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**MLAB 117 Medical Laboratory Procedures 1**  
**Winter 2021**  
**COURSE OUTLINE**

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The course description is available on the web:  
<http://camosun.ca/learn/calendar/current/web/mlab.html#mlab117>

Camosun College will continue to follow the guidance of the Provincial Health Officer, the B.C. Government and WorkSafeBC, and as such may revise the delivery of courses. Courses with an approved face-to-face component may need to move to online or remote delivery if necessary.

The COVID-19 pandemic has presented many challenges, and Camosun College is committed to helping you safely complete your education. Following guidelines from the Provincial Health Officer, WorkSafe BC and the B.C. Government to ensure the health and wellbeing of students and employees Camosun College is providing you with every possible protection to keep you safe including COVID Training for students and employees, health checks, infection control protocols including sanitization of spaces, PPE and ensuring physical distancing. Please refer to: <http://camosun.ca/covid19/faq/covid-faqs-students.html>

However, if you're at all uncomfortable being on campus, please share your concerns with your Instructor and if needed, alternatives will be discussed.

Ω Please note: This outline will not be kept indefinitely. Students are recommended to keep this outline for their records, especially to assist in transfer credit to post-secondary institutions.

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## 1. Instructor Information

- (a) **Instructor** Alex Purdy  
(b) **Office hours** Tuesdays 9:30 – 10:30  
(c) **Location** [Click or tap here to enter text.](#)  
(d) **Phone** 250-370-4764 **Alternative:** [Click or tap here to enter text.](#)  
(e) **E-mail** [purdya@camosun.ca](mailto:purdya@camosun.ca)  
(f) **Website** <http://camosun.ca/learn/programs/medical-laboratory-assistant/>

## 2. Intended Learning Outcomes

Upon successful completion of this course a student will be able to:

- compare and contrast the duties, roles, and responsibilities of Certified Medical Laboratory Assistants (CMLA) in community clinics and hospitals.
- apply knowledge of venous anatomy and blood components to identify, describe, and perform the correct procedures and various techniques for blood collection and sample preparation.
- apply the components of laboratory testing procedures (professionalism, interpreting requests, planning and preparing for collecting procedures, establishing patient relationships, performing collection procedures, and pre-analytical preparation) to patient case-based scenarios simulating common practice situations.
- discuss the implications of varied patient health conditions (physical and emotional) on all patient and client interactions commonly encountered by Medical Laboratory Assistants.

### 3. Required Materials

Textbook: Warekois & Robinson. (2015) Phlebotomy: Work text and Procedure Manual 5th Ed.

### 4. Course Content and Schedule

The following schedule is tentative and subject to change if deemed necessary by the instructor.

Module	Unit	Topic	Pre-Reading	Assignment	Learning Outcome
		Introduction to CMLA Program Review of Course Outlines Learning in an online environment		D2L Orientation Video D2L Scavenger Hunt	
1	1	Introduction to Phlebotomy  1. Define phlebotomy 2. Describe the major duty of phlebotomists, and discuss other responsibilities that are important. 3. List personal qualities that characterize a professional, and explain how a phlebotomist demonstrates these qualities.	Chapter 1	Discussion - Get to know you activity	
	2	Anatomy of Phlebotomy  1. Identify the most common veins for phlebotomy 2. Differentiate arteries, veins and capillaries 3. Define and use terminology commonly used in the laboratory and correct terminology related to specimen collection	Chapter 5	Discussion - Terminology Study Aid	1
	3	Phlebotomy Equipment  1. Knowledge of guidelines in selection of appropriate venipuncture site in arms and hands and feet 2. Describe the use and purpose of equipment used in phlebotomy	Chapter 8	Phlebotomy Video Discussion	2
2	4	Patient Identification, Requisitions and Labels  1. The student will be able to greet and identify patients in a professional manner using SNOD 2. Obtains informed consent prior to procedure and respects a patient's right to refuse 3. Interpret requisition (paper or electronic) data to verify patient information, test requests and required procedures. 4. Demonstrates knowledge of established protocols for accurate patient identification. 5. Demonstrates knowledge of rules of confidentiality in regards to personal patient information	Chapter 9	Patient Scenario Assignment	2,3

