

	<p style="text-align: center;">School of Health and Human Services Medical Radiography Technology</p> <p style="text-align: center;">Course Name: Clinical Education 2 Course Number: MRAD 230</p>
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COURSE OUTLINE

The Approved Course Description is available on the web:

<http://camosun.ca/learn/calendar/current/web/mrad.html#MRAD230>

Please note:

- *This outline will be electronically stored for five (5) years only. It is strongly recommended students keep this outline for your records.*
- *This course is only open to students in the Medical Radiography program.*

Introduction:

This is the second of three clinical education courses. The students will build on their previous clinical experience by focusing on higher acuity patient cases. Term objectives will remain on examinations of the entire skeleton (except cranium), chest, abdomen, and gastrointestinal contrast studies.

Students will be scheduled in all areas related to patient imaging practice such as general imaging department, acute/trauma areas, operating room, patient wards and outpatient clinics. In addition, students will be directed to start their required Bone Mineral Densitometry, Mammography and Computed Tomography (CT) rotation. This includes performing CT scans of the head, thorax, abdomen/pelvis and spine.

Prerequisites: A minimum of "C+" in MRAD 122, MRAD 124, MRAD 125, MRAD 127, MRAD 129; and "COM" in MRAD 120

Co-requisite: MRAD 237

Students must achieve a minimum of a C+ (65%) to use this course as a prerequisite. Refer to the Camosun Calendar for detailed information about course prerequisites.

1. Instructor Information

(a)	Instructor:	Sarah Erdelyi		
(b)	Office Hours:	NA- available by request		
(c)	Location:	MRT 212D		
(d)	Phone:	250 370 3996	Alternative Phone:	
(e)	Email:	erdelyis@camosun.bc.ca		
(f)	Website:	http://online.camosun.ca/		

