

CLASS SYLLABUS



COURSE TITLE: MLAB 117 – Medical Laboratory Procedures 1
CLASS SECTION: BX01AC
TERM: F2022
COURSE CREDITS: 3
DELIVERY METHOD(S): Synchronous, Blended

Camosun College campuses are located on the traditional territories of the Lək̓ʷəŋən and W̱SÁNEĆ peoples. We acknowledge their welcome and graciousness to the students who seek knowledge here.
Learn more about Camosun's [Territorial Acknowledgement](#).

<https://camosun.ca/about/covid-19-updates>

Camosun College requires mandatory attendance for the first class meeting of each course. If you do not attend, and do not provide your instructor with a reasonable explanation in advance, you will be removed from the course and the space offered to the next waitlisted student.

INSTRUCTOR DETAILS

NAME: Alex Purdy and Tarah Craig
EMAIL: purdya@camosun.ca & CraigT@camosun.ca
OFFICE: CHW 317
HOURS: Alex - Wednesday 9:30 – 10:30, Tarah - Varied

As your course instructor, I endeavour to provide an inclusive learning environment. However, if you experience barriers to learning in this course, do not hesitate to discuss them with me. Camosun College is committed to identifying and removing institutional and social barriers that prevent access and impede success.

CALENDAR DESCRIPTION

In this course, students learn about the laboratory professionals and their role in the diagnosis and treatment of human disease. Building on a general knowledge of human anatomy, students take a closer look at the venous system and the components of circulating blood in the human body. Using the basic components of laboratory testing procedures, students integrate foundational technical skills for specimen collecting with safe work practices and professional behaviours. Students demonstrate clinical and laboratory safety indicators, display appropriate levels of decision-making, and use therapeutic communication strategies by practicing their skills on each other.

PREREQUISITE(S): **One of:** C in Biology 12; C in BIOL 090; C in BIOL 103
CO-REQUISITE(S): n/a
PRE/CO-REQUISITE(S): n/a

COURSE DELIVERY

| ACTIVITY | HOURS / WEEK | # OF WEEKS | ACTIVITY HOURS |
|----------|--------------|------------|----------------|
| Lecture | 3 | 14 | 42 |
| Seminar | | | |

| | | | |
|-------------------------------|-------------|----|----|
| Lab / Collaborative Learning | 2 | 14 | 28 |
| Supervised Field Practice | | | |
| Workplace Integrated Learning | | | |
| Online | | | |
| | TOTAL HOURS | | 70 |

COURSE LEARNING OUTCOMES

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

- a) Compare and contrast the duties, roles, and responsibilities of Certified Medical Laboratory Assistants (CMLA) in community clinics and hospitals.
- b) Apply knowledge of venous anatomy and blood component to identify, describe, and perform the correct procedures and various techniques for blood collection and sample preparation.
- c) 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.
- d) Discuss the implications of varied patient health conditions (physical and emotional) on all patient and client interaction commonly encountered by Medical Laboratory Assistants.

COURSE OBJECTIVES AND MAPPED PROFESSIONAL COMPETENCIES

(also known as “sub-outcomes” or “learning objectives”)

1. Demonstrates knowledge of venous anatomy and blood collection terminology and equipment to identify, describe, and perform the correct procedures and various techniques for blood collection and sample preparation. *(BCSLs- Unit 2A, Unit 3B, Unit 3C)*
2. Follow current policies and procedures for specimen collection, handling, labeling and transportation of samples. *(CSMLS -1.08, 2.03, 2.04, 2.06, 2.07, 2.14) (BCSLs - Unit 2C: 2.14, 1.11 1.14, Unit 3C)*
3. Apply the foundational principles of laboratory safety, routinely utilizing laboratory hygiene, personal protective equipment, and infection control practices. *.(CSMLS -1.01, 1.02, 1.08) (BCSLs - Unit 2C)*
4. Understand the professional roles and responsibilities of the Medical Laboratory Assistant, professional organizations, and the health care system for both public and private sectors and the importance of following current standards and practices. *(CSMLS - 7.10) (BCSLs – Unit 1A: CoPC3, Unit 1C: 7.10)*

REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

Required Materials: Warekois & Robinson. (2019) Phlebotomy: Work text and Procedure Manual 5th Ed.