Module	Unit	Topic	Pre-Reading	Assignment	Learning Outcome
	5	<b>Specimen Collection</b> <ol style="list-style-type: none"> <li>The student will be able to identify commonly ordered tests and their corresponding tubes and know how to collect in the proper sequence and whether or not to mix.</li> <li>Identify the color codes of the evacuated tubes with the additives contained in the tubes.</li> <li>Compare common additives and anticoagulants used to preserve blood specimens and describe the general use of each type of coagulant.</li> </ol>	Chapter 8	Patient Requisition, Label and Order of Draw Assignment	2
	6	<b>Butterfly and Syringe Collection</b> <ol style="list-style-type: none"> <li>Knowledge of butterfly use and safe disposal.</li> <li>Knowledge of syringe and syringe transfer device.</li> <li>Knowledge of sharps disposal systems for needles.</li> </ol>	Chapter 9	Chapter 9 Study Questions	2
	7	<b>Capillary Collection</b> <ol style="list-style-type: none"> <li>Knowledge of the steps for capillary collection including order of draw</li> <li>List situations in which a capillary collection is preferred.</li> <li>Discuss proper capillary collection site selection.</li> <li>List precautions to be observed when collecting capillary blood.</li> </ol>	Chapter 10	Capillary Quiz and Video Discussion – <a href="#">PKU Assignment</a>	2
	8	<b>Specimen Handling, Processing &amp; Transportation</b> <ol style="list-style-type: none"> <li>Adheres to established protocols for labeling and traceability of specimens</li> <li>Assesses specimen suitability for testing</li> <li>Adheres to guidelines for specimen retention, storage, transportation and disposal</li> </ol>	Chapter 16	Chapter 16 Study Questions WHMIS Assignment	3
3	9	<b>Foundations of Lab Safety</b> <ol style="list-style-type: none"> <li>Demonstrates lab safety principles</li> <li>Knowledge of electrical safety, fire safety and radiation hazards.</li> <li>Knowledge of use of spill kits and containment procedures for biological or chemical hazards.</li> </ol>	Chapter 3 Chapter 4 of Lab Safety	Chapter 3 Safety Review Worksheet	3
	10	<b>Infection Control &amp; Safety</b> <ol style="list-style-type: none"> <li>Uses personal protective equipment, e.g. gloves, gowns, mask, face shields, aprons</li> <li>Applies laboratory hygiene and infection control practices</li> <li>Knowledge of transmission and prevention of Hep A; B; C. Have knowledge of the importance of Hep B vaccination. Knowledge of Transmission and prevention of HIV.</li> </ol>	Chapter 4	Infection Control Written Assignment	3
4	11	<b>The Organizations that impact MLAs and Healthcare</b> <ol style="list-style-type: none"> <li>Demonstrates knowledge of the health care system, professional laboratory organizations and their responsibilities (Invite Rep from BCSLS)</li> </ol>			4

Module	Unit	Topic	Pre-Reading	Assignment	Learning Outcome
	12	Professional Communication and Patient based scenarios for specimen collection  1. Knowledgeable in the theory, technical skills and clinical application of procedures performed in the laboratory 2. Knowledge of how to deal with complications associated with venipuncture: patients with no identification, failure to draw blood, rolling veins, sclerosed veins or scarred veins, collapsed veins, hematoma, thrombosed area, edematous area, burned area, excessive bleeding, petechiae.			1,4

Lab	Activities		
1 - 10%	Demonstrate qualities that characterize a medical laboratory professional	Demonstrates knowledge of established protocols for accurate patient identification.	Demonstrates knowledge of rules of confidentiality in regards to personal patient information when performing lab based activities
2 – 10%	Demonstrates lab safety principles	Demonstrates knowledge of a guidelines for specimen retention, storage, transportation and disposal	Demonstrates knowledge in the theory, technical skills and clinical application of procedures performed in the laboratory

