## **CLASS SYLLABUS**



COURSE TITLE: MLAB 139 – Pre-Analytics & Lab Principles

CLASS SECTION: BX01A-C

TERM: W2022

COURSE CREDITS: 3

DELIVERY METHOD(S): Synchronous, Blended

Camosun College campuses are located on the traditional territories of the Ləkwəŋən and WSÁNEĆ peoples. We acknowledge their welcome and graciousness to the students who seek knowledge here.

Learn more about Camosun's Territorial Acknowledgement.

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. Our measures include COVID Training for students and employees, health checks, infection control protocols including sanitization of spaces, PPE and ensuring physical distancing. For details on these precautions please follow this

link: <a href="http://camosun.ca/covid19/faq/covid-faqs-students.html">http://camosun.ca/covid19/faq/covid-faqs-students.html</a>. However, if you're at all uncomfortable being on campus, please share your concerns with your Instructor. If needed, alternatives will be discussed.

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: Tarah Craig

EMAIL: craigT@camosun.ca

OFFICE: CHW 317

HOURS: Wednesday, 09:00 – 10:30; by appointment via D2L Collaborate or in-person

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 examine the function and safe operation of laboratory and accessory analytical founding the medical laboratory environment. Students explore technical and biological principles affecting the preparation and quality of samples. By focusing on chemical analysis and reagents, students will learn how and why blood products and other samples are collected, labelled, prepared, handled, stored, packaged and transported in the pre-analytical phase.

**Note:** Only open to students in the Certified Medical Laboratory Assistant program.

PREREQUISITE(S): One of: C in Biology 12; C in BIOL 090; C in BIOL 103

One of: C in Chemistry 11; C in CHEM 070

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) Identify and describe the equipment (including accessories) and components commonly found in medical laboratory departments, and explain how they interrelate to produce a diagnostic analysis of specimens.
- b) Identify and demonstrate the skills necessary for proper collection, labelling, and preparation of specimens other than blood for distribution to clinical laboratory departments.
- c) Explain the influence of correct labeling and handling procedures, selecting appropriate collection tubes, order of draw, preparation, and aseptic technique on accurate results.
- d) Discuss problem solving and troubleshooting for analytical errors based on incorrect labeling and handling procedures, improper selection of collection tubes, incorrect order of draw, preparation errors, and poor aseptic technique.

# COURSE OBJECTIVES AND MAPPED PROFESSIONAL COMPETENCIES (also known as "sub-outcomes" or "learning objectives")

- a) Knowledge of safe and effective use of laboratory equipment and devices commonly encountered in the laboratory and how they contribute to the diagnostic process.
- b) Prepare, label, and store chemicals, reagents and stains demonstrating aseptic techniques, including appropriate disinfection of glassware. Knowledge of the importance of specimen collection with an emphasis on specimen integrity, priorities, sample volumes and storage requirements as they relate to test results
- c) Knowledge of the proper instruction of patients for collection and preparation of urine and other non-blood specimens for analysis
- d) Employ knowledge of non-blood specimen procedures by practicing collection and preparation techniques used in microbiology

## REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

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

B) CSMLS Laboratory Safety Guidelines 8th Edition

RECOMMENDED: N/A

#### STUDENT EVALUATION

DESCRIPTION	WEIGHTING
Attendance & Participation	5%
Assignments (5)	
- Background Knowledge Assignment – 5%	
- Equipment Report Assignment – 5%	20%
- Instructional Videos Assignment – 5%	
- Review Questions Assignment – 5%	
Quizzes (4)	20%
Research Paper (1)	10%
Competency Assessments (2)	20%
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 <u>Grade Review and Appeals</u> policy for more information. <a href="http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf">http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf</a>

## 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.

LAB: Section A: Tuesday 15:00 – 16:50

Section B: Tuesday 12:30 - 14:20

LECTURE: Section A & B: Thursday 10:00 – 11:20

WEEK	DATE RANGE	ACTIVITY or TOPIC	Readings
1	Week of Jan 10	Lab: Introductions, Course Intro, Safety Lecture: Introduction to Equipment & Supplies Assessment Assigned: Background Knowledge Assignment	
2	Week of Jan 17	Lab: Equipment, Supplies Lecture: Urinalysis	Lab Safety CSMLS Guidelines – Chapter 16
3	Week of Jan 24	Lab: Urine Collection, Instructions, & Storage Lecture: Centrifuges & Aliquoting Assessment Assigned: Equipment Report Assignment	

