CLASS SYLLABUS



COURSE TITLE: MIDS 167 – Basics of ECG

CLASS SECTION: BX01A-D

TERM: F2021

COURSE CREDITS: 3

DELIVERY METHOD(S): 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.

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: Jana Suraci

EMAIL: SuraciJ@camosun.ca

OFFICE: CHW 317 (Online meetings available)

HOURS: As per request

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 12lead 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): Click or tap here to enter text. PRE/CO-REQUISITE(S): Click or tap here to enter text.

COURSE DELIVERY

ACTIVITY
Lecture
Seminar
Lab / Collaborative Learning
Supervised Field Practice

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

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 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")

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

REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

Aehlert, B. (2017) ECGs Made Easy 6th Edition

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.

<u>Week</u>	<u>Activity</u>	Assignments and Deadlines *See D2L for reading lists and activity details
Week 1 Sept 6-10	Lecture 1: Introductions to MIDS 167	Chapter 1: Anatomy and Physiology (Try to review before the first class)
Lab	Lab 1: Cardiac Anatomy *No face-to-face lab	Lab 1: Cardiac Anatomy Labeling Assignment
Week 2 Sept 13-17	Lecture 2: Cardiac Anatomy	Chapter 1: Anatomy and Physiology Chapter 2: Basic Electrophysiology

Lab	Lab 2: Cardiac Anatomy and ECG Lead Placements	Lab 2: Cardiac Anatomy and ECG Lead Placements
Week 3 Sept 20-24	Lecture 3: Electrophysiology/Electrical Conduction System	Chapter 2: Basic Electrophysiology
Lab	Lab 3: Individual Vectors	Lab Readings: https://nurseyourownway.com/2017/05/03/cardia-c-axis-deviation/ Lab 3: Individual Vector's Worksheet
Week 4 Sept 27-Oct 1	Lecture 4: Interpretation of an ECG Strip/Sinus Rhythms	Chapter 3: Sinus Mechanisms
Lab	Lab #4: Blood Pressures	Lab 4: Blood Pressures Worksheet
Week 5 Oct 4 - Oct 8	Lecture 5: Review of Sinus Rhythms	Chapter 3: Sinus Mechanisms
Lab	Lab #5: The Actual ECG Tracing	Assignment 1: Blood Flow of the Heart Due Oct 10 th by 11:59PM
Week 6 Oct 11-Oct 15	Lecture 6: **Midterm**	**Midterm** Friday, Oct 15th from 8:30-9:50am
Lab	No labs. Study for midterm.	No lab assignment
Week 7 Oct 18-22	Lecture 7: Introduction to Atrial Rhythms	Chapter 4: Atrial Rhythms Introduce Assignment 2: Rhythms Study Guide
Lab	Lab 7: ECG Interpretations and Skills Review/Troubleshooting	Lab 7: Worksheet
Week 8 Oct 25-Oct 29	Lecture 8: Introduction to Junctional Rhythms	Chapter 5: Junctional Rhythms
Lab	Lab 8: ECG Interpretations and Holter Monitors	Lab 8: Worksheet
Week 9 Nov 1-Nov 5	Lecture 9: Introduction to Ventricular Rhythms	Chapter 6: Ventricular Rhythms
Lab	Lab 9: Practice ECG Interpretation/Practice ECGs	Lab 9: Worksheet
Week 10 Nov 8-12	Lecture 10: Introducing Heart Block Rhythms	Chapter 7: Atrioventricular Blocks
Lab	Lab 10: Practice ECG Interpretations/Practical Skills Assessment	Lab 10: Practical Skills Assessment
Week 11 Nov 15-Nov 19	Lecture 11: Introducing the Pacemaker Rhythms	Chapter 8: Pacemaker Rhythms Assignment 2: Rhythms Study Guide Due Nov 19 @ 11:59PM
Lab	Lab #11: Self-Directed Lab (Assignment 3)	
Week 12 Nov 22-Nov 26	Lecture 12: Patient Assessment and Cardiac Emergencies	Reading: PDF – To be posted
Lab	Lab Activity 12: Patient Assessment and Cardiac Emergencies	Lab 12: Patient Assessment and Cardiac Emergencies due Nov. 28th by 11:59PM.
Week 13 Nov 29-Dec 3	Lecture 13: Flex Week	Assignment 3: ECG Case Studies due Dec 3 rd @11:59PM
Lab	Lab 13: Practical Skills Exam	Practical Skills Exam during labs
Week 14 Dec 6-10	Lecture 14: Review	
Lab	Make up labs/exam only. No regular labs.	
Week 15	Exam	TBA

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 <u>CAL exams page</u>. http://camosun.ca/services/accessible-learning/exams.html

STUDENT EVALUATION

DESCRIPTION	WEIGHTING
Professionalism and Contributions	5
Labs	10
Assignment 1	10
Assignment 2	10
Assignment 3	10
Midterm	15
Practical 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

TEST AND EXAMINATION PROCEDURES

There are policies regarding written test and examination procedures including late arrivals and missed tests. Please see the Health and Human Services Student Handbook item 5.4 for Test and Examination Procedures at http://camosun.ca/learn/school/health-human-services/student-info/index.html

WRITTEN ASSIGNMENTS

Assignments are due before 2400 hours (midnight) on the assigned day unless otherwise specified. Assignments about patients, residents or clients must be completed using the individual's initials only. Unless otherwise directed by individual course outlines, assignments must be: word processed, double spaced, font meeting APA 7th edition guidelines, with a title page and a reference list. Students requiring an extension for the due date of an assignment must negotiate with the instructor, at least 48 hours before the due date. Assignments submitted late without an approved extension will result in a 5% deduction in mark for each day late.

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

Support Service	Website
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.