



Course Syllabus

Course title: Laboratory & Phlebotomy Skills 2

Class section: MLAB - 151 - BX01A

Term: 2025S

Course credits: 3

Total hours: 75

Delivery method: Blended

Territorial acknowledgment

Camosun College respectfully acknowledges that our campuses are situated on the territories of the Ləkʷəŋən (Songhees and Kosapsum) and W̱SÁNEĆ peoples. We honour their knowledge and welcome to all students who seek education here.

Instructional hours

Lab hours: 4 per W

DE Hours: 1 per W

W = Week

T = Term

Instructor details

Name: Lauren Nagy

Email: NagyL@camosun.ca

Course description

Course Description:

In this course, students continue to develop mastery of basic phlebotomy and specimen collection skills by practicing these techniques on each other. Students enhance their critical thinking and decision-making skills by executing increasingly difficult simulated collection scenarios using their knowledge of human behaviour, professional communication, and patient management. Students demonstrate critical patient and client safety behaviours that indicate growing clinical and laboratory capabilities in a variety of collecting environments simulating outpatient, inpatient, and in-home community collections under the direct supervision of instructors with supporting online modules.

Prerequisites:

All of:

- C+ in AHLT 104
- C+ in AHLT 112
- C+ in MLAB 117
- C+ in MLAB 121

Pre or Co-requisites:

All of:

- C+ in MLAB 147

Learning outcomes

Upon successful completion of this course, the learner will be able to

1. Demonstrate the ability to use correct procedures and techniques in obtaining specimens for analysis in a variety of environments on patients of varying capability and complexity
2. Demonstrate the ability to discern, select, and perform the correct protocols and procedures for collecting, labelling, processing, transporting and storing specimens requested in community and hospital practice situations
3. Demonstrate the correct quality management and troubleshooting behaviours in laboratory operations, daily use of, and maintenance for laboratory and clinic equipment used in specimen management
4. Determine the appropriate procedures to be used in challenging situations by evaluating relevant variables and making appropriate decisions in patient or client case-based scenarios simulating complex practice situations

Competency mapping

Competency Mapping MLAB 151

BCSLS Competencies

Unit 1A: Role of Medical Laboratory Assistant

CoPC6 Perform the required duties within the scope of practice of the Medical Laboratory Assistant in the hospital laboratory system, public health laboratories and private laboratories. CoPC7 Knowledgeable in the theory, technical skills and clinical application of procedures performed in the laboratory. CoPC3 Understand the importance of the skill of the Medical Laboratory Assistant in relation to patient care, specimen procurement and specimen integrity. CoPC1,4,9 Participate in providing for the health care needs of the public, always keeping the welfare and confidentiality of the patient paramount, and respecting the dignity, values, privacy, and beliefs of the individual.

Unit 1B: Critical Thinking

8.01 Demonstrates knowledge of a dynamic environment; adapts and responds to change. 8.02 Recognizes that change initiated in one area may impact other areas of health care services. 8.03 Engages in reflective practice; stops and thinks about practice, consciously analyzes decision making and draws conclusions to improve future practice (new). 8.04 Organizes work to accommodate priorities. 8.05 Maximizes efficient use of resources, e.g. time, equipment, personnel. Demonstrates effective problem solving/trouble-shooting strategies and initiates appropriate follow up

Unit 1C: Professionalism

7.03 Recognizes limitations of own competence and seeks action resolve.

7.06 Takes responsibility and is accountable for professional actions.

7.08 Promotes the image and status of the profession of medical laboratory science as members of the health care team.

Unit 3A: Patient Identification

2.02 Interpret requisition (paper or electronic) data to verify patient information, test requests and required procedures. 2.03 Provide patients with instructions for collection, transport and storage of specimens collected outside of the laboratory environment. 2.04 Demonstrates knowledge of established protocols for accurate patient identification.. • Demonstrates knowledge of rules of confidentiality regarding personal patient information. 2.05 Demonstrates knowledge of the protocols for procurement of information with legal/industrial implications and ensures chain of custody is maintained, e.g. Blood alcohol, urine drug testing, and confidential testing.

