Animal Nutrition
ANS 333 – Department of Agriculture
Spring 2019

Instructor: Dr. Erin G. Brown
Office: Room 106 – Agriculture Building
Telephone: 468-3705 (Department)
Email: browneg@sfasu.edu

Office Hours: MW 9:00 – 11:00 am; T 8:30 am – 9:30 am

Lecture: TR 11:00 am - 12:15 pm
Room: 121 Agriculture Building


Course Description: Understand the nature, function and metabolism of nutrients in animal production.

Student Learning Outcomes:
1. The student will demonstrate competence of technical subject matter in animal and poultry sciences.
2. The student will demonstrate effective oral and written communication skills.
3. The student will exhibit leadership and other interpersonal skills needed for career placement and advancement.
4. The student will exhibit problem solving skills based on quantitative and analytical reasoning.
5. The student will demonstrate knowledge of farm and ranch skills.

Objectives:
1. To introduce the student to the field of animal nutrition
2. To acquaint students with the basic anatomical differences between the various species of animals.
3. To help the student understand the division of feedstuffs into nutrient classes.
4. To understanding the function, digestion and metabolism of the various nutrients.

Grading: Your grade will be based on your performance in lecture (major quizzes = 350 points; minor quizzes = 50 points; Presentations = 100 pts).

Attendance Policy: You are expected to attend lecture. There are no make ups for lecture minor quizzes. The lowest major lecture quiz will be dropped. **Major quizzes may be made up on the day the student returns to class from an excused absence with a note and will be administered during class time.** The excuse note must be presented on the day the student returns to class when the quiz is administered, no exceptions. Any student wanting to replace a low major quiz grade may take the final and the percentage on the final will be used to calculate the replacement major lecture quiz grade.

Lecture Major Quizzes: There will be 7 major lecture quizzes during the semester each worth 50 points. The lowest major lecture quiz will be dropped. **Major quizzes will not be returned to students. Major quizzes may be made up on the day the student returns to class from an excused absence with a note and will be administered during class time.** The excuse note must be presented on the day the student returns to class when the quiz is administered, no exceptions.
The student must notify the instructor of the excused absence prior to missing class if it is a university related absence. The instructor must be notified of illness on the day of the quiz and return with a doctor’s excuse in order to take the quiz upon returning to class. The instructor must be notified of other excused absences the day the absence occurs and return with proof of absence.

**Lecture Minor Quizzes:** Lecture minor quizzes will occur at random times during the semester. These quizzes will be worth a total of 50 points. The quizzes could be for attendance or an actual quiz. Absolutely no make ups for missed lecture minor quizzes.

**Final Exam:** May 14 10:30 am – 12:30 pm

<table>
<thead>
<tr>
<th>Score Card</th>
<th>Lecture Grade</th>
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<tbody>
<tr>
<td>Major Quiz 1 (50 pts)</td>
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<td>Major Quiz 2 (50 pts)</td>
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<td>Minor Quizzes (50 pts)</td>
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<td>Nutrition Presentation (50 pts)</td>
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<td>Vitamin Presentation (50 pts)</td>
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<td>Lecture (500 pts total)</td>
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**Final Grade (%) = (total lecture pts ÷ 450) * 100**

**Final Exam Schedule:**
http://www.sfasu.edu/registrar/Registration/final examschedule.html

**Add/Drop Policy:**
http://www.sfasu.edu/upp/pap/academic_affairs/add_drop.html

**Cell Phone Policy**
The entire class will be awarded 2 bonus points on each quiz if no cell phones are viewed/used for the classes leading up to each quiz. If a phone is viewed/used during class time, the entire class losses 1/2 point each time the phone is used/viewed.

**Academic Integrity**
Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism.

**Definition of Academic Dishonesty**
Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or
plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one's own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one's paper without giving the author due credit.

Please read the complete policy at http://www.sfasu.edu/policies/academic_integrity.asp

Withheld Grades Semester Grades Policy (A-54)

Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

Students with Disabilities

To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to http://www.sfasu.edu/disabilityservices/.

