ORIGINAL COURSE IMPLEMENTATION DATE: January 2026

REVISED COURSE IMPLEMENTATION DATE:

COURSE TO BE REVIEWED (six years after UEC approval)**:** April 2031

Course outline form version: 28/10/2022

OFFICIAL UNDERGRADUATE COURSE OUTLINE FORM

Note: The University reserves the right to amend course outlines as needed without notice.

Course Code and Number: MLA 07	**Number of Credits:** 0 Course credit policy (105)
Course Full Title: Introduction to Electrocardiography **Course Short Title:** Intro to Electrocardiography	
Faculty: Faculty of Education, Community, & Human Dev.	**Department (or program if no department):** Continuing Education

Calendar Description:

Focuses on information on the anatomy and physiology of the heart, lead theory, electrocardiography (ECG) equipment, troubleshooting, and dealing with a variety of patient situations. Emphasis is on correct placement of the 12-lead, 15-lead, and Lewis-lead ECG, recognition of arrhythmias that require immediate response, and the properties that comprise an accurate ECG tracing. Will also include a description of Holter monitors, blood pressure and event monitors for diagnosis, identification of normal and abnormal sinus rhythms, and recognizing myocardial infarction (MI) patterns.

Prerequisites (or NONE):	MLA 01, MLA 02, MLA 03, and MLA 06.
Corequisites (if applicable, or NONE):	NONE
Pre/corequisites (if applicable, or NONE):	NONE

Antirequisite Courses *(Cannot be taken for additional credit.)*

Former course code/number: **N/A**

Cross-listed with: **N/A**

Equivalent course(s): **N/A**

(If offered in the previous five years, antirequisite course(s) will be included in the calendar description as a note that students with credit for the antirequisite course(s) cannot take this course for further credit.)

Typical Structure of Instructional Hours

Lecture/seminar	40
Tutorials/workshops	40
Supervised laboratory hours (science lab)	40
Total hours	**120**

Scheduled Laboratory Hours

Labs to be scheduled independent of lecture hours: ☒ No ☐ Yes

Course Details

Special Topics course: **No**

(If yes, the course will be offered under different letter designations representing different topics.)

Directed Study course: **No**

(See policy 207 for more information.)

Grading System: **Letter grades**

Delivery Mode: **May be offered in multiple delivery modes**

Expected frequency: **Annually**

Maximum enrolment (for information only)**: 24**

Prior Learning Assessment and Recognition (PLAR)

PLAR cannot be awarded for this course because:

This is a course in a non-credit certificate program that relies on in-class experience and training.

Transfer Credit *(See bctransferguide.ca.)*

Transfer credit already exists: **[click to select]**

Submit outline for (re)articulation: **[click to select]**

(If yes, fill in transfer credit form.)

Department approval	**Date of meeting:**
Faculty Council approval	**Date of meeting:** February 21, 2025
Undergraduate Education Committee (UEC) approval	**Date of meeting:** April 25, 2025

Learning Outcomes

Upon successful completion of this course, students will be able to:

1. Describe the cardiovascular circulation system.
2. Explain the functions, controls, and maintenance of electrocardiography machines and equipment.
3. Identify the correct procedures in performing ECG tests.
4. Perform electrography.
5. Perform the placement of Holter monitors.
6. Recognize arrhythmias that require an immediate response.
7. Describe the process of evaluating ECG tracings and determining the presence of dysrhythmias.

Recommended Evaluation Methods and Weighting *(Evaluation should align to learning outcomes.)*

Assignments:40%	Quizzes/tests:25%	[click to select]	%
Final exam:25%	Project:10%	[click to select]	%

Details:

A passing grade of 80% must be obtained prior to advancing to the next course.

NOTE: The following sections may vary by instructor. Please see course syllabus available from the instructor.

Typical Instructional Methods *(Guest lecturers, presentations, online instruction, field trips, etc.)*

Combination of lectures, group activities, hands-on and self-directed learning.

Texts and Resource Materials *(Include online resources and Indigenous knowledge sources. Open Educational Resources (OER) should be included whenever possible. If more space is required, use the Supplemental Texts and Resource Materials form.)*

	Type	Author or description	Title and publication/access details	Year
1.	Textbook	Ellis, Karen M.	EKG Plain and Simple	2016
2.				
3.				
4.				
5.				

Required Additional Supplies and Materials:

Scrubs, hospital approved footwear, lab coat.

Course Content and Topics

- Anatomy and physiology of the cardiovascular system
- Basic electro-physiology of the cardiovascular system
- Electrocardiograms
- Lead morphology
- Lead placement
- Clinical aspects of the ECG
- Calculating heart rates
- Interpreting normal and abnormal rhythms
- Holter monitors
- Event monitors
- Blood pressure monitors including 24-hour monitoring