

ANDREWS UNIVERSITY
DEPARTMENT OF AGRICULTURE
COLLEGE OF ARTS & SCIENCES

ANSI 114 INTRODUCTION TO ANIMAL SCIENCE
FALL SEMESTER 2018

SYLLABUS
3 credits

PROFESSOR: Dr. Katherine Koudele
Office: Smith Hall 109
Telephone: 471-6299
Email: koudelej@andrews.edu

I. CLASS SCHEDULE

Monday, Wednesday, Friday 9:30-10:20 AM SH114

II. COURSE DESCRIPTION

This introductory course in animal science is designed to enable students to begin to understand the broad and economically important livestock component of the agricultural industry so they are better able to determine in which area of it they would wish to make a career. Topics covered include: evaluation of feedlot and breeding animals, nutrition and digestion, genetics, reproductive physiology and management, behavior, lactation, welfare, housing and health, and marketing of animal products.

III. COURSE MATERIALS

Field, Thomas and Robert Taylor. 2016. Scientific Farm Animal Production, 11th edition. Pearson/Prentice-Hall. ISBN: 978-0-13-376720-9

IV. COURSE LEARNING OBJECTIVES

Upon successful completion of this course, students should be able to:

1. Knowledge
 - a. Explain how and why animals were domesticated and their relation with humans worldwide
 - b. Describe the basics of how animal products are graded, harvested, processed and marketed
 - c. Explain the basic anatomy, genetics, digestive and reproductive physiology of farm animals as well as their health management.
2. Skills
 - a. Apply a basic knowledge of animal nutrient needs to various types of livestock
 - b. Identify a variety of livestock behaviors and issues involving animal welfare
3. Attitudes, Values
 - a. Develop an appreciation for the extent and complexity of animal agriculture and its impact on everyone's daily life

V. COURSE OUTLINE

<u>Date</u>	<u>Topic</u>	<u>Text chapter</u>	<u>(Week)</u>	<u>Assignment Due</u>
Aug. 27	Introduction to course			
29	Animal contributions	1		
31	Overview of animal industries	2		
Sept 3	Labor Day – no classes			
5	Test Ch. 1, 2; Red meat products	3		
7	Red meat products, Poultry & eggs	4	2a)	Supermarket meat counter tour & 2b) Forum discussion
10	Milk and milk products	5		
12	Wool and mohair	6	3)	Strange dairy products
14	By-products of meat animals	7		
17	9:00-9:40 Test Ch. 3-6 By-products article URL: http://discovermagazine.com/2001/aug/featcow			
19	9:00-9:40 By-products article discussion	7	4a)	Article report on <u>By-products</u>
	Market classes & grades	8		
21	9:00-9:40 Visual evaluation & judging	9		
24	Reproduction	10	4b)	Judging practice
26	Test Ch. 7-9; Reproduction	10		
28	Artificial insemination, ET, etc.	11		
Oct. 1	Test Ch. 10; Artificial insemination, ET	11		
3	Artificial insemination, ET; Genetics	11, 12		
5	Genetics and genetics practice (<i>in class</i>)	12	6a)	Genetics practice problems
8, 9	Fall Recess – no classes			
10	Genetics practice and genetics “experiment” (<i>in class</i>)		6b)	Gummy bear breeding
12	Test Ch. 11, 12; Genetic change through selection - 13			
15	Genetic change through selection; Mating systems – 13, 14			
17	Mating systems	14		
19	Nutrients & functions	15	7)	Forum discussion on hybrids
22	Nutrients & functions, con’t;			
24	Test Ch. 13, 14; Digestion and absorption of feed -16			
26	Providing nutrients for body functions	17		
29	Growth and development	18	8)	Article report on <u>Nutrition</u>
31	Growth and development, con’t; Lactation	18, 19		
Nov. 2	Test Ch. 15-17; Lactation			
5	Adaptation to the environment	20		
7	Animal behavior	22		
9	Test Ch. 18-19; Animal behavior	22		
12	Animal health	21		
14	Test Ch. 20, 22; Animal health	21		
16	Animal health, con’t	21	11)	Disease matching (<i>in class</i>)
19	Issues in Animal Agriculture	23	12)	Article report on <u>Health</u>
21-25	Thanksgiving Break - no classes			

