

CLASS SYLLABUS



COURSE TITLE: MRAD 173 – Pathology – Part A
CLASS SECTION: BX01
TERM: S2023
COURSE CREDITS: 3
DELIVERY METHOD(S): Synchronous

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: Dan Andrews
EMAIL: AndrewsD@camosun.ca
OFFICE: CHW 317
HOURS:

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 advanced beginner course, students explore various musculoskeletal, respiratory, and cardiovascular pathologies due to disease and trauma. Students study images obtained from a variety of sources illustrating the appearance of pathological conditions common to these systems. To better understand how pathology impacts patient care and technical considerations for the radiographer, students discuss and experiment with adaptive actions and plan appropriate practice responses during laboratory activities.

Note: Only open to students in the Medical Radiography program.

PREREQUISITE(S): **All of:** C+ in MRAD 106
CO-REQUISITE(S): N/A
PRE/CO-REQUISITE(S): **All of:** C+ in MRAD 156

COURSE DELIVERY

| ACTIVITY | HOURS / WEEK | # OF WEEKS | ACTIVITY HOURS |
|-------------------------------|--------------------|------------|----------------|
| Lecture | 2 | 15 | |
| Seminar | | | |
| Lab / Collaborative Learning | 1 | 15 | |
| Supervised Field Practice | | | |
| Workplace Integrated Learning | | | |
| Online | | | |
| | TOTAL HOURS | | 45 |

COURSE LEARNING OUTCOMES

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

- a) discuss the nature and effects of pathophysiologic processes on the human body as they pertain to radiographic imaging. (A.3.4, E.2.7)
- b) organize commonly occurring pathological conditions of the musculoskeletal, respiratory, and cardiovascular systems by classification, etiology, pathogenesis, signs and symptoms, treatment, and radiographic appearance. (A.3.4, E.1.3)
- c) apply knowledge of commonly occurring pathological conditions of the musculoskeletal, respiratory, and cardiovascular systems as they pertain to the components of a radiographic examination. (A.3.4, B.3.4, E.1.3, E.2.7)

COURSE OBJECTIVES AND MAPPED PROFESSIONAL COMPETENCIES

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

Canadian Association of Medical Radiation Technologists Competency Profile, Radiological Technology (2019)

1. discuss the nature and effects of pathophysiologic processes on the human body as they pertain to radiographic imaging. (A.3.4, E.2.7)
2. organize commonly occurring pathological conditions of the musculoskeletal, respiratory, and cardiovascular systems by classification, etiology, pathogenesis, signs and symptoms, treatment, and radiographic appearance. (A.3.4, E.1.3)
3. apply knowledge of commonly occurring pathological conditions of the musculoskeletal, respiratory, and cardiovascular systems as they pertain to the components of a radiographic examination. (A.3.4, B.3.4, E.1.3, E.2.7)

MSK

- Classify MSK pathologies in terms of their attenuation of x-rays. RTR.3.2
- Explain the changes in technical factors required for obtaining optimal quality radiographs in patients with various underlying pathologic conditions. RTR.3.2, 2.2.2
- Define and describe key terms of MSK pathologies. RTR.6.4
- Describe the physiology of the MSK system. RTR.6.4
- Identify anatomic structures on both diagrams and radiographs of the MSK system. RTR.6.4, RTR.3.2
- Differentiate the various pathologic conditions affecting the MSK system and their radiographic manifestations. RTR.6.4, RTR.3.2, 2.2.2

Respiratory

- Classify Respiratory pathologies in terms of their attenuation of x-rays. RTR.3.2
- Explain the changes in technical factors required for obtaining optimal quality radiographs in patients with various underlying pathologic conditions. RTR.3.2, 2.2.2
- Define and describe key terms of Respiratory pathologies. RTR.6.4
- Describe the physiology of the Respiratory system. RTR.6.4
- Identify anatomic structures on both diagrams and radiographs of the Respiratory system. RTR.6.4, RTR.3.2

- Differentiate the various pathologic conditions affecting the Respiratory system and their radiographic manifestations. RTR.6.4, RTR.3.2, 2.2.2

Cardiovascular

- Classify Cardiovascular pathologies in terms of their attenuation of x-rays. RTR.3.2
- Explain the changes in technical factors required for obtaining optimal quality radiographs in patients with various underlying pathologic conditions. RTR.3.2, 2.2.2
- Define and describe key terms of Cardiovascular pathologies. RTR.6.4
- Describe the physiology of the Cardiovascular system. RTR.6.4
- Identify anatomic structures on both diagrams and radiographs of the Cardiovascular system. RTR.6.4, RTR.3.2
- Differentiate the various pathologic conditions affecting the Cardiovascular system and their radiographic manifestations. RTR.6.4, RTR.3.2, 2.2.2

REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

[INSERT TEXT HERE]

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 or DATE RANGE | ACTIVITY or TOPIC | OTHER NOTES |
|--------------------|---|--------------|
| 1 – May 1-5 | Intro <u>Readings:</u> Eisenberg Ch. 1 Kowalczyk Ch. 1 | |
| 2 – May 8-12 | Skeletal Trauma <u>Readings:</u> Eisenberg Ch. 4 (pp. 128-149 only) Kowalczyk Ch. 12 | |
| 3 – May 15-19 | Skeletal Trauma, cont. | |
| 4 – May 22-26 | Skeletal Pathologies <u>Readings:</u> Eisenberg Ch. 4 (pp. 84-128) Kowalczyk Ch. 2 | |
| 5 – May 29-June 2 | Skeletal Pathologies, cont. | |
| 6 – June 5-9 | Skeletal Pathologies, cont. | Quiz 1 (11%) |
| 7 – June 12-16 | Cardiovascular Pathologies <u>Readings:</u> Eisenberg Ch. 7 Kowalczyk Ch. 4 | |
| 8 – June 19-23 | Cardiovascular Pathologies, cont. | |

| WEEK or DATE RANGE | ACTIVITY or TOPIC | OTHER NOTES |
|--------------------|---|--------------|
| 9 – June 26-30 | Cardiovascular Pathologies , cont. | |
| 10 – July 3-7 | Respiratory Pathologies begin if Cardiovascular have completed (Flexible) | Quiz 2 (11%) |
| 11 – July 10-14 | Respiratory Pathologies <u>Readings:</u> Eisenberg Ch. 3 Kowalczyk Ch. 3 | |
| 12 – July 17-21 | Respiratory Pathologies , cont. | |
| 13 – July 24-28 | Respiratory Pathologies , cont. | |
| 14 – Aug 1-5 | Flex Week | Quiz 3 (11%) |
| 15 – Aug 7-11 | Final Exam or Assessment 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 noticed is required. Deadlines can 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 |
|-----------------|-------------|
| Lab Assignments | 33 |
| Quizzes | 33 |
| Final Exam | 34 |
| 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

TEST AND EXAMINATION PROCEDURES

There are policies regarding Teaching and Learning Practices for HHS Students, including 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.

(<https://legacy.camosun.ca/learn/school/health-human-services/student-info/index.html#teaching>)

Please, inform me as soon as possible if conditions have arisen to prevent you from taking your examination during the available times.

ASSIGNMENTS

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 10% deduction in marks for each day late, until the eve of the next assignment due date, or whenever the assignment no longer has value; whichever comes first. Abandoned/late assignments will not be accepted during the Flex weeks at the end of the semester.

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.

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](http://camosun.ca/services/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.