



Medical Radiography Technology

Course Name: Patient Care
Course Number: MRAD 111

COURSE OUTLINE

The Approved Course Description is available on the web:

http://camosun.ca/learn/calendar/current/web/mrad.html#MRAD111

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:

The students in this course will gain knowledge and skills for patient care as required prior, during, and post imaging exams. They will be introduced to imaging accessory equipment and patient support equipment used in the operating room, patient's room, and the emergency/trauma areas. Students will gain skills in preparing sterile surgical trays, injectable medication, and application of oxygen supply, ECG leads, and intravenous lines. Students will also focus on the atypical patient. Through the study of various patient disability scenarios (physical, mental, and emotional), students will plan patient specific care models.

This course will provide the knowledge and skills to effectively manage patients during imaging procedures for the post-surgical patient, critical/trauma patient, and those with life lines and tube attachment. It will also provide the theory and practice for assessment of patient vital signs and basic ECG's. The skills required for the preparation of IV contrast media for imaging examinations will be covered. Theory will be supported with supervised laboratory activities designed to give students opportunities to apply their critical thinking and manual skills to a variety of patient care situations. Topics in this course will be aligned to complement and support other Medical Radiography courses.

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:	Donna Mears & Lynelle Yutani
(b)	Office Hours:	Wednesdays 12:30 -2:30
(c)	Location:	WT 212D
(d)	Phone:	250-370-
(e)	Email:	mearsD@camosun.ca
(f)	Website:	http://online.camosun.ca/

2. Intended Learning Outcomes/Competencies

Letters and numbers following certain learning outcomes indicate the specific competencies covered from the CAMRT Medical Radiography Competency Profile:

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

- 1. Provide safe care of non-ambulatory patients during positioning and transporting. (A1.1, B1.2, B1.3, B1.4, B5.1)
- Assess and interpret patient vital signs. (A1.1, B3.1, B3.2, F1.4, I1.4, I3.9, I4.10, J1.4)
- 3. Evaluate and provide required care for patients with limited abilities. (A1.1, B3.2, B5.1)
- 4. Assess and participate in medical emergencies. (B3.1, B3.2, B3.3, G7.7, I3.9, I4.10, J2.9, K1.11, M1.9)
- 5. Manage patients' therapeutic and supportive devices to ensure safety and comfort. (B3.4, B5.1)
- 6. Manage patients with altered emotional, mental, or physical conditions. (B1.5, B3.2)
- 7. Apply medical asepsis, surgical asepsis, standard precautions and isolation protocols. (B4.1, B4.2, B4.3, B4.4, B4.5, B4.6, B4.7, J2.5)
- 8. Prepare solutions and IV contrast media for imaging examinations. (G4.7, G5.7, G6.7, G7.6, I3.7, K1.6, J2.8)
- 9. Assess patient sensitivity and contraindications to IV contrast media. (G4.6, G4.8, G5.6, G5.8, G6.6, G6.8, G6.9, G7.7, I3.6, K1.5, M1.5)

CAMRT Medical Radiography Competency Profile

3. Learning Resources

Required Textbooks:

Torres, L.S., Dutton, A.G., & Linn-Watson, T. (2010). *Patient Care in Imaging Technology* (8th ed.). Baltimore: Lippincott Williams & Wilkins

Optional Textbooks:

Elkin, M.K., Perry, A.G., & Potter, P.A. (2008). *Nursing Interventions & Clinical Skills* (4th ed.). Mosby.

Ehrlich, R.A., & Daly, J.A. (2009). *Patient Care in Radiography* (7th ed.). Mosby.

Desire-to-Learn (D2L):

D2L – the Camosun College online learning portal contains the remainder 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.

Additional resources may include, but are not limited to: lecture notes, PowerPoint slides, Laboratory Manuals, and hyperlinks. You may prefer to download lectures notes ahead of time (when available) and then write your notes directly onto copies of the slides.

D2L materials *must not* be considered your sole source of information! They merely summarize the main points and provide direction for your learning experiences. You may need to write down additional information in each lecture. Additionally, not all details can be covered in a lecture, and you will be required to refer to textbook material that is not discussed specifically in class.

To prepare yourself for your lab activities refer to your core textbook and the schedule section of the syllabus for each lab week.

Other useful material

Web sites:

- Canadian Association of Medical Radiation Technologist (CAMRT)
- The very Image of Care / L'i magerie au coeur de votre santé
- Canadian Institute for Health Information Medical Imaging
- <u>Canada Health Infoway</u>

Free Handbook available for you in PDF online:

 Infection Control Handbook (Basic measures & Additional precautions) 4Th Edition Revised

D2L/Blogs/ Discussion boards/ Social Media – Joining Communities:¹

Are there rules for joining online conversations?

