CLASS SYLLABUS



COURSE TITLE: MIDS 167: Basics of Electrocardiography

CLASS SECTION: BX01A & BX01B

TERM: S2022

COURSE CREDITS: 3

DELIVERY METHOD(S): TBA

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.

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: Janelle Hay and Jana Suraci

EMAIL: <u>janelleh@camosun.ca</u>, <u>suracij@camousn.ca</u>,

PHONE: 250-370-4755

OFFICE: CHW Rm 317

HOURS: By appointment

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 anatomy, physiology, and pathology of the electrical conduction system of the heart. Students learn the theory and skills necessary to conduct diagnostically acceptable electrocardiograms (ECGs) on patients and clients with diverse conditions and capabilities. Students learn to correctly recognize and respond to errors and pathologies commonly discovered during 12-lead ECG recordings and 24-hour Holter monitoring.]

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
Lecture
Seminar
Lab / Collaborative Learning
Supervised Field Practice
Workplace Integrated Learning
Online

HOURS / WEEK	# OF WEEKS	ACTIVITY HOURS
3	14	42
2	14	28

TOTAL HOURS 70

COURSE LEARNING OUTCOMES

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

- a) identify and explain the relationship of cardiac anatomy, physiology, and pathology to lead placement and recorded results.
- b) describe and demonstrate correct patient preparation, lead placement, equipment operation, calibration, and maintenance, used in non-invasive cardiac testing.
- c) determine and apply appropriate corrective actions or alternate methodology for a sub-optimal ECG accounting for patient age and condition, common errors, and known causes of anomalies.
- d) complete the required number of technically accurate electrocardiograms in accordance with British Columbia Society of Laboratory Science (BCSLS) eligibility requirements for clinical practicum participation.

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

Sonography Canada Competencies

5.2d Correlate results from cardiac testing (ECG, Holter monitoring, stress ECG).

REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

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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	* TENTATIVE as of May 2, 2022*		
1	Synchronous Lecture Wed May 4 @2:30pm: Introduction and Course Overview		
	Asynchronous Lecture: Recorded Lecture to be posted		
	Labs: Introduction and Basic Anatomy		
	Homework:		
	1. Read Chapter 1 Anatomy and Physiology		
	2. Cardiac Labeling Worksheet due by May 10th @ 11:59pm		
2	Synchronous Lecture Wed May 11: Cardiac Anatomy		
	Asynchronous Lecture: Cardiac Anatomy		
	Labs:		
	Homework:		
	1. Read Chapter 1 Anatomy and Physiology		
	2. Assignment 1: Cardiac Physiology and Blood Flow due May 24th @ 11:59pm		

3	Synchronous Lecture Wed May 18: Basics of Electrophysiology
	Asynchronous Lecture: Basics of Electrophysiology
	Labs:
	Homework:
	1. Read Chapter 2 Basics of Electrophysiology
	2. QUIZ: Ch. 2 due May 24th th @ 11:59pm (Open book)
	3. Assignment 1: Cardiac Physiology and Blood Flow due May 24th @ 11:59pm
4	Synchronous Lecture Wed May 25: Interpretations of an ECG Tracing
	Asynchronous Lecture: Sinus Mechanisms
	Labs:
	Homework:
	1. Read Chapter 3 Sinus Mechanisms
	2. QUIZ: Ch. 3 due May 31 st @ 11:59pm (Open book)
5	Synchronous Lecture Wed June 1: *No Synchronous Lecture*
	Asynchronous Lecture: Atrial Rhythms
	Labs:
	Homework:
	1. Read Chapter 4 Atrial Rhythms
	2. QUIZ: Ch. 4 due June 7 th @11:59pm (Open book)
	3. Assignment 2 ECG Rhythms – Study Guide due July 10 th @ 11:59pm
6	Synchronous Lecture Wed June 8: *No Synchronous Lecture*
	Asynchronous Lecture: Review
	Labs:
	Homework:
	Study for Midterm
	2. Assignment 2 ECG Rhythms – Study Guide due July 10 th @ 11:59pm
7	Synchronous Lecture Wed June 15: Midterm
/	Asynchronous Lecture: Midterm
	Labs:
	Homework:
	Assignment 2 ECG Rhythms – Study Guide due July 10 th @ 11:59pm
8	Synchronous Lecture Wed June 22: Introduction to Junctional Rhythms
	Asynchronous Lecture: Introduction to Junctional Rhythms
	Labs:
	Homework:
	1. Read Chapter 5: Introduction to Junctional Rhythms
	2. QUIZ: Atrial & Junctional Rhythms due June 28th @ 11:59pm (Open book)
	3. Assignment 2 ECG Rhythms – Study Guide due July 10 th @ 11:59pm
9	Synchronous Lecture Wed June 29th: Introduction to Ventricular Rhythms
	Asynchronous Lecture: Introduction to Ventricular Rhythms
	Labs:
	Homework:
	1. Read Chapter 6: Ventricular Rhythms
	2. QUIZ: Ch. 7 due July 5 th @ 11:59pm (Open book)
	3. Assignment 2 ECG Rhythms – Study Guide due July 10th th @ 11:59pm
10	Synchronous Lecture Wed July 6th: Atrioventricular and Bundle Branch Blocks
	Asynchronous Lecture Atrioventricular and Bundle Branch Blocks
	Labs: Holter Monitor Systems
	Homework:
	1. QUIZ: Holter due July 12 th @ 11:59pm
	2. Read Chapter 7: Atrioventricular Blocks
	3. QUIZ: Ch. 7 due July 12 th @ 11:59pm (Open book)
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11	Synchronous Lecture Wed July 13 th : Pacemakers and ICDs		
	Asynchronous Lecture Pacemakers and ICDs		
	Labs:		
	Homework:		
	1. Read Chapter 8 Pacemaker Rhythms		
	2. Assignment 3 Patient Case Studies due July 26 th @ 11:59pm		
12	Synchronous Lecture Wed July 20th: Patient Assessment and Cardiac Emergencies		
	Asynchronous Lecture Flex Week		
	Labs: Practical Exam		
	Homework:		
	1. Read Handout*		
	2. Assignment 3 Patient Case Studies due July 26 th @ 11:59pm		
13	Synchronous Lecture Wed July 27th: Flex Week		
	Asynchronous Lecture Review		
	Labs: ECG Interpretation Case Studies		
	Homework:		
	1. Assignment 3 Patient Case Studies due July 26 th @ 11:59pm		
	2. Study!		
14	Synchronous Lecture Wed Aug 3 rd : Review		
	Labs: Make up labs/No regular labs. Work period for assignment		
	Homework:		
	1. Assignment 3 Patient Case Studies due July 26 th @ 11:59pm		
	2. Study!		