Unit 3B:

- Identify and describe location of major veins and arteries in arms and hands. • Knowledge of guidelines in selection of appropriate venipuncture site in arms and hands and feet. • Knowledge of guidelines in selection of venipuncture vs. skin puncture. • Identify and describe the types, parts and demonstrate appropriate uses of equipment required to collect specimens by venipuncture: o Vacutainer needles and gauge of needles including adapters and holders. o Types of evacuated tubes and determine additives and their requirement for testing procedures. o Use and release of tourniquets. o Antiseptic cleansing solutions: alcohol, iodine. o Use of butterfly and safe disposal.

- o Use of syringe and syringe transfer device. o Sharps disposal systems for needles. 2.06 Demonstrate correct venipuncture technique and established procedures: o Verification and identification of patients according to established protocols. o Select appropriate sites for venous collection for adults, children, and infants. o Demonstrate positioning of patient for blood collection. o Demonstrate correct technique for venipuncture. o Demonstrate successful collection of blood by venipuncture

- o Have knowledge of the importance of order of draw. o Demonstrate correct inversion of vacutainer tubes according to guidelines. o Demonstrate care after collection. o Demonstrate verification and labelling of specimens. o Knowledge of appropriate blood volumes for collection. 2.06 BCSLS guideline: students must demonstrate successful completion of a minimum of 15 venipunctures prior to practicum. • 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. • Knowledge of how to deal with unusual patient circumstances: unconscious, obesity, uncooperative, anxious, fainting, seizures, impaired patient, abusive patient. • Knowledge of how to deal with circumstances or collections requiring special care: infections, burns, diabetic patients, cancer patients, dialysis patient fistulas or shunts, children and infant's mastectomy, PICC lines, arterial lines,

IV areas. 2.07 Knowledge of procedures determining specimen integrity: specimen priority, turnaround time, basal state and factors affecting basal state. 2.08 Rationale for rejection of specimens, protocols regarding repeat collections, transport, and storage of specimens

CSMLS Competencies

- 1.01: Applies the principles of routine practices.
- 1.02: Uses personal protective equipment, e.g. gloves, gowns, mask, face shields, aprons.
- 1.03: Applies laboratory hygiene and infection control practices.
- 1.04: Minimizes possible dangers from biological specimens, laboratory supplies and equipment.
- 1.07: Handles and disposes sharps.
- 1.09: Uses disinfection and sterilization methods.
- 1.10: Minimizes potential hazards related to disinfection/sterilization methods.
- 1.15: Applies proper ergonomic principles to minimize risk of injury (new).
- 2.02: Verifies relevant information is provided for test request.
- 2.03: Provides information to the client on specimen collection, transportation, and storage.
- 2.04: Confirms the identity of the patient and performs venipuncture and capillary blood collection to obtain appropriate samples for laboratory analysis.
- 2.05: Performs sample collection and chain of custody procedures relating to specimens with legal implications.
- 2.06: Adheres to established protocols for labeling and traceability of specimens.
- 2.07: Delivers specimens considering priority and stability.
- 2.08: Assesses specimen suitability for testing.
- 2.09: Verifies that the pertinent data on the specimen and requisition correspond.
- 5.01: Practices effective communication with colleagues, patients/clients, and other health care professionals:
 - o active listening, verbal communication, non-verbal communication, written communication
 - o Conflict management
 - o Identifies barriers to effective communication.
 - o Uses technology appropriately to facilitate communication

5.02: Demonstrates effective teamwork skills.

5.03: Demonstrates interdisciplinary/interprofessional team skills: o Communication o Collaboration o Role clarification o Reflection

5.04: Demonstrates adaptive skills when interacting with patients/clients.

6.02: Follows established protocols as defined in policy, process, and procedure manuals.

7.01: Maintains confidentiality of health care information.

7.03: Recognizes limitations of own competence and seeks action resolve.

7.04: Obtains informed consent prior to procedure and respects a patient's right to refuse.

7.06: Takes responsibility and is accountable for professional actions.

7.08: Promotes the image and status of the profession of medical laboratory science as members of the health care team.

