# **AG - ANIMAL SCIENCE (AGS)**

# AGS-113 Survey of the Animal Industry (3)

Introduces students to the various species and breeds of domestic animals and to create an understanding of the principles of food animal production, product marketing, and issues confronting the animal industry. Arts & Sciences Elective Code: B

Hours per week: 3.0 lecture

# AGS-214 Domestic Animal Physiology (3)

Studies the comparative anatomy and physiology of the major body systems of cattle, sheep, swine and horses. Includes laboratory exercises involving physiology and anatomy of animals in healthy and diseased states. Arts & Sciences Elective Code: B

Hours per week: 3.0 lecture

# AGS-279 Livestock Merchandising (2)

Covers the fundamentals of preparing for successful livestock sales, including advertising, photography, livestock preparation, sale guidelines and customer support. Students participate in one to three livestock sales. Arts & Sciences Elective Code: B Hours per week: 1.0 lecture, 2.0 lab

### AGS-305 Livestock Evaluation (3)

Examines the selection of breeding and meat animals based upon performance and visual appraisal. Students will use Kirkwood farm laboratory livestock and may include off-campus assignments. Arts & Sciences Elective Code: B

Hours per week: 2.0 lecture, 2.0 lab

# AGS-319 Animal Nutrition (3)

Examines the nutritional principles, digestive systems, composition, and nutritional characteristics of common feedstuffs, ration formulation, and recommended animal feeding programs. Arts & Sciences Elective Code: B *Hours per week:* 3.0 lecture

### AGS-350 Artificial Insemination of Cattle (1)

Develops skills of artificial insemination, heat detection and supportive background knowledge of beef and dairy herds, and discusses recommended nutrition, management and genetics. Arts & Sciences Elective Code: B

Hours per week: 0.5 lecture, 1.0 lab

# AGS-356 Livestock Behavior and Welfare (3)

Studies applications of basic animal behavior principles to ensure optimum performance and well being. Examines the effects of environment, stress, disease, and nutrition on animal physiology and performance. Arts & Sciences Elective Code: B Hours per week: 3.0 lecture

#### AGS-357 Livestock Behavior and Welfare Lab (2)

Meets concurrently with Livestock Behavior and Welfare. Examines the effects of environment, stress, disease, and nutrition on animal physiology and performance. Arts & Sciences Elective Code: B Hours per week: 4.0 lab

Corequisite: Take AGS-356.

### AGS-425 Swine Systems Management (3)

Identifies records needed in swine production and record keeping techniques. Students prepare budgets and cash flows as they relate to swine production. Also, various marketing opportunities and practices are examined and analyzed. Arts & Sciences Elective Code: B Hours per week: 2.0 lecture, 2.0 lab

# AGS-441 Livestock Housing and Equipment (3)

Studies the design and management of livestock facilities to limit stress and optimize performance. Teaches methods to minimize the environmental impact of livestock operations. Arts & Sciences Elective Code: B

Hours per week: 2.0 lecture, 2.0 lab

# AGS-500 Beef Industry and Feedlot Management (3)

Presents an overview and introduction to the entire beef industry. Relates and applies methods of starting cattle on feed and fall management of weaned calves. Deals with feedlot budgeting, determination of 205-day weights, ratios and fall management of the beef cow herd. Arts & Sciences Elective Code: B

Hours per week: 3.0 lecture

# AGS-501 Stockmanship, Bunk Management and Cattle Processing Lab (2)

Meets concurrently with Beef Industry Feedlot Management. Works with Kirkwood cattle and custom-fed cattle to practice low stress cattle handling, effective bunk management, and proper receiving and processing. Arts & Sciences Elective Code: B

Hours per week: 4.0 lab

Corequisite: Take AGS-500.

#### AGS-502 Beef/Cow Calf Production (2)

Participates in calving of the Kirkwood Community College herd. Deals with proper nutrition, health, solving obstetrics problems, and preparation of cow's return to estrus. Also includes records, identification, and pasture management. Arts & Sciences Elective Code: B Hours per week: 2.0 lecture

### AGS-503 Cow Calf Lab (1)

Meets concurrently with Beef Cow/Calf Production. Observes and assists with calving the Kirkwood Community College cow herd. Practices baby calf health and management along with preparation of the cow herd for rebreeding. Plans and implements early lactation nutrition for the cow herd. Arts & Sciences Elective Code: B Hours per week: 2.0 lab

Corequisite: Take AGS-502.

### AGS-512 Beef Breeding/Reproduction/Nutrition (3)

Studies the anatomy and physiology of the female and male reproductive systems. Develops an understanding of proper use of heat synchronization, A.I., super ovulation, embryo transplants, and new developments in biotechnology. Deals with health, heritability, and nutritional problems. Arts & Sciences Elective Code: B *Hours per week*: 3.0 lecture

# AGS-513 Reproduction and Nutrition Lab (2)

Meets concurrently with Beef Breeding/Reproduction/Nutrition. Develops reproductive strategies and management plans along with practicing principles to enhance reproductive efficiency. Develops and implements nutritional programs for beef cattle herds. Arts & Sciences Elective Code: B

Hours per week: 4.0 lab

Corequisite: Take AGS-512.

### AGS-516 Beef Science Management (2)

Works with evaluation management by identifying, measuring and selecting commercially important traits of beef cattle. Provides the basic information needed to understand terminology and predict performance through the use of sire summaries. Allows students to improve average performance of offspring by matching genetic potential to feed resources through multiple trait selection. Arts & Sciences Elective Code: B Hours per week: 2.0 lecture

# AGS-517 Livestock Merchandising Lab (1)

Meets concurrently with Beef Science Management. Collects and analyzes beef cattle data for management and marketing use. Prepares cattle for sales and exhibition. Includes genomic, identification, phenotypic evaluation, and preparation for photography and videos. Arts & Sciences Elective Code: B

Hours per week: 2.0 lab

Corequisite: Take AGS-516.

# AGS-531 Swine Reproduction and Management (3)

Recognizes swine reproductive characteristics and reproductive functions of swine breeding stock, and identifies type and confirmation necessary for economic production. Deals with breeds, breeding programs, breeding systems, including A.I., and appropriate management techniques. Arts & Sciences Elective Code: B Hours per week: 3.0 lecture

# AGS-532 Swine Reproduction and Management Lab (2)

Meets concurrently with Swine Reproduction and Management. Teaches breeding systems, including heat detection, AI methods, and current industry breeding practices. Explains equation for proper collection and extension, as well as methods for processing and packaging. Arts & Sciences Elective Code: B

Hours per week: 4.0 lab

Corequisite: Take AGS-531.

### AGS-948 Special Projects (1-3)

Includes an agreed-to development plan for an applied problem solution. Allows student to pursue exploration and fact gathering of special-interest projects. Student and instructor meet weekly for discussion, observation and evaluation of the project development. Arts & Sciences Elective Code: B

Hours per week: 1.0 lecture