<u>Date</u>	<u>Topic</u>	<u>Text chapter</u>	<u>(Week) Assignment Due</u>
Nov 26	Test Ch. 21; Issues in Animal Agriculture, con't	23	
	Beef breeds and breeding	24	
28	Beef breeds and breeding, con't	24	
30	Feeding/managing beef cattle	25	13) Article report on <u>Issues</u>
Dec 3	Feeding/ managing beef cattle, con't	25	14) Forum discussion on <u>Issues</u> article
5	Swine breeding and management summary	28, 29	
Dec. 10 (M)	Final Exam on Ch. 23, 24, 25	10:30-12:30	Smith Hall 114

Note about Syllabus:

All students in this course are expected to read and be familiar with this syllabus. The syllabus has been prepared to assist you in understanding what is expected of you and to permit you to plan your time in conjunction with demands from other courses. Although care has been taken in preparing this syllabus, there may be times when the syllabus (e.g. policies, topics, due dates) will need to be changed as necessary appropriate. Any changes will be announced in class as far in advance as practical.

VI. ATTENDANCE POLICY

A record of attendance will be taken at every class period. If a student accumulates unexcused absences for more than 20% of the scheduled classes, an **F grade** can be assigned. For more details on the University's attendance policy see the Student Handbook

VII. EVALUATION & GRADING

Grade will be determined by scores on:

- In-class tests (~70% of total)
- In-class activities
- Outside of class activities
- Forum discussion postings
- Article reports and commentary (Both writing mechanics and content will be evaluated.)

Grading Scale:

93-100%	A
89-92	A-
86-88	B+
82-85	B
78-81	B-
74-77	C+
70-73	C
66-69	C-
58-65	D
below 57	F

VIII. ASSIGNMENTS & ARTICLE REPORTS

Learning Hub

This is a software program that Andrews, and many other schools, use to help students and teachers manage the content/material of a course. It allows students to upload their assignments from anywhere during the period when the time frame for submitting the assignment is open.

The Review sheets for the in-class Tests will be posted on the Learning Hub to help you prepare for the tests. Slides shows will also be posted on the Learning Hub. Assignments and Article Reports are to be submitted on-line via the Learning Hub website.

How to submit Assignments via Learning Hub:

1. Click on Current Students on the Andrews University website home page
2. Click on Learning Hub on the right side of that next page
3. Log onto Learning Hub using your Andrews user name and password
4. Select which class you want to see
5. Click on the assignment you wish to do, read it, and answer it on a Word document or save it as a PDF on your computer.
6. Then submit that document onto Learning Hub as a Word document or as a PDF (no other formats).
7. TIME FRAME: Check the time frame in which the assignment can be uploaded. Once the deadline has passed (usually just before class starts), you will not be able to upload your assignment and will get no points for it unless you talk to me personally about extreme circumstances that prevented your completing it on time.

Assignment 2a: Supermarket Meat Counter Tour

Learning Hub Setup Instructions:

- This assignment is to be uploaded into Dropbox
- The assignment will be open from the time the class is first posted.
- This assignment is DUE by class time (9:30) on September 7, 2018.
- One file is to be submitted one time.

Assignment description:

- Visit a local supermarket and photograph the most expensive cuts of beef, pork, and lamb you find there. If you're able to travel, please go to a supermarket outside of Berrien Springs so as not to overwhelm our local Hardings Market. You may go in groups if needed for transportation.
 - i. Caption each photograph with:
 1. Cut of meat, weight, price
 2. Name of store
 3. Location of store

Assessment criteria:

- Quality/clarity of each photograph: 0-3 points x 3 = 0-9 points possible
- Completeness of caption for each photograph: 0-4 points x 3 = 0-12 points possible

Assignment 2b: Forum Response to Supermarket Meat Counter Tour

Learning Hub Setup Instructions:

- This is a Forum Discussion assignment.
- This assignment is DUE by class time (9:30) on September 10, 2018.

Assignment description:

- Give your thoughts about these products, prices, and how they were displayed at the store.

Assessment criteria:

- A good Forum post would include initial comments followed by 2 responses to other student posts.
- Discussion will be evaluated based on the Forum Grading Rubric detailed in the class syllabus. (See below)

Assignment 3: Strange Dairy Products Discovery

Learning Hub Setup Instructions:

- This assignment is to be uploaded into Dropbox
- This assignment is DUE at 9:30 September 12, 2018.
- One file is to be submitted one time.

