UNDERGRADUATE COURSES DESCRIPTIONS

36250 Introduction to Animal Science 3 Cr. General aspects in livestock and poultry including genetics & breeding, nutrition, reproduction and animal products. Production in dairy cattle, sheep & goat, and poultry including types and breeds, establishing the flock, selecting and judging, systems of production, nutrition, reproduction, breeding, buildings and equipments, managing, health, disease prevention and parasite control.

36352 Livestock Anatomy and Physiology 4 Cr. Anatomy of cattle, goat, sheep, horse and fowls. Physiology of circulation, digestion, reproduction, respiration and urogenital apparatus.

Prerequisite: Biology 36100

36355 Reproductive Physiology 4 Cr. Anatomy of male and female organs of cattle, sheep, goat, horse and fowls. Oogenesis period, spermatogenesis, pregnancy, placental physiology, endocrinology, artificial insemination, embryo transfer.

Prerequisite: Anatomy and Physiology 36352; General Biochemistry 36285.

36151 General Microbiology 3 Cr. Physiology of microorganisms, bacterial metabolism, viral and bacterial structure, fungal structure and physiology, effect of physical and chemical agents on microorganisms, staining methods and microbiological cultures. **Prerequisite:** Biology 36100

36356 Animal and Poultry Diseases 3 Cr. Viral diseases of domestic animals and fowls, bacterial diseases, metabolic diseases, nutritional diseases, fungal and parasitic diseases.

Prerequisite: Microbiology 36151

36351 Principles of Animal Hygiene 3 Cr. Effect of environment on animals, principle of sanitation, disinfection, vaccination, quarantine and dispose of dead animals, hygiene of animal houses.

Prerequisite: Microbiology 36151

36357 Dairy Production 3 Cr. Breeds, mammary gland, mastitis, reproduction, management of feeds and feeding, housing, breeding, record keeping, judging, and milking machines.

Prerequisite: Animal Nutrition II 36252, Animal Breeding I 36353

36454 Special Topics 2 Cr. Laboratory, library and field research in a specialized topic.

Prerequisite: Fourth Year Standing.

36251 Animal Nutrition I 4 Cr. Introduction, chemical composition of animals and plants. Role of nutrients in animal nutrition, digestion and absorption of nutrient in animals. Determination of nutritional value (energy and protein) of feeds. Estimation of nutrients requirement of animals.

Prerequisite: General Biochemistry 36285, Livestock Anatomy and Physiology 36352

Department of Animal Sciences

36252 Animal Nutrition II 3 Cr. Feedstuff classification, roughages, hays, plant and animal protein sources, by-product feeds, vitamin and mineral supplementation, feed additives, animal feeding and feed preparation.

Prerequisite: Animal Nutrition I 36251

36350 Animal Nutrition III 2 Cr. Feed standards, methods of feed formulation (regression, pierson, square, general linear model).

Prerequisite: Animal Nutrition II 36252

36359 Poultry Production 4 Cr. Introduction, characteristics of poultry breeds, anatomy of fowl, breeding of poultry. Incubation, physiology of laying, housing and environmental requirements for poultry rearing, marketing of eggs and poultry meats.

Prerequisite: Animal Breeding I 36353, Animal Nutrition II 36252.

36353 Animal Breeding I 3 Cr. An introductory course in genetics with emphasis on the application of genetic principles in animals including poultry, gene frequencies, variation in economic traits, principles of selection, selection for superior breeding stocks. **Prerequisite:** Genetics 36263

36354 Animal Breeding II 3 Cr. A study of genetic principles in animal breeding plans based on selection, aid to individual selection, methods of mating and their application with emphasis on practical problems.

Prerequisite: Animal Breeding I 36353

36358 Sheep & Goat Production 3 Cr. Breeds, Judging, breeding, nutrition (feedlot and grazing), reproduction, buildings & equipments, management, fattening, products (meat, milk, wool & mohair), diseases.

Prerequisite: Animal Nutrition II 36252, Animal Breeding I 36353