

# ANATOMY (ANA)

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## **ANA-504L Microscopic Anatomy Lab (1 credits)**

This course incorporates microscopic examination of the organ system and training in processing of tissue for imaging and the use of imaging equipment and the chemical properties and uses of traditional and current staining methods. This course consists of three hours of laboratory a week.

Course Types: Natural Sciences; Oral Communication; Scientific Reasoning

## **ANA-601 Research Methods in Anatomy I (3 credits)**

This course provides guidance to the student in the formulation of an original anatomical project. The student will identify their project, and develop a research plan that includes embryology, histology, neurology and comparative and gross anatomy of their topic, and initiate the introduction and methods sections of a publishable paper and convey their progress to classmates. Students will consider the function of the IRB and assess of the appropriateness of different statistical analyses.

## **ANA-602 Research Methods in Anatomy II (4 credits)**

This course is a continuation of ANA 601 Research Methods in Anatomy I. This is a cadaver-based course in which the student will study and independently dissect additional regions of the cadaver that were exclusively faculty demonstrations during their gross anatomy course (BIO-639). In addition, the student will then perform a thorough dissection of the region of their project topic defined in ANA-601. Emphasis will be placed on correlation of the embryology and histology of the region, and clinical and epidemiology implications of the region. The pathology present will be analyzed. The student will gain experience assisting the instructor(s) in anatomy laboratories. Students will perform the research and analysis needed to complete the publishable manuscript begun in ANA-601.

Prerequisite(s): Take ANA-601; Take (BIO-639 BIO-639L) or take (BIO-505 BIO-505L)

## **ANA-603 Advanced Human Dissection (4 credits)**

In this course students will gain an in-depth understanding of human anatomy through independent dissection of the human body. They will develop their dissection and presentation skills through class presentation of their completed dissections.

Course Types: Natural Sciences; Oral Communication; Scientific Reasoning

Corequisite(s): Take ANA-504L BIO-505 BIO-505I BIO-517 BIO-517L BIO-520 BIO-520L ANA-601

## **ANA-604 Anatomy Capstone (3 credits)**

This course offers students the opportunity to expand their knowledge of human anatomy through the advanced dissection of human cadaveric materials. Students will complete a capstone project in which they will write a review style manuscript, this will facilitate the connection between all aspects of the MS Anatomy Program: embryologic development, anatomy, neurology and histology to form and function. The capstone project will then be presented in a lecture format to their peers to simulation presentations for scientific meeting and instructional purposes in preparation for their future career.

Course Types: Capstone

Corequisite(s): Take ANA-504L ANA-601 BIO-505 BIO-517 BIO-520

## **ANA-605 Research Seminar (3 credits)**

This course is a continuation of ANA 602 Research Methods. Students will perform the research and analysis outlined in the research proposal created in ANA602.

Course Types: Critical Analysis; Natural Sciences; Oral Communication; Scientific Reasoning

Prerequisite(s): Take ANA-602