ANATOMY (ANAT)

ANAT 1101A. Anatomy I. (5 Credit Hours)
The gross anatomy course provides an in-depth study of the human body using cadaveric dissection. Additional emphasis is placed on developmental anatomy and normal radiographic anatomy. This course will include the anatomical relationships of the back, thorax, abdomen, pelvis, perineum (reproductive system) and the limbs.

ANAT 1101B. Gross Anatomy B. (2 Credit Hours)
The gross anatomy course provides an in-depth study of the human body using cadaveric dissection. Additional emphasis is placed on developmental anatomy and normal radiographic anatomy. This course will include the anatomical relationships of the head and neck.

ANAT 1102B. Anatomy II. (4 Credit Hours)
This course for DO, DPM and MSA students provides an in-depth study of the human body by conducting lectures, laboratory/computer demonstrations, and cadaveric dissection. This course combines the anatomical structural relationships of the head, neck, and the central nervous system. Integration of clinically-relevant material and/or clinical case presentations relevant to both board study and clinical practice are included in all lecture topics. Additional emphasis is placed on developmental anatomy and normal radiographic anatomy.
Prerequisite: *Anatomy I required prerequisite*

ANAT 1104. Neuroanatomy. (2 Credit Hours)
The structural and functional organization of the central nervous system is presented through lectures and laboratory/computer demonstrations on parts of the brain and spinal cord. The course covers the role of the brain and spinal cord in sensory perception and movement of the human body, including organs and behavioral responses. Integration of clinically-relevant material and/or clinical case presentations are included in all lecture topics.

ANAT 1106. Medical Cell & Tissue Biology. (4 Credit Hours)
A comprehensive study of human cell biology, basic tissue types, and the histology of organs and organ systems. The relationships between typical (nonpathological) histology, gross anatomy, and function are emphasized. Examples of clinical relevance highlight the breakdown of normal microstructure and its impact on function. The course consists of regularly-scheduled lectures, self-directed lab exercises using high-resolution digital micrographs, and collaborative learning exercises.

ANAT 1201A. Anatomy I. (5 Credit Hours)
The gross anatomy course provides an in-depth study of the human body using cadaveric dissection. Additional emphasis is placed on developmental anatomy and normal radiographic anatomy. This course will include the anatomical relationships of the back, thorax, abdomen, pelvis, perineum (reproductive system) and the limbs.

ANAT 1201B. Anatomy II. (4 Credit Hours)
This course for DO, DPM and MSA students provides an in-depth study of the human body by conducting lectures, laboratory/computer demonstrations, and cadaveric dissection. This course combines the anatomical structural relationships of the head, neck, and the central nervous system. Integration of clinically-relevant material and/or clinical case presentations relevant to both board study and clinical practice are included in all lecture topics. Additional emphasis is placed on developmental anatomy and normal radiographic anatomy.

ANAT 2003. The Cranial Nerves. (1 Credit Hour)
This online elective course for DO, DPM, DPT, PA, and MSA students covers important cranial nerve topics relevant to both board study and clinical practice. Web-based modules guide students through patient case analyses with a focus on the diagnosis of commonly occurring nerve lesion deficits. The course fuses review of normal anatomy, central connections, and function of the cranial nerves with clinical analyses of CT images and MRIs that illustrate the radiological manifestation of various cranial nerve dysfunctions.

ANAT 2026. Problem-Based Anatomy. (1 Credit Hour)
The problem-based anatomy course is designed for students who desire a greater appreciation of the clinical relevance of anatomy and will be of educational utility to the student preparing for board examinations. The course will utilize lecture and discussion to guide students through selected clinical vignettes from the text, Problem-Based Anatomy. Each clinical vignette provides an educational framework in which the student can apply his or her anatomical knowledge to clinical situations. Another value-added attribute of the course is its integrated approach to the field of anatomy. Therefore, wherever appropriate the clinical vignettes will explore the various subdisciplines of anatomy. These include anatomic pathology, cell biology, embryology, gross anatomy, histology, neuroanatomy and radiologic anatomy. Prerequisite for MSA students only: Consent of Instructor

ANAT 2031. Human Development. (2 Credit Hours)
This is a graduate level human development course. The course will be student driven and presented in a lecture format. The students will be expected to have read the assigned chapters before the corresponding class meeting. Examinations will consist of essay type questions. Students will be required to make an oral presentation on a topic of their choice related to the course material. Student presentations will be graded based on organization, clarity, style of presentation, quality of visual aids and ability to answer questions. The presentations will be open to DMU students and faculty.

ANAT 2052. Forensic Osteology. (1 Credit Hour)
This course provides an introduction to forensic osteology and its role in the medicolegal system. Students will review human osteology and gain a better understanding of human skeletal variation. Topics include bone biology, the effects of sex, ancestry, age, and stature on bone, bone pathology, skeletal trauma, taphonomy, and the medicolegal processes. Case studies will be used to reinforce the material.

ANAT 2065. Coronary Circulation. (1 Credit Hour)
Understanding the burden of coronary arterial disease requires contextual knowledge of the anatomy and physiology of the coronary circulation. Anatomically, this course will cover general concepts of blood vessel formation and remodeling, development of coronary vessels, the anatomy of the coronary vessels along with anomalies and collateral circulation. Physiologically, methods of measuring coronary blood flow and its regulation and distribution will be considered. Lastly, anatomic and physiologic adaptations related to aging, exercise and cardiac hypertrophy will be considered. Prerequisite courses apply to MSA students.
Prerequisites: *ANAT 1101A (MSA 1A01), ANAT 1101B (MSA 1A02), PHYPM 1116*

ANAT 2211. Lower Limb Anatomy. (3.5 Credit Hours)
A comprehensive course in the functional anatomy of the lower limb. Podiatric medical students dissect and identify the detailed structures of the foot, leg and thigh in order to become expert in the structure and function of this region of the body.