

- 480 Special Problems in Anatomy**  
Fall, Spring, Summer. 1 to 5 credits. A student may earn a maximum of 15 credits in all enrollments for this course. R: Approval of department. SA: ANT 480

Topics from an anatomical field such as gross anatomy, histology, tissue culture, cytology, neurology, or embryology.

- 485 Directed Study in Human Prosection**  
Fall, Spring, Summer. 2 to 4 credits. A student may earn a maximum of 15 credits in all enrollments for this course. P:M: (ANTR 350 or ZOL 328 or KIN 217) R: Open only to juniors or seniors.

Prosection of selected regions and isolated structures of preserved human cadavers.

- 534 Cell Biology and Physiology I**  
Fall. 3 credits. Interdepartmental with Physiology; Biochemistry and Molecular Biology. Administered by Department of Physiology. R: Open only to graduate-professional students in the College of Human Medicine or College of Osteopathic Medicine.

Modern concepts of cell biology as a basis for understanding the physiology of human tissues and organ systems in health and disease.

- 535 Cell Biology and Physiology II**  
Spring. 4 credits. Interdepartmental with Physiology; Biochemistry and Molecular Biology. Administered by Department of Physiology. R: Open only to graduate-professional students in the College of Human Medicine or the College of Osteopathic Medicine.

Modern concepts of cell biology as a basis for understanding the physiology of human tissues and organ systems in health and disease. Continuation of PSL 534.

- 551 Medical Gross Anatomy**  
Fall. 6(4-6) R: Open only to graduate-professional students in the College of Human Medicine or College of Osteopathic Medicine or approval of department. SA: ANT 551

Human regional gross anatomy with clinical correlations using prosections, cross-sections, medical imaging, multimedia and hypermedia.

- 552 Medical Neuroscience**  
Spring. 4(3-2) Interdepartmental with Neurology and Ophthalmology; Physiology; Radiology. Administered by Department of Neurology and Ophthalmology. R: Graduate-professional students in colleges of Human Medicine and Osteopathic Medicine. SA: ANT 552

Correlation of normal structure and function of the human nervous system with clinical testing, classical lesions, and common diseases.

- 562 Medical Histology**  
Spring. 3(2-2) R: Graduate-professional students in colleges of Human Medicine and Osteopathic Medicine. SA: ANT 562

Histology of the human body.

- 585 Directed Study in Human Prosection**  
Fall, Spring, Summer. 1 to 5 credits. A student may earn a maximum of 15 credits in all enrollments for this course. P:M: (ANTR 551) R: Open only to graduate-professional students in the College of Human Medicine or College of Osteopathic Medicine and approval of department.

Prosection of selected regions and isolated structures of preserved human cadavers. Oral presentation.

## VETERINARY ANATOMY ANTV

### College of Veterinary Medicine

- 515 Comparative Veterinary Gross Anatomy**  
Fall. 6(2-10) R: Open only to graduate-professional students in the College of Veterinary Medicine. SA: ANT 515

Canine anatomy. Comparisons with ruminant, porcine, and equine anatomy.

- 516 Veterinary Histology and Cell Biology**  
Fall. 4(3-2) R: Open only to graduate-professional students in the College of Veterinary Medicine. SA: ANT 516

Principles of developmental, cellular, and molecular biology as related to veterinary medicine.

- 517 Veterinary Neuroanatomy**  
Spring. 1(1-0) R: Completion of Semester 1 of the graduate-professional program in the College of Veterinary Medicine. SA: ANT 517

Introduction to the anatomy of the nervous system using the canine species as a model.

- 610 Veterinary Gross Anatomy Dissection**  
Spring. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. P:NM: (ANTV 515) R: Open only to graduate-professional students in College of Veterinary Medicine. SA: ANT 610

Dissection and prosection of selected regions of domestic animals.

- 611 Research Problems in Veterinary Anatomy**  
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to graduate-professional students in the College of Veterinary Medicine. Approval of department. SA: ANT 611

Veterinary gross anatomy, cell biology, histology, or neurobiology.

## ANIMAL SCIENCE ANS

### Department of Animal Science College of Agriculture and Natural Resources

- 110 Introductory Animal Agriculture**  
Fall, Spring. 4(3-2) SA: ANS 112

History of animal agriculture and its relationship to human needs, production systems, marketing, and environmental considerations. Current goals of and limitations affecting U.S. farm animal production.

- 200A Introductory Judging of Livestock or Carcasses**  
Spring. 1 to 2 credits. A student may earn a maximum of 3 credits in all enrollments for this course. P:NM: (ANS 211) R: A student may earn a maximum of 8 credits from ANS 200A, ANS 200B, ANS 200C, ANS 200D, ANS 300A, ANS 300B, ANS 300C and ANS 300D.

Evaluation of functional conformation of beef cattle, sheep and swine and their carcasses. Preparation for intercollegiate competition. Field trips required.

- 200C Introductory Judging of Dairy Cattle**  
Spring. 1 to 2 credits. A student may earn a maximum of 3 credits in all enrollments for this course. R: A student may earn a maximum of 8 credits from the following courses: ANS 200A, ANS 200B, ANS 200C, ANS 200D, ANS 300A, ANS 300B, ANS 300C and ANS 300D. SA: ANS 200B

Evaluation of functional conformation of dairy cattle. Preparation for intercollegiate competition. Field trips required.

- 200D Introductory Judging of Horses**  
Spring. 1 to 2 credits. A student may earn a maximum of 3 credits in all enrollments for this course. R: A student may earn a maximum of 8 credits from ANS 200A, ANS 200B, ANS 200C, ANS 200D, ANS 300A, ANS 300B, ANS 300C and ANS 300D. SA: ANS 200B

Evaluation of functional conformation and performance of horses. Preparation for intercollegiate competition. Field trips required.

- 210 Animal Products**  
Fall. 4(3-3) R: Not open to freshmen.

Edible animal products. Processing, preservation, storage and distribution of dairy, meat, and egg products.

- 211 Animal and Product Evaluation**  
Fall. 3(1-4)

Evaluation of breeding stock, market animals and carcasses. Production records and soundness of breeding animals. Quality grading, yield grading and pricing of market animals and carcasses.

- 212 Merchandising Purebred Livestock**  
Spring of odd years. 2(1-2) RB: (ANS 110)

Purebred livestock industry. Private treaty and auction sales. Advertising, animal selection and budgeting of purebred livestock sales. Field trips required.

- 222 Introductory Beef Cattle Management**  
Spring. 3(2-2) RB: (ANS 110) Not open to students with credit in ANS 422.

Management practices and systems for beef herds. Feed requirements, reproduction, breeding, performance testing, housing, and diseases. Costs and returns. Field trips required.

- 232 Introductory Dairy Cattle Management**  
Fall. 3(2-2) Not open to students with credit in ANS 432.

Principles and techniques of dairy herd management including calf and heifer care plus lactating and dry cow management.

- 242 Introductory Horse Management**  
Fall. 3(2-2) Not open to students with credit in ANS 442.

Principles of horse management. Reproduction, nutrition, herd health, genetics, economics, marketing. Field trips required.