ANIMAL SCIENCE (ASCI)

Courses

ASCI 001. Introductory Animal Sciences. 0 or 4 Credits.
An overview of the genetics, nutrition, reproduction, and management of livestock and recreation species; introduction to animal behavior, animal disease, and biotechnology.

ASCI 006. Companion Animal Care & Mgmt. 3 Credits.
Scientific principles of nutrition, breeding selection, health, management practices, pet therapy, and animal bonding. Primary emphasis on cat and dog.

ASCI 097. Introductory Special Topics. 0.5-15 Credits.
See Schedule of Courses for specific titles.

ASCI 098. Introductory Special Topics. 0.5-15 Credits.
See Schedule of Courses for specific titles.

ASCI 108. Equine Enterprise Management. 3 Credits.
Provides guidelines for understanding risks, liabilities and other pertinent topics necessary for running a successful equine-related business. Prerequisite: ASCI 001.

ASCI 110. Animal Nutrit, Metab & Feeding. 0 or 4 Credits.
Principles of meeting the nutrient requirements of animals, especially as they relate to the practical problems of formulation and production systems.

ASCI 115. Introduction to Equine Studies. 4 Credits.
Overview of the scientific and practical application of equine management and selection principles. Housing, nutrition, herd health, reproduction, and career opportunities.

ASCI 117. Horse Health and Disease. 3 Credits.
Discusses the basic anatomy and physiology of the horse, common equine diseases and problems, their diagnoses, prevention, and treatment. Prerequisite: ASCI 001; a Biology course, or Instructor permission.

ASCI 118. Appl Animal Health. 0 or 3 Credits.
A study of small and large domestic animal diseases. Natural response to disease, methods of diagnosis, control, and treatment. Prerequisite: ASCI 001; a Biology course, or Instructor permission.

ASCI 121. Equus. 2-4 Credits.
A hands-on equine management experience. Students perform horse duties, recordkeeping, and make financial and management decisions on a horse boarding operation. Prerequisite: Sophomore standing; Instructor permission.

ASCI 122. Animals in Soc/Animal Welfare. 3 Credits.
Designed to heighten awareness and understanding of human-animal relationships in society, agriculture, and science. Prerequisite: Sophomore standing.

ASCI 125. Equine Instructing Techniques. 0 or 3 Credits.
Examines philosophies, concepts and teaching-learning strategies needed for the development of sound equine instructing skills. Prerequisite: ASCI 115 or Instructor Permission.

ASCI 134. CREAM. 4 Credits.
A two-semester course in which students perform the work and make the financial and management decisions associated with the CREAM dairy herd. Prerequisite: Sophomore/Junior standing; Instructor permission.

ASCI 135. CREAM. 4 Credits.
A two-semester course in which students perform the work and make the financial and management decisions associated with the CREAM dairy herd. Prerequisite: Sophomore/Junior standing; Instructor permission.

ASCI 141. Anat&Physiol Domestic Animals. 0 or 4 Credits.
A comprehensive review of the structure and function of domestic animals, emphasizing those of economic importance. Differences between mammalian and avian species are discussed. Prerequisite: BIOL 001; a chemistry course, or Instructor permission.

ASCI 143. Forage and Pasture Mgmt. 4 Credits.
Principles and practices of growing and utilizing forage plants for hay, silage and pasture; introduction to management intensive grazing; understanding forage quality. Pre/co-requisites: PSS 010 or one semester Biology or one semester Plant Biology or Instructor permission. Cross-listed with: PSS 143.

ASCI 154. Dog Training and Behavior. 3 Credits.
Canine behavior is thoroughly examined and applied to the training and behavior modifications of dogs. Prerequisite: ASCI Major or Instructor Permission.

ASCI 156. Dairy Management Seminar. 2 Credits.
Seminar course addresses research, policy, and production topics in the dairy industry and develops leadership roles through guest speakers, field trips and group projects. Prerequisites: 2 + 2 FARMS or CREAM or Instructor permission.

ASCI 168. Animal Genetics. 3 Credits.
The discussion of genetic principles and their application in the improvement of farm animals. Student teams develop a breeding plan in a semester project. Prerequisites: BIOL 001 or BCOR 011 or Instructor permission.

ASCI 171. Zoos, Exotics & Endang Species. 3 Credits.
From gorillas to golden lion tamarinds, how human attitudes, activities, utilization, and management strategies impact wild and captive animal populations. Prerequisite: ASCI 001 or Instructor permission.

ASCI 181. Animal Science Career Seminar. 1 Credit.
Discussion and workshop activities exploring careers in animal and food science. Includes resume preparation and interview training. Prerequisite: Sophomore standing.

ASCI 191. Intermediate Special Topics. 0.5-15 Credits.
See Schedule of Courses for specific titles.

ASCI 192. Intermediate Special Topics. 0.5-15 Credits.
See Schedule of Courses for specific titles.
ASCI 195. Field Experience. 0.5-15 Credits.
Professionally-oriented field experience under joint supervision by faculty and business or community representative. Prerequisite: Instructor permission. Total credits towards graduation cannot exceed 15 hours.