Responsible Use of Technology: It is expected that all students will only use cell phones, PDAs, laptop computers, MP3 players and other technology outside of class time or when appropriate in class. Answering a cell phone, texting, listening to music or using a laptop computer for matters unrelated to the course may be grounds for dismissal from class or other penalties.

Classroom Behavior: Disruptive, distracting, or disrespectful behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic, or other penalties. The instructor shall have full discretion over what behavior is appropriate/inappropriate in the classroom.
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<thead>
<tr>
<th>Date</th>
<th>Lecture Topic</th>
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<tbody>
<tr>
<td>Jan 31</td>
<td><strong>Major Quiz 1</strong></td>
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<td></td>
<td>Concepts in Nutrition</td>
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<td>Methods of Analysis</td>
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<td>Feb 7</td>
<td><strong>Major Quiz 2</strong></td>
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<td></td>
<td>Gastrointestinal Tract and Nutrition</td>
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<td>Feb 21</td>
<td><strong>Major Quiz 3</strong></td>
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<td>Nutrients (Water and Carbohydrates)</td>
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<td>March 7</td>
<td><strong>Major Quiz 4</strong></td>
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<td>Nutrients (Protein and Fat)</td>
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<td>March 7</td>
<td><strong>Major Quiz 5</strong></td>
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<td>CHO digestion and metabolism</td>
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<td>Protein digestion and metabolism</td>
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<td>March 28</td>
<td><strong>Major Quiz 6</strong></td>
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<td></td>
<td>Fat digestion and metabolism</td>
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<td>Measuring Digestibility</td>
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<td>April 16</td>
<td><strong>Major Quiz 7</strong></td>
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<td>Feeding Standards</td>
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<td>April 23</td>
<td>Mineral/Vitamin Presentations</td>
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<td>April 25</td>
<td>Mineral/Vitamin Presentations</td>
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<td>April 30</td>
<td>Mineral/Vitamin Presentations</td>
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<td>May 2</td>
<td>Mineral/Vitamin Presentations</td>
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<td>May 7</td>
<td><strong>Major Quiz 7</strong></td>
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Animal Nutrition ANS 333
Nutrition Topic Presentation

**Topic Due:** January 31  
**Slides Due:** Thursday before the week of your presentation  
**Presentation date:** __________

**Purpose:** To understand a “real” nutrition topic that you have encountered in your life.

The topic of your presentation is wide open to any nutrition related topic/idea. Your presentation should present the claim or idea and then present scientific findings to prove/disprove the claim.

On a separate page, you must have literature cited. Use peer-reviewed publications (ex: Journal of Animal Science). **Do not use webpage citations.** You need at least 6 peer-reviewed references. **Your references should be recent within the last 5 years.**

**Length of presentation:** The presentation needs to present the topic and provide evidence for the claim of the topic. You will need to build a powerpoint presentation. The presentation will be 3-5 minutes in length.

**References:** Use the format from the Journal of Animal Science (JAS) (http://jas.fass.org/). References should be on a separate page in alphabetical order and titled literature cited. Look at an article from JAS to see the correct way to format. Examples for various types of sources are listed below:

**Journals**


**Books**


**Conferences**
Animal Nutrition ANS 333
Vitamin/Mineral Presentation

Topic: Select a vitamin or mineral by Feb 5
Slides due: March 12
Presentations: April 23, 25, 30, May 2

Prepare a presentation over the mineral or vitamin selected. Use powerpoint to prepare the presentation.

Include:
- Picture of structure (vitamins)
- Functions of vitamin/mineral for livestock
- Functions of vitamin/mineral for humans (please limit)
- How is it absorbed
- Any regulation for absorption
- Deficiency symptoms
- Toxicity symptoms
- Feed/food sources

List to select from:

**Vitamins**
A
D
K
E
Thiamine
Riboflavin
Niacin
Panthothenic acid
Pyridoxine
Biotin
Folic acid
Cobalamin
Ascorbic acid

**Minerals**
Calcium
Phosphorus
Magnesium
Sodium
Chloride
Potassium
Iron
Sulfur
Zinc
Copper
Selenium
Cobalt
Iodine
Fluorine
Manganese