7.12: Respects the diversity, dignity, values, and beliefs of patients/clients and colleagues.

7.13: Demonstrates knowledge of interpersonal skills: o Recognizes signs of individual and group stress o Recognizes signs of patient stress. o Exhibits empathy when assisting patients and colleagues

8.01: Demonstrates knowledge of a dynamic environment; adapts and responds to change.

8.03: Engages in reflective practice; stops and thinks about practice, consciously analyzes decision making and draws conclusions to improve future practice (new)

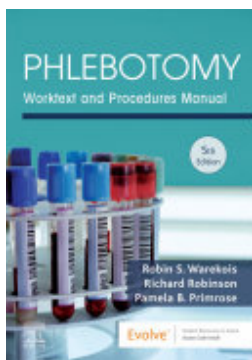
8.04: Organizes work to accommodate priorities.

8.05: Maximizes efficient use of resources, e.g. time, equipment, personnel.

8.06: Demonstrates effective problem solving/trouble-shooting strategies and initiates appropriate follow up (new).

Course reading materials

Title: Phlebotomy - E-Book



Authors: Robin S. Warekois, Richard Robinson, Pamela Primrose

Publisher: Elsevier Health Sciences

Publication Date: 2019-07-26

Edition: 6th

Additional Information

Also available as a textbook

Required/Optional: Required



Title: Complete Phlebotomy Exam Review - E-Book

Authors: Pamela Primrose

Publisher: Elsevier Health Sciences

Publication Date: 2015-02-25

Additional Information

Also available as a textbook

Required/Optional: Optional

Course materials

Students must have access to a laptop or tablet and a reliable internet connection.

Course schedule

Week	Readings	Practical Skills				Asynchronous
1	Ch 8 & 9	08-May	-MLAB 151 Syllabus overview -Review of MLAB 121 -Multi-sample needle venipuncture practice (task trainer)	09-May	- Patient Identification - Accessioning review - Requisitions and LIS content - Multi-sample needle venipuncture practice (task trainer) - Multi-sample	- Discussion 1: Video Review due May 25

					needle venipuncture (student)	
2	Ch 8 & 9	15-May	- Specimen integrity & Winged infusion sets (WIS) - Introduction to winged infusion sets (task trainer)	16-May	- Specimen Collection Variables and Complications - WIS arm (student)	
3	Ch 11	22-May	- Introduction to Syringe draws (straight needle - task trainer)	23-May	- Straight needle syringe collections (student)	
4	Ch 11 & Ch 16	29-May	- Syringes with WIS - Introduction to hand vein collections (task trainers) with vacutainer and syringe	30-May	- Referral Labs - WIS/Syringe/Hand (student) - Practice for next week's assessment	
5		05-Jun	Skills Check #1 - Butterfly Arm	06-Jun	Skills Check #1 - Butterfly Arm	- Discussion 2: Review a Procedure due Jun 29
6	Ch 14	12-Jun	- Introduction to Blood Cultures (PPT) - Collect Blood Culture (student)	13-Jun	- Introduction to Community Volunteer Initiative - Phlebotomy practice WIS/Syringe/Hand (student)	
7	Ch 14	19-Jun	- Chain of Custody urine & legal blood alcohol collections	20-Jun	- WIS/Syringe/Hand (student) - Practice for Skills assessment - syringe arm (student)	
8		26-Jun	Skills Check #2 - Syringe Arm	27-Jun	Skills Check #2 - Syringe Arm	
9	Ch 12	03-Jul	- Complex Patient Circumstances/Line	04-Jul	- Community Volunteers	- Discussion 3: Distraction

			Draws - Phlebotomy practice WIS/syringe/Hand (student)			Techniques due Jul 20 - Complex Phlebotomy Situations Assignment due Jul 22
10	Ch 12	10-Jul	- Prenatal/Pediatric/Autism patients	11-Jul	- Community Volunteers	
11		17-Jul	Skills Check #3 - Butterfly Hand (vacutainer)	18-Jul	Skills Check #3 - Butterfly Hand (vacutainer)	
12	Ch 12	24-Jul	- Community Volunteers	25-Jul	- Complex Phlebotomy Simulation	- Final Written Scenario due Jul 29 - Complex Phlebotomy Participation and Observation Assignment due Jul 30
13	Ch 12	31-Jul	- Transfusion Medicine - Blood collection in full PPE - Practice for Final Assessment	01-Aug	- Community Volunteers	
14		07-Aug	Final Skills Assessment	08-Aug	Final Skills Assessment	
15		NO WRITTEN EXAM				

