

Animal & Veterinary Sciences 251: Principles of Animal Science

COURSE SYLLABUS - FALL 2015

I. Personnel

Lecture Instructor: Dr. Marlon Knights
Office: Percival E-334
Office #: 293-1946
Office hours: M W F—9:00 - 10:00 am; other times by appointment.
Email: marlon.knights@mail.wvu.edu

Graduate Teaching Assistant: Ms. Sara Carr
Office: Agricultural Sciences Building - Room 1018
Office #: 293-1994
e-mail: sscarr@mix.wvu.edu
Office Hours: M,W, F 10-11 and T, R 8-9.30

II. Course description

This is an introduction to basic animal agriculture and to the production of meat, milk, eggs and wool for society. Contributions to society of animals and animal products and basic principles and physiology of nutrition, genetics, reproduction, lactation, growth and development, health, environment, behavior are discussed along with an examination of current issues facing the livestock industry.

Lectures: M W F--8:00-8:50 a.m., Room 1001 Ag Sci (**Attendance is required**)

Laboratory: Four sections—M, T, W, Th, from 2:00-4:50 p.m., Students will meet in front of the Agricultural Sciences Building for transport by bus to the livestock farm unless otherwise indicated. **Students are *required* to use the bus transportation provided. Bus leaves 2:00 p.m. SHARP** and normally will return to campus by 4:50 p.m., but a few labs may run late. Please wear old clothes and boots -- you will get dirty.

III. Course text

1. *Scientific Farm Animal Production*, Tenth (11th) edition, Robert E. Taylor and Thomas G. Field
2. *Animal Science Lab Manual, First (1st)* edition, Marlon Knights

IV. Objectives: As a result of your study you should:

1. Develop an appreciation of the role of animals and animal contributions to human needs.
2. Discuss the broad scope and integration of the livestock and poultry industries in the United States.
3. Outline the production, consumption trends, marketing and use of animals and animal products.
4. Understand and develop the ability to effectively use terminology common to the animal and poultry industries.
5. Recognize the common types and breeds of farm animals and understand how characteristics of form relate to function.
6. Understand the methods used in animal selection, management, and marketing.
7. Apply the scientific principles of behavior, reproduction, genetics, nutrition, growth and lactation to the production of animals and animal products.
8. Critically evaluate current issues involving animal production and consumer health and welfare.
9. Perform routine husbandry procedures on a farm-scale enterprise and on companion animals.
10. Understand the social, cultural, and/or environmental issues impacting community and willingness to engage with community to effect positive change.
11. Understand the role and responsibility of the livestock industry and your role as an agriculture practitioner in supporting development of citizens in your community, country and the world.
12. Understand the needs of the community, including the need for livestock products, appreciate the quality of livestock products that available to different segments of the community and how your role as an agriculture practitioner can positively impact the quality and quantity of food provided to members of the community.

V. Grading system

Examinations and quizzes will be based on multiple choice, short answer, and matching questions. The final grade will be determined on the basis of the following points:

Lecture:

Chapters/Study questions (20 Chapters x 10 points)	200 pts
4 Exams @ 100 pts	400 pts
1 Final @ 200 pts	200 pts

Spot Quiz

200 pts

Lab:

Attendance and Reports	200 pts
Final Lab exam	100 pts

LITTLE EASTERN Participation (must) 100 pts

Service Learning/ Civic Engagement:

200 pts

TOTAL

1600 pts

The numerical letter grade equivalents are: **A** $\geq 90\%$; **B** 80-89%; **C** 70-79%; **D** 60-69%; **F** $\leq 59\%$. *There are no required papers to write nor will term papers or special projects serve in lieu of the written examinations.* Requests for corrections relative to the grading of individual exams must be presented to either Ms. Carr or Dr. Knights within 48 hours after graded exams are returned to you.

The student learning/civic engagement component of the course is designed to assist you in understanding the role and responsibility of the livestock industry and your role as an agriculture practitioner in supporting development and help you become actively contributing citizens and community members through the service you perform. Service Learning/ Civic engagement is geared at enhancing your knowledge of the WVU/Morgantown community, to establish connections within the community, to develop a greater understanding of the needs of the community and a willingness to contribute towards addressing those needs. This component of the course is administered by the CCE <http://service.wvu.edu/about> If you have any questions or concerns about your service hours, please contact Alexis McMillen at Alexis.McMillen@mail.wvu.edu

Students would be expected to complete a minimum of **15 contact hours** with certified CCE community partner by **November 2nd 2015**. You will not be given a grade for this course unless this component of the course is completed and verified by the CCE.

Students are expected to attend all lab sessions. The chapter for each lab should be read before attending the session and lab reports must be completed and returned at the following lab session. Some labs require that you research information outside the normal class session. All students will be assigned an animal at the beginning of class. You are required to collect relevant information on your assigned animal, prepare and show that animal at the Little Eastern

Competition.

