



## Livestock Management Certificate

The Certificate in Livestock Management is designed to provide students with basic skills in livestock production management for employment opportunities on farms, ranches, and agriculture sales and services. The certificate will enhance technical competencies for individuals currently working in the livestock industry or those individuals wanting to gain employment in this industry. For students interested in continuing their studies, all courses are applicable to the A.A.S. or B.S. degree programs related to Livestock Production and/or Animal and Veterinary Sciences.

### Certificate Requirements

Required Courses.....12-15 hrs

AGR 125, 126 (1); AGR 255 or 330 (2), select 1 course from AGR 312 (4), 321 (4), 372, 373, 374, 375, 376, 377, or 421; select 1 course from 326, 327 (4), 328 (4), 329 (4), 332, or 380 (4).

Total Curriculum Requirements:.....12-15 hrs

### Course Descriptions

**AGR 125 Principles of Animal Science. (3) I.** Corequisite: AGR 126. Management and production of livestock enterprises; types, market classes, and grades of beef cattle, sheep and swine, and the breeds and products of dairy cattle.

**AGR 126 Animal Science Laboratory. (1) I.** Corequisite: AGR 125. Applied principles in the proper handling, restraint, and management techniques in beef, dairy, sheep, swine, and horses.

**AGR 255 Companion Animal Management. (3) A.** Care and management of dogs, cats, rabbits, birds, reptiles and tropical fish. Companion animal breeds, behavior, nutrition, genetics and reproduction will be emphasized.

**AGR 312 Ecology and Management of Grasslands and Pastures (4) A.** Prerequisites: AGR 130 and 131, and Junior Standing. Examination of grasslands and pastures from an ecological perspective with an emphasis on wildlife and livestock management. 3 Lec/2 Lab.

**AGR 321 Feeds and Feeding. (4) I.** Feeds used in livestock feeding; including harvesting, storage, feeding characteristics, and ration formulation from these feedstuffs. 3 Lec/2 Lab.

**AGR 326 Light Horse Production and Management. (4) A.** Prerequisite: AGR 125 and 126, or 250. Size and scope of horse industry, conformation and selection of horses, basics of equine nutrition and reproduction. Signs of health and illness. Routine health care procedures. 3 Lec/2 Lab.

**AGR 327 Beef Production. (4) I.** Prerequisites: AGR 125 and 126. History, importance, and trends associated with the beef cattle industry; systems of selecting, breeding, feeding, marketing, and management of beef cattle. 3 Lec/2 Lab.

**AGR 328 Swine Production. (4) A.** Prerequisites: AGR 125 and 126. History, importance, and trends associated with the swine industry; systems of selecting, breeding, feeding, marketing, and management of swine. 3 Lec/2 Lab.

**AGR 329 Sheep and Goat Production (4) A.** Prerequisite: AGR 125 and 126. An overview of the sheep and goat industry. Topics include selection, breeding, reproduction, health, nutrition, management, and marketing of sheep and goats and their products. 3 Lec/2 Lab.

**AGR 330 Animal Products. (3) A.** Prerequisites: AGR 125 and 126. Principles of grading, cutting, identifying, pricing, and consumer evaluation of poultry, beef, pork, and lamb cuts, and related products. 2 Lec/2 Lab.

**AGR 332 Poultry Production and Management. (3) A.** History and importance of the poultry industry, breeds, breeding, feeding, and management in the layer and broiler industry.



Department of Agriculture  
*School of Applied Sciences and Technology*  
College of Business & Technology (2020-2021)

**AGR 372 Topics and Laboratories in Animal Sciences. (2-6) A.** May be taken to a maximum of six hours, provided the topics are different. Lec/Lab hours will vary depending on topic.

**AGR 373 Animal Diseases. (3) I.** Prerequisite: six hours of animal science. Treatment, prevention, and eradication of infectious and parasitic disease of farm animals.

**AGR 374 Genetics of Livestock Improvement. (3) II.** Prerequisite: six hours of animal science. Applied genetic principles of improving farm animals including crossbreeding, inbreeding, and other mating plans.

**AGR 375 Reproduction and Artificial Insemination of Domestic Animals. (3) A.** Prerequisite: six hours of animal science. Reproductive systems, study and practice of artificial insemination, and pregnancy diagnosis of domestic animals. 2 Lec/2 Lab.

**AGR 376 Anatomy and Physiology of Domestic Animals. (3) A.** Prerequisite: AGR 125. Fundamental physiological processes of livestock relating to production, nutrition, and diseases. 2 Lec/2 Lab.

**AGR 377 Livestock Behavior and Welfare (3) A.** Prerequisite: AGR 125 and 126. An overview of livestock behavior and its application in modern animal husbandry.

**AGR 380 Technical Management of Dairy Cattle. (4) I.** Prerequisites: AGR 125 and 126. History, economics and nutritional importance and trends associated with the dairy industry including systems of selecting, breeding, feeding, sanitation, housing, marketing and management for financial success emphasizing both the cow and herd management. 3 Lec/2 Lab.

**AGR 421 Animal Nutrition. (3) II.** Prerequisite: AGR 321 or instructor approval. Principles of nutrition basic to modern livestock feeding; symptoms of nutrient deficiencies, nutritional disorders, metabolism of nutrients, feed additives, and modern methods of feed preparation and feeding.

**For More Information**

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