

	<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, 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 Computed Tomography (CT) rotation. This includes performing CT scans of the head, thorax, abdomen/pelvis, extremities 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)	Instructors:	Jennifer Knight (South Island Group) and Hong Gerow (North Island Group)		
(b)	Office Hours:	NA- available by request		
(c)	Location:	MRT 212D		
(d)	Phone:	N/A	Alternative Phone:	250 370 3996 (Sarah Erdelyi)
(e)	Email:	@camosun.bc.ca and @camosun.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

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

Summary of Assignments (evaluated for **completeness** by Camosun Instructor)

Assignment	Deadline	Estimation of Time Needed	Grading Scheme
Confidentiality Agreement Form (D2L Dropbox)	Clinical Day 1	1 hour (clinical time)	COM, IP or NC
Online Participation (D2L Content/Discussions)	Week 1	1-2 hours (homework)	
Portfolio Acknowledgement Form (D2L Dropbox)	Week 1	15 minutes (clinical time)	
Orientation Checklist (D2L Dropbox)	Week 1	1 or more shifts (clinical time)	COM, IP or NC
Formative Evaluations (D2L Dropbox) 6 required in total <i>*1 of 3 from these weeks not mandatory (scheduling dependent)</i>	Weeks 4, 6*, 8, 10*, 12, 14*, 15 or 16	15 minutes (clinical time)	COM, IP or NC
Written Image Analysis (Study Share)	Weeks 4, 8, 12	2-4 hours (homework)	COM, IP or NC
Self-Reflections (D2L Dropbox)	Weeks 2, 6, 10	1-2 hours (homework)	COM, IP or NC
Attendance Tracking Forum (D2L Discussion)	Weeks 1-16	Variable	COM, IP or NC
Portfolio Summary Sheets (D2L Dropbox) <i>*may need to submit twice if minimum requirements not met by week 15</i>	Week 15 and/or 16	30 minutes (clinical time)	COM, IP or NC

Summary of Clinical Requirements (evaluation **result** determined by Clinical Site Instructor)

Activity or Assessment	Timeline	Estimation of Time Needed
Formative Evaluations (6) See formative evaluation criteria on D2L	Same as above	30-60 minutes (clinical time)
Clinical Portfolio <u>Radiographic Procedures</u> -Unassisted Procedures (excluding head) (27) -Competency Assessments (10 minimum) -Verbal Image Critiques/Observed or Assisted Procedures (head – not mandatory until end of final practicum) (0-4) <u>Other Modalities (site dependent, i.e. required number takes into consideration final placement site)</u> -Verbal Case Reviews/Observed or Assisted (0-4 FL, 0-2 OR, 4-13 CT) (minimum 10 total) -Unassisted Procedures (0-4 FL, 0-2 OR, 4-13 CT) (minimum 10 total) -Competency Assessments for FL and OR (0-3) (no minimum to complete MRAD 230; cumulative with final practicum)	Throughout weeks 2-15 <i>*Should complete FL and OR portfolio requirements by end of MRAD 230 if placed at CRH or CDH for final practicum; all others should complete at least half of the verbal case review and unassisted requirements</i> <i>*If unable to complete FL and OR requirements by end of MRAD 230, must complete additional CT procedures (verbal case reviews and unassisted cases)</i> <i>*Competency Assessments and procedures completed in “other modalities” are cumulative with final practicum course, MRAD 250</i> <i>*CT Competency Assessments must be completed during final practicum</i>	Variable (clinical time)
Pocket Book <u>Single procedure</u> observations forms (one for each unassisted procedure signed off in portfolio) <u>Daily performance</u> observation forms (2 per biweekly rotation)	Throughout weeks 1-15	Variable (clinical time)

Assessment Details

Clinical assessments for this course are based on the minimum level of competence expected for the advanced beginner student and, in some cases, entry-level technologist.

At the end of the practicum, cumulative and ongoing competence will be determined by the student’s

- participation in the scheduled clinical hours;
- completion of a minimum number of unassisted procedures;
- ability to demonstrate entry-level competence on a minimum number of competency assessments;
- and satisfactory results on formative evaluations, especially for evaluation of final rotation

Evidence for satisfactory participation will be determined by the completeness and accuracy of record-keeping in the pocket book, ongoing attainment of clinical requirements, and the D2L

attendance tracking forum. Failure to adhere to the participation and/or attendance requirements will result in remedial action as directed by the Camosun Instructor.

