Faculty members in the Department of Pathology and Laboratory Medicine in the Faculty of Medicine also teach in the program.

The MLT program is designed to prepare students for a career in the profession of medical technology by acquiring theoretical knowledge and practical skills in various disciplines of the specialty. Besides presenting theoretical knowledge, the program is dedicated to training students in the reliable performance of physical, chemical, and biological tests by utilizing routine and automated techniques. In addition, students are trained to develop the ability to interpret generated laboratory results and hence contribute to the diagnosis of disease. Continuing one's education, and updating skills and knowledge, as well as medical professional ethics, are emphasized.

**MLTP 201 Clinical Hematology I**  3.0; 3 cr.
A course that introduces students to fundamental concepts in hematology, including the development of blood cell elements, normal physiology of blood cells, and their disorders. This course focuses on anemia, with a special emphasis on diagnosis.

**MLTP 202 Clinical Hematology II**  3.0; 3 cr.
A course that consists of lectures and demonstrations in hematology with emphasis on coagulation and hemostatic disorders, white blood cell anomalies, and leukemia.

**MLTP 203 General Microbiology**  2.2; 3 cr.
A course that covers structure and morphology of micro-organisms, nutritional requirements and growth, sterilization and disinfection, introduction to microbial genetics, collection and handling of clinical specimens, culture techniques for clinical specimens and expected pathogens, antibiotic sensitivity testing, and assay.

**MLTP 204 Systematic Bacteriology**  2.4; 4 cr.
A course that covers the characteristics of bacteria of medical importance with concentration on the diseases they cause, pathogenesis, mode of transmission, control and methods for isolation, identification, and interpretation of results.

**MLTP 207 Immunology and Blood Banking**  2.0; 2 cr.
A course that consists of lectures in basic immunology, including types of immune responses, cells of the immune response, antigens, antibodies, and complement system, as well as basic principles in blood banking and transfusion medicine.
LABM 234  
Special Topics/Techniques in Laboratory Medicine  
A course that provides theoretical knowledge in specialized topics including endocrinology, chromatography, toxicology, tumor markers, therapeutic drug monitoring, flowcytometry, molecular testing, advanced clinical microbiology, antimicrobial agents, blood banking and transfusion medicine, and total quality management.

LABM 235  
Medical Mycology  
A course that covers the different kinds and types of fungi (yeast and mold). This course discusses their disease spectrum mode of infection, gross requirements, and cultural and non-cultural methods of identifications as well as antifungal drugs and susceptibility testing of fungi.

LABM 240  
Clinical Microbiology  
Practical experience in clinical microbiology (aerobic and anaerobic bacteriology, mycobacteriology, mycology, and susceptibility testing). Eight weeks.

LABM 250  
Clinical Parasitology and Urinalysis  
Practical experience in clinical microscopy pertaining to parasitology, urinalysis, and spermogram. Four weeks.

LABM 260  
Serology  
Practical experience in clinical immunology and serodiagnostic techniques. Four weeks.

LABM 270  
Blood Banking  
Practical experience in blood banking and transfusion medicine. Four weeks.

LABM 280  
Cytogenetics, Molecular Diagnostics and Histotechniques  
Practical experience in reception, cytogenetics, and histotechniques. Four weeks.

MBIM 223  
Parasitology for MLT Students  
Second semester.

PHYL 246  
Physiology for Nursing Degree Students and Undergraduates  
A course that outlines fundamental principles of human physiology and the mechanisms governing the function of different body organs. Prerequisite: BIOC 246; BIOL 201 (or BIOL 210). Annually.

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