2. Intended Learning Outcomes/Competencies

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

1. **prepare for the procedure by:** reviewing and interpreting the requisition, reviewing previous images and reports, selecting technical factors and selecting/entering patient information, confirming patient preparation (A1.1, B1.8, F1.1, F2.2-30.2, F2.3-30.3, F2.4-30.4, F32.2, F32.3, F32.4, F33.2, F33.3, F33.4, F34.2 -41.2, F34.3 – 41.3, F24.4-41.4, G1.1, G2.2,G2.3, G2.4, G3.2,G3.3, G3.4, G4.2,G4.3,G4.4, G4.5,G5.2,G5.3,G5.4, G5.5, G6.2,G6.3, G6.4, G6.5, G7.2,G7.3,G7.4, G7.5, H1.1, H2.2,H2.3,H2.4, H3.2,H3.3,H3.4, I1.1, I2.2, I2.3, I2.4, I3.2, I3.3, I3.4 , I3.5, I4.2, I4.3,I4.4, I4.5, J1.1, J2.2,J2.3 J2.6,J3.2, J3.3, K1.3, L1.1, L1.2, L1.7, M1.3, M1.4)
2. **communicate with the patient and prepare them for the procedure by:** verifying patient identification, introducing themselves to the patient, assessing the patient condition, explaining the procedure to the patient and communicating with the patient throughout the procedure. (A1.1,B1.7,B2.2, B2.3, B3.1, B3.2, F1.2, F29.5, F30.5, G1.2, H1.2, I1.2, J1.2, J2.4, J3.4,J3.5, L1.3)
3. **perform the procedure by:** accurately positioning the patient using anatomic landmarks, applying the correct markers, adapting the procedure to the patient or situation and repeating or acquiring additional images as needed. (F1.1, F2.5-F28.5, F2.6-F28.6, F29.6,F29.7, F30.6, F30.7, F31.5- 33.5, F31.6-33.6, F32.5,F32.6, F33.5,F33.6, F34.5 –F41.5, F34.6 –F41.6, G1.1, G2.5, G2.6, G3.8,G4.9, G4.10 G5.9,G5.10. G6.10.G6.11, G7.8,G7.9, H1.1, H2.5, H2.6, H3.5, H3.6, H3.7,I1.1, I2.5, I2.6, I3.10, I3.11, I3.12, I4.11, I4.12, J1.1, J2.10,J3.6, K1.4, K.12, K1.13, L1.4,L1.5,L1.6)
4. **operates the imaging equipment by:** aligning the imaging system, adjusting technical factors, operating equipment and accessories in a safe manner and applying correct post processing algorithms. (E1.1-1.4, E1.9, E1.10, E1.12, E1.13, J3.7, L1.8, L1.9)
5. **apply the principles of safe radiation protection practices by:** ascertaining pregnancy status, using shielding and collimation to limit radiation dose, providing protection for others assisting with the examination and following all provincial and national radiation safety requirements. (C1- all, C2-all, C3.3)
6. **ensure patient and worker safety by:** locking wheelchairs and stretchers, using proper transfer techniques, following standard precautions and isolation practices. (B1.1-1.4, B4.1-4.7)
7. **analyze the image by:** critiquing the image using the guidelines provided, recognizing the exposure values, windowing and leveling the image, recognizing correct image quality and determining the need for a repeat or additional view. (A1.1, E1.14, E2-all, F2.7-28.7, F2.8-28.8, F29.8, F29.9, F30.8, F30.9, F32.7, F32.8, F33.7, F33.8, F34.7 –F41.7, F34.8 –F41.8, G2.7,G2.8,G3.9,G3.10, G4.11,G4.12,G5.11, G5.12, G6.12,G6.13, H2.7,H2.8, H3.7,H3.8, I2.7,I2.8, I3.13,I3.14, I4.13,I4.14, J2.11,J3.7, J3.8, K1.14,K1.17, L1.10, L1.13,L1.14, M1.11, M1.12)
8. **provide patient care by:** assessing the patient condition, assisting the patient throughout the procedure, providing comfort and safety to the patient, preparing contrast and assisting with its administration, initiating emergency procedures, managing tubes, lines and other accessory equipment, providing privacy and respecting patient needs. (A1.1, B1.1-1.6, B2.3, B3.1 – 3.4, B5.1, F1.4, G1.4,G3.5 ,G3.6,G3.7, G4.5-4.8, G5.5- 5.8, G6.5-6.8, G7.5-7.7, H3.5, H1.4, I1.4, I3.6-3.9, I4.6-4.9, J1.4, J2.7- 2.9, K1.5,K1.6,K1.11, M1.5 M1.6,M1.7,M1.9)

9. **perform post procedure activities by:** completing all documentation, verifying image archival and providing post procedural instructions. (B1.9, B3.5, D1.1, E3.1, E3.4, G3.11, G4.13, G5.13, G6.14, G7.12, I3.15, I4.15, J2.12, J3.9, K1.18, M1.13)
10. work in an organized and efficient manner throughout a procedure and over the course of multiple procedures. Use resources efficiently and perform the procedure within a reasonable time frame. (A7.1, F1.3, G1.3, H1.3, I1.3, J1.3)
11. perform work in a professional, legal and ethical manner by performing procedures within the identified scope of competency, demonstrating knowledge of patients' legal rights, asking for and receiving feedback graciously and adhering to all relevant policies. (A2.1 – 2.6, D1.3)
12. be accountable for performance by taking responsibility for their actions.
13. work as part of the health care team by: contributing to the department workflow, communicating with patients, family, coworkers and other health care professionals, assisting others without prompting and using time productively. (A2.8, A3.5, A3.7, B2.2)

3. Learning Resources

Required Textbooks: All previously required program textbooks

Optional Textbooks: All previously recommended program textbooks

Desire-to-Learn (D2L): Camosun's Learning Management System (LMS), contains online learning materials for this course. Log in at <https://online.camosun.ca/>.