Recommended Material: Complete Phlebotomy Exam Review, (2015) 2nd Edition

COURSE SCHEDULE, TOPICS, AND ASSOCIATED PREPARATION / ACTIVITY / EVALUATION

The following schedule and course components are subject to change with reasonable advance notice, as deemed appropriate by the instructor.

| Week | Asynch Assignment | Lab – Tues | Lecture - Thurs | Learning Objectives | BCSLs and CSMLS |
|-------------|---|---|--|---|------------------------|
| 1 | Assignment #1 D2L Orientation | Orientation, Phleb room tour, Camosun Emergency Response | Review D2L and Collaborate Course Outlines Unit 1 Intro to Phlebotomy | <ol style="list-style-type: none"> 1. Review Course Outline, expected safety requirements, and lab tour 1. Define phlebotomy. 2. List at least five job skills that are important for phlebotomists to have, and explain why each is important. 3. Describe the major duty of phlebotomists, and discuss four other responsibilities that are important. 4. Explain why informed consent and confidentiality are important legal issues for phlebotomists | |
| 2 | #2 Chapter 8 Worksheet and Circulatory Quiz | Unit 2 Venipuncture equip | Unit 3 Anatomy of Phlebotomy | Unit 2 PPT <ol style="list-style-type: none"> 1. Describe the use and purpose of phlebotomy equipment including vacutainer needles and gauge of needles including adapters and holders, types of evacuated tubes and determine additives, and their requirement for testing procedures, use and release of tourniquets. 2. Locate the bevel, shaft, hub, and point of a needle, and describe safety features included. 3. Define needle gauge, and explain the use of different gauges. 4. Knowledge of guidelines in the selection of appropriate venipuncture sites in arms and hands and feet. UNIT 3 <ol style="list-style-type: none"> 1. Identify and determine the suitable collection locations for venous blood specimen collections, and identify the advantages and disadvantages of each in arms and hands 2. Differentiate arteries, veins, and capillaries. 3. Identify the components of blood. | Unit 3B |
| 3 | #3 What's your SMART Goal? | Phlebotomy Materials and Task Trainers | Unit 4 Venipuncture Procedure and Order of Draw | <ol style="list-style-type: none"> 1. The student will be able to greet and identify patients in a professional manner using SNOD 2. Obtains informed consent prior to the 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. | Category 2, 2.06 |
| 4 | #4 Chapter 9 Work Sheet | Unit 5 Requisitions combo with Lab Requisitions and Labels | Unit 6 WIS and Syringe and Terminology | <ol style="list-style-type: none"> 1. Identify and describe the types, parts, and appropriate uses of winged infusion sets and syringe equipment required to collect specimens for venipuncture. 2. Safe disposal of all sharps systems for needles. 3. Define and use correct terminology related to specimen collection in the lab. | Unit 3C |
| 5 | #5 What's wrong here? | CROSS OVER LAB ACTIVITY with MLAB 121 Lab Samples/ Common Test Review | Unit 7 Capillary Collection | <ol style="list-style-type: none"> 1. Knowledge of guidelines in the selection of venipuncture vs. skin puncture. 2. Describe the common skin puncture devices, the appropriate order of draw and min/max levels. 3. Describe the precautions to be observed when collecting capillary blood. 4. Knowledge of use of cleansing solutions of skin as per protocols. | Unit 3B |

