## CURRENT DEPARTMENT OF ANATOMY & PHYSIOLOGY COURSES

(updated 1/30/17)

Course #	Cr. Hrs.	Year/ Semester	Course Title	Instructor	Course Description
AP 700	5	1 <sup>st</sup> /Fall	Gross Anatomy I	Klimek	AP 700. Gross Anatomy I. (5) I. Gross dissection of the dog with comparative aspects of the cat. Two hours lecture and nine hours lab per week. Pr.: First-year standing in the College of Veterinary Medicine.
AP 710	5	1 <sup>st</sup> /Fall	Microscopic Anatomy I	Klimek	AP 710. Microscopic Anatomy I. (5) I. Origin, development, and microscopic structure and appearance of the cells and tissues of the animal body. Three hours lectures and four hours lab per week. Pr.: First-year standing in the College of Veterinary Medicine.
AP 737	5	1 <sup>st</sup> /Fall	Veterinary Physiology I	Wangeman n	AP 737. Veterinary Physiology I. (5) I. Function of the animal body at the cellular level, including nerve and muscle function. Basic pathophysiological mechanisms will be emphasized and correlated with clinical topics. Five hours lectures a week. Pr.: First-year standing in the College of Veterinary Medicine or consent of instructor.
AP 730	1	1 <sup>st</sup> /Fall	Cross-Course Integration I	Lillich	AP 730. Cross-Course Integration I (1) I. This course is intended to provide first-year students an opportunity to experience the depth of veterinary/biomedical research required to advance the practice of veterinary medicine. The students will examine relevant connections, consider conceptual relationships, and critically evaluate integrative issues germane to both the practice of and the innovative progress of veterinary medicine. Faculty members in the Department of Anatomy and Physiology will present topical overviews, based on their professional and personal experiences, designed to connect and integrate fundamental anatomical and physiological principles and relationships. These presentations provide examples of the fundamental requirements for clinical therapies and also provide examples of how innovative science leads to new therapies for long standing clinical disease. One hour lecture per week. Pr.: First-year standing in the College of Veterinary Medicine or consent of instructor.
AP 785	1	1 <sup>st</sup> /Fall	Introduction to Veterinary Medicine and Biomedical Research: Concepts and Values	Lillich	AP 785. Introduction to Veterinary Medicine and Biomedical Research: Concepts and Values. (1) I. This course is intended to provide first-year students an opportunity to experience the depth of veterinary/biomedical research required to advance the practice of veterinary medicine, and advance the field of medicine in general. The students will examine the challenges of conducting 1) foundational and translation research (genetic/genomic and mechanistic research), 2) foundational and applications to clinical research 3) population and observational research (epidemiology, prospective clinical trials, retrospective studies), 4) pharmacologic research (the impact of pharmacology on the biomedical sciences). The students will examine relevant connections, consider conceptual relationships, and critically evaluate integrative issues germane to both the practice of and the innovative progress of veterinary medicine. This course will be designed to connect and integrate fundamental principles and relationships between research and clinical application. Additionally, by drawing on the multidisciplinary literature presented by faculty, students will explore the challenges in conducting genetic/genomic research, using genomic information, implementing research results to clinical practice, as well as addressing the social, legal, and professional policies that are emerging from new research. Students will be expected to do reading and to complete online worksheets and present their findings/opinions in class. Class time will be devoted to presentations and to discussion of readings and related current events. One hour lecture per week. Pr.: First-year standing in the College of Veterinary Medicine.