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WEEK	DATE RANGE	ACTIVITY or TOPIC	Readings
	Week of Jan 31	Lab: Centrifugation & Aliquoting	
4		Lecture: Non-Blood Specimens	
		Assessment Assigned: Equipment Quiz	
	Week of	Lab: Non-Blood Specimen Collection & Instructions	Phlebotomy Worktext &
5	Feb 7	Lecture: Introduction to Microbiology	Procedures Text – Chapter
	reb /	Assessment Assigned: Instruction Videos Assignment	15
		Lab: Review & Competency Assessment #1	Phlebotomy Worktext &
6	Week of	Lecture: Microbiology Media & Plating	Procedures Text – Chapter
0	Feb 14	Assessment: Competency Assessment #1	14
		Assessment Assigned: Urine & Non-Blood Specimens Quiz	
7	Week of	Reading Week - No Lab or Lecture	
	Feb 21	Reading Week - No Lab of Lecture	
	Week of	Lab: Microbiology Media Plating, Smear Making, & Gram	
8	Feb 28	Staining	
	1 CD 20	Lecture: Microbiology Non-blood Specimens & Worms	
	Week of	<b>Lab:</b> Timed Collections, Special Collections & Instructions	
9	Mar 7	Lecture: Thick & Thin Blood Smears; Lab Math	
	IVIAI 7	Assessment Assigned: Lab Math Quiz	
		Lab: Blood Smears & Staining	Phlebotomy Worktext &
10	Week of	Lecture: Microbiology Review & Research Assignment	Procedures Text – Chapter
	Mar 14	Assessment Assigned: Bacteria Research Assignment;	14
		Microbiology Quiz	
	Week of	Lab: Blood Smears & Staining, Plate Streaking & Reagent	
11	Mar 21	Information Review	
	IVIGI ZI	Lecture: Point of Care	
	Week of	Lab: Point of Care	Phlebotomy Worktext &
12	Mar 28	Lecture: Automation	Procedures Text – Chapter
	IVIUI ZO		17
13	Week of Apr 4	Lab: Competency Assessment #2	
		Lecture: Pre-analytical Case Studies	
		Assessment Assigned: Review Questions Assignment	
14	Week of	Lab: Make Up Lab (If needed)	
	Apr 11 Lecture: Review & Final Exam Overview		
15	Week of Apr 18	Final Exam: To be determined	
		Time Example to be determined	

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 scan be reviewed on the <a href="CAL exams page">CAL exams page</a>. <a href="http://camosun.ca/services/accessible-learning/exams.html">http://camosun.ca/services/accessible-learning/exams.html</a>

#### 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.
- Skills checks have critical measurable values, if these values are not performed correctly or in the correct order this will result in a failure to meet requirements.
- 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. All submissions must contain student name, C#, title and date.
- Unless otherwise stated, all assignments will be submitted via D2L.
- 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.

(Camosun Academic Policy) http://camosun.ca/learn/calendar/current/pdf/academic-policies.pdf

#### 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.

#### 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: <u>http://camosun.ca/learn/school/health-human-services/student-info/program-info/cmla.html</u>
- 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 <a href="http://camosun.ca/students/">http://camosun.ca/students/</a>.

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

Support Service	Website
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 <a href="Centre for Accessible">Centre for Accessible</a> 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: <a href="http://camosun.ca/services/accessible-learning/">http://camosun.ca/services/accessible-learning/</a>

## Academic Integrity

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

#### **Academic Progress**

Please visit <a href="http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.1.pdf">http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.1.pdf</a> 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 <a href="http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.2.pdf">http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.2.pdf</a> for further details about course withdrawals. For deadline for fees, course drop dates, and tuition refund, please visit <a href="http://camosun.ca/learn/fees/#deadlines">http://camosun.ca/learn/fees/#deadlines</a>.

## **Grading Policy**

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

## Grade Review and Appeals

Please visit <a href="http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf">http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf</a> 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"

(<a href="http://camosun.ca/learn/calendar/current/procedures.html">http://camosun.ca/learn/calendar/current/procedures.html</a>) and the Grading Policy at <a href="http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf">http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf</a>.

## 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 <a href="http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.8.pdf">http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.8.pdf</a> 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 <a href="http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.5.pdf">http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.5.pdf</a> 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.