

COURSE SYLLABUS



COURSE TITLE:	MLAB 173 - Laboratory Pathophysiology
CLASS SECTION:	BX01
TERM:	F2024
COURSE CREDITS:	3
DELIVERY METHOD(S):	Synchronous

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

INSTRUCTOR DETAILS

NAME:	Tarah Craig
EMAIL:	CraigT@camosun.ca
OFFICE:	CHW 317-88
HOURS:	Varied, please email me to see availability.

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

Restricted to students in Certified Medical Laboratory Assistant

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.

PREREQUISITE(S):	C+ in MLAB 139
CO-REQUISITE(S):	C+ in MLAB 147
EQUIVALENCIES:	N/A

COURSE OBJECTIVES AND MAPPED PROFESSIONAL COMPETENCIES

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.

- c) 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.
- d) 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).

Competencies

- 1) 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)
- 2) Knowledge and demonstration of procedures for collecting and handling specimens across all laboratory sciences divisions. (BCSLs – Unit 3F: 3.02, 3.01, Unit 3G)
- 3) 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 5th Ed.

Recommended:

Thibodeau, G. and Patton, K. (2018). The Human Body in Health and Disease, 7th edition, St. Louis, MO. Elsevier. ISBN 978-0-323-83074-4

Open Education Resource Textbook Available on D2L

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	DATE	ACTIVITY/TOPIC	ASSIGNED THIS WEEK	COMPETENCIES CSMLS/BCSLs
1	2 Sep 2024	Lecture – Introduction to Course, Unit 1 – Tissue & Integumentary System Asynchronous Lecture: Skeletal & Muscular System Lecture Recording (Available on D2L) Lab – Introduction to Anatomy Dude, Worksheets/Activity Related to Lecture Topics	Open Book Quiz #1 – Integumentary, Skeletal, Muscular, and Nervous Systems	2.01 Unit 2A
2	9 Sep 2024	Lecture – Nervous System Asynchronous Lecture – Respiratory System (Available on D2L) Lab – Worksheets/Activity Related to Lecture Topics	Open Book Quiz #2 – Respiratory, Digestive, Endocrine, Circulatory Systems	

WEEK	DATE	ACTIVITY/TOPIC	ASSIGNED THIS WEEK	COMPETENCIES CSMLS/BCSLs
3	16 Sep 2024	Lecture – Digestive System Asynchronous Lecture – Endocrine System (Available on D2L) Lab - Worksheets/Activity Related to Lecture Topics	Open Book Quiz #3 – Reproductive Systems, Urinary Systems, Lymphatic, Immune Systems	
4	23 Sep 2024	Lecture – Circulatory System (Blood!) Asynchronous Lecture – Reproductive Systems (Available on D2L) Lab - Worksheets/Activity Related to Lecture Topics	Term Project Part 1	
5	30 Sep 2024	Lecture – Overview of Midterm, Urinary System Asynchronous Lecture – Lymphatic + Immune System (Available on D2L) Lab - Worksheets/Activity Related to Lecture Topics	Term Project Part 2	
6	7 Oct 2024	Lecture – Midterm Review Lab – Midterm (Classroom Location to Be Determined)	Term Project Part 3	
7	14 Oct 2024	Lecture – Introduction to Laboratory Departments, Transfusion Medicine Lab – Blood Grouping Activities (leading into Transfusion Assignment)	Open Book Quiz #4 – Transfusion Medicine Assignment #1 – Transfusion Medicine	
8	21 Oct 2024	Lecture – Transfusion (if needed), Hematology 1 Lab – Smear Making, Staining, Slide Quality Review	Open Book Quiz #5 – Hematology & Coagulation	Unit 3E, 3F
9	28 Oct 2024	Lecture – Hematology 2, Coagulation Lab – Hematology, Coagulation Based Activities		Unit 3E, 3F
10	4 Nov 2024	Lecture – Chemistry 1 Lab – Core Lab Simulation Activity	Open Book Quiz #6 – Chemistry	Unit 3E, 3F
11	11 Nov 2024	Lecture – Chemistry 2 Lab – Term Project Presentations (Location to be announced)	Term Project Part 4	Unit 3E, 3F
12	18 Nov 2024	Lecture – Histology, Cytology Lab – Histology & Cytology Staining	Open Book Quiz #7 – Histology & Cytology	Unit 3G
13	25 Nov 2024	Lecture – Final Exam Overview Lab – MLAs in the Emergency Room Activity		Unit 3G
14	2 Dec 2024	Lecture – Back Up Lecture Time/ Exam Q&A Review Session (Optional) Lab – Review Games (Optional)		
15/16	9 Dec 2024	EXAM 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 notice is required. Deadlines can be reviewed on the [CAL exams page](https://camosun.ca/services/academic-supports/accessible-learning/academic-accommodations-exams). <https://camosun.ca/services/academic-supports/accessible-learning/academic-accommodations-exams>

