

# MEDICAL LAB ASSISTANT (MLAB)

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## **MLAB 1111 Credits: 3**

### **Professional Practice Total Hours: 90**

This course focuses on the roles and responsibilities of Medical Laboratory Assistant in the public and private laboratory sectors. Medical-legal, ethical and professional approaches to work are discussed. Safe laboratory practices, including infection control, electrical and fire safety as well as WHMIS are described and practised in a laboratory setting. Other topics include quality assurance programs, purchasing and inventory control systems as well as reception and clerical skills. Preparation for employment is also included in this course.

## **MLAB 1112 Credits: 2**

### **Laboratory Fundamentals Total Hours: 60**

This course provides an overview of human anatomy and physiology relevant to the practice of a Medical Laboratory Assistant. Medical terminology, abbreviations, pathophysiology and lab tests relevant to each system are discussed. Other topics include: basic laboratory procedures including the use of common laboratory equipment and reagent preparation.

## **MLAB 1113 Credits: 6**

### **Specimen Collection & Process Total Hours: 180**

This course focuses on the collection and processing of specimens for medical laboratory testing and analysis. A major focus of the course is blood collection, including venous and capillary collection techniques, according to approved protocols and procedures. Providing instructions to clients for the correct collection for urine, breath, sputum, stool and semen specimens is emphasized and practised. In the lab setting the students practise their skills as well as develop effective communication strategies and professional behaviours.

## **MLAB 1114 Credits: 3**

### **Medical Laboratory Procedures Total Hours: 90**

This course provides an overview of the common tests analyzed in the medical laboratory. The preanalytical requirements for tests in clinical chemistry, hematology, microbiology, transfusion services, anatomical pathology, cytology and the tumour marker lab are explored. The significance, collection requirements, abbreviations and terminology related to these tests is studied. Basic procedures done in chemistry, hematology, transfusion services and bacteriology are also introduced. The role of the Canadian Blood Services in providing blood products is described. The importance of following standard operating procedures and protocols set by medical laboratories is emphasized.

## **MLAB 1115 Credits: 4**

### **Electrocardiography Total Hours: 120**

This course provides an introduction to the anatomy and electrical conduction system of the heart. Topics include procedures for performing 12/15 lead electrocardiograms, 24-hour blood pressure monitors, use and maintenance of equipment and the analysis of electrocardiogram tracings. Students also learn to identify tracings that require the immediate attention of a physician. During the lab component of the course, students perform electrocardiograms as well as practise the correct procedure for applying Holter monitors.

## **MLAB 1116 Credits: 1**

### **Human Relations Skills Total Hours: 30**

This course introduces students to the basic concepts of effective communication within a health care setting. Topics include the communication process, barriers to effective communication and the development of effective interpersonal skills with both clients and colleagues.

## **MLAB 1117 Credits: 1**

### **Med Lab Computer Applications Total Hours: 30**

This course focuses on the computer applications required by a MLA in a medical laboratory. Keyboarding skills are practised, data entry skills are performed and Laboratory Information Systems are used. Students also complete billing procedures for laboratory tests. Online resources that support the role of the MLA are accessed and used.

## **MLAB 1218 Credits: 4**

### **Laboratory Practicum Total Hours: 120**

During this course, students perform the duties of a Medical Laboratory Assistant in the workplace. The collection and processing of specimens are performed under the supervision of practicum site personnel. During the practicum, effective communication skills, professional conduct and adherence to standard operating procedures are required.