



School of Health & Human Services
Medical Radiography

Course Name: Pathology for Radiographers – Part A

Course Number: MRAD 173

Academic Term 3: Advanced Beginner

COURSE OUTLINE

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.

The approved Course Description is available on the web:

<http://camosun.ca/learn/calendar/current/web/mrad.html#MRAD173>

Please note:

- *This outline will **not** be kept indefinitely.*
- *This outline will only be electronically stored for five (5) years.*
- *It is strongly recommended students keep this outline for your records; especially to assist in transfer credit to post-secondary institutions.*
- *This course is only open to students in the Medical Radiography program.*

1. Instructor Information

| | | |
|-----|----------------------|---|
| (a) | Instructor: | Lynelle Yutani |
| (b) | Office Hours: | As posted or by appointment |
| (c) | Location: | MRT 212E |
| (d) | Phone: | 250-370-3995 |
| (e) | Email: | yutaniL@camosun.ca |
| (f) | Website: | http://online.camosun.ca/ |

2. Intended Learning Outcomes/Competencies

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

1. discuss the nature and effects of pathophysiologic processes on the human body as they pertain to radiographic imaging.
2. organize commonly occurring pathological conditions of the musculoskeletal, respiratory, and cardiovascular systems by classification, etiology, pathogenesis, signs and symptoms, treatment, and radiographic appearance.
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.

3. Required Materials

Required Textbooks:

Eisenberg, Ronald L., Johnson, Nancy M. (2007). *Comprehensive Radiographic Pathology*. (6th ed.) Mosby Elsevier, St. Louis, Mi.

Kowalczyk, N., & Mace, J.D. (2008). *Radiographic Pathology for Technologists* (6th ed.). Mosby.

Optional Textbooks:

Drake, R.L., Vogl, W., & Mitchell, A.W.M. (2015). *Gray's Anatomy for Students* (3rd ed.). Churchill Livingstone.

Desire-to-Learn (D2L):

D2L – the Camosun College online learning portal – contains the majority of the learning materials for this course. Students are expected to familiarize themselves with the online learning environment and all the features it has to make this course experience enriching. Log on at <https://online.camosun.ca/> to access these materials.

To ensure you are prepared each week, please visit D2L prior to each lecture. An overview will be provided at the beginning of each module, which contains important information about learning objectives and resource materials. The D2L calendar should be used to obtain information about specific dates and times for all course assessments.

D2L materials should **not** be considered your sole source of information. You will be required to refer to textbook or other material that is not discussed specifically during the lecture.

Other:

Camosun College Library Research Guide/Medical Radiography

<http://camosun.ca.libguides.com/mrad>

4. Course Content and Schedule:

Days/Times & Room Number: Lecture, Tuesdays 1430-1620, WT 212C & Lab, Fridays 1230-1320 WT 212C

Course Schedule:

| Week | Dates (M-Fri) | Modules | Tuesday (Lecture) | Friday (Lab) | Assignments |
|------|----------------|--|--|--|---------------------------|
| 1 | May 2-6 | Module 1 – Intro to Pathology <ul style="list-style-type: none"> Chapters 1 in both books (Eisenberg & Kowalczyk) Chapter 2 in Eisenberg | Course Intro & explanation of how the course material will be taught | Review of Medical Terminology | |
| 2 | May 9-13 | | Intro to Pathology & Classification of Disease | Discovering Imaging’s Purpose in the detection and treatment of diseases | |
| 3 | May 16-20 | | Specialized Imaging | Quiz 1 (40 questions) | |
| 4 | May 23-27 | Module 2 – Skeletal System Pathologies <ul style="list-style-type: none"> Traumatic Injury Chapter 12 in Kowalczyk Chapter 4 – Eisenberg Chapter 2 – Kowalczyk Chapter | Skeletal Trauma | Patient Requisitions/ Signs & Symptoms | |
| 5 | May 30-June 3 | | Skeletal Trauma | Patient Considerations/ Outcomes & Treatments | |
| 6 | June 6-10 | | Skeletal Pathologies | Adapting Technical Factors | |
| 7 | June 13-17 | | Skeletal Pathologies | Images Workshop | |
| 8 | June 20-24 | | Skeletal Pathologies/MISC | Midterm (60 questions) | Dropbox Lab Assignment #1 |
| 9 | June 27-July 1 | Module 3 – Cardiovascular System Pathology <ul style="list-style-type: none"> Chapter 7 – Eisenberg Chapter 4 – Kowalczyk | Cardiovascular Pathologies | STAT | |
| 10 | July 4-8 | | Cardiovascular Pathologies | Adapting Technical Factors & Images Workshop | |
| 11 | July 11-15 | | Cardiovascular Pathologies | Quiz 2 (40 questions) | Dropbox Lab Assignment #2 |
| 12 | July 18-22 | Module 4 – Respiratory System Pathology <ul style="list-style-type: none"> Chapter 3 – Eisenberg Chapter 3 – Kowalczyk | Respiratory Pathologies | Adapting Technical Factors | |
| 13 | July 25-29 | | Respiratory Pathologies | Images Workshop | |
| 14 | August 1-5 | | Respiratory Pathologies | Review for Final Examination | Dropbox Lab Assignment #3 |
| 15 | August 8-12 | Cumulative Written Final on Covered Chapters & Images (120 questions) | | | |

***The course schedule is subject to change at the discretion of the instructor.
Do not make personal plans until the final exam schedule is posted by the registrar.***

5. Student Assessment

| | |
|-----------------------|-------------|
| Professionalism | 5% |
| Quizzes | 20% |
| Midterm | 25% |
| Assignments | 20% |
| Cumulative Final Exam | 30% |
| TOTAL | 100% |

Late Policy/Emergency Situations:

Failure to turn in an assignment on time will result in a late penalty of 10% per day for up to five academic (business) days. After five days, the assignment will be given a grade of zero (0).