Assessment and evaluation

Type	Description	Weight
Participation	Lab Participation and Community Partner Activity	10%
Assignment	Complex Phlebotomy Simulation	15%
Discussion	Video Review, Procedure Review, and Distraction Techniques	15%
Practical Assessment	WIS Arm, Syringe Arm, WIS Hand	30%

Type	Description	Weight
Practical Assessment	Finals Skills Assessment: Observed and Written Components	30%

Course guidelines and expectations

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.

Attendance

Students are expected to be on time; tardiness disrupts the class. When students are more than 5 minutes late (and/or the door is shut), they cannot enter the classroom until the class break period. Since lectures are online, please enter the ZOOM session without disruption and with volume muted. 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.

Attendance in labs is mandatory. If a lab is going to be missed, you must notify your instructor by email at least one hour before the start of lab whenever possible. If a lab must be missed due to unforeseen circumstances or pre-arranged conditions, a make up lab can possibly be planned with the instructor. Please arrange with the instructor ahead of time so they are aware of your absence.

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.

Participation in Learning Activities

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Written Assignments

Assignments are due by 23:59 on the assigned day unless otherwise specified. Unless otherwise directed by individual course outlines or assignment descriptions, assignments must be: word processed, double spaced, font meeting APA 7th edition guidelines, with a title page and reference list in APA 7th edition format. Student requiring an extension for the due date of an assignment must discuss with the instructor, at least 24 hours before the due date. Assignment submitted late without an approved extension will result in a 10% deduction in mark for each day late, and will not be accepted after 7 days post due date.

Student Assessment

Students must achieve a minimum of 65% in order to pass this course and use it as a prerequisite. Detailed information regarding assignments will be available on D2L. Complete all assignments on time and submit by the designated due dates. Unless otherwise stated, all assignments will be submitted via D2L.

The use of AI generated tools is permitted ONLY for brainstorming and organizing your ideas. Its use will not be tolerated when passed off as original writings for class assignments. Any assignment that can be proven to have used AI tools in an unauthorized way will be treated as plagiarism and given a zero. (Camosun Academic Policy: <http://camosun.ca/learn/calendar/current/pdf/academic-policies.pdf>)

In emergency circumstances, a student may arrange to take an assessment before or after the scheduled time if the student would otherwise be unable to complete the program or course. Exceptions due to emergency circumstances, such as unavoidable employment commitments, health problems, or unavoidable family crises, require the approval of the instructor. Holidays or scheduled

flights are not considered to be emergencies. The student may be required to provide verification of the emergency circumstance.

School or departmental information

Students are required to read and are accountable for the College policies (outlined below) and practicum guidelines as described in the School of Health and Human Services (HHS) and program handbooks.

[CMLA Program Handbook](#)

Clinical and Practice Placements in HHS

<https://camosun.ca/programs-courses/school-health-and-human-services/hhs-programs/practicums>

School of Health and Human Services (HHS)

<https://camosun.ca/hshs/student-info/hshs-student-handbook#top>

HHS Program Handbooks

<https://camosun.ca/hshs/student-info/hshs-student-handbook#program>

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College policies and student responsibilities

The college expects students to be responsible, respectful members of the college community. Responsible students meet expectations about attendance, assignments, deadlines, and

appointments. They become familiar with academic policies and regulations, and their rights and responsibilities.

College policies are available online at the [Policies and Directives](#) page. Academic regulations are detailed on the [Academic Policies and Procedures for Students](#) page.

