ANIMAL SCIENCE
http://asci.uvm.edu/

OVERVIEW
The research program focuses on farm 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 and Veterinary Sciences; PHD, Cornell University
Barlow, John; Associate Professor, Department of Animal and Veterinary Sciences; DVM, University of Illinois Urbana-Champaign; PHD, University of Vermont
Dann, Heather; Adjunct Assistant Professor, Department of Animal and Veterinary Sciences; PHD, University of Illinois
Fobare Erickson, Patricia Ann; Senior Lecturer, Department of Animal and Veterinary Sciences; DVM, Cornell University
Frank, Richard; Adjunct Professor, Department of Animal and Veterinary Sciences; PHD, Purdue University
Greenwood, Sabrina Louise; Associate Professor, Department of Animal and Veterinary Sciences; PHD, University of Guelph
Kraft, Jana; Associate Professor, Department of Animal and Veterinary Sciences; PHD, Friedrich-Schiller-University of Jena
McKay, Stephanie Dawn; Associate Professor, Department of Animal and Veterinary Sciences; PHD, University of Alberta
Smith, Julia M.; Research Associate Professor, Department of Animal and Veterinary Sciences; DVM, Cornell University
Testroet, Eric; Assistant Professor, Department of Animal Science and Veterinary Sciences; PHD, Iowa State University
Townson, David H; Professor, Department of Animal and Veterinary Sciences, PHD, Ohio State University
van Amburgh, Michael; Adjunct Professor, Department of Animal Science and Veterinary Science; PHD, Cornell University
Zhao, Feng-Qi; Professor, Department of Animal and Veterinary Sciences; 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: BIOL 001 or BCOR 011 and ASCI 141 or ANPS 019 or ANPS 020.

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. 1-18 Credits.
Written courses, seminars or topics beyond the scope of existing offerings. See Schedule of Courses for specific titles. Prerequisite: Department Chair permission. May enroll more than once for maximum of fifteen hours.

ASCI 298. Advanced Special Topics. 1-18 Credits.
Written courses, seminars or topics beyond the scope of existing offerings. See Schedule of Courses for specific titles. 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. 2 Credits.
Students discuss and practice the grant/proposal writing process by developing and writing a research proposal in response to a specific request for proposals. Students practice grant writing and review, and they share their work and review the work of others. Pre/Corequisites: Graduate standing; recommended be taken prior to/ during the semester of student's first committee meeting.
ASCI 322. One Health: Zoonoses. 3 Credits.
Zoonoses and vector-born disease account for the majority of emerging and re-emerging diseases. Students will learn about the drivers that influence infection in animals and humans, tools used for disease monitoring and prevention, and policies and programs aimed at prevention. Cross-listed with: PH 322.

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. Advanced Special Topics. 1-6 Credits.

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

ASCI 496. Advanced Special Topics. 1-18 Credits.
See Schedule of Courses for specific titles.