

# ANATOMY (ANAT)

## ANAT 1000 - Basic Human Anatomy

3 Credits

Gross and microscopic structure of human body; emphasis on anatomical concepts, terminology, and correlation of structure and function.

**Attributes:** Bio-Chemical Biology Elective, Chemical Biology Elective

## ANAT 4000 - Human Gross Anatomy

5 Credits

This course is an in-depth and clinically oriented study of the structure and function of human body emphasizing anatomical concepts and relationships relevant to health professionals. The course instructional format consists of a combined attribute of lecture and laboratory sessions. Cadaver dissection is required.

### Restrictions:

Enrollment is limited to students with a major in Athletic Training, Exercise Science, Occupational Science or Occupational Therapy.

Enrollment limited to students in the Doisy College Health Sciences college.

## ANAT 4300 - AHP Neurosciences

4 Credits

This course is designed to provide students the opportunity to thoroughly examine the structure and function of the human nervous system with an emphasis of functional considerations related to clinical practice.

### Restrictions:

Enrollment is limited to students with a major in Physical Therapy.

## ANAT 5000 - Human Gross Anatomy

8 Credits

Structure and function of human body; emphasis on anatomical relationships and concepts and their functional significance; dissection required.

## ANAT 5010 - Human Gross Anatomy

5 Credits

Structure and function of human body; emphasis on anatomical relationships and concepts and their functional significance; dissection required.

## ANAT 5050 - Human Gross Anatomy

6 Credits

This course is a highly in-depth and clinically oriented study of the structure of the human body emphasizing anatomical concepts and relationships relevant to physician assistants. The course instructional format consists of a combined attribute of lecture and laboratory sessions. Cadaver dissection is required. Must be enrolled in the Physician Assistant Program in Doisy College Health Sciences.

## ANAT 5100 - Human Histology and Ultrastructure

5 Credits

Microscopic anatomy of human body; emphasis on relationships between structure and function of tissues and organs. (Offered every Fall semester.)

## ANAT 5200 - Human Embryology

2 Credits

Prenatal human development; emphasis on correlation of normal development with development of common congenital malformations. (Offered each Fall.)

## ANAT 5300 - Human Systems Neurobiology

5 Credits

Structure and function of the human nervous system; emphasis on neuroanatomical relationships of functional systems and neurobiological concepts of brain mechanisms. (Offered every Spring semester.)

## ANAT 5400 - Human Systems Physiology

4 Credits

This course will be taken concurrently with the Human Histology and Ultrastructures course (ANAT-5100) as part of the curriculum requirements for a Certificate in anatomical and Physiological Sciences. Physiology lectures will correlate with lectures and labs in ANAT 5100 which together will emphasize structure and function of cells, tissues and organ systems. Physiological principles and mechanisms will be stressed.

## ANAT 5440 - Basic Research Techniques

2 Credits

Fundamental techniques and instrumentation; emphasis on principles underlying preparation of material for histological, histochemical and ultrastructural examination and interpretation of results.

## ANAT 5500 - Advanced Dissections in Human Anatomy

1-3 Credits

This course will serve as an opportunity for students to develop advanced dissection and presentation skills as they perform prosections of human cadavers to ongoing medical, graduate and allied health anatomy courses. Students will perform regional dissections and presentations, under the guidance of anatomy faculty, with emphasis on clinical applications of gross anatomical structure and function. This course provides students with instruction and experience in teaching techniques in anatomy.

**Prerequisite(s):** ANAT 5000; ANAT 5100; ANAT 5200; ANAT 5300

## ANAT 5750 - Intro to Anatomical Research

1 Credit

Exposure to research activities in department by rotation through faculty research laboratories. (Offered every semester.)

## ANAT 5910 - Internship

1-6 Credits

Internship.

## ANAT 5950 - Special Study for Exams

0 Credits (Repeatable for credit)

## ANAT 5960 - Master's Project

0-4 Credits (Repeatable for credit)

## ANAT 5970 - Research Topics

1-3 Credits

## ANAT 5980 - Graduate Independent Study in Anatomy

1-3 Credits

## ANAT 5981 - Graduate Independent Study in Anatomy

1-4 Credits (Repeatable for credit)

## ANAT 5990 - Thesis Research

0-6 Credits (Repeatable for credit)

## ANAT 6320 - Developmental Neurobiology

2 Credits

A presentation of the principles and concepts that underlie the development of the nervous system. Lectures and discussions of assigned journal articles will cover neurogenesis, neuronal differentiation, the formation of functional neural circuit and regressive phenomena during brain development. Offered occasionally.

**Prerequisite(s):** ANAT 5300; ANAT 6300; ANAT 6340

**ANAT 6670 - Visual Neuroscience**

2 Credits

Overview of visual processing, from chemical mechanism of transduction by retinal photoreceptors to anatomical and physiological correlates of visual perception in cerebral cortex. Assigned readings on analysis of receptive field properties, mechanisms of dark and light adaptation, sensation of color and control of ocular reflexes. Human visual dysfunctions included. Offered every spring semester.

**Prerequisite(s):** ANAT 5300

**ANAT 6890 - Anatomy & Neurobiology Seminar**

1 Credit

Selected topics in anatomy. Attendance and participation required for all M.S.(R) and Ph.D. students. Offered every fall and spring semester.

**ANAT 6900 - Anatomy Journal Club**

1 Credit

Selected topics in anatomy. Attendance and participation required for all M.S.(R) and Ph.D. students.

**ANAT 6950 - Special Study for Exams**

0 Credits (Repeatable for credit)

**ANAT 6970 - Advanced Research Topics in Anatomy**

0-3 Credits (Repeatable for credit)

May be repeated. Titles of topics must be registered.

**ANAT 6980 - Graduate Independent Study in Anatomy**

0-3 Credits (Repeatable for credit)

**ANAT 6990 - Dissertation Research**

0-6 Credits (Repeatable for credit)

Dissertation Research.