Assignment description:

- Go to a local supermarket, or specialty market, and search for dairy products you consider unusual or rarely seen in stores. If you're able to travel, please go to a supermarket outside of Berrien Springs so as not to overwhelm our local Hardings Market. You may go in groups if needed.
- Photograph three of those products
- Caption each photograph with:
 - The name of the item and its price
 - Name of store
 - Location of store

Assessment criteria:

- Quality/clarity of each photograph: 0-3 points x 3 = 0-9 points possible
- Completeness of caption for each photograph: 0-4 points x 3 = 0-12 points possible

Assignment 4a: By-Products Article Report Format

- a) You are to use the article found at this URL <http://discovermagazine.com/2001/aug/featcow>
- b) Report is to be 2 full pages long and should be typewritten with double-spacing, spell-checking, normal margins (1"), 11-12-point Times New Roman, Calibri or Arial font, and correct grammar and punctuation, use of paragraphs, topic sentences, etc.
 - Note: You will be graded on the mechanics of your article report as well as the content so be attentive to them,
- c) The first 1 ½ pages are to be a summary of the whole article. The last ½ page is to be your assessment/reaction/critique to the article, i.e. what you liked/disliked, agreed with/ disagreed with. Do not take up a lot of the first page with assignment information such as your name, date, assignment, etc.
- d) The reference for the article should be clearly cited like this:
Author name. Journal name. Article date. Volume:issue number. Page numbers.
- e) The report is DUE to be submitted in Dropbox at 9:30 on September 19, 2018.
- f) Late reports will have 10% deducted for each day they are late.
- g) A total of 10 points is possible.

Assignment 4b: Judging Practice Results

Learning Hub Setup Instructions:

- This assignment is to be uploaded into Dropbox
- This assignment is DUE at 9:30 on September 24, 2018.
- One file is to be submitted one time.

Assignment description:

- Go to: <http://www.livestockjudging.com/classes.aspx?free=on>
- Judge 3 classes for market animals based on what you have learned in class
- Upload the score you got on each of the classes you judged and include your assessment of why you think you scored the way you did.
 - i. It does not matter how well or poorly you did the judging since this is your first time attempting it. But your comments on why you scored the way you did is more important.

Assessment criteria:

- Listing which classes you judged: 0-3 points x 3 classes = 9 points possible
- Explaining the challenges you found when scoring each class: 0-3 points x 3 classes = 9 points possible

Assignment 7: Forum Response to Hybrid Animals

Learning Hub Setup Instructions:

- This is a Forum Discussion assignment.
- This assignment is DUE at 9:30 on October 19, 2018.
- One file is to be submitted one time.

Assignment description:

- In class we discussed some species-crossing between certain livestock species (e.g. donkey x horse).
- What are your thoughts about this practice? Pros/Cons? Do you feel that there are moral concerns involved?
- You may bring in authors and articles you have read on this topic to support your position.

Assessment criteria:

- A good Forum post would include initial comments followed by 2 responses to other student posts.
- Discussion will be evaluated based on the Forum Grading Rubric detailed in the class syllabus. (See below.)

Assignment 8: Nutrition Article Report

- a) The format is to be the same as described in Assignment 4a above.
- b) Only the periodicals in the Agriculture Reading Room are to be used. Select an article related to some aspect of animal nutrition (feedstuffs, nutritional diseases, feeding management practices, etc.)
- c) NO internet articles allowed without prior approval from instructor.
- d) The report is DUE to be submitted in Dropbox at 9:30 on October 29, 2018.

Assignment 13: Issues Article Report

- a) The format is to be the same as described in Assignment 4a above.
- b) Only the periodicals in the Agriculture Reading Room are to be used.
- c) Select an article related to some aspect of animal issues (animal welfare, public health and animal agriculture, human health and animal products in diet, environmental impact of animal agriculture on wildlife, etc.).
- d) NO internet articles allowed without prior approval from instructor.
- e) The report is DUE to be submitted in Dropbox at 9:30 on November 30, 2018.

Assignment 14: Forum Discussion of Issues Article

LearningHub Setup Instructions:

- This is a Forum Discussion assignment.
- This assignment is DUE at 9:30 on December 3, 2018.
- One file is to be submitted one time.

Assignment description:

- Comment on one or two interesting items you found in the article you reported on regarding Animal Issues.

Assessment criteria:

- A good Forum post would include initial comments followed by 2 responses to other student posts.
- Discussion will be evaluated based on the Forum Grading Rubric detailed below.

