

AG 101 T/ SC-1 -- INTRODUCTORY ANIMAL SCIENCE

Course Objective:

This 4 credit, natural and physical science course with a lab will develop a basic understanding of animal agriculture in today's society. We will explore the scientific basis and the resulting societal implications of animal and food production. Integrated and comparative approaches will be used to examine the biological, economic, and management principles associated with livestock and poultry production.

Class Meets:

MWF 9:05-10 am Berndt Hall 610

Lab Meets:

Thurs: 9:05-noon or 1:25-4:35 , BH 710

The majority of the labs will be off campus. Appropriate dress should be worn.

Required Text:

Prentice Hall Agribook: Introduction to Animal Science

Instructor:

Beth LaShell, 730 BH, lashell_b@fortlewis.edu, 247-7189

Office Hours: MWF: 10:05-11:10 am or by Appointment

Lecture Outline and Reading

Topics

Species terminology
General overview of animal agriculture
Aquaculture
Pig Project
The final product - milk
The final product - eggs
The final product - wool & mohair
The final product - meat/meat by-products
Diet, Health and Consumer Issues
Companion animals
Male Reproduction
Female Reproduction
Genetics/Selection
Growth and development
Livestock nutrition and feeding
Environmental considerations
Animal health
Animal Behavior

Text Reading

Glossary; Appendix: Animal Parts and Terms
Ch. 1, 2
Ch 3
Ch 4 (Swine breeds), 434
Ch 4 (Dairy & Goat breeds), Ch 5 -6
Ch 4 (Poultry breeds), Ch 7, 203-204
Ch.4 (Sheep & Goat breeds), Ch 8
Ch 4 (Beef breeds), Ch. 10-11
Ch. 12-13
Ch. 14
Ch 15-16
Ch 15-16
Ch 17-19
Ch. 20
Ch. 21-22
Ch. 23
Ch. 24
Ch 25

Your final grade in the class will be based on the components listed below:

Component	Maximum Points
Three (100 pt) Exams	300
Article Assignment	50
Homework	125
Six (20 pt) Quizzes (drop lowest)	100
Laboratory and livestock enterprise participation	125
Data collection and summary assignment	100
Comprehensive optional final - Tues 12/11 7:30 am	100**
Total Points	800
Tentative Grading Scale: A 94-100 B 85-93 C 75-84 D 65 -74	

**** Optional Final (100 Points)- Tuesday December 11, 2007 7:30-9:30 am**

I will compute your grade the final week of class and you will have the option of accepting that grade or taking the final and trying to improve your grade. Taking the final can not lower your grade, the grade you are shown the last week of class, is the minimum grade you will receive. The score you receive on the final can be used to replace any 100 point exam or assignment due during the semester. **To have this option you must take the exams and hand in your assignments on the due dates.** Missing an exam or not completing an assignment means losing the option to skip the final. The Final Exam will be given only at its assigned time during Finals Week. Please do not plan on leaving campus prior to this time.

Article Assignment (50 Points)- Due November 16, 2007

Peer reviewed scientific articles will be placed on reserve at Reed Library. Students should select one of the articles to review. The review should begin with a paragraph that summarizes the article. The remainder of the review should discuss whether the author makes a well supported argument. If the author is convincing explain what you find compelling about the argument. If you are not convinced, explain why not.

Homework Assignments may include the following topics (125 Points)

Scientific Method Hypothesis	Fat Intake Calculation
Animal Distribution	Draw male and female reproductive parts
Animal and Trade Statistics	Genotype Worksheet
Diet, Health and Consumer Issue Research	Genetics Research
Risk Factor Concept Map	Calculate % DM

Data Collection and Summary Assignment (100 points) - Due December 1, 2006

As part of our laboratory experience, we will be recording weights on pigs throughout the semester. Students should select 10 pigs at the beginning of the semester to gather data on. Data will include breed, sex, color, birthdate, pen # and weights (taken approximately 3 times during semester). Students will formulate a hypothesis related to weight gain and select a variable to measure. Using these data, students will calculate average daily gains, total gains and weight per day of age. Students will complete the assignment by summarizing their conclusions related to their hypothesis including any possible biases that occurred.

Tentative Weekly Schedule:

	<u>Lecture</u>	<u>Lab</u>
Week 1	Animal Science & Specie terminology	James Ranch
Week 2:	Domestication and Statistics	Moodle/Internet/Scientific Method
Week 3:	Milk products and Dairy production	Napier Farms
Week 4:	Egg and chicken production	Pig lab 1
Week 5:	Wool and sheep production	Weaselskin Equestrian Center
Week 6:	Diet and Health Issues	Animal Products Lab
Week 7:	Companion animals	Rio Grande Alpacas and Llamas
Week 8:	Male Reproduction	Pig lab 2
Week 9:	Female Reproduction	Sunnyside Meats
Week 10	Animal Genetics	Southern Ute Bison Operation
Week 11:	Growth and Development	Mad Hatter Elk Ranch
Week 12:	Nutrition	Pig lab 3
Week 13:	Environmental Considerations	Data analyses and graphing with MS Excel
Week 14:	Animal Health	Make-up lab, if necessary
Week 15:	Finals	

This is a tentative schedule that is subject to change.

Class Policies:

There will be no makeup quizzes.

Exams can only be made up if arrangements have been made prior to day of test.

Extra credit opportunities are available.

Special Needs: If you need special accommodation due to a documented disability, please inform your instructor at the beginning of the term so appropriate arrangements can be made.

Academic Honor Code: Documented dishonesty or inappropriate actions in this class will result in a 0 grade for the assignment in question and may be reported to the vice-president for academic affairs for further action.

Information included on this syllabus is designed to meet the main objectives of Natural/Physical Science classes which are to :

- instill a clear understanding of the basic scientific viewpoint
- enable students to learn and use the scientific method
- evaluate the impacts of science and technology on society
- increase the level of science literacy

"Students with disabilities have equal access and equal opportunity in this course. If you require reasonable accommodations to fully participate in course activities or meet course requirements, you must register with Disability Services, 280 Noble Hall, 247-7459. If you qualify for services, bring your letter of accommodation to me as soon as possible."

Directions to San Juan Basin Research Center (Old Fort)

Hwy 160 West toward Cortez approximately 10 miles to the top of Hesperus Hill. Turn left on Hwy 140 at Hesperus One Stop. Go South for 5 miles. Look for signage on right and turn into any of the drives.