| | | | | | |
|----|---|--|--|---|---|
| 6 | #6 Patient Requisitions, Labels, and Order of Draw | Capillary Collection | Unit 8 Patient Identification, Complications | 1. 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. | Unit 2B, |
| 7 | #7 Chapter 16 Worksheet | Written Lab Assessment #1 | Unit 9 Specimen Handling | 1. Stores, handles, transports, and disposes of biological and other hazardous materials according to legislation. 2. Collects and transports specimens taking into account priority and stability requirements. 3. Understand the importance of the skill of the Medical Laboratory Assistant in relation to patient care; specimen procurement and specimen integrity. | Category 1, 1.08. Category 2, 2.03, 2.07. Unit 1A, CoPC3, |
| 8 | #8 WHMIS | Complications and Patient Identification | Unit 10 Foundations of Lab Safety | 1. Applies the principles of routine practices. 2. Knowledge of legislated Acts and the importance of documentation and reporting requirements: SDS (Safety Data Sheets), WHMIS 2015, TDG (Transportation of Dangerous Goods), and WorkSafeBC. 3. Knowledge of electrical safety, fire safety, and radiation hazards. 4. Knowledge of workplace accidents and emergencies, use of spill kits and containment procedures for biological or chemical hazards, and Blood and Body Fluid or Needlestick exposures. | Category 1, 1.01. Category 2, 2.14 Unit 2C |
| 9 | #9 Infection Control Quiz and Safety Review Worksheet | Specimen Handling | Unit 11 Infection Control | 1. Knowledge of transmission through droplet, airborne, contact, common vehicle, or vector and associated isolation precautions necessary for each mode of transmission. 2. Use of personal protective equipment, e.g. gloves, gowns, mask, face shields, aprons. 3. Knowledge of transmission and prevention of Hep A; B; C and HIV. Have knowledge of the importance of Hep B vaccination. | Category 1, 1.02 Unit 2C |
| 10 | #9 Phases of Analytical Testing | CROSS OVER LAB ACTIVITY Specimen Lab | Unit 12 The Organizations the impact MLAs and Healthcare | 1. Demonstrates knowledge of the health care system, professional laboratory organizations and their responsibilities. | Category 7, 7.10. Unit 1C, 7.10 |
| 11 | #10 Glucose Paper | Safe Work Practices | Guest Speakers: BCSLS/ LifeLabs/IHA | | |
| 12 | | Written Lab Assessment #2 | Unit 13 Professional Communication | 1. Describe the elements of communication. 2. List your responsibilities in the communication process both towards the patient and toward peers. 3. Describe the importance of listening and practice active listening. 4. Critical thinking case-based learning. | |
| 13 | #10 Glucose Paper Due Nov 27th | Group Activity A/B/C RePlay | Guest Speakers: BCSLS/ LifeLabs/IHA | | |
| 14 | Review Week/Make-up Labs | | | | |
| 15 | Finals Week | | | | |

Students registered with the Centre for Accessible Learning (CAL) who complete quizzes, tests, and exams with academic accommodations have booking procedures and deadlines with CAL where advanced noticed is

required. Deadlines can be reviewed on the [CAL exams page](http://camosun.ca/services/accessible-learning/exams.html). <http://camosun.ca/services/accessible-learning/exams.html>

STUDENT EVALUATION

| DESCRIPTION | WEIGHTING |
|--------------------------|--------------|
| Asynchronous Assignments | 35 |
| Participation | 10 |
| Lab Assessments | 25 |
| Quizzes | 5 |
| Final Exam | 25 |
| | TOTAL |
| | 100% |

If you have a concern about a grade you have received for an evaluation, please come and see me as soon as possible. Refer to the [Grade Review and Appeals](http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf) policy for more information. <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf>

