



NEW YORK
CHIROPRACTIC
COLLEGE

New York Chiropractic College

Masters of Science in Clinical Anatomy

Graduate Program

Course Catalog

AST 6556 - Preparation as a College Educator

2 credits

Course Description: This interactive course will explore the elements of how to prepare and deliver courses at the college level. The content will include adult education theories, current educational research and course design. Class discussion and projects will include practical and theoretical aspects of course design including: parameters of learning objectives and syllabus design, decisions in course content, preparation and delivery, assessment design, analysis and grading and issues of instructional inclusiveness.

Prerequisites: Entrance requirements.

CAN 5203 - Teaching Methodology

2 credits

Course Description: Continuation of topics covered in Preparation as a College Educator. This interactive course will explore the elements of teaching and assessment in medical education.

The content will build upon previous theories and teaching methods with an emphasis on effective teaching, skilled educational planning and informed assessment and evaluation.

Prerequisite: Preparation as a College Educator

CAN 5302 - Cross Sectional Imaging Anatomy

2 credits

Course Description: A web-based/self-directed course examining advanced topics in medical imaging anatomy, concentrating on cross-sectional images such as magnetic resonance imaging and computed tomography.

Prerequisites: Entrance requirements.

CAN 5102 - Developmental Anatomy

2 credits

Course Description: Gametogenesis, gastrulation, neurulation, implantation and the physiology of human pregnancy. The embryology, growth and development of the circulatory system. Musculoskeletal embryology and limb development. The embryology and development of the gastrointestinal, respiratory and urinary systems. The anatomy and function of the thoracic viscera, with emphasis on the heart, pulmonary system, and the autonomic nervous system.

Prerequisites: Entrance requirements.

CAN 5501 - Special Topics – Embryology

2 credits

Course Description: This course is an in-depth examination of specific topics in embryology, examined in greater detail than in the previous developmental anatomy course. Content will be organized around tissues and organ systems, with particular emphasis on organogenesis, genetic control of development, developmental defects, and implications for postnatal health and well-being.

Prerequisites: Developmental Anatomy

CAN 5101 - Special Topics - Gross Anatomy

2 credits

Course Description: This course is an in-depth examination of specific topics in general gross anatomy, examined in greater detail than in the required prerequisite human gross anatomy sequence. Content will be organized around organ systems, with particular emphasis on developmental and acquired diseases and defects, and implications for health and well-being.

Prerequisites: Entrance requirements.

CAN 5201 – Special Topics – Neuroanatomy

2 credits

Course Description: This course is an in-depth examination of specific topics in neuroanatomy and neurophysiology, examined in greater detail than in the required prerequisite neurosciences sequence. Content will address clinical applications, with particular emphasis on developmental and acquired diseases and defects, and implications for health and well-being.

Prerequisites: entrance requirements.

CAN 5301 - Special Topics – Histology

2 credits

Course Description: This course is an in-depth examination of specific topics in histology, examined in greater detail than in the prerequisite cell and tissue biology prerequisite. Content will be organized around tissues and organ systems, with particular emphasis on organogenesis, genetic control of development, developmental defects, and implications for postnatal health and well-being. When resources permit, hands-on preparation and examination of histological specimens will be included in the course.

Prerequisites: entrance requirements.

CAN 5503 - Seminar in Anatomical Sciences

1 credit

Course description: A seminar in topic relevant to anatomical education at the professional school level (including chiropractic, medical, osteopathic, podiatric, and nursing programs). Professionals in anatomical education and related disciplines will address students on various topics related to professional basic sciences education.

Prerequisites: admission to MSCA program.

RES 5601 - Experimental Design and Research Methodologies

3 credits

Course Description: A self-directed on-line course designed to introduce the graduate student to typical methods in analyzing biomedical data using descriptive and inferential statistics. This course will help guide the graduate student to preparing a thesis.

Prerequisites: Admissions requirements.

CAN 5502 - Advanced Special Dissection

3 credits

Course Description: A practical course in which the students, under the direction of the course coordinator, will complete specific dissections upon a prosection cadaver. The dissections will be prepared for the purpose of serving as demonstration specimens for the anatomy components of the D.C. and A.O.M. programs.

Prerequisites: entrance requirements.

CAN 5401 - Teaching Practicum

5 credits

Course description: In the second year of the program, the student will fully participate in the teaching of professional level courses at one of the three participating institutions. The teaching experience will vary, depending upon course offerings at the participating institutions, but will typically include gross anatomy, neuroanatomy, embryology and histology. The MSCA student will act as an assist/co-lead instructor under the guidance of the particular course coordinator.

Prerequisites: Preparation as a College Educator II

CAN 5601 - Thesis Research

1-6 credits

Course Description: Research toward a topic approved by the student's thesis committee. May be taken for 1 to 6 hours credit, up to a maximum of 6 hours credit.

Prerequisite: approval of thesis director.