AP 780	1	1 <sup>st</sup> /Fall	Three-Dimensional Imaging Anatomy of the Dog (Elective)	Szladovits	AP 780. Three-Dimensional Imaging Anatomy of the Dog (Elective). (1) I. The purpose of this elective course is to develop three-dimensional thinking in canine anatomy and using this knowledge to identify normal and abnormal structures in radiographs, ultrasonographs, computerized tomography and magnetic resonance images. Further objective of the course is to understand the importance of the normal anatomy during the examination of CT and MRI studies. Two hour lecture per week. Pr.: Professional veterinary student standing or consent of instructor.
AP 780	1	1 <sup>st</sup> /Fall	History of Veterinary Medicine (Elective)	Erickson	AP 780. History of Veterinary Medicine (Elective). (1) To introduce students to the history of veterinary medicine in the United States and the world, the development of the early colleges of veterinary medicine, the contributions of some of the pioneers in veterinary medicine, the impact of animal diseases, and the evolving role of the veterinarian in society. One hour lecture per week. Pr.: Professional veterinary student standing or consent of instructor.
AP 780	1	1 <sup>st</sup> /Fall	Practical Use and Interpretation of Veterinary Scientific Literature (Elective)	Klimek	AP 780. Practical Use and Interpretation of Veterinary Scientific Literature (Elective) (1) I. Designed primarily for veterinary students in the first, second or third year of the DVM curriculum. The course is intended to teach literature search skills, organization of your own literature library, and critical evaluation of clinical reports and research literature. The format is lecture as well as small group and online discussion. Students are required to contribute to classroom and online discussions and to complete written assignments. Two hour lecture per week. Pr.: Professional veterinary student standing or consent of instructor.
AP 705	6	1 <sup>st</sup> /Spring	Gross Anatomy II	Klimek	AP 705. Gross Anatomy II. (6) II. Gross dissection of the horse and ruminant with comparative aspects of the pig, laboratory animals, and the chicken. Three hours lecture and nine hours lab per week. Pr.: AP 700.
AP 747	6	1 <sup>st</sup> /Spring	Veterinary Physiology II	Kumari	AP 747. Veterinary Physiology II. (6) II. Introduction to function of the cardiovascular, endocrine, respiratory, renal, digestive, and reproductive systems of domestic animals with emphasis on physiologic control mechanisms, interrelationships of body systems, and criteria for evaluating animal health. Five hours lecture and three hours laboratory exercise per week. Pr.: AP 737.
AP 740	1	1 <sup>st</sup> /Spring	Cross-Course Integration II	Lillich	AP 740. Cross-Course Integration II. (1) II. This course is intended to provide first-year students an opportunity to experience the depth of veterinary/biomedical research required to advance the practice of veterinary medicine. The students will examine relevant connections, consider conceptual relationships, and critically evaluate integrative issues germane to both the practice of and the innovative progress of veterinary medicine. Faculty members in the Department of Anatomy and Physiology will present topical overviews, based on their professional and personal experiences, designed to connect and integrate fundamental anatomical and physiological principles and relationships. These presentations provide examples of the fundamental requirements for clinical therapies and also provide examples of how innovative science leads to new therapies for long standing clinical disease. One hour lecture per week. Pr.: AP 730 or consent of instructor.
AP 780	1	1 <sup>st</sup> /Spring	Applied Anatomy (Elective)	Lillich	AP 780. Applied Anatomy (Elective). (1) II. The purpose of this elective is to integrate the anatomy learned in AP-Gross Anatomy I and II (equine portion) with emphasis on how the muscles of thoracic and pelvic limbs move the body. The focus of the class will be to reinforce learned knowledge in order to master anatomical landmarks of the major muscle groups and joints. Knowledge of these landmarks is necessary to competently approach many examinations and diagnostic/therapeutic procedures of the limbs. These would include lameness evaluation, arthrocentesis, joint surgery, fracture repair and amputation. Fresh cadaver limbs will be utilized for some procedures and live animals will be used for traditional examinations. An orthopedic surgeon will co-coordinate this course to introduce clinical topics. Pr.: Professional veterinary student standing with at least one semester of AP 700 Gross Anatomy I experience

AP 780	2	1 <sup>st</sup> /Spring	Veterinary Neuroscience (Elective)	Szladovits	AP 780 Veterinary Neuroscience (Elective) (2) II. Focus is on the anatomy of the nervous system (external and internal structures of the brain and spinal cord), the function of the nervous system (sensory system, motor system and special senses), basic principles of clinical neurology (lesion localization, making differential diagnosis, prognosis and treatment plan), neurological examination and neurodiagnostics (CSF analysis, neuroimaging).
AP 780	1	1 <sup>st</sup> /Spring	Veterinary Comparative Embryology (Elective)	Klimek	AP 780. Veterinary Comparative Embryology (Elective). (1) II. An overview of development anatomy as it relates to clinically important developmental defects and/or normal structure and function of common domestic animals. One hour lecture per week. Pr.: Professional veterinary student standing or consent of instructor.
AP 770	4	2 <sup>nd</sup> /Fall	Veterinary Pharmacology I	KuKanich	AP 770 Veterinary Pharmacology I (4) I. The basic principles of pharmacology, the interaction of drugs and living systems including fundamental principles of pharmacokinetics, pharmacodynamics, receptor-coupling, and mechanisms of action. A system-based approach to drug classes will be emphasized. Four hours lecture per week. Pr.: AP 737 and 747 or equivalent.
AP 772	2	2 <sup>nd</sup> /Spring	Veterinary Pharmacology II	KuKanich	AP 772 Veterinary Pharmacology II. (2) II. The basic principles of pharmacology, the relationship of drug actions and interactions on physiological principles and pathophysiological conditions. Pharmacokinetics, pharmacodynamics, and a system-based approach to drug classes will be emphasized. Two hours of lecture per week. Pr.: AP770.
DVM 700	0	1 <sup>st</sup> /Fall	Veterinary Career Development		DVM 700. Veterinary Career Development I. (1) Introduction to career opportunities in veterinary medicine.
DVM 704	1	3 <sup>rd</sup> /Fall	Ethics and Jurisprudence		DVM 704. Ethics and Jurisprudence (1) I. Socratic ethics are discussed along with the American Veterinary Medical Association's Code of Ethics and practical situations with a fundamental ethical basis. The Kansas Practice Act is explored as an example of governance in veterinary medicine. The role of animals in humans' wellbeing is addressed along with the philosophy of animal welfare. The law and the practicing veterinarian are discussed with emphasis upon professional liability. PR: Third year standing in College of Veterinary Medicine.
DVM 710	1	1 <sup>st</sup> /Fall	Veterinary Clinical and Professional Skills I.		DVM 710 Veterinary Clinical and Professional Skills I. (1) I. The clinical skills course will serve as a required introductory level course for first year veterinary students. The course will be taught in the fall semester of the first year CVM program with participation by faculty from all three departments in the CVM. The course will include introductory lectures, online modules, structured laboratory activities, self-directed laboratory sessions, and clinical experiences in the Veterinary Health Center. PR: First year standing in College of Veterinary Medicine.