

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

Barbano, David Mark; Adjunct Professor, Department of Animal Science; PHD, Cornell University

Barlow, John; Assistant Professor, Department of Animal Science; DVM, University of Illinois Urbana-Champaign; PHD, University of Vermont

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

Greenwood, Sabrina Louise; Assistant Professor, Department of Animal Science; PHD, University of Guelph

Kerr, David; 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

Townson, David H; Professor, Department of Animal Science, PHD, Michigan State University

Zhao, Feng-Qi; Associate Professor, Department of Animal Science; PHD, University of Alberta

Courses

ASCI 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.

ASCI 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.

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 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 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.

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. Prerequisites: ASCI 171 and 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.

ASCI 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.

ASCI 302. ASCI Graduate Seminar. 1 Credit.

Topics of current faculty and graduate student interest presented in a seminar-discussion format. Pre/corequisite: Graduate standing.

ASCI 303. Research Proposal Writing. 1 Credit.

Students develop and write a formal proposal for their graduate research project. Pre/co-requisite: Graduate standing; must be taken prior to/during the semester of student's first committee meeting.

ASCI 391. Master's Thesis Research. 1-10 Credits.

ASCI 392. Independent Literature Rsch. 1-6 Credits.

Reading and literature research culminating in a paper on a topic of current interest in Animal Sciences.

ASCI 395. Special Topics. 1-6 Credits.

ASCI 396. Special Topics. 1-6 Credits.

ASCI 491. Doctoral Dissertation Research. 1-12 Credits.