5313. Nutritional Biochemistry in Animals (3). Nutrient metabolism and regulation in animals. Course integrates metabolic pathways with nutrition and physiology. S.


5315. Animal Endocrinology (3). Prerequisite: Consent of instructor. Course will address current research on hypothalamic-pituitary-gonadal axes and other current topics. S, even years. (Writing Intensive)


5318. Topics in Animal Stress, Welfare, and Behavior (3). Students will write and discuss each topic online. Topics include animal rights philosophy and applications, stress mechanisms, measuring behavior and welfare, and other current topics. F.

5400. Advanced Meat Science and Muscle Biology (4). Advanced study of meat components, their development, and effect on meat characteristics and processing properties. Emphasis on industry issues and the current scientific literature. Not for students who have taken ANSC 4400. SS.

5401. Experimental Techniques in Meat Chemistry and Muscle Biology (4). Histological, chemical, and biological properties of meat. Experimental techniques in meat science and muscle biology will be studied in lecture and individual lab study.

5402. Advanced Horse Production (4). An advanced study of equine science, including health, lameness, disease, genetics, reproductive physiology, nutrition, and research topics within the equine industry.


5404. Physiology of Reproduction (4). Anatomy of reproductive systems, physiological regulations of reproductive processes, estrous cycle, gonadal functions, semen evaluation, fertilization, embryology, pregnancy, parturition, lactation, reproductive efficiency, and research techniques. SSII, odd years.


6000. Master’s Thesis (V1-12).

6001. Supervised Teaching (V1-3). Supervised teaching experience at the university level.

7000. Research (V1-12).

8000. Doctor’s Dissertation (V1-12).

Food Science (FDSC)

Undergraduate Courses

2300. [AGRI 1329] Principles of Food Technology (3). Basic information necessary to understand technological aspects of modern industrial food supply systems. A fundamental background in food classification, modern processing, and quality control. F, S, SS.

2302. Elementary Analysis of Foods (3). Basic laboratory practice in food product testing. Should have had a course in chemistry or other lab science. S.

3100. Food Science Seminar (1). Information to prepare students to function in a competitive work environment or professional/graduate school. F, S.

3301. Food Microbiology (3). Prerequisite: MBIO 3401 or consent of instructor. Study of methods for preservation of food with respect to control of microbiological growth and activity. S, even years. (Writing Intensive)

3302. Advanced Food Analysis (3). Prerequisites: CHEM 3305, 3105, FDSC 2302, or permission of instructor. Study of laboratory techniques fundamental to establishing the nutritional value and overall acceptability of foods. Investigation of food constituents and methods used in their analysis. F, even years. (Writing Intensive)

3303. Food Sanitation (3). Principles of sanitation in food processing and food service applications. Chemical, physical, and micro-