Graduate Advising Notes

1. Several of the 200-level and approved elective courses have prerequisites other than courses listed as admission requirements.
2. Students must request specific information concerning the Master of Science program from the department office.
3. Upon admission, students should see the graduate coordinator for aid in program planning, selection of graduate adviser, and selection of a thesis committee.
4. To progress through the graduate program, the student must:
   a. Maintain a minimum 3.0 GPA
   b. Complete all prerequisite coursework
   c. Attain classified standing
   d. Meet university writing requirement
   e. File for advancement to candidacy
   f. Complete the program requirements
   g. File a master thesis committee assignment form
   h. Formally present and defend the thesis research results
5. Advancement to candidacy requires the completion of 9 program units in residence (minimum GPA of 3.0), meeting the university writing skills requirement, departmental requirements, and filing a petition for advancement to candidacy a minimum of one semester prior to enrollment in thesis and within the deadline.
6. The student shall meet the university graduate writing skills requirement by earning a minimum of 450 verbal on the GRE. If a minimum of 450 verbal is not met by a student, the student shall meet the requirement by then earning a score of 124 or higher in the Upper-Division Writing Exam (UDWE) or by earning a ***B*** or better in a designated ***W*** course to be specified by the graduate committee of the School of Agricultural Sciences and Technology.
7. The student may apply a maximum of 2 units of independent study to the master's program.
8. See *Division of Graduate Studies* in this catalog for university requirements.

COURSES

Note: Active immunization against tetanus (available through Student Health Services) is a prerequisite for registration in any laboratory course in agriculture and for any student employment on the University Farm.

Note: Cost to the student of extended field trips varies each semester depending upon itinerary. The student should ask the course instructor.

Animal Science Principles (A Sci)

1. Introduction to Animal Science (3)
Overview of the livestock and poultry industry; types and breeds, world distributions, foods and products from farm animals, reproduction, genetics, nutrition, and marketing. (2 lecture, 2 lab hours)

35. Feeds and Feeding (3)
Prerequisite: Chem 3A. Principles of nutrition; nutrients and their metabolism; comparison of qualitative nutrient requirements of non-ruminant and ruminant animals and formulating diets to meet these requirements. (2 lecture, 3 lab hours)

65. Introduction to Animal Health (3)
The stockman's approach to animal health and disease control in domestic animals. Classification of animal diseases, their causes and appropriate treatments with emphasis on preventative medicine. (2 lecture, 3 lab hours) (Formerly A Sci 65A)

101. Environmental Management of Farm Animals (3)
Prerequisite: A Sci 1. Basic principles of environmental management as applied to domestic farm animals. Special emphasis given to animal behavior, animal welfare, and animal performance. The optimal animal environment will be studied in detail.

125. Animal Genetics (3)
Prerequisite: A Sci 1. Genetic principles and application to livestock production; basic inheritance, qualitative genetics, variation in economic traits of livestock, quantitative inheritance, selection progress; current methods of genetic livestock improvement.

135. Animal Nutrition (3)
Prerequisite: A Sci 35. Principles of nutrition and metabolism; digestive physiology of farm animals.

145. Anatomy and Physiology of Farm Animals (3)
Prerequisite: Biol 10 or Zool 10. General structures of farm animals and physiological functions of organs in the animal body. (Formerly A Sci 145A)

146. Physiology of Lactation (3)
Fundamentals of anatomy, physiology, and endocrinology of milk synthesis and secretion; milking machine systems and management; pathological and environmental factors affecting lactation.

155. Animal Reproduction (3)
Prerequisite: A Sci 145. Principles of reproductive physiology, associated endocrine hormones, and their application to domestic animals.

156. Artificial Insemination — Embryo Transfer (1)
Prerequisites: A Sci 145, 155 (or concurrently). Basic principles of artificial insemination and embryo transfer with emphasis on application to cattle. (3 lab hours)

163. Dairy Cattle Nutrition (3)
Prerequisite: A Sci 135. Principles of dairy cattle nutrition. Nutritional requirements of the dairy calf through the mature cow. Special emphasis on computerized diet formulation and feed inventory control.

165. Infectious Diseases of Domestic Animals (4)
Prerequisite: Biol 10 or Zool 10. Microbiological concepts related to bacterial, viral, and fungal diseases in domestic animals with emphasis on specific diseases of veterinary importance. (3 lecture, 3 lab hours)

Production and Management (A Sci)

11. Livestock Selection and Evaluation (3)
Prerequisite: A Sci 1 or concurrently. Basic factors involved in selection and evaluation of livestock; relationships of live market animal traits to carcass cutability and quality. (2 lecture, 3 lab hours)