

CLASS SYLLABUS



COURSE TITLE: MLAB 173 – Laboratory Pathophysiology
CLASS SECTION: BX01A-B
TERM: W2023
COURSE CREDITS: 3
DELIVERY METHOD(S): 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: Tarah Craig
EMAIL: craigt@camosun.bc.ca
OFFICE: CHW 317
HOURS: CHW 128: Thursday 1500 – 1600; D2L Collaborate Post Lectures.

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 review anatomic systems and discuss pathologies and conditions commonly investigated by medical laboratories. Students will focus on learning how tests required in hematology, chemistry, transfusion medicine, histology, cytology, and microbiology provides physicians with critical information for diagnosing, treating, and monitoring health conditions. Students learn how pathologies and conditions affect patient and client interactions and explore appropriate responses by the Medical Laboratory Assistant.

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

PREREQUISITE(S): C+ in MLAB 139
CO-REQUISITE(S): n/a
PRE/CO-REQUISITE(S): C+ in MLAB 147

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:

- Demonstrate knowledge of tests and procedures used when collecting and handling specimens in hematology, chemistry, transfusion medicine, histology, cytology, and microbiology.
- Discuss the nature, relationship, and effects of pathophysiologic processes on the human body as they pertain to the analysis conducted in medical laboratories for specimen handling and collections.
- Classify commonly occurring pathological conditions investigated in laboratory sciences into the divisions of hematology, transfusion medicine, histology, cytology, and microbiology and describe the nature of each.
- Apply knowledge of commonly investigated pathological conditions as they pertain to 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).

COURSE OBJECTIVES AND MAPPED PROFESSIONAL COMPETENCIES

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

- Demonstrate knowledge of the fundamentals of terminology, anatomy & physiology, pathophysiology and disease transmission during the pre-analytical phase of specimen collection. (CSMLS 2.01) (BCSLS – Unit 2B)
- Knowledge and demonstration of procedures for collecting and handling specimens across all laboratory sciences divisions. (BCSLS – Unit 3F: 3.02, 3.01, Unit 3G)
- Understand the human body systems and their primary functions and structures as they relate to pathological conditions and the associated lab tests. (BCSLS Unit 2A: 2.01, Unit 2C: Competencies: Infection Control)

REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

REQUIRED:

Warekois & Robinson. (2015) Phlebotomy: Work text and Procedure Manual 4th Ed.

RECOMMENDED:

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 OF	ACTIVITY or TOPIC	READINGS	ASSIGNED	DUE
1	Jan 09	Lecture: Course Introduction, Anatomy & Physiology Basics Lab: Introduction to Lab Materials (Anatomy Man, Complete Anatomy & Coloring Worksheets)	Phlebotomy Worktext and Procedures Text Chapter 6 (Integumentary, Skeletal, Muscular, Nervous)	Quiz #1	
2	Jan 16	Lecture: Unit 2: Skeletal System & Muscular System + Unit 3: Nervous System Lab: Bone Model + Muscle Worksheet + Nervous Coloring Sheet	Phlebotomy Worktext and Procedures Text Chapter 6 (Digestive & Urinary)		Quiz #1
3	Jan 23	Lecture: Unit 4: Digestive System + Unit 5: Urinary System Lab: Digestion with Anatomy Man + Urinary System Worksheet	Phlebotomy Worktext and Procedures Text Chapter 6 (Digestive & Urinary)	Quiz #2	
4	Jan 30	Lecture: Unit 6: Respiratory System + Unit 7: Endocrine System + Unit 8: Reproductive System Lab: Complete the lecture + Coloring Sheets	Phlebotomy Worktext and Procedures Text Chapter 6 (Respiratory, Reproductive & Endocrine Systems)		Quiz #2
5	Feb 6	Lecture: Unit 9: Cardiovascular System + Unit 11: Lymphatic & Immune System Lab: Respiratory System Worksheet & Circulatory System Coloring Sheet	Phlebotomy Worktext and Procedures Text Chapter 7 (Circulatory, Lymphatic, Immune)	Quiz #3	
6	Feb 13	Lecture: Make Up Lecture + Introduction to Departments Lab: None		Term Projects – Sign Up Included	Quiz #3
7	Feb 20	Reading Week – No Lecture or Lab			
8	Feb 27	Lecture: Hematology/ Midterm Review Lab: Written Midterm		Quiz #4 Assignment #1	Written Midterm
9	Mar 6	Lecture: Hematology Lab: Blood Cell ID + Microscopy Work			
10	Mar 13	Lecture: Transfusion Lab: Blood Typing		Assignment #2	Quiz #4 Assignment #2
11	Mar 20	Lecture: Chemistry Lab: Term Project Presentations			Term Project Day 1 Students
12	Mar 27	Lecture: Chemistry Lab: Term Project Presentations		Quiz #5	Term Projects Day 2 Students
13	Apr 3	Lecture: Histology & Cytology Lab: None – STAT HOLIDAY		Quiz #6	Quiz #5
14	Apr 10	Lecture: Review & Final Exam Prep Lab: Make Up Lab			Quiz #6 Assignment #1
15	Apr 17	Final Exam – To be determined			Final Exam

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 [CAL exams page](http://camosun.ca/services/accessible-learning/exams.html). <http://camosun.ca/services/accessible-learning/exams.html>

STUDENT EVALUATION

DESCRIPTION	WEIGHTING
Assignments (2) Blood Test Assignment – 5% Transfusion – Blood Grouping Assignment– 5%	10%
Term Project (1) Laboratory Testing in Medical Disorders Lab Presentation	20%
Open Book Quizzes (6) A&P Basics, Integumentary, Skeletal, Muscular, & Nervous System – 5% Digestive, Urinary, Respiratory, Endocrine, & Reproductive Systems– 5% Cardiovascular, Immune/Lymphatic Systems – 5% Hematology – 5% Chemistry – 5% Transfusion/Histology/Cytology 5%	30%
Written Midterm Exam	15%
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

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:
<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
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.

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. If you are reading this, please send an email to CraigT@camosun.ca with the subject line: "YOURNAME Found it" to receive a bonus 5 points on either the written midterm or term project (whichever grade is lowest). This bonus is for those who took the time to read over the syllabus.

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.