ANIMAL SCIENCES

Program of Study

The M.S. degree in Animal Sciences may be earned for a program of study in reproductive physiology, animal health, nutrition or management. The Ph.D. degree may be earned by completing a program of study in Food and Nutrition Sciences or Biological Sciences. Thesis research constitutes a major portion of the M.S. and Ph.D. programs. Students are required to take Graduate Seminar and Ph.D. students must present four seminars and M.S. students must present three seminars.

Graduate students will take many of their formal graduate courses in supporting departments, depending upon their specific interests and fields of study. Graduate students appointed to assistantships in the Animal and Veterinary Sciences field devote half time to work in the Department. Complete research facilities are available, including laboratories and animal units, with opportunities for field tests.

The Department of Animal and Veterinary Science also offers a non-thesis Master of Professional Studies (M.P.S.) degree in Animal Sciences. Requirements for the M.P.S. are 30 credit hours, of which at least 15 hours must be 500 and/or 600-level. In addition, each student will be required to complete a minimum of three hours in an "independent study" type course within the Department. The M.P.S. student is required to demonstrate competence in chosen fields of specialization during an oral comprehensive examination at the completion of his or her program. Courses selected must include a minimum of 12 credits in the Animal and Veterinary Sciences. In addition, a minimum of 12 hours must be selected in a specialized field of study. The three credit 'independent study" type course is to be a short-term research-type project. Upon completion of the project, a written report will be presented to the major professor and a seminar on the project will be presented to the Department of Animal and Veterinary Science.

Research Facilities

The AVS Program Office and many of the teaching, research and Cooperative Extension faculty and graduate students are housed in Hitchner Hall. Hitchner Hall is also home to a number of research and service laboratories that provide valuable research information to the livestock producers of the state. These include the Veterinary Diagnostic Lab, Embryology Lab and a new state-of-the-art Digital Imaging Lab. Research laboratories in Rogers Hall are dedicated to nutrition and reproductive physiology. Many of our students have either worked in the labs or chosen to do laboratory- based projects for their senior class presentations. These experiences allow them to acquire additional skills working with research animals, computers and other technologies, and laboratory equipment. Located just one mile from the center of campus is the J. F. Witter Teaching and Research Farm which is the heart of the Department's livestock teaching and research programs. The farm is home to:

90 Registered Holstein dairy cows and heifers
32 Standard bred horses

The farm consists of over 500 acres of forest, pasture and crop land. Livestock waste from the facility is recycled through the farm's composting facility. In addition, the Small Animal Facility on campus houses a variety of laboratory animals. Animal and Veterinary Sciences programs are geared towards a "hands on" approach. These facilities provide students with a multitude of animal experience necessary for jobs in the livestock, veterinary and medical research fields. Labs held at the Witter Center where students can actually touch and feel the animal whose physiology and nutrition they have been studying reinforce campus lectures.

Applying

Students interested in pursuing graduate studies in animal nutrition should have undergraduate courses in mathematics, physics, organic chemistry, biochemistry, and quantitative analysis.

Training in physiology and biochemistry is desirable for students interested in animal physiology, and some work in statistics is desirable for all graduate students

Students who wish to receive first-round consideration for the coming academic year are advised to have a completed application arrive in the department before February 15.

Correspondence

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Graduate Faculty

Martin R. Stokes, Ph.D. (Glasgow, 1978), Professor and Chair. Ruminant nutrition, silage preservation and utilization, dietary manipulation to maximize animal performance and efficiency.

Gary W. Anderson, Ph.D. (Virginia Tech, 1982), Associate Extension Professor. Reproduction efficiency of livestock, dairy farm management, animal health.

Kenneth M. Andries, Ph.D. (Kansas State University, 1996), Assistant Extension Professor. Animal breeding. Beef, sheep and deer management.

Robert C. Bayer, Ph.D. (Michigan State, 1972), Professor. Fisheries and aquaculture nutrition, management and physiology.

Robert C. Causey, Ph.D., D.V.M., (Louisiana State, 1985, University of Minnesota, 1989), Assistant Professor. Equine reproduction, veterinary microbiology.

William R. Congleton, Ph.D. (Kentucky, 1977), Associate Professor. Systems analysis and computer simulation, animal breeding, and factors influencing profit.

David P. Marcinkowski, Ph.D. (The Ohio State University, 1982), Associate Extension Professor. Dairy management, dairy reproduction.

Hans Michael Opitz, D.V.M. (Free University of West Berlin, 1964), Associate Extension Educator. Poultry pathology.

Robert A. Taft, Ph.D. (West Virginia, 1999), Research Associate. Sr. Manager Reproductive Technologies Resource, The Jackson Laboratory, reproductive physiology of mice, assisted reproductive technologies.

Charles R. Wallace, Ph.D. (Florida, 1986), Associate Professor. Reproductive efficiency of livestock.

James A. Weber, Ph.D., D.V.M., (Idaho, 1992, Washington, 1994), Associate Professor. Embryo development in livestock, reproductive physiology of horses and cattle.