ANIMAL SCIENCE

OVERVIEW
The research program focuses on dairy animal agriculture involving a combination of courses and graduate research. Areas of research interest include lactation physiology, mastitis, calf and cow nutrition, immunology, and genetics.

DEGREES
- Animal Science AMP
- Animal Science M.S.

FACULTY
Barlow, John W.; Assistant Professor, Department of Animal Science; DVM, University of Illinois Urbana-Champaign
Dann, Heather; Adjunct Assistant Professor, Department of Animal Science; PHD, University of Illinois
Fobare Erickson, Patricia Ann; Senior Lecturer; DVM, Cornell University
Grant, Richard; Adjunct Professor, Department of Animal Science; PHD, Purdue University
Greene, Elizabeth Ann; Extension Professor, Department of Animal Science; PHD, Kansas State University
Greenwood, Sabrina Louise; Assistant Professor, Department of Animal Science; PHD, University of Guelph
Kerr, David E; Associate Professor, Department of Animal Science; PHD, University of Saskatchewan
Kraft, Jana; Assistant Professor, Department of Animal Science; PHD, University of Jena
McKay, Stephanie Dawn; Assistant Professor, Department of Animal Science; PHD, University of Alberta
Smith, Julia M.; Extension Associate Professor, Department of Animal Science; PHD, Cornell University
Wright, Andre-Denis G.; Professor, Department of Animal Science; PHD, University of Guelph
Zhao, Feng-Qi; Associate Professor, Department of Animal Science; PHD, University of Alberta

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

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

ASC 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.

ASC 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.

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

ASC 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.

ASC 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. Prerequisites: ASCI 171 and Instructor permission.

ASC 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.

ASC 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.

ASC 301. ASCI Graduate Journal Club. 1 Credit.
Students learn to critically read and discuss current scientific literature in terms of scientific method and merit. Pre/corequisite: Graduate standing.

ASC 302. ASCI Graduate Seminar. 1 Credit.
Topics of current faculty and graduate student interest presented in a seminar-discussion format. Pre/corequisite: Graduate standing.

ASC 303. Research Proposal Writing. 1 Credit.
Students develop and write a formal proposal for their graduate research project. Pre/co-require: Graduate standing; must be taken prior to/during the semester of student’s first committee meeting.

ASC 391. Master’s Thesis Research. 1-10 Credits.

ASC 392. Independent Literature Rsch. 1-6 Credits.
Reading and literature research culminating in a paper on a topic of current interest in Animal Sciences.

ASC 395. Special Topics. 1-6 Credits.
ASCI 396. Special Topics. 1-6 Credits.
ASCI 491. Doctoral Dissertation Research. 1-12 Credits.