ASCI 196. Field Experience. 0.5-15 Credits.
Professionally-oriented field experience under joint supervision by faculty and business or community representative. Prerequisite: Instructor permission. Total credits towards graduation cannot exceed 15 hours.

ASCI 197. Undergraduate Research. 0.5-15 Credits.
Research activity under direction of qualified staff member. Must have faculty member approval. Written proposal and report required. Prerequisite: Junior standing; Department Chair permission.

ASCI 198. Undergraduate Research. 0.5-15 Credits.
Research activity under direction of qualified staff member. Must have faculty member approval. Written proposal and report required. Prerequisite: Junior standing; Department Chair permission.

ASCI 208. Equine Industry Issues. 3 Credits.
Case-based course enhances students’ abilities to integrate information, use logical thought processes, and produce concise, organized solutions to real problems, from individual horses to industry-wide. Prerequisites: ASCI 115 or ASCI 117 or Instructor permission.

ASCI 211. Summer Farm Management. 4 Credits.
A work-study program on the modern practices associated with farm management. Taught at Miner Institute, Chazy, NY. For students with a strong interest in farm management. Prerequisite: Junior, Senior or Graduate standing.

ASCI 215. Physiology of Reproduction. 3 Credits.
Fundamental principles of the physiology of reproduction with emphasis on, but not limited to, farm animals. Prerequisites: ASCI 141 or Instructor permission.

ASCI 216. Endocrinology. 3 Credits.
Physiology of endocrine and autocrine/paracrine systems and growth factors. Prerequisites: Course in both Biology and physiology; one course in Anatomy desirable.

ASCI 217. Physiology of Reproduction Lab. 1 Credit.
Laboratory for fundamental principles of the physiology of reproduction with emphasis on, but not limited to, farm animals. Must be taken concurrently with ASCI 215. Prerequisites: ASCI 141 or Instructor permission. Co-requisite: ASCI 215.

ASCI 220. Lactation Physiology. 3 Credits.
Physiological mechanisms that control and affect lactation in domestic and laboratory animals with emphasis on dairy cattle. Includes mammary anatomy, development and health, and milk synthesis. Prerequisite: One chemistry course and one course in anatomy and physiology, or Instructor permission.

ASCI 221. Physiology of Endocrine and Autocrine/Paracrine Systems. 3 Credits.
Organization of biosynthetic and regulatory pathways; pathogenesis of representative taxa from the parasitic protozoa, helminthes, and arthropods of humans and domestic animals. Prerequisite: BIOL 001, BIOL 002 or BCOR 011, BCOR 012, and ASCI 101.

ASCI 230. Agricultural Policy & Ethics. 3 Credits.
Examines American agriculture and policies from various perspectives - historical, political, ecological, technological, social, economic, and ethical. Emphasis on contemporary issues, policy options, future developments. Prerequisite: Junior standing or permission.

ASCI 233. Dairy Cattle Breeding. 2 Credits.
Setting breeding goals, making selection and mating decisions; balancing opposing forces to maximize genetic progress, and understanding the underlying genetic principles. Prerequisites: A genetics course; a Statistics course; Instructor permission.

ASCI 234. Advanced Dairy Management. 15 Credits.
An intensive, residential program at the Miner Institute providing an in-depth experiential program in the management of the dairy herd. Prerequisites: ASCI 110, ASCI 134 or ASCI 135 or equivalents. Fifteen hours.

ASCI 252. FARMS Senior Project. 1-18 Credits.
The students will conduct independent research focused on a project proposal that was developed and approved in previous course work (ASCI 156). Prerequisite: FARMS Program enrollment; ASCI 156.

ASCI 263. Clin Topics:Companion Animal Med. 3 Credits.
The use of case studies in companion animal medicine to develop clinical, analytical, and diagnostic skills. Prerequisite: ASCI 118; ASCI 141; Junior standing.

ASCI 264. Clin Topics: Livestock Medicine. 3 Credits.
An advanced study of diseases in cattle, sheep, goats, and pigs, emphasizing disease detection, pathobiology, treatment and prevention. Prerequisites: ASCI 118, ASCI 141, Junior standing.

ASCI 272. Adv Top:Zoo,Exotic,Endang Spec. 3 Credits.
An exploration of modern zoo philosophy and ethics and the extent of human intervention necessary for the preservation of endangered species. Prerequisite: ASCI 171 and Instructor permission.

ASCI 277. Animal and Human Parasitology. 3 Credits.
This course will emphasize the morphology, life cycles, and pathogenesis of representative taxa from the parasitic protozoa, helminthes, and arthropods of humans and domestic animals. Prerequisite: BIOL 001, BIOL 002 or BCOR 011, BCOR 012, and 100 level ASCI course or equivalent or instructor permission.

ASCI 297. Advanced Special Topics. 0.5-15 Credits.
Written courses, seminars or topics beyond the scope of existing offerings. See Schedule of Courses for specifics. Prerequisite: Department Chair permission. May enroll more than once for maximum of fifteen hours.

ASCI 298. Advanced Special Topics. 0.5-15 Credits.
Written courses, seminars or topics beyond the scope of existing offerings. See Schedule of Courses for specifics. Prerequisite: Department Chair permission. May enroll more than once for maximum of fifteen hours.