Policies all students should be familiar with include the [Academic Integrity Policy](#). This policy expects students to be honest and ethical in all aspects of their studies. It defines plagiarism, cheating, and other forms of academic dishonesty. Infractions of this policy can result in loss of marks or a failing grade. To learn more about plagiarism and cheating, including the use of artificial intelligence, review the [Academic Integrity Guide](#).

The [Academic Accommodations for Students with Disabilities Policy](#) defines how Camosun provides appropriate and reasonable academic accommodations. The Centre for Accessible Learning (CAL) coordinates academic accommodations. Students requiring academic accommodations should request and arrange accommodations through CAL. Contact CAL at least one month before classes start to ensure accommodations can be put in place in time. Accommodations for quizzes, tests, and exams must follow CAL's booking procedures and deadlines. More information is available on the [CAL website](#).

Students must meet the grading and promotion standards to progress academically. More information is available in the [Grading Policy](#).

The college uses two grading systems. A course will either use the standard letter grade system (A+ to F) or a competency-based approach with grades of complete, completed with distinction or not completed. Visit the [Grades/GPA page](#) for more information.

Students must meet the college's academic progress standards to continue their studies. A student is not meeting the standards of progress when a GPA falls below 2.0. The college offers academic supports for students at risk of not progressing. The [Academic Progress Policy](#) provides more details.

If you have a concern about a grade, contact your instructor as soon as possible. The process to request a review of grades is outlined in the [Grade Review and Appeals Policy](#).

The [Course Withdrawals Policy](#) outlines the college's requirements for withdrawing from a course. Consult the [current schedule](#) of deadlines for fees, course drop dates, and tuition refunds.

If students experience a serious health or personal issue, they may be eligible for a [medical or compassionate withdrawal](#). The [Medical/Compassionate Withdrawal Request Form](#) outlines what is required.

The [Acceptable Technology Use](#) policy ensures the use of the college network and computers contribute to a safe learning environment. This policy also applies to the use of personal devices with the college network.

Students experiencing sexual violence can get support from the Office of Student Support. This Office of Student support is a safe and private place to discuss supports and options. More information is available on the [sexual violence support and education site](#). Students can email oss@camosun.ca or phone 250-370-3046 or 250-370-3841.

The [Student Misconduct Policy](#) outlines the college's expectations of conduct. Students should behave to contribute to a positive, supportive, and safe learning environment.

The [Ombudsperson](#) provides an impartial, independent service to help students understand college policies.

Services for students

Successful students seek help and access college services. These services are recommended to make the most of your time at college.

Services for Academic Success

- [Career Lab](#): Connects students with work-integrated learning experiences, including co-op placements and career fairs.
- [English, Math, and Science Help Centres](#): Get one-on-one help with homework.
- [Library](#): Get help with research, borrow materials, and access e-journals and e-books. Libraries at both campuses provide computers, individual and group study spaces.
- [Makerspace](#): A place to innovate, collaborate, and learn new skills and technology in a fun, dynamic, inclusive environment.
- [Writing Centre & Learning Skills](#): Get assistance with academic writing or meet with a learning skills specialist for help with time management, preparing for exams, and study skills.

Enrolment, Registration, and Records

- [Academic Advising](#): Talk to an academic advisor for help with program planning.
- [Financial Aid and Awards](#): Learn about student loans, bursaries, awards, and scholarships.
- [Registration](#): Get information about Camosun systems, including myCamosun, and college policies and procedures.
- [Student Records](#): Get verification of enrolment to access funding, request a transcript, or credential.

Wellness and Cultural Supports

- [Counselling](#): It's normal to feel overwhelmed or unsure of how to deal with life's challenges. The college's team of professional counsellors are available to support you to stay healthy.

Counselling is free and available on both campuses. If you need urgent support after-hours, contact the Vancouver Island Crisis Line at 1-888-494-3888 or call 911.

- [Centre for Indigenous Education and Community Connections](#): Provides cultural and academic supports for Indigenous students.
- [Camosun International](#): Provides cultural and academic supports for international students.
- [Fitness and Recreation](#): Free fitness centres are located at both campuses.

For a complete list of college services, see the [Student Services](#) page.

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 the course content or schedule. When changes are necessary the instructor will give clear and timely notice.