p>department and write three one page refection papers on the condition and facilities in a modern livestock operation.</p>		
<p><u>Written Assignments</u></p>	<ul style="list-style-type: none"> • Compare livestock production benchmarks and world population One page paper comparing production of a modern dairy cow to its counter part 50 year ago while also comparing the worlds population growth over the same time period. Focusing on how we have increased production to feed a larger population. • Production Claim Assignment Student will select one production claim that is listed on the label of an animal source food and research its merit. Then prepare a powerpoint slide to explain the production claim. • Survey of consumers of meat products and connections to modern livestock production Student will survey three non family members on their daily eating habits and feelings towards animal production. Then write a one page paper comparing it to their own diet and feelings towards animal scoured foods. • Selection of Animal Agriculture related Issue Students will select one animal agriculture related issue and write a one page profile what are the strongest arguments of each side of that issue. • Complete: First 1000 days assignment Students will write a one page paper on the importance of proper nutrition in the first 1000 days of life and what that proper nutrition looks like. • Define Ethics and Sustainability with relation to Livestock Production Students will write a one page paper defining what they believe ethical and sustainable livestock production looks like. 	<p><u>7 1 page papers</u></p>	<p><u>50 points each</u></p>

<p><u>Comprehensive Final Exam</u></p>	<p>There will be a FINAL exam. The exam will test the students' understanding of modern and historical impacts meat has had on the diet and lifestyle of different cultures taught during weeks 1-16 in the course. As well as students should be able to develop and defend their viewpoint of if and how animal source foods should be included in the diet. The exam will be taken in class. The questions will consist of multiple choice, fill-in-the-blank, identification, and short and long answer.</p>		<p><u>200 points</u></p>
<p><u>Attendance</u></p>	<p>Attendance will be tracked through points of day which will be a short reflection on the discuss of class that week given through canvas at the conclusion of class every Friday.</p>		<p><u>160 points</u></p>

For information on how UF assigns grade points, visit: <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>

A	94 – 100%		C	74 – 76%
A-	90 – 93%		C-	70 – 73%
B+	87 – 89%		D+	67 – 69%
B	84 – 86%		D	64 – 66%
B-	80 – 83%		D-	60 – 63%
C+	77 – 79%		E	<60

III. Annotated Weekly Schedule

Week	Topics, Homework, and Assignments
Week 1	<ul style="list-style-type: none"> • Topic: Module 1 History of Feeding a Diverse World: Introduction • Summary: Introduce the course and cover expectations listed in the Syllabus. Begin to study what has historically made up the diet of different countries. • Assignment: Living at Poverty Level Challenge
Week 2	<ul style="list-style-type: none"> • Topic: Module 1 History of Feeding a Diverse World • Summary: Examine where current dietary standard evolved from and their current application in a modern society • Assignment: Design a Weekly Grocery Calendar
Week 3	<ul style="list-style-type: none"> • Topic: Module 2 Brief History of Animal Production • Summary: Explore how modern livestock practices evolved and their place in a modern society. • Assignment: Complete Compare livestock production benchmarks and world population
Week 4	<ul style="list-style-type: none"> • Topic: Module 2 Brief History of Animal Production • Summary: Class this week will be conduct at our cattle, swine and meat facilities. This week will focus on the experiential learning component of the class students will observe animal behavior and modern livestock production practices. • Assignment: Reflection on modern livestock production practices
Week 5	<ul style="list-style-type: none"> • Topic: Module 3 Current Challenges of Animal Production • Summary: This week class will be focused on discussing the ethical and economic challenges of Animal welfare. • Assignment: Production Claim Assignment Select Country for Country Profile
Week 6	<ul style="list-style-type: none"> • Topic: Module 3 Current Challenges of Animal Production • Summary: This week we will focus on the sustainability of modern animal production. Focusing on environmental impacts in livestock production • Assignment: Exam 1
Week 7	<ul style="list-style-type: none"> • Topic: Module 4 Understanding Animal Welfare • Summary: The Meat Paradox is one of the key issues this class tries to address. This week we will present the meat paradox and discuss the ethical concerns that come with including meat. • Assignment: Survey of consumers of meat products and connections to modern livestock production
Week 8	<ul style="list-style-type: none"> • Topic: Module 4 Understanding Animal Welfare • Summary: This week we will continue to explore the Meat Paradox and discuss why people choose to historically include meat in their diet.

