

# COURSES

## MEDICAL LAB TECHNOLOGY (MLT)

### MLAB 1201 INTRODUCTION TO CLINICAL LAB SCIENCE

1 lec/3 lab (2 Cr.) An introduction to clinical laboratory science including quality control laboratory math safety basic laboratory equipment and techniques medical terminology accreditation and certification. Prerequisite: permission of instructor.

Credits

2

Distribution

MLAB

Offered

Fall

Course Fee

Health professions fee: \$40, Insurance: \$13; Lab fee: \$24

### MLAB 1211 URINALYSIS AND BODY FLUIDS

2 lec/3 lab (2 Cr.) An introduction to the study of urine and body fluid analysis. Includes the anatomy and physiology of the kidney physical chemical and microscopic examination of urine cerebrospinal fluid and other body fluids as well as quality control quality assurance and safety. Prerequisite: permission of instructor.

Credits

2

Distribution

MLAB

Offered

Fall

Course Fee

Health professions fee: \$40, Lab fee: \$24

### MLAB 1227 COAGULATION

1 lec/2 lab (2 Cr.) A course in coagulation theory procedures and practical applications. Includes quality control quality assurance safety and laboratory procedures which rely on commonly performed manual and/or semi-automated methods. Prerequisite: permission of instructor.

Credits

2

Distribution

MLAB

Offered

Spring

Course Fee

Health professions fee: \$40

### MLAB 1231 PARASITOLOGY/ MYCOLOGY

1 lec/4 lab (2 Cr.) A study of the taxonomy, morphology, and pathogenesis of human parasites and fungi, including the practical application of laboratory procedures, quality control, quality assurance, and safety. Prerequisite: permission of instructor.

Credits

2

Distribution

MLAB

### MLAB 1235 IMMUNOLOGY/ SEROLOGY

2 lec/1 lab (2 Cr.) An introduction to the theory and application of basic immunology including the immune response principles of antigen-antibody reactions and the principles of serological procedures as well as quality control quality assurance and safety. Prerequisite: permission of instructor.

Credits

2

Distribution

MLAB

Offered

Fall

Course Fee

Health professions fee: \$40, Lab fee: \$24

## MLAB 1360 CLINICAL I

18 lab (3 Cr.) A health-related work based learning experience that enables the student to apply specialized occupational theory skills and concepts. Direct supervision is provided by the clinical professionals. Students rotate through hematology, coagulation, urinalysis, serology, and phlebotomy. Prerequisite: permission of instructor.

Credits

3

Distribution

MLAB

Offered

Summer

Course Fee

Clinical Travel Fee: \$15, Health Professions Fee: \$60

## MLAB 1415 HEMATOLOGY

3 lec/3 lab (4 Cr.) The study of blood cells in normal and abnormal conditions. Instruction in the theory and practical application of hematology procedures including quality control quality assurance safety manual and/or automated methods as well as blood cell maturation sequences and normal and abnormal morphology with associated diseases. Prerequisite: permission of instructor.

Credits

4

Distribution

MLAB

Offered

Spring

Course Fee

Health professions fee: \$80, Lab fee: \$24

## MLAB 2238 ADVANCED TOPICS

2 lec (2 Cr.) This course examines the integration of all areas of the clinical laboratory and correlates laboratory testing data with diagnostic applications and pathophysiology using critical thinking skills. A review of the MLT curriculum is conducted to prepare students for the certification exam. A passing grade is required on the exit exam to complete the course. This course is taken during the last semester of the program. Prerequisite: permission of instructor.

Credits

2

Distribution

MLAB

Course Fee

Health professions fee: \$40

## MLAB 2360 CLINICAL II

18 lab (3 Cr.) A health-related work-based learning experience that enables the student to apply specialized occupational theory skills and concepts. Direct supervision is provided by the clinical professionals. Students rotate through microbiology, clinical, chemistry, parasitology, and immunohematology. Prerequisite: permission of instructor.

Credits

3

Distribution

MLAB

## MLAB 2401 CLINICAL CHEMISTRY

3 lec/4 lab (4 Cr.) An introduction to the principles procedures physiological basis and significance of testing performed in Clinical Chemistry. Includes quality control reference values and safety. Prerequisite: permission of the instructor.

Credits

4

Distribution

MLAB

Offered

Spring

Course Fee

Health professions fee: \$80, Lab fee: \$24

## MLAB 2431 IMMUNOHEMATOLOGY

3 lec/4 lab (4 Cr.) A study of blood antigens and antibodies. Presents quality control, basic laboratory technique and safety. Includes the principles, procedures and clinical significance of test results in genetics, blood group systems, pre-transfusion testing, adverse effects of transfusions, donor selection and components, and hemolytic disease of the newborn.

Credits

4

Distribution

MLAB

Offered

Fall

Course Fee

Health professions fee: \$80, Lab fee: \$24

## MLAB 2434 CLINICAL MICROBIOLOGY

3 lec/4 lab (4 Cr.) This course includes a detailed study of bacteria found in humans as pathogens or normal flora. Emphasis is placed on the laboratory identification of bacteria specimen collection and determination of antimicrobial susceptibility.

Prerequisite: permission of instructor.

Credits

4

Distribution

MLAB

Offered

Fall

Course Fee

Health professions fee: \$80, Insurance: \$13

## PLAB 1223 PHLEBOTOMY

1 lec/2 lab (Cr. 2) Skill development in the performance of a variety of blood collection methods using proper techniques and standard precautions. Includes vacuum collection devices syringes capillary skin puncture butterfly needles and blood culture and specimen collection on adults children and infants. Emphasis on infection prevention, patient identification, specimen labeling, quality assurance, specimen handling, processing, accessioning, professionalism, ethics, and medical terminology.

Prerequisite: permission of instructor.

Credits

2

Distribution

MLAB

Course Fee

Health professions fee: \$40, Lab fee: \$24