COURSE GUIDELINES & EXPECTATIONS

Attendance

- Students are expected to be on time and to leave their cameras on for the first portion of lecture in order to perform attendance. Tardiness disrupts the class so while lectures are online, please enter the collaborate room quietly and without disruption. When students are more than 5 minutes late (and/or the classroom door is shut), they cannot enter the classroom until the class break period.
- If you choose not to or are unable to attend lecture **it is your responsibility to acquire all information given during a class missed**, incl. notes, hand-outs, assignments, changed exam dates etc. Email the instructor as a courtesy.
- Attendance of labs are mandatory and missed sessions will result in lost marks. See the D2L for a full description of the lab assessments. **If an absence must occur, please notify the instructor at least one hour before the start of lab**
- Missed exams cannot be made up except in case of documented illness (doctor's note required). The instructor must be informed that the students will be missing the exam before the exam start time.

Student Assessment

Students must achieve a **minimum of 65%** and complete all assignments in order to use this course as a prerequisite.

- Detailed information regarding assignments will be available on D2L.
- Complete all assignments on time and submit on the designated due dates. In exceptional circumstances, students may request an extension; however that extension must be arranged with the instructor before the due date. Students who have not prearranged an extension will have **10% of the total possible mark deducted per day** from late assignments.
- Incomplete assignments will not be accepted.
- Unless otherwise stated, all assignments will be submitted via D2L

SCHOOL OR DEPARTMENTAL INFORMATION

Health & Human Services Student Handbook: <http://camosun.ca/learn/school/health-human-services/student-info/index.html>

General Practicum Information: <http://camosun.ca/learn/school/health-human-services/student-info/practicum-info.html>

Allied Health & Technologies Department Handbooks:

- Certified Medical Laboratory Assistant: <http://camosun.ca/learn/school/health-human-services/student-info/program-info/cmla.html>
- Diagnostic Medical Sonography: <http://camosun.ca/learn/school/health-human-services/student-info/program-info/sono.html>
- Medical Radiography: <http://camosun.ca/learn/school/health-human-services/student-info/program-info/mrad.html>

Students enrolled in Allied Health & Technologies Programs must achieve a minimum of 65% or a “COM” in each of their courses in order to use their course as a pre-requisite and progress in their program.

Students enrolled in Allied Health & Technologies Programs must participate in learning activities that include intimate and direct personal contact with their classmates during supervised practice. Students are training to perform the duties of a healthcare professional. These duties usually require constant, close physical contact with patients and clients. Students may be required to simulate and perform these activities on one another during this course. Students may also be required to use special hygiene practices and protective gear to protect themselves from the transmission of communicable diseases (like COVID-19). Risks associated with learning and performing the physical duties of a healthcare profession cannot be entirely eliminated by any amount of caution or protection. Students who refuse, or are incapable of participating and performing these activities due to personal or medical limitations, may only continue to participate in their course work when supported by officially registered accommodations or temporary medical advisory.

STUDENT RESPONSIBILITY

Enrolment at Camosun assumes that the student will become a responsible member of the College community. As such, each student will display a positive work ethic, assist in the preservation of College property, and assume responsibility for their education by researching academic requirements and policies; demonstrating courtesy and respect toward others; and respecting expectations concerning attendance, assignments, deadlines, and appointments.

SUPPORTS AND SERVICES FOR STUDENTS

Camosun College offers a number of services to help you succeed in and out of the classroom. For a detailed overview of the supports and services visit <http://camosun.ca/students/>.

| Support Service | Website |
|---------------------|---|
| Academic Advising | http://camosun.ca/advising |
| Accessible Learning | http://camosun.ca/accessible-learning |
| Counselling | http://camosun.ca/counselling |

| Support Service | Website |
|-------------------------------------|---|
| Career Services | http://camosun.ca/coop |
| Financial Aid and Awards | http://camosun.ca/financialaid |
| Help Centres (Math/English/Science) | http://camosun.ca/help-centres |
| Indigenous Student Support | http://camosun.ca/indigenous |
| International Student Support | http://camosun.ca/international/ |
| Learning Skills | http://camosun.ca/learningskills |
| Library | http://camosun.ca/services/library/ |
| Office of Student Support | http://camosun.ca/oss |
| Ombudsperson | http://camosun.ca/ombuds |
| Registration | http://camosun.ca/registration |
| Technology Support | http://camosun.ca/its |
| Writing Centre | http://camosun.ca/writing-centre |

If you have a mental health concern, please contact Counselling to arrange an appointment as soon as possible. Counselling sessions are available at both campuses during business hours. If you need urgent support after-hours, please contact the Vancouver Island Crisis Line at 1-888-494-3888 or call 911.