## 5. Basis of Student Assessment (Weighting)

Quizzes	10%
Discussions	20%
Assignments	30%
Lab Assessments	20%
Final Exam	20%
<b>TOTAL</b>	<b>100%</b>

### TEST AND EXAMINATION PROCEDURES

There are policies regarding written test and examination procedures including late arrivals and missed tests. Please see the Health and Human Services Student Handbook item 5.4 for Test and Examination Procedures at <http://camosun.ca/learn/school/health-human-services/student-info/index.html>

### WRITTEN ASSIGNMENTS

Assignments are due before 2400 hours (midnight) on the assigned day unless otherwise specified. Assignments about patients, residents or clients must be completed using the individual's initials only. Unless otherwise directed by individual course outlines, assignments must be: word processed, double spaced, font meeting APA 7th edition guidelines, with a title page and a reference list. Students requiring an extension for the due date of an assignment must negotiate with the instructor, at least 48 hours before the due date. Assignments submitted late without an approved extension will result in a 5% deduction in mark for each day late.

## 6. Grading System

- Standard Grading System (GPA)
- Competency Based Grading System

## 7. Recommended Materials to Assist Students to Succeed Throughout the Course

Review the School of Health and Human Services [Student Handbook](#) and the specific section for the [CMLA](#) program.

## 8. College Supports, Services and Policies

### Immediate, Urgent, or Emergency Support



If you or someone you know requires immediate, urgent, or emergency support (e.g., illness, injury, thoughts of suicide, sexual assault, etc.), **SEEK HELP**. Resource contacts:

<http://camosun.ca/about/mental-health/emergency.html> or  
<http://camosun.ca/services/sexual-violence/get-support.html#urgent>

### College Services

Camosun offers a variety of health and academic support services, including counselling, dental, centre for accessibility, help centre, learning skills, sexual violence support & education, library, and writing centre. For more information on each of these services, visit Student Services at <http://camosun.ca/services>

## College Policies

Policies are available on the College website at <http://camosun.ca/about/policies>. Camosun strives to provide clear, transparent, and easily accessible policies that exemplify the college's commitment to life-changing learning. It is the student's responsibility to become familiar with college policies.

Education and academic policies include, but are not limited to, [Academic Progress](#), [Admission](#), [Course Withdrawals](#), [Grading](#), [Involuntary Health and Safety Leave of Absence](#), [Prior Learning Assessment](#), [Medical/Compassionate Withdrawals](#), [Sexual Violence and Misconduct](#), [Standards for Awarding Credentials](#), [Student Ancillary Fees](#), [Student Appeals](#), and [Student Penalties and Fines](#).

## Student Conduct Policy

The [Student Conduct Policy](#) provides clear expectations of appropriate academic and non-academic student conduct and establishes processes for resolution of conduct issues or the imposition of sanctions for inappropriate conduct. It is the student's responsibility to become familiar with the content of this policy.

## A. GRADING SYSTEMS

<http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf>

The following two grading systems are used at Camosun College:

### 1. Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	A		8
80-84	A-		7
77-79	B+		6
73-76	B		5
70-72	B-		4
65-69	C+		3
60-64	C		2
50-59	D		1
0-49	F	Minimum level has not been achieved.	0

### 2. Competency Based Grading System (Non GPA)

This grading system is based on satisfactory acquisition of defined skills or successful completion of the course learning outcomes.

Grade	Description
COM	The student has met the goals, criteria, or competencies established for this course practicum or field placement.
DST	The student has met and exceeded, above and beyond expectation, the goals, criteria, or competencies established for this course, practicum or field placement.
NC	The student has not met the goals, criteria or competencies established for this course, practicum or field placement.

## B. Temporary Grades

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy at <http://www.camosun.bc.ca/policies/E-1.5.pdf> for information on conversion to final grades, and for additional information on student record and transcript notations.

<b>Temporary Grade</b>	<b>Description</b>
I	<i>Incomplete:</i> A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family.
IP	<i>In progress:</i> A temporary grade assigned for courses that are designed to have an anticipated enrollment that extends beyond one term. No more than two IP grades will be assigned for the same course.