ANATOMY (ANAT)

Courses

ANAT 301. Head and Neck Anatomy, DH. 4 Units.
Gross anatomy of the head and neck. Lecture and demonstration.

ANAT 303. General and Oral Histology and Embryology. 3 Units.
Microscopic study of fundamental cells, organs, tissues, and systems of the body. Analyzes in detail the pulp, periodontal tissues, alveolar process, oral mucosa, and calcified tissues of the tooth. Includes development of head and neck structures.

ANAT 507. Stem Cell Biology and Medicine. 4 Units.
Provides students with information on the latest developments in animal and human stem cell research and on the potential application of stem cells to medicine. Explores the derivation, manipulation, and differentiation of embryonic, germ, and adult stem cells. Lectures presented by faculty participating in stem cell research in areas of their expertise.

ANAT 510. Gross Anatomy. 8.5 Units.
Supports the organ system curriculum in the first year of medical education. Teaches students the morphological setting upon which clinical knowledge and experiences are built. Approaches anatomy from a gross structural perspective. Students use knowledge to recognize clinical variations and abnormalities in preparation for their medical careers.

ANAT 511. Human Anatomy for Dentists I. 5 Units.
An in-depth study of the human anatomical sciences, including: gross anatomy, general and oral histology, embryology, and neuroscience as they relate to the dental profession. Designed for students in the first year of dentistry, and for students in the dental track of the biomedical sciences postbaccalaureate certificate program.

ANAT 512. Human Anatomy for Dentists II. 5 Units.
An in-depth study of the human anatomical sciences, including gross anatomy, general and oral histology, embryology, and neuroscience as they relate to the dental profession. Designed for students in the first year of dentistry, and for students in the dental track of the biomedical sciences postbaccalaureate certificate program.

ANAT 513. Human Anatomy for Dentists III. 5 Units.
An in-depth study of the human anatomical sciences, including gross anatomy, general and oral histology, embryology, and neuroscience as they relate to the dental profession. Designed for students in the first year of dentistry, and for students in the dental track of the biomedical sciences postbaccalaureate certificate program.

ANAT 515. Human Embryology. 2 Units.
Reviews the morphologic processes and molecular basis of human development. Includes the production of human gametes, fertilization, gastrulation, placentaion, and development of the major organ systems. Emphasizes clinically relevant features of pregnancy and developmental processes that are susceptible to malformation.

ANAT 516. Neuroscience GS. 6 Units.
Integrated approach to the fundamentals of neuroanatomy and neurophysiology, with applications to clinical neurology.

ANAT 525. Special Topics: Advanced Dissection. 1-4 Units.
Detailed dissection of a specified body region. Demonstration and lecture. May be repeated for additional credit. Offered on demand. Prerequisite: ANAT 541; or equivalent with approval of program director or department chair.

ANAT 527. Advanced Clinical Anatomy for Nurse Anesthetists. 5 Units.
Emphasizes detailed description and applied anatomy of the body systems (cardiovascular, respiratory renal, hepatic nervous, and endocrine) relevant to the nurse anesthetist.

ANAT 529. Gross Anatomy and Embryology. 10.5 Units.
Provides the morphological foundation upon which clinical knowledge and experiences are built. Supports the organ-system curriculum in the freshman year. Approaches anatomy from gross structural and embryological perspectives. Provides students with the knowledge necessary to recognize clinical variations and abnormalities during their medical careers. Cross-listing: ANAT 510.

ANAT 541. Gross Anatomy GS. 7 Units.
Anatomy of the head, neck, locomotor system, thorax, abdomen, pelvis, and perineum. Correlated with radiology, applied features, and embryological development. Summer and Autumn quarters.

ANAT 542. Cell Structure and Function GS. 7 Units.
The microscopic structure of cells, tissues, and organs of the human body. Autumn Quarter.

ANAT 544. Human Embryology Lecture. 2 Units.
The plan of development as it pertains to humans. Considers principles.

ANAT 548. Introductory Flow Cytometry. 1 Unit.
Provides the introductory education and skills students need to implement basic flow cytometry-based techniques into the repertoire on which they draw in addressing experimental questions and in developing research proposals. Includes identifying basic science and translational research questions that can be addressed with flow cytometry, introduction to flow cytometry sample preparation, data collection, and data analysis; as well as presentation of data in figures for communication of results at science conferences and in peer-reviewed publications.

ANAT 558. Applied Gross Anatomy GS. 3 Units.
Emphasizes practical application of the anatomical knowledge covered in human gross anatomy. Considers applied anatomy problems involving biomechanical functions of the body, as well as application of anatomical principles to specific fields of human activity. Prerequisite: ANAT 541; or consent of instructor.

ANAT 594. Directed Study in Anatomy. 1-7 Units.
Intensive study of a selected topic approved by the chair of the department. Individual guidance by a staff member.

ANAT 697. Research. 1-8 Units.

ANAT 699. Dissertation. 1-5 Units.

ANAT 891. Anatomy Elective. 1.5-18 Units.
A self-designed and self-directed dissection elective in the fourth year of the MD curriculum with emphasis on the head, neck, abdomen, pelvis, thorax, back, or limbs—correlating basic anatomy with clinical applications.