COLLEGE-WIDE POLICIES, PROCEDURES, REQUIREMENTS, AND STANDARDS

Academic Accommodations for Students with Disabilities

The College is committed to providing appropriate and reasonable academic accommodations to students with disabilities (i.e. physical, depression, learning, etc). If you have a disability, the [Centre for Accessible Learning](#) (CAL) can help you document your needs, and where disability-related barriers to access in your courses exist, create an accommodation plan. By making a plan through CAL, you can ensure you have the appropriate academic accommodations you need without disclosing your diagnosis or condition to course instructors. Please visit the CAL website for contacts and to learn how to get started:

<http://camosun.ca/services/accessible-learning/>

Academic Integrity

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.13.pdf> for policy regarding academic expectations and details for addressing and resolving matters of academic misconduct.

Academic Progress

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.1.pdf> for further details on how Camosun College monitors students' academic progress and what steps can be taken if a student is at risk of not meeting the College's academic progress standards.

Course Withdrawals Policy

Please visit <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.2.pdf> for further details about course withdrawals. For deadline for fees, course drop dates, and tuition refund, please visit <http://camosun.ca/learn/fees/#deadlines>.

Grading Policy

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf> for further details about grading.

Grade Review and Appeals

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf> for policy relating to requests for review and appeal of grades.

Mandatory Attendance for First Class Meeting of Each Course

Camosun College requires mandatory attendance for the first class meeting of each course. If you do not attend, and do not provide your instructor with a reasonable reason in advance, you will be removed from the course and the space offered to the next waitlisted student. For more information, please see the "Attendance" section under "Registration Policies and Procedures" (<http://camosun.ca/learn/calendar/current/procedures.html>) and the Grading Policy at <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf>.

Medical / Compassionate Withdrawals

Students who are incapacitated and unable to complete or succeed in their studies by virtue of serious and demonstrated exceptional circumstances may be eligible for a medical/compassionate withdrawal. Please visit <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.8.pdf> to learn more about the process involved in a medical/compassionate withdrawal.

Sexual Violence and Misconduct

Camosun is committed to creating a campus culture of safety, respect, and consent. Camosun's Office of Student Support is responsible for offering support to students impacted by sexual violence. Regardless of when or where the sexual violence or misconduct occurred, students can access support at Camosun. The Office of Student Support will make sure students have a safe and private place to talk and will help them understand what supports are available and their options for next steps. The Office of Student Support respects a student's right to choose what is right for them. For more information see Camosun's Sexualized Violence and Misconduct Policy: <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.9.pdf> and camosun.ca/sexual-violence. To contact the Office of Student Support: oss@camosun.ca or by phone: 250-370-3046 or 250-370-3841

Student Misconduct (Non-Academic)

Camosun College is committed to building the academic competency of all students, seeks to empower students to become agents of their own learning, and promotes academic belonging for everyone. Camosun also expects that all students to conduct themselves in a manner that contributes to a positive, supportive, and safe learning environment. Please review Camosun College's Student Misconduct Policy at <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.5.pdf> to understand the College's expectations of academic integrity and student behavioural conduct.

Changes to this Syllabus: Every effort has been made to ensure that information in this syllabus is accurate at the time of publication. The College reserves the right to change courses if it becomes necessary so that course content remains relevant. In such cases, the instructor will give the students clear and timely notice of the changes.