

# CHAE - Anatomical Science

## **CHAE 800 Advanced Anatomical Sciences (3 Credit Hours)**

This course will provide exposure to the four cardinal anatomical sciences. Gross Anatomy, Micro Anatomy, Embryology & Neuroanatomy. The course will include anatomy, histology and embryology, and multiple neuroanatomy online lectures and labs to ensure students are well versed in each of the specialties.

## **CHAE 801 Advanced Medical Imaging (3 Credit Hours)**

This course provides the principles and applications of medical imaging and clinical-case scenarios using evidence-based approaches and peer-reviewed materials that contribute to the integration of concepts relating to the major medical diagnostic techniques used to examine the different regions of the human body. The learning experience in this course fosters self-directed and independent study and builds clinical problem-solving skills. This educational approach will also help students to develop skills such as recognition and interpretation of human structures and the variations presented in medical imaging. Students will learn to apply these skills in an educational and/or scientific research environment. The format of this course is aligned with the educational framework established in CHAE 800.

## **CHAE 803 Contemporary Teaching Anatomy (3 Credit Hours)**

Anatomy is one of the oldest disciplines in human history. From Hippocrates and Galen to da Vinci and Vesalius and into the Enlightenment and modern age, knowledge of anatomy has evolved, experiencing many paradigm shifts in the way it is learned and taught. In this course, students will examine the culture-history of anatomy instruction and place this heritage in context with contemporary needs, issues, and best practices relating to course development, course management, dissection, grading, and integration of content in diverse academic settings.

## **CHAE 813 Stewards of Anatomy Education (3 Credit Hours)**

This course will address what it means to be a steward of teaching anatomy, preparing students for a variety of settings and tasks associated with leadership in anatomy education. Topics include a cross-section of various classroom settings and teaching anatomy to the public. It further discusses the role of teaching assistants, sessional teachers, and engaging clinical faculty in anatomy education. The course ends with lessons on research and scholarship within the anatomical sciences, potentially suitable for students to share with professionals in their discipline, advancing anatomy education knowledge.

## **CHAE 814 Anatomy Education Foundations (3 Credit Hours)**

The purpose of this course is to prepare future anatomy educators to analyze instructional situations and determine appropriate methods to support student learning. This is achieved by exploring foundational human anatomy education approaches, discussing pedagogical strategies, and developing assessments aligned with theories of adult learning.

## **CHAE 815 Teaching & Tech for Anatomy (3 Credit Hours)**

This course provides a comparison of traditional and contemporary teaching modalities such as the use of body donations and medical imaging. Course topics will include ethics and donor acquisition, variations in lab experiences, and technology in teaching modalities. Various emergent teaching methods will be discussed and learners will place them into their professional contexts.

## **CHAE 900 Research (2-6 Credit Hours)**

The goal of this course is submission of the doctoral candidate's research proposal to Institution Review Board and receiving approval to collect data. Prerequisites Advisor approval required.