Missed quizzes cannot be made-up.

In emergency/mitigating circumstances, such as health problems or personal crises, exceptions to this will be made solely at the discretion of the instructor. Evidence of acute injury, illness, or other emergency situation may be required; however, this does not guarantee that an exception will be made. In such situations, it is highly recommended that the student make all efforts to communicate with the instructor at least 48 hours before the quiz/assignment date.

Final Exam

The final examination is cumulative and includes material from all modules covered in the course. This final examination will occur during the regularly scheduled final exam week. In emergency circumstances, a student may write a test or final examination 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 prior, written 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.

For more detailed information regarding tests, quizzes, and assignments, see D2L.

6. Grading System

The following two grading systems are used at Camosun College. This course will use:

- Standard Grading System (GPA)**
- Competency Based Grading System**

Students must achieve a minimum of 65% to use this course as a prerequisite.

Grading Systems

Standard Grading System (GPA)

| Percentage | Grade | Description | Grade Point Equivalency |
|------------|-------|---|-------------------------|
| 90-100 | A+ | | 9 |
| 85-89 | A | | 8 |
| 80-84 | A- | | 7 |
| 77-79 | B+ | | 6 |
| 73-76 | B | | 5 |
| 70-72 | B- | | 4 |
| 65-69 | C+ | Minimum level of achievement to use the course as a prerequisite. | 3 |
| 60-64 | C | | 2 |
| 50-59 | D | Minimum level of achievement for which credit is granted. | 1 |
| 0-49 | F | Minimum level has not been achieved. | 0 |

Temporary Grades

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See the Grading Policy E-1.5 at the Education/Academic tab <http://camosun.ca/about/policies/policies.html> for information on conversion to final grades, and for additional information on student record and transcript notations.

| Temporary Grade | Description |
|-----------------|--|
| I | <i>Incomplete:</i> A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family. |
| IP | <i>In progress:</i> A temporary grade assigned for courses that, due to design may require a further enrollment in the same course. No more than two IP grades will be assigned for the same course. (For these courses a final grade will be assigned to either the 3 rd . course attempt or at the point of course completion.) |
| CW | <i>Compulsory Withdrawal:</i> A temporary grade assigned by a Dean when an instructor, after documenting the prescriptive strategies applied and consulting with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum, worksite, or field placement. |

For more information about Camosun's Grading Policy, please use the following link:

<http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf>

7. Recommended Materials or Services to Assist Students

STUDENT CONDUCT POLICIES

It is the student's responsibility to become familiar with the content of these policies. These policies are available in each School Administration Office, Registration, and on the College website in the Policy Section.

[Academic Policies and Procedures](#)
[Student Conduct Policy](#)

LEARNING SUPPORT AND SERVICES FOR STUDENTS

There are a variety of services available to assist students throughout their learning. This information is available in the College Calendar, Registrar's Office or the College website at

<http://www.camosun.bc.ca>

MRT PROFESSIONAL CODE OF ETHICS

Camosun College Medical Radiography students are expected to abide by the Canadian Association of Medical Radiation Technologists' (CAMRT) Code of Ethics inasmuch as it applies to them in the learning and clinical environments. This information is available on the CAMRT website at:

[CAMRT Code of Ethics](#)

AHT Department Policies & Procedures

Camosun College Medical Radiography students are responsible for knowing all of the Department Policies and must abide by them, including dress codes & lab safety procedures.

<http://camosun.ca/learn/programs/mrt/handbook.pdf>

8. GENERAL INFORMATION

Suggested Study Time/Study Habits

- Successful students will probably spend 6 – 12 hours outside of class per week studying the content for this course to achieve **full** marks.
- Map out a study schedule; include time for reading, assignments, group work, and online content.
- It is valuable to review your notes within 24 hours following each class to help retain the information.
- Study groups are a highly effective way of learning for many students.

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 a 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.
- Student **attitudes and behaviours** surrounding attendance contribute to the professionalism mark in the course; however, attendance is not recorded.

The Medical Radiography Technology program is committed to promoting competence, professionalism and integrity in our students and developing their core skills to succeed throughout their academic programs and in their careers. The purpose of Academic Honesty Guidelines is to provide clear expectations of appropriate academic conduct and to establish processes for discipline in appropriate circumstances. It is the student's responsibility to become familiar with the content and the consequences of academic dishonesty. Before you begin your assignments, review the Academic Policies on the Camosun College website:

<http://camosun.ca/learn/becoming/policies.html>