

	<p style="text-align: center;"><b>School of Health and Human Services</b>  Medical Radiography Technology</p> <p style="text-align: center;"><b>Course Name: Clinical Education 1</b>  <b>Course Number: MRAD 120</b></p>
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## COURSE OUTLINE

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**The Approved Course Description is available on the web:**

<http://camosun.ca/learn/calendar/current/web/mrad.html#MRAD120>

*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 first of three clinical education courses. The students are provided opportunities to apply the foundational skills acquired in Term 1. Students will become both competent and confident in the imaging workplace. The focus will be on attaining competencies on procedures of the entire skeleton (excluding cranium), chest, abdomen, gastrointestinal system, fluoroscopy and operating room procedures.

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 scheduled on various shifts including days, afternoons and weekends to experience a variety of procedures. Patient competency evaluations will be performed on patients with varying medical acuity.

Students will have weekly academic time of one (1) day per week for self-directed online didactic course requirements.

**Prerequisites:** A minimum of "C+" in MRAD 102, MRAD 103, MRAD 105, MRAD 107, MRAD 109, MRAD 111, MRAD 113, MRAD 115

***Refer to the Camosun Calendar for detailed information about course prerequisites.***

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### **1. INSTRUCTOR INFORMATION**

(a)	<b>Instructor:</b>	Sarah Erdelyi/Brent McMillen
(b)	<b>Office Hours:</b>	N/A- available by request
(c)	<b>Location:</b>	MRT 212D
(d)	<b>Phone:</b>	250-370 -3996 (Sarah) or -3169 (Brent)
(e)	<b>Email:</b>	<a href="mailto:erdelyis@camosun.bc.ca">erdelyis@camosun.bc.ca</a> , <a href="mailto:mcmillenb@camosun.ca">mcmillenb@camosun.ca</a>
(f)	<b>Website:</b>	<a href="http://online.camosun.ca/">http://online.camosun.ca/</a>

## 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 (evaluated by Camosun Instructor)

Assignment	Deadline	Estimation of Time Needed	Grading Scheme
Hospital Online Orientation (D2L Dropbox)	Prior to Day 1	1 shift (clinical time)	COM or NC
Orientation Checklist (D2L Dropbox)	Week 2	1 or more shifts (clinical time)	COM or NC
Orientation Quiz (D2L Quiz)	Week 2	30 minutes (academic time)	COM or NC
Formative Evaluations (D2L Dropbox) <i>*additional as requested</i>	Weeks 3, 5, 7, 9, 11, 13, 15, 17	15 minutes (clinical time)	COM or NC
Test Image Transfers Form (D2L Dropbox)	Week 3	60 minutes (clinical time)	COM or NC
Images for Assignment Form (D2L Dropbox)	Weeks 4, 8, 12, 16	15 minutes (clinical time)	COM or NC
Written Image Analysis (Study Share)	Weeks 4, 8, 12, 16	2-4 hours (academic time)	COM or NC
Self-Reflections (D2L Discussion)	Weeks 3, 7, 11, 15	1-2 hours (academic time)	COM or NC
Portfolio Summary Sheets (D2L Dropbox)	Week 17	30 minutes (clinical time)	COM or NC

Summary of Clinical Requirements and Assessments (completed/evaluated by site Clinical Instructor and validated by Camosun Instructor)

Activity or Assessment	Timeline	Estimation of Time Needed
Observation Forms for Procedures Performed Unassisted (21 with all critical criteria met)	Weeks 1-18	Variable (clinical time)
Verbal Image Critiques (44)	Weeks 1-18	15-30 minutes (clinical time)
Competency Assessments (7 successful attempts)	Weeks 3, 5, 7, 9, 11, 13, 15	30-60 minutes (clinical time)
Formative Evaluations (X8) <i>*additional as requested</i>	Weeks 2, 4, 6, 8, 10, 12, 14, 16	30-60 minutes (clinical time)
Portfolio Summary Sheets	Week 17	30-60 minutes (clinical time)

#### Assessment Details

Clinical assessments conducted during this course will be based on the minimum level of competence expected for a novice.

Clinical progression and maintenance of competence must be demonstrated and evident by meeting expectations on bi-weekly formative evaluations. Cumulative and ongoing competence must be demonstrated through participation in a minimum number of verbal image critiques using a variety of anatomical parts, performance of a minimum number of procedures unassisted where all critical criteria were demonstrated, and completion of a minimum number of successful attempts at competency. Inability to meet these expectations will result in failure to complete the clinical course.

The summative evaluation result for this course (complete or incomplete) will depend on the status of completion for all required clinical activities and online course assignments. Additional information about each of the assignments, clinical activities, and assessments can be found in the clinical course on D2L.

## 5. COURSE SCHEDULE

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

Please note the **REVISED** start date. Week 1 begins January 12-16. See D2L course news for further details.

Mon. – Sun.	Week	Formative Evaluations	Competency Assessments	Online Assignments (due Sunday night)	Additional Requirements for D2L Dropbox (due Sunday night)
		Clinical instructor or approved designate	Clinical instructor or approved designate	Camosun instructor	Camosun instructor <i>*only if requested</i>
Jan. 5-9	0				
12-18	0				Online Modules
19-25	1				Online Modules
26- Feb. 1	2	Weeks 1-2			
2-8	3		Assessment 1	Self-Reflection 1	Formative Evaluation Weeks 1-2
9-15	4	Weeks 3-4		Written Image Analysis 1	
16-22	5		Assessment 2		Formative Evaluation Weeks 3-4
23-Mar. 1	6	Weeks 5-6			
2-8	7		Assessment 3	Self-Reflection 2	Formative Evaluation Weeks 5-6
9-15	8	Weeks 7-8		Written Image Analysis 2	
16-22	9		Assessment 4		Formative Evaluation Weeks 7-8
23-29	10	Weeks 9-10			
30-Apr. 5	11		Assessment 5	Self-Reflection 3	Formative Evaluation Weeks 9-10
6-12	12	Weeks 11-12		Written Image Analysis 3	
13-19	13		Assessment 6		Formative Evaluation Weeks 11-12
20-26	14	Weeks 13-14			
27-May 3	15		Assessment 7	Self-Reflection 4	Formative Evaluation Weeks 13-14
4-10	16	Weeks 15-16*		Written Image Analysis 4	
11-17	17				Formative Evaluation Weeks 15-16* Portfolio Summary Sheets
18-24	18				Remediation Form

## 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.
NC	The student has not met the goals, criteria or competencies established for this course, practicum or field placement.

### 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 Grading Policy E-1.5 at [camosun.ca](http://camosun.ca) 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 <sup>rd</sup> 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.

[Camosun College Policy for Grading](#)

## 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 website in the Policy Section.

Academic Policies and Procedures  
Student Conduct  
Respectful Workplace

## 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](#)

## Program Policies & Procedures

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

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

[MRT Student Clinical Handbook:](#)

[Desire2Learn \(D2L\) MRAD 120 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>



These materials were originally created by BCIT. Adaptations have been made to reflect

Camosun College policies. Permission to use these materials has been granted by 