Forum Discussion Grading Rubric

CRITERIA	UNSATISFACTORY = 0	LIMITED = 1	PROFICIENT = 2	EXEMPLARY = 3
CRITICAL ANALYSIS (UNDERSTANDING OF READINGS AND OUTSIDE REFERENCES)	Discussion postings show little or no evidence that readings were completed or understood. Postings are largely personal opinions or feelings, or "I agree" or "Great idea," without supporting statements with concepts from the readings, outside resources, relevant research, or specific real-life application.	Discussion postings repeat and summarize basic, correct information, but do not link readings to outside references, relevant research or specific real-life application and do not consider alternative perspectives or connections between ideas. Sources are not cited.	Discussion postings display an understanding of the required readings and underlying concepts including correct use of terminology and proper citation.	Discussion postings display an excellent understanding of the required readings and underlying concepts including correct use of terminology. Postings integrate an outside resource, or relevant research, or specific real-life application (work experience, prior coursework, etc.) to support important points. Well-edited quotes are cited appropriately. No more than 10% of the posting is a direct quotation.
PARTICIPATION IN THE LEARNING COMMUNITY	Discussion postings do not contribute to ongoing conversations or respond to peers' postings. There is no evidence of replies to questions.	Discussion postings sometimes contribute to the class' ongoing conversations as evidenced by — affirming statements or references to relevant research or, — asking related questions or, — making an oppositional statement supported by any personal experience or related research.	Discussion postings contribute to the class' ongoing conversations as evidenced by — affirming statements or references to relevant research or, — asking related questions or, — making an oppositional statement supported by any personal experience or related research.	Discussion postings actively stimulate and sustain further discussion by building on peers' responses including — building a focused argument around a specific issue or — asking a new related question or — making an oppositional statement supported by personal experience or related research.
ETIQUETTE IN DIALOGUE WITH PEERS	Discussion postings are at midpoint or later in the module or contributions are only posted on the last day of the module.	Discussion postings respond to most postings of peers several days after the initial discussion.	Discussion postings respond to most postings of peers within a 48 hour period.	Discussion postings are distributed throughout the module (not posted all on one day or only at the beginning or only on the last day of the module).
QUALITY OF WRITING AND PROOFREADING	Written responses contain numerous grammatical, spelling or punctuation errors. The style of writing does not facilitate effective communication.	Written responses include some grammatical, spelling or punctuation errors that distract the reader.	Written responses are largely free of grammatical, spelling or punctuation errors. The style of writing generally facilitates communication.	Written responses are free of grammatical, spelling or punctuation errors. The style of writing facilitates communication.

(ADAPTED FROM JOAN VANDERVELDE, U OF WISCONSIN, STOUT)

TOTAL

IX. ACADEMIC HONESTY

In harmony with the mission statement, Andrews University expects that students will demonstrate the ability to think clearly for themselves and exhibit personal and moral integrity in every sphere of life. Thus, students are expected to display honesty in all academic matters.

Academic dishonesty includes (but is not limited to) the following acts:

- Falsifying official documents;
- Plagiarizing, which includes copying others' published work, and/ or failing to give credit properly to other authors and creators;
- Misusing copyrighted material and/or violating licensing agreements (actions that may result in legal action in addition to disciplinary action taken by the University);
- Using media from any source or medium, including the Internet (e.g., print, visual images, music) with the intent to mislead, deceive or defraud;
- Presenting another's work as one's own (e.g., placement exams, homework assignments);
- Using materials during a quiz or examination other than those specifically allowed by the teacher or program;
- Stealing, accepting, or studying from stolen quizzes or examination materials;
- Copying from another student during a regular or take-home test or quiz;
- Assisting another in acts of academic dishonesty (e.g., falsifying attendance records, providing unauthorized course materials).

Andrews University takes seriously all acts of academic dishonesty. Such acts as described above are subject to incremental discipline for multiple offenses and severe penalties for some offenses. These acts are tracked in the office of the Provost. Repeated and/or flagrant offenses will be referred to the Committee on Academic Integrity for recommendations on further penalties. Consequences may include denial of admission, revocation of admission, warning from a teacher with or without formal documentation, warning from a chair or academic dean with formal documentation, receipt of a reduced or failing grade with or without notation of the reason on the transcript, suspension or dismissal from the course, suspension or dismissal from the program, expulsion from the university, or degree cancellation. Disciplinary action may be retroactive if academic dishonesty becomes apparent after the student leaves the course, program or university.

X. DISABILITY ACCOMODATIONS

If you qualify for accommodation under the American Disabilities Act, please see contact Student Success in Nethery Hall 210 (disabilities@andrews.edu or 269-471-6096) as soon as possible so that accommodations can be arranged.

XI. EMERGENCY PROTOCOL

Andrews University takes the safety of its student seriously. Signs identifying emergency protocol are posted throughout buildings. Instructors will provide guidance and direction to students in the classroom in the event of an emergency affecting that specific location. It is important that you follow these instructions and stay with your instructor during any evacuation or sheltering emergency.