

# **Masters in Medical Science with a concentration in Interdisciplinary Medical Science (IMS) - Course Descriptions**

## **GMS 7930 Medical Science Learning Skills**

This course has a hybrid problem based learning design. It combines an assessment of learning/study skills and styles, with case-based instruction on which to practice these skills.

## **GMS 6418 Core Principles and Musculoskeletal System**

Emphasized in this course are those aspects of fundamental biochemistry, cell biology, and genetics, the anatomy of the musculoskeletal system and the development of human behavior that have immediate relevance for clinical medicine while also providing a fundamental foundation of understanding that will permit life-long learning. Lectures will be directed to provide a practical understanding of the subjects addressed in this course. The order of lecture material has been developed to integrate knowledge and understanding gained at the cellular, anatomical, and behavioral level that is essential in developing a useful perspective on human function in health and disease.

## **GMS 6707 Medical Neuroscience**

Emphasized in this course are those aspects of the nervous systems that have immediate relevance for clinical medicine while also providing a fundamental foundation of understanding that will permit life-long learning. Lectures will be directed to provide a practical understanding of the subjects addressed in this course. The order of lecture material has been developed to integrate knowledge and understanding gained at the cellular, anatomical, and behavioral level that is essential in developing a useful perspective on human function in health and disease.

## **GMS 6411 Cardiovascular and Pulmonary Systems**

The primary goal of this course is to present the fundamental principles governing the structure and function of the cardiovascular and pulmonary systems including the circulating blood. Using an interdisciplinary approach, this course will encompass molecular, cellular, tissue, organ, and system-level integration through concepts derived from basic genetics, biochemistry, cell biology, histology, anatomy, radiological imaging, neuroscience, and physiology.

## **GMS 6419 Excretory, Endocrine and Reproductive Systems**

Emphasized in this course are those aspects of the gastrointestinal, endocrine, renal and reproductive systems that have immediate relevance for clinical medicine while also providing a fundamental foundation of understanding that will permit life-long learning. Lectures will be directed to provide a practical understanding of the subjects addressed in this course. The order of lecture material has been developed to integrate knowledge and understanding gained at the molecular, cellular, organ and system level that is essential in developing a useful perspective on human function in health and disease.