

Animal & Food Sciences

College of Agriculture, Food & Environment

The degrees of Master of Science (Plan A and Plan B) and Doctor of Philosophy are available in Animal and Food Sciences.

Admission Requirements

Applicants to the Master's program must have completed a four-year degree at an accredited institution of higher education, must have achieved at least a 3.00 GPA for all undergraduate courses, and must submit scores from the verbal, quantitative, and analytical portions of the Graduate Record Exam (GRE). Applicants must have completed these courses; 1 semester calculus or physics, 3 semesters biology/physiology, 3 semesters chemistry (including 1 semester of organic chemistry or biochemistry). Additional courses in physiology, cell biology, microbiology, and anatomy are encouraged. Applicants for a Ph.D. program must be in the process of completing, or have already completed, an M.S. degree or equivalent. Applicants must complete the on-line graduate school application.

Degree Requirements

Programs in Animal Sciences are divided into the disciplinary areas of animal nutrition, reproduction, physiology, and food science. Special interests in beef or dairy cattle, horses, poultry, sheep and swine may be pursued within many of these areas. Programs in food science offer specialization in dairy technology, food chemistry, food microbiology, food safety, meat biochemistry, and meat processing.

Graduate Courses

ASC 404g	Sheep Science	(4)
ASC 408g	Swine Science	(2)
ASC 410g	Equine Sciences	(3)
ASC 420g	Dairy Cattle Science	(3)
ASC 564	Milk Secretion	(3)
ASC 601	Mammalian Endocrinology (Same As Pgy 601)	(3)
ASC 602	Micronutrient Metabolism (Same As Ns 602)	(4)
ASC 630	Advanced Meat Science (Same As Fsc 630)	(4)
ASC 660	Biology Of Reproduction (Same As Pgy/Ana 660)	(3)
ASC 664	Advanced Animal Breeding	(3)
ASC 680	Laboratory Methods In Nutritional Sciences	(4)
ASC 681	Energy Metabolism	(2)
ASC 682	Microbial Ecology Of Digestion	(4)
ASC 683	Protein Metabolism	(2)
ASC 684	Advanced Ruminant Nutrition	(3)
ASC 685	Mineral Metabolism	(2)
ASC 686	Advanced Nonruminant Nutrition	(3)
ASC 687	Vitamin Metabolism	(2)
ASC 688	Equine Nutrition	(2)
ASC 689	Physiology Of Nutrient Digestion And Absorption	(3)

ASC 690	Macronutrient Metabolism In Animals	(2)
ASC 748	Master's Thesis Research	(0)
ASC 749	Dissertation Research	(0)
ASC 767	Dissertation Residency Credit	(2)
ASC 768	Residence Credit For The Master's Degree	(1-6)
ASC 769	Residence Credit For The Doctor's Degree	(0-12)
ASC 771	Animal Science Seminar	(1)
ASC 780	Special Problems In Animal Derived Foods (Same As Fsc 780)	(1-4)
ASC 781	Special Problems In Genetics And Animal Breeding	(1-4)
ASC 782	Special Problems In Animal Nutrition	(1-4)
ASC 783	Special Problems In Reproductive Physiology (Subtitle Required)	(1-4)
ASC 790	Research In Animal Derived Foods (Same As Fsc 790)	(1-6)
ASC 791	Research In Genetics And Animal Breeding	(1-6)
ASC 792	Research In Animal Nutrition	(1-6)
ASC 793	Research In Reproductive Physiology (Subtitle Required)	(1-6)
FSC 434g	Food Chemistry	(4)
FSC 530	Food Microbiology	(5)
FSC 535	Food Analysis	(4)
FSC536	Advanced Food Technology	(4)
FSC 538	Food Fermentation And Thermal Processing	(4)
FSC 540	Food Sanitation	(3)
FSC 630	Advanced Meat Science (Same As Asc 630)	(4)
FSC 632	Foodborne Disease Agents	(3)
FSC 636	Food Packaging	(2)
FSC 638	Food Proteins	(3)
FSC 640	Food Lipids	(3)
FSC 642	Food Pigments	(3)
FSC 780	Special Problems In Animal Derived Foods (Same As Asc 780)	(1-4)
FSC 790	Research In Animal Derived Foods (Same As Asc 790)	(1-6)