4. Student Assessment

Summary of Assignments (grade determined by Camosun Instructor)

Assignment	Timeline	Estimation of Time Needed	Grading Scheme
Orientation Scavenger Hunt	Week 1	1 shift (clinical time)	COM or NC
Check-in Survey	Week 2	30 minutes (academic time)	COM or NC
Image Transfer Training	Week 3	60 minutes (clinical time)	COM or NC
Written Image Analysis (X3)	Weeks 4, 8, 12	2-4 hours (academic time)	COM or NC
Self-Evaluation and Reflection (X2)	Weeks 6, 10	60 minutes (academic time)	COM or NC
Portfolio Summary Sheet	Week 15	30 minutes (academic time)	COM or NC

**Students must satisfactorily complete all assignments to receive a complete grade in this course*

Summary of Clinical Requirements and Assessments (grade determined by Clinical Site Instructor)

Activity or Assessment	Timeline	Estimation of Time Needed
Formative Evaluation (X6)	Weeks 2, 4, 6, 8, 10, 12	30 minutes (clinical time)
Clinical Portfolio	Throughout	Variable (clinical)

Competency Evaluation (X21) Verbal Image Critique, Specialty Image Critique and CT Case Reviews (X34)	weeks 1-15	time)
Summative Evaluation	Week 15	30-60 minutes (clinical time)

Assessment Details

Additional information about each of the assignments, clinical activities, and assessments can be found in the clinical course on D2L.

In addition to completion of all course assignments, the result of the summative evaluation determines the final course grade. The summative evaluation is a compilation of information from formative evaluations and status of completion of the clinical portfolio.

5. Course Schedule

The following schedule is subject to change if deemed necessary by the Camosun course instructor. Specific dates and deadlines are listed in the course on D2L. Check the D2L course news for updates.

Week	Important Dates List of Required Activities	Total scheduled shifts (8.0 hours each including lunch and breaks)
0	Welcome email and instructions from clinical instructor	0
1	September 2: first day of clinical term Assignment: Orientation Scavenger Hunt No academic day	4
2	Clinical Assessment: Formative Evaluation 1 of 6 (Orientation Evaluation) Academic day for all students: September 12	4
3	Assignment: Image Transfer Training One academic day	4
4	Assignment: Written Image Analysis 1 of 3 Clinical Assessment: Formative Evaluation 2 of 6 One academic day	4
5	Academic day for all students: October 3	4
6	Assignment: Self-Evaluation 1 of 2 Clinical Assessment: Formative Evaluation 3 of 6 One academic day	4
7	October 13: Thanksgiving Holiday No academic day	4
8	Academic day for all students: October 20 Clinical Assessment: Formative Evaluation 4 of 6 Assignment: Written Image Analysis 2 of 3	4
9	One academic day	4
10	Assignment: Self-Evaluation 2 of 2 Clinical Assessment: Formative Evaluation 5 of 6 One academic day	4
11	November 11: Remembrance Day No academic day	4
12	Clinical Assessment: Formative Evaluation 6 of 6 Assignment: Written Image Analysis 3 of 3 One academic day	4
13	One academic day	4
14	One academic day	4
15	Academic day for all students: based on final exam schedule for online courses Clinical Assessment: Summative Evaluation	4
16	Remediation week	Up to 5

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

Competency Based Grading System

This grading system is based on satisfactory acquisition of defined skills or successful completion of the course learning outcomes.

Grade	Description
COM	The student has met the goals, criteria, or competencies established for this course, practicum or field placement.
DST	The student has met and exceeded, above and beyond expectation, the goals, criteria, or competencies established for this course, practicum or field placement.
NC	The student has not met the goals, criteria or competencies established for this course, practicum or field placement.

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
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. <i>(For these courses a final grade will be assigned to either the 3rd course attempt or at the point of</i>
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,

7. Recommended Materials or Services to Assist Students to Succeed throughout the Course

CONDUCT POLICIES

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

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

LEARNING SUPPORT AND SERVICES FOR STUDENTS

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

[Camosun.ca](http://camosun.ca)

MRT PROFESSIONAL CODE OF ETHICS

Camosun College Medical Radiography Technology students are expected to abide by the Canadian Association of Medical Radiation Technologist (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](#)

MRT Department Policies & Procedures

Camosun College Medical Radiography Technology students are responsible for knowing all of the MRT Department Policies and must abide by them:

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

MRT Student Clinical handbook policies:

[Desire2Learn \(D2L\) Mrad 230 Course](#)

8. GENERAL INFORMATION

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>



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