Week	Topics, Homework, and Assignments
	<ul style="list-style-type: none"> • Assignment: N/A
Week 9	<ul style="list-style-type: none"> • Topic: Module 5 Current Role of Animal Source Foods in the Diet • Summary: This week we will discuss the history of food and animal source food preservation that has led to the complexity and uniqueness of meat dishes around the world. • Assignment: Preparing a meat dish
Week 10	<ul style="list-style-type: none"> • Topic: Module 5 Current Role of Animal Source Foods in the Diet • Summary: This week we discuss the many challenges of feeding the world and specifically compare and contrast those challenges in developing and developed countries. Focusing on what role animal source proteins should play in challenge. • Assignment: Selection of Animal Agriculture related Issue
Week 11	<ul style="list-style-type: none"> • Topic: Module 5 Current Role of Animal Source Foods in the Diet • Summary: This week we will discuss the role of animal source foods in the develop of infants. This week we will highlight the challenges of providing animal source foods to developing countries. • Assignment: Exam 2 Complete: First 1000 days assignment
Week 12	<ul style="list-style-type: none"> • Topic: Module 6 Ethics and Sustainable of Livestock Production • Summary: This week we will discuss the ethical implications of livestock production paying attention where many of the widely varying viewpoints originate from. • Assignment: Animal Agriculture related Issue Due
Week 13	<ul style="list-style-type: none"> • Topic: Module 6 Ethics and Sustainable of Livestock Production • Summary: This we will expand on the ethical implication of livestock production focusing on environmental impacts. • Assignment: Define Ethics and Sustainability with relation to Livestock Production
Week 14	<ul style="list-style-type: none"> • Topic: Module 7 The Future of Animal Source Foods in the Diet • Summary: This week we will discuss what the future options of animal source foods and protein in the diet. We will focus on cell cultured meat, alternative proteins and alternative production methods. • Assignment: Country Profile Due
Week 15	<ul style="list-style-type: none"> • Topic: Module 7 The Future of Animal Source Foods in the Diet • Summary: This week we will discuss what the future options of animal source foods and protein in the diet. We will focus on cell cultured meat, alternative proteins and alternative production methods. • Assignment: Final Video Project Due

IV. Student Learning Outcomes (SLOs)

Student Learning Outcomes (SLOs)

At the end of this course, students will be expected to have achieved the General Education learning outcomes as follows:

Content: Students demonstrate competence in the terminology, concepts, theories, and methodologies used within the discipline(s).

- Identify, describe, and explain biological aspects of the human diet and the role animal-source foods have played in the diet, historically and in modern society.

Assessments: Worksheets, exams, country nutritional profile

- Identify, describe, and explain the challenges of feeding an ever-growing population and the challenges of feeding this growing population with alternative foods.

Assessments: Worksheets, exams

Critical Thinking: Students carefully and logically analyze information from multiple perspectives and develop reasoned solutions to problems within the discipline(s).

- Critically analyze and evaluate the future of animal-source food production as well as the production of alternative foods, including their connection and possible impacts on the environment

Assessments: Homework assignments, exams, production benchmark assignment

- Critically evaluate and assess the life cycle and production practices used in modern livestock production, making connections to the welfare of livestock as well as consumption of their foods in the diet

Assessments: Worksheets, exams, production claim assignment

Communication: Students communicate knowledge, ideas, and reasoning clearly and effectively in written and oral forms appropriate to the discipline(s).

- Develop and present the analysis of qualitative and quantitative data, and logic to draw reasonable conclusions based on their analysis on a specific problem

Assessments: Worksheets, country profile, final video assignment

Connection: Students connect course content with meaningful critical reflection on their intellectual, personal, and professional development at UF and beyond.

- Analyze and compare the diets of different cultures and the affect on the population.

Assessments: Worksheets, ethics and sustainability assignment, final video assignment

VI. Required Policies

Attendance Policy

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

Working with Livestock

Working with livestock will require students to adhere to handling practices provided by the instructor either in written or verbal format. Animals are capable of injuring people, especially

when they are in the flight or fight mode inspired by a stressful situation. The instructors will work to provide students with the ability to manage livestock with minimal stress, thus lowering the risk of injury to people and animals.

Biosafety and Security

The biosafety and biosecurity of animals and students is a top priority for laboratory activities. Disease transmission can have severe negative consequences on animal and human health that can also be fiscally taxing. The use of cell phones or cameras at animal facilities is not permitted without receiving written permission. Instructors and TA's may dismiss students from class for violation of biosecurity procedures.

Students Requiring Accommodation

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.

UF Evaluations 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 <https://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 <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

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.

Counseling and Wellness Center

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

The Writing Studio

The writing studio is committed to helping University of Florida students meet their academic and professional goals by becoming better writers. Visit the writing studio online at <http://writing.ufl.edu/writing-studio/> or in 2215 Turlington Hall for one-on-one consultations and workshops.

In-Class Recordings

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 educational 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 delivered by any 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 presentations 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 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.