MODERN HUMAN ANATOMY
(ANAT)

ANAT 6111 - Human Gross Anatomy (8 Credits)
The Human Gross Anatomy course examines the form and function of
the human body at a macroscopic level. Systems-based and regional
anatomy lectures are complemented by full-body cadaver dissection.
Medical imaging labs provide the opportunity to learn ultrasound skills.
Requirements: Must be a degree-seeking student in MS Modern Human
Anatomy program.
Grading Basis: Letter Grade
ANAT 6205 - Imaging and Modeling (4 Credits)
This course covers major medical and scientific imaging modalities with
an emphasis on 3D scientific and medical visualization. Students will
also receive instruction in advanced digital image processing and 3D
modeling using industry-standard software such as MATLAB and Maya.
Prerequisite: Only ANAT degree-seeking students
Grading Basis: Letter Grade
A-GRAD Restricted to graduate students only.
Typically Offered: Fall.
ANAT 6208 - Foundations in 3D Modeling for Anatomical Sciences (1 Credit)
An introduction to the applications and techniques necessary for 3D
scanning, modeling, and printing. This lab-based course will provide
students with hands-on experience on acquiring and processing surface
scan data along with strategies for printing and finishing objects
using fused-deposition modeling and stereo lithography. Pre-requisite:
ANAT 6205
Grading Basis: Letter Grade
Typically Offered: Fall, Spring, Summer.
ANAT 6210 - Autodesk Maya for Anatomical Science (2 Credits)
Autodesk Maya for Anatomical Sciences teaches students to create
professional animations illustrating concepts inherent in the study of
medical science using Autodesk Maya. Pre-requisite: ANAT 6208.
Grading Basis: Letter Grade
Typically Offered: Fall, Summer.
ANAT 6220 - Unreal Engine for the Anatomical Sciences (2 Credits)
This course builds upon the foundational 3D modeling skills learned
in ANAT 6260 and provides students with the practical experience,
inpiration, and confidence to incorporate the Unreal Engine into their
capstone. Students will deploy an app built with Unreal Engine. Pre-
requisite: ANAT 6208 Prerequisite; ANAT-MS student or instructor
permission.
Grading Basis: Letter Grade
Typically Offered: Fall, Spring, Summer.
ANAT 6310 - Neuroanatomy (4 Credits)
Structure & Function in the Human Nervous System. Basic neuroanatomy
& neural systems with workshop focus employing facilitated discussions
& problem-oriented cases. Laboratory sessions will employ brain
specimens, models & image sets. Team-based projects are in-depth
exploration of topics with development of collaborative presentations.
Requisite: Restricted to ANAT students only.
Grading Basis: Letter Grade
Typically Offered: Fall.
ANAT 6840 - Independent Study (1-6 Credits)
This course enables the student to pursue an investigation in a modern human anatomical field of choice toward completion of a capstone project with relatively minor supervision from faculty advisors.
Grading Basis: Letter Grade
A-GRAD Restricted to graduate students only.
Typically Offered: Fall, Spring, Summer.

ANAT 6910 - Teaching Practicum (1-4 Credits)
Hands-on teaching course in which students apply pedagogical theories to practice in a professional program as a teaching assistant, lecturer or other instructional position. Prereq.: ANAT 6412. Course restricted to ANAT majors.
Grading Basis: Satisfactory/Unsatisfactory
Repeatable. Max Credits: 4.
A-GRAD Restricted to graduate students only.
Typically Offered: Fall, Spring, Summer.

ANAT 6911 - Advanced Teaching Practicum (1-4 Credits)
Hands-on teaching course in which students apply pedagogical theories to practice in a professional program as a teaching assistant, lecturer or other instructional position. Pre-requisite: ANAT degree-seeking student; ANAT 6412
Grading Basis: Letter Grade
Repeatable. Max Credits: 4.
A-GRAD Restricted to graduate students only.
Typically Offered: Fall, Spring, Summer.

ANAT 6931 - MSMHA Internship (1-6 Credits)
The internship provides hands-on learning opportunities and practical experience for graduate students in institutions related to anatomical sciences, imaging, technology/biotechnology, innovation, and entrepreneurship. Restricted to ANAT students only
Grading Basis: Letter Grade
Typically Offered: Fall, Spring, Summer.

ANAT 6950 - MSMHA Capstone Project (1-12 Credits)
The Capstone project is a scholarly and/or research-based pursuit of knowledge and content development in the area of anatomical sciences, modern imaging and modeling technologies, and educational science completed as part of the MS in Modern Human Anatomy. Prerequisite: Must be ANAT degree-seeking student.
Grading Basis: Letter Grade with IP
Repeatable. Max Credits: 12.
Additional Information: Report as Full Time.
Typically Offered: Fall, Spring, Summer.