

HUMAN ANATOMY

ANTR

Department of Anatomy College of Human Medicine

- 350 Human Gross Anatomy and Structural Biology**
Fall, Spring. 3(4-0) P: (BS 111 or LBS 149H or LBS 145) R: Not open to freshmen or approval of department. SA: ANT 316, ANTR 316
Survey of human systemic gross anatomy with clinical illustrations. Introduction to the language of medicine. Structural basis of physiological principles. Designed for pre-professional students entering health-care disciplines.
- 381 Human Gross Anatomy Laboratory**
Spring. 2(0-6) P: (ANTR 350) R: Approval of department. Not open to students with credit in KIN 217 or ZOL 328.
Structured survey of human regional gross anatomy using prosections, cross-sections, medical imaging, multimedia, and hypermedia.
- 401 Quantitative Human Biology**
Spring. 3(4-0) Interdepartmental with Biomedical Engineering; Materials Science and Engineering; Radiology. Administered by College of Engineering. P: (MTH 235 and PHY 184) and (PSL 250 or concurrently or PSL 431 or concurrently) and (CEM 141 or CEM 151) and (ANTR 350 or concurrently) RB: (CSE 131 or concurrently or CSE 231 or concurrently or PSL 410)
Qualitative description and quantitative engineering analysis of selected, tractable human-biological systems. Multi-disciplinary problem-solving among medical and engineering professionals.
- 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: (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 the 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.
- 820 Advanced Neuroanatomy**
Summer of odd years. 1 to 5 credits. A student may earn a maximum of 12 credits in all enrollments for this course. Interdepartmental with Neuroscience. Administered by Program in Neuroscience. R: Approval of department.
Current topics in anatomy and physiology processes of central nervous system cells.
- 839 Systems Neuroscience**
Spring. 4(4-0) Interdepartmental with Neuroscience; Pharmacology and Toxicology; Physiology; Psychology; Zoology. Administered by Program in Neuroscience. R: Open only to graduate students in the Colleges of Human Medicine, Osteopathic Medicine, Agriculture and Natural Resources, Natural Science, Social Science, and Veterinary Medicine. SA: ANT 839
Anatomy, pharmacology, and physiology of multicellular neural systems. Sensory, motor, autonomic, and chemo-regulatory systems in vertebrate brains.

- 885 Vertebrate Neural Systems**
Spring of odd years. 3(2-2) Interdepartmental with Neuroscience; Physiology. Administered by Program in Neuroscience. SA: ANT 885
Comparative analysis of major component systems of vertebrate brains. Evolution, ontogeny, structure, and function in fish, amphibians, reptiles, birds and mammals.

VETERINARY ANATOMY

ANTV

Department of Pathobiology and Diagnostic Investigation 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. RB: (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.