PHYSIOLOGY AND PATHOLOGY (GS12)

Course descriptions in school catalogs and the Course Search (https://catalog.uth.edu/course-search/)are correct at the time of publication. See myUTH (https://uthidp.uth.edu/nidp/saml2/sso/?id=Campus-Affiliate-LOA2-DUO&sid=0&option=credential&sid=0) for more recent course information and to register for courses.

GS12 1011 MTB Seminar Series (1 Credit)
Prerequisite: None. This class is a forum in which students, postdoctoral fellows and occasionally faculty present their ongoing research to facilitate discussion, learning and scientific interactions. Areas of research that are discussed include both fundamental and translational cell biology and biochemistry, touching on topics in cancer, muscle and kidney physiology, neuroscience, protein structure/function, as well as cardiovascular and circadian physiology. All students will be expected to attend lectures and participate in discussions. Post-candidacy students will be expected to present a 45-minute seminar describing their thesis research. Auditing this course is permitted with course directors' consent. Pass/Fail

GS12 1164 Human Pathobiology (4 Credits)
Prerequisite: None. This course is designed to provide a comprehensive introduction to human health and disease at the molecular, cellular, tissue and system levels for each human organ system. Lectures will highlight the key elements routinely covered in medical school: histology, anatomy, physiology and pathophysiology courses with an emphasis on the understanding of the mechanisms of cell injury and death, inflammation and repair, immunopathology, vascular disturbances and carcinogenesis. The course will include two two-hour lectures each week, review of slides will be included in each lecture. Students will have opportunities to examine histological and pathological specimens (using scanned slides), be introduced to human anatomy and physiology and spend time integrating knowledge into clinical scenarios. This is a required course for all students in the Clinical and Translational Oncology Track of the Cancer Biology Program. Letter Graded

GS12 1262 Cellular Basis Cardiac Function (2 Credits)
Prerequisite: None. This course will provide a comprehensive review of mechanisms of energy transfer in a highly specialized organ. Letter Graded

GS12 1442 Principles of Experimental Mouse Pathology (2 Credits)
Prerequisite: None. This course conveys the fundamental knowledge needed to perform valid and interpretable research using mouse models. This course will feature lectures covering basic concepts of mouse biology, developmental biology, and genetics (including basics of genetically engineered mice, inbred backgrounds and nomenclature); animal study design; mouse models of cancer; toxicology; ante mortem and post mortem pathological characterizations (including background strain lesions). The course will feature a diverse group of instructors with a strong background on the subjects presented. Letter Graded