Clinical Laboratory Science (CLI) - Graduate Courses

Courses

CLI 440/540 Cr.1

Clinical Parasitology

Course covers important parasites of humans including zoonoses and emerging parasitic diseases. Life cycles, clinical features and infective diagnostic stages will be included in the lecture component. The laboratory will include demonstrations and diagnostic procedures. This course will provide the necessary pre-clinical competencies required for advancement to the clinical education component of the Clinical Laboratory Science Program. This course is taught largely at an undergraduate level. Graduate students will have additional course requirements/expectations. Lect. 1, Lab 2. Prerequisites: MIC 230 and admission to the Clinical Lab Science Program, or graduate status. Not open to students who have earned credit in BIO 506. Offered Spring.

CLI 470/570 Cr.8

Diagnostic Microbiology

This course provides an in depth study of the major groups of pathogenic bacteria, fungi, parasites, and viruses and their relationship to human disease. Topics include clinical signs and symptoms of these diseases, proper method of collecting, transporting, and processing appropriate clinical specimens, modes of transmission, and state-of-theart laboratory methods used for the identification of these pathogens and diagnosis of the diseases they cause. Principles of theory will be applied in rotation. Rotation provides students with opportunities to process a variety of patient specimens and gain experience with a wide variety of state-of-the-art procedures and equipment for the isolation and identification of pathogenic bacteria, fungi, protozoa, helminths, and viruses. Molecular diagnostic procedures will also be employed. Eight-week rotation. This course is taught largely at an undergraduate level. Graduate students will have additional course requirements/ expectations. Prerequisite: CLI 440; admission to Clinical Lab Science Program; acceptance into a NAACLS accredited clinical lab science program; admission into the Clinical Lab Science BS/Clinical Micro MS dual degree program. Offered Spring.

CLI 480/580 Cr.3

Laboratory Management and Education

A course designed to introduce senior students to skills and knowledge required to manage a clinical laboratory and educate future clinical laboratory scientists. Students will participate with lab managers in activities such as ordering supplies, quality control, quality management and quality improvement. They will be introduced to human resource management, financial management, scheduling issues, instrument selection for profitability and the processes involved in preparing for laboratory inspections and maintaining JCAHO and CAP laboratory accreditation. This course is taught largely at an undergraduate level. Graduate students will have additional course requirements/ expectations. Prerequisite: admission to Clinical Lab Science Program; acceptance to a NAACLS accredited internship site; admission into the Clinical Lab Science BS/Clinical Micro MS dual degree program. Offered Fall.

CLI 484/584 Cr.2

Laboratory Management

This course will discuss laboratory management issues along with theory, practical application, and evaluation of principles/models. Development of critical thinking, problem solving, teamwork, communication, professionalism, research, management, and leadership skills will be emphasized. This course is taught largely at an undergraduate level. Graduate students will have additional course requirements/expectations. Offered Spring.