Make-up exams will be given only for University-approved absences. Arrangements to take the make-up exam must be made in advance. Students who miss an exam because of illness must provide a medical doctor's statement verifying the illness and shall inform the instructor of such absence on the day of return to class. Other unavoidable absences from the campus such as field trips and intercollegiate events must be documented and the instructor informed in advance of the absence. **Cheating will not be tolerated. You can be expelled from the University with the reason for expulsion added to your transcript.**

The instructor reserves the right to postpone or rearrange the presentation of material by making an announcement during a regularly scheduled class meeting. Examinations will not be moved without announcing the change at least two lecture periods prior to the scheduled time. The syllabus is a general guideline and does not constitute a contract between the student, instructors and the University. Grade corrections on examinations will be made at the discretion of the instructor. Students may appeal the grade earned in the course as outlined in the undergraduate catalog.

Administrative responsibility for courses in the Division of Animal Science resides with:

Dr. Robert Taylor, Division Director
Room G038, Agricultural Sciences Building
293-2231, Ext. 4420

FINAL EXAM-- TUESDAY, DECEMBER 15, 11:00am to 1:00 pm

Month	Day	Chapter	Content
August	17	1	Introduction
August	19	1	Animal Contribution
August	21	2	Industry Overview
August	24	2	Industry Overview
August	26	3	Red Meats
August	28	4	Poultry & Egg Products
August	31	5	Milk & Milk Products
September	2	6, 7	Wool and Mohair & Meat Animal By-Products
September	4	1-7	Exam 1
September	7		Labor Day—No Class
September	9	8	Market Classes and Grades
September	11	9	Visual Evaluation of Market animals
September	14	10	Reproduction
September	16	10	Reproduction
September	18	11	Reproductive Management
September	21	11	Reproductive Management
September	23	11	Reproductive Management
September	25	12	Intro. Genetics
September	28	12	Intro. Genetics
September	30		Exam 2
October	2	13	Selection
October	5	13	Selection
October	7	14	Mating Systems
October	9	14	Mating Systems
October	12		Fall Recess
October	14	15	Nutrients and their Functions
October	16	16	Digestion
October	19	16	Digestion & Feeds
October	21	17	Feeding Animals
October	23	17	Feeding Animals
October	26	18	Growth & Development
October	28	18	Growth & Development
October	30		Exam 3
November	2	19	Lactation
November	4	19	Lactation
November	6	20	Adaptation to the Environment
November	9	20	Adaptation to the Environment
November	11	22	Animal Behavior
November	13	22	Animal Behavior
November	16	21	Animal Health
November	18	21	Animal Health
November	20		Exam 4
November	21-29		Fall Recess
November	30	23	Issues in Animal Agriculture
December	2	23	Issues in Animal Agriculture
December	4		Review
December	7		Service Reflection
December	15		Finals (11.00 am-1.00 pm)

AVS 251 Lab Schedule Fall 2015

Lab	Date	Topic	Location	Instructor/ Chapter
1	August 17-20	Animal Welfare Training; Request Little Eastern Animal	Ag Science Building Computer Lab - Library Room G016	Carr Chap. 1
2	August 24-27	Safety, Animal Handling, and Restraint	Farm, meet bus in front of AGS	Carr/Knights Chap. 5
3	Aug. 31-Sept. 3	Animal Health & Vaccinations	Farm, meet bus in front of AGS	Carr/Knights Chap. 4
	September 8-10	Products Lab; Little Eastern Animals Assigned	Take Home	Carr/Knights (Handouts)
4	September 14-17	Livestock Production Systems; Anatomy of Farm Species	Farm, meet bus in front of AGS	Carr/Knights Chap. 2,3
5	September 21-24	Live Animal & Weight Evaluation; Body Condition Scoring	Farm, meet bus in front of AGS	Carr/Knights Chap. 6, 7, 8
6	Sept. 28- Oct. 1	Carcass Evaluation *DRESS WARMLY*	AGS G072--Meats Lab *DRESS WARMLY*	Dr. Kenney (Handouts)
7	October 5-8	Animal Feeds	Farm, meet bus in front of AGS	Carr/Knights Chap. 11
8	October 12-15	NO LAB	Fall Break on 12th and 13th	
9	October 19-22	Training, Fitting, and Showing/Little Eastern Practice	Farm, meet bus in front of AGS	Sarah Carr (Handouts)
10	October __	<u>LITTLE EASTERN</u>	Livestock Farm	Sarah Carr
11	October 26-29	Reproductive Management 1: Breeding Soundness Examination	Farm, meet bus in front of AGS	Carr/Knights Chap. 9
12	November 2-5	Equine Management	Reedsville Farm, meet bus in front of AGS	Carr
13	November 9-12	The Basics of Livestock Nutrition and Feed Manufacture	Farm, meet bus in front of AGS	Carr/ Moritz (Handouts)
14	November 16-19	Reproductive Management 2: Estrous Synchronization and Pregnancy Diagnosis	Farm, meet bus in front of AGS	Carr/Knights Chap. 10
15	November 23-26	NO LAB	Thanksgiving Break	
16	Nov. 30-Dec. 3	Laboratory Practical	Farm, meet bus in front of AGS	Sarah Carr