EVALUATION OF LEARNING

DESCRIPTION	WEIGHTING
Transfusion Assignment	5%
Term Project – Laboratory Testing in Medical Disorders Part 1 – Topic Research, Ranking, and Selection 2.5% of total grade Part 2 – Topic Research, and Test Selection 2.5% of total grade Part 3 – Narrated Powerpoint & Fair Handout Creation 15% of total grade Part 4 – Topic Presentation Fair Participation 5% of total grade	25%
Open Book Quizzes (7) #1 - A&P Basics, Integumentary System, Musculoskeletal System, Nervous System – 5% #2 - Digestive System, Respiratory System, Cardiovascular System, Endocrine System – 5% #3 – Reproductive System, Urinary System, Immune/Lymphatic System – 5% #4 – Transfusion – 5% #5 – Hematology – 5% #6 – Chemistry – 5% #7 – Histology & Cytology – 5%	35%
Midterm Exam	15%
Final Exam	20%
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](https://camosun.ca/sites/default/files/2021-05/e-1.14.pdf) policy for more information. <https://camosun.ca/sites/default/files/2021-05/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, both under the assignments tab and in the content section.
- Complete all assignments on time and submit by 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. Depending on the reason, students who have prearranged an extension may still have 10% of the total possible mark deducted per day from late assignments. This will be clearly defined by the instructor so the student is aware of the grading. If an extension is not arranged before the due date, the assignment will automatically have 10% deducted per day, up to 5 days. After 5 days the assignment can not be handed in and will be given a zero.
- A student is only permitted to miss one assignment per term
- 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 as tardiness disrupts the class. 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. Since lectures are online, please enter the zoom room quietly and without disruption.
- If you choose not to or are unable to attend lecture **it is your responsibility to acquire all information given during a class missed**, including notes, hand-outs, assignments, changed exam dates etc. **Please email the instructor as a courtesy so they are aware of your absence.**
- Attendance in labs is mandatory. If a lab must be missed due to **unforeseen circumstances** or **pre-arranged conditions**, a make up lab can be planned with the instructor. This will be up to the student to arrange with the instructor.
 - Notification of a missed lab must be sent to your instructor at least one hour before lab start time whenever possible.
- 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 camosun.ca/services.

Support Service	Website
Academic Advising	camosun.ca/services/academic-supports/academic-advising
Accessible Learning	camosun.ca/services/academic-supports/accessible-learning
Counselling	camosun.ca/services/health-and-wellness/counselling-centre
Career Services	camosun.ca/services/co-operative-education-and-career-services
Financial Aid and Awards	camosun.ca/registration-records/financial-aid-awards
Help Centres (Math/English/Science)	camosun.ca/services/academic-supports/help-centres
Indigenous Student Support	camosun.ca/programs-courses/iecc/indigenous-student-services
International Student Support	camosun.ca/international
Learning Skills	camosun.ca/services/academic-supports/help-centres/writing-centre-learning-skills
Library	camosun.ca/services/library
Office of Student Support	camosun.ca/services/office-student-support
Ombudsperson	camosun.ca/services/ombudsperson
Registration	camosun.ca/registration-records/registration
Technology Support	camosun.ca/services/its
Writing Centre	camosun.ca/services/academic-supports/help-centres/writing-centre-learning-skills

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 Integrity

Students are expected to comply with all College policy regarding academic integrity; which is about honest and ethical behaviour in your education journey. The following guide is designed to help you understand your responsibilities: <https://camosun.libguides.com/academicintegrity/welcome>

Please visit <https://camosun.ca/sites/default/files/2021-05/e-1.13.pdf> for Camosun's Academic Integrity policy and details for addressing and resolving matters of academic misconduct.

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:

<https://camosun.ca/services/academic-supports/accessible-learning>

Academic Progress

Please visit <https://camosun.ca/sites/default/files/2023-02/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 <https://camosun.ca/sites/default/files/2021-05/e-2.2.pdf> for further details about course withdrawals. For deadline for fees, course drop dates, and tuition refund, please visit <https://camosun.ca/registration-records/tuition-fees#deadlines>.

Grading Policy

Please visit <https://camosun.ca/sites/default/files/2021-05/e-1.5.pdf> for further details about grading.

Grade Review and Appeals

Please visit <https://camosun.ca/sites/default/files/2021-05/e-1.14.pdf> for policy relating to requests for review and appeal of grades.

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 <https://camosun.ca/sites/default/files/2021-07/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: <https://camosun.ca/sites/default/files/2021-05/e-2.9.pdf> and camosun.ca/services/sexual-violence-support-and-education. 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 <https://camosun.ca/sites/default/files/2021-05/e-2.5.pdf> to understand the College's expectations of academic integrity and student behavioural conduct.

Looking for other policies?

The full suite of College policies and directives can be found here: <https://camosun.ca/about/camosun-college-policies-and-directives>

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.