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

STUDENT EVALUATION

DESCRIPTION	WEIGHTING
Professionalism and Participation	5%
Quizzes	10%
Assignment 1	10%
Assignment 2	10%
Assignment 3	10%
Midterm	15%
Practical Skills Exam	10%
Written Exam	30%
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. http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf

COURSE GUIDELINES & EXPECATIONS

Laboratory Participation

Laboratory activities are intended to be completed during scheduled lab time to enhance learning and solidify concepts that are of high importance to a Medical Lab Assistant student. Students are expected to take initiative to prepare themselves for each activity by completing assigned course readings or by completing any additional preparatory work that is assigned by the instructor. Students are encouraged to work collaboratively to complete laboratory activities, as well as seek help from the lab assistant or course instructor. Laboratory participation will often include a reflective component about the activity and content; therefore, physical presence and active participation is essential.

Any laboratory worksheet that is provided should be completed and submitted online via the D2L Dropbox within the timeframe specified by the instructor (usually by the end of the week). Grades will be assigned for completeness and accuracy. Laboratory worksheets and/or reflections that are not submitted within the specified timeframe will receive a grade of 0 (zero). Additionally, access to the lab space and equipment is only available during scheduled lab times; therefore, it will not be possible to make up missed lab activities.

Laboratory Evaluations

Laboratory evaluations consist of role-playing scenarios, which combine practical skills and therapeutic communication skills in a simulated clinical environment. These evaluations are typically conducted in pairs, where partners will act as simulated patients for each other. These evaluations will isolate various aspects of performing ECGs.

Midterm and Final Exam

The midterm and written final exam are administered online via D2L. For both tests, the content is cumulative from all lectures/labs/assigned readings up to that point in the course. The final exam will also include a practical exam for students to demonstrate the practical skills learned in the labs. Students who perform poorly on the midterm should seek help from the instructor as early as possible to work together to develop a plan for success.

With the exception of emergency circumstances, a student who does <u>not</u> notify the instructor ahead of time about absenteeism or does not have an acceptable reason for being absent the day of the midterm or final exam or a quiz will receive a grade of 0 (zero).

Illness and Emergency Circumstances

It is acknowledged that short-term illness or personal priorities that are of critical importance, such as an appointment with a specialist, may occasionally conflict with a course assessment. In this case, if the student notifies the instructor **before** the anticipated absence, the student **may** be provided the opportunity to make up an assessment. Notifying the instructor by email is considered an acceptable means of communication.

This exception is not intended to be the norm. Students are expected to be present for all course assessments. The instructor will use discretion to determine if the reason for absenteeism is acceptable and/or whether absenteeism is problematic. Reasons that are unacceptable include birthday parties, family gatherings, employment commitments, etc. Students who miss significant time may be at risk of falling behind in the course. The instructor will use discretion to determine what course of action will be taken for students who miss multiple activities and/or assessments.

Exceptions due to emergency circumstances, such as health problems or unavoidable family crises, require the approval of the instructor. In the case of an emergency, the student may be required to provide verification of the emergency circumstance as early as possible. Personal commitments, such as holidays or scheduled flights, are <u>not</u> considered to be emergencies.

For more information course assessments, see the materials posted to D2L.

Students must achieve a minimum of 65% and complete all assignments 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 pre-arranged 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.
- 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.

Attendance

- Students are expected to be **on time**; 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.
- 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.
- 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 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.

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.