Clinical progression and maintenance of competence must be demonstrated. This is evident by receiving satisfactory ratings on formative evaluations. Ratings are determined by qualified Medical Radiation Technologists, called Clinical Instructors, who have been trained on how to use program assessment forms. Judgment of student performance is cumulative and progressive, meaning the following factors will be considered when determining performance ratings:

- completeness of the clinical portfolio relative to the week/experience level and department workload/modality area;
- feedback from observations forms;
- and overall knowledge, skills and attitudes related to the CAMRT competencies for an entry-level MRT.

Although self-reflection will be completed as a written assignment, personal goals must be discussed with the Clinical Instructor before the total score can be determined.

Students are required to submit evidence of participation in clinical activities and assessments on an ongoing basis using D2L. Failure to submit documentation will result in removal from the clinical practicum until the required evidence can be provided. Turning in documentation after the deadline may lead to further investigation and remedial action as determined by the Camosun Instructor.

Along with clinical assessments, students are also expected to complete several written assignments.

- Self-reflection assignments must be completed prior to each formative evaluation. It is highly recommended that students make use of the note-taking pages that have been provided in the pocket book to assist with incorporating personal experiences and practical examples.
- Image analysis and case review assignments will involve transferring clinical images to the Camosun Picture Archiving and Communications System (PACS) by means of the approved process. Students are expected to be self-directed in the completion of written assignments, following the instructions and using the resources suggested on D2L. With the exception of the time needed to complete the image transfer process, students are expected to complete all written assignments outside of clinical hours. Using clinical hours to complete written assignments is not considered a productive use of time, and may result in further investigation and remedial action as determined by the Camosun Instructor.

The summative result for this course (complete or incomplete) will depend on the status of completion of the clinical portfolio, achieving the advanced beginner score or higher by the final formative evaluation, and the completeness of online course requirements. Final status will be determined by the Camosun Instructor.

Inability to meet any of these expectations will result in failure to complete the clinical course.

Additional information can be found in the course content on D2L.

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.

Date (M-Sun)	Week	Important Dates	Clinical Requirements/Goals	Online Assignments
Aug 31-Sep 6	0	Information about clinical practicum distributed	-Proof of CPR recertification or registration in upcoming course -Proof of Mask-fit renewal or intent to attend appointment on campus/private arranged	Documentation (or communication about your status with pre-placement requirements) must be provided to the Program Assistant on or before first day of clinical.
7-13	1	September 8 – first day of Fall term September 8 or 9 - day 1 clinical or first academic day	-Island Health Confidentiality Acknowledgement Form (clinical day 1) -Island Health Online Module (clinical day 1) -Portfolio Student Acknowledgement Form (end of week 1) -Orientation Checklist (end of week 1)	Complete “Getting Started” module on D2L (first academic day). Forms must be submitted to the appropriate D2L Dropbox.
14-20	2		-Reflection on weeks 1-2 with CI and determine personal learning goals for weeks 3-4	Submit Self-Reflection 1.
21-27	3			
28-Oct 4	4		-Monthly progress update for weeks 1-4 (portfolio) -Complete image transfer 1	Submit Formative Evaluation Form. Submit Study Share Assignment 1.
Oct 5-11	5			
12-18	6	October 12 – Thanksgiving Day (no students on site)		Submit Formative Evaluation Form*. Submit Self-Reflection 2.
19-25	7	October 19 – midterm academic day		
Oct 26-Nov 1	8		-Monthly progress update for weeks 5-8 (portfolio) -Complete image transfer 2	Submit Formative Evaluation Form. Submit Study Share Assignment 2.
2-8	9			
9-15	10	November 11 – Remembrance Day (no students on site)		Submit Formative Evaluation Form*. Submit Self-Reflection 3.
16-22	11			
23-29	12		-Monthly progress update for weeks 9-12 (portfolio) -Complete image transfer 3	Submit Formative Evaluation Form. Submit Study Share Assignment 3.
30-Dec 6	13			
7-13	14	December 11 – last day for new content in online courses		Submit Formative Evaluation Form*.
14-20	15	December 18 –academic day for final exam(s)	-Monthly progress update for weeks 13-15/16 (portfolio) -Complete image transfers for random portfolio quality audits -Return OSLs, portfolios and pocket books to CI	Final Formative Evaluation Form must be completed in week 15 or 16, along with Procedures Checklist, Successful Competency Assessment Forms, and Formative Evaluations Summary Form.
21-27	16	December 24 – last day of Fall term (2:00pm)	-Remediation time or attend additional clinical hours to work ahead for CP3	

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

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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