Some Websites have guidelines for acceptable use. A great example is Mashable's (2010) guidelines, which offer eight easy principles:

- 1) No personal attacks
- 2) Hate speech will not be tolerated
- 3) Language needs to respect others
- 4) Spam will be removed
- 5) Constructive criticism is allowed; smear tactics are not
- 6) Comments need to be relevant
- 7) Quality of conversation needs to be maintained
- 8) Every user needs to take part in building the community

These rules can apply to any situation. Being kind and keeping comments respectful are the important points to remember. Constructive arguments and dialogue are encouraged; name-calling and insults are not.

4. Student Assessment

Summative Evaluations	Grades	Notes
Class midterm	20%	Week 8, the exam will last 50 minutes .
Lab midterm	20%	Week 9, lab midterm that will assess skills learned in the lab.
Poster presentations in class	10%	Week 14, Monitoring and Medical Interventions. Each group of students will be presenting in class the information relative to their assigned topic and illustrate the major points with a poster presentation
Class cumulative final exam	20%	Week 15, the exam will last 1 hour and 50 minutes.
Lab consolidation final exam	20%	Week 15, there will be a lab consolidation final exam
Class participation	10 %	Completing your weekly online interactive test in class.
Total	100 %	

¹ Fraser, R. (2011). The Nurse's Social Media Advantage how making connections and sharing ideas can enhance your nursing practice, Sigma Theta Tau International Honor Society of Nursing. [P.188]

Assessment Details:

Class exams:

Midterm & Final Exam:

Midterm and final exams contains a mix of multiple choice and short answer questions. Please take note, the final lecture exam is cumulative, with a greater emphasis of the content viewed after midterm exam.

Assignment – Poster presentation in class:

This activity will allow students to better understand and integrate the major highlights of one specific medical condition. At the beginning of the semester your instructor will generate a group through D2L and your name will be assigned randomly to one team of four students. You will research, share, collaborate, develop, create and work on a Poster Presentation/Collage that will capture the complexity of your medical interventions. Your Poster will synthesis this information and illustrates what are the major Q's to remember with an interesting and provoking tag.

It is mandatory for the students to do all the reading on the various medical emergencies to be prepared for this group project activity in **chapter 9**. Students should focus on the specific topic (shock & hemorrhage, Pulmonary embolus & Diabetic Emergencies, Cerebral vascular accident & Cardiac respiratory emergencies, Seizures & Syncope) assigned by their instructor. Prior to attending and participating in class students will prepare 4 questions to ask and constructively challenge the other teams on their group presentations (Poster). The instructor will introduce you to the evaluation grid for this assignment at the beginning of the semester.

Lab exams:

Lab exams consist of a role playing case study scenario (low tech simulation) where each student will have the opportunity to demonstrate their knowledge, caring and intervention approach in their future professional role as a medical radiography technologist. You will impersonate a patient and switch roles after with your classmate to be the MRT link to a case study scenario provided to you at your lab time exam. Your instructor will introduce you to the evaluation grid at the beginning of the semester and prepare you weekly to meet the objective of this evaluation.

Please take note the final lab and lecture exams will be scheduled by the registrar and is cumulative.

Policy for Assignments:

- Unless otherwise stated, all assignments are due at the *beginning* of the lab/class of the
 due date. There is a 10%/day late penalty. The format is expected to be professional, i.e.
 a neat, legible, clean copy. "Rough" drafts risk rejection and a subsequent late penalty.
- If you fail to turn in a completed assignment on time, you will incur a *late penalty*. Exceptions to this rule will be made solely at the discretion of the instructor. In mitigating circumstances, 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 students attempt to arrange an extension of an assignment 48 hours BEFORE the due date, if possible.

Policy for class and lab exams / assignments:

• 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 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.

(Camosun Academic Policy http://camosun.ca/learn/calendar/current/pdf/academic-policies.pdf)

5. Course Content and Schedule:

Lecture Days/Times & Room Number:

Wednesday 1030 - 1220pm; WT 212C

Class participation is a key component of this course and strongly recommended. It will take the form of questions, games, presentations, professional reflection and discussions, individually or in groups. At the end of many classes, you will be given a class participation question for the following lesson. Students will be asked to present or explain their answers at the beginning of the next class. Formative quizzes or "pop up" quizzes can be part of a teaching strategy to help you evaluate if you comprehend and integrate the information delivered in class.

Lab Days/Times & Room Number:

Thursdays 3:30 – 5:20 pm; WT 216

Lab is a moment where you are transferring your learning, practicing, integrating and demonstrating your skills. You will develop and enhance your professional abilities to know, to be and to do through various lab activities that are directly linked to the expectations of your profession (standards of practice) and your professional environment (future employer). Your attendance and active participation in lab is mandatory.

The following schedule is tentative and subject to change if deemed necessary by the instructor.

Week	Lecture ²	Topics/Quizzes/Assignments	Lab Activities	
		Wednesday	Friday	
		Course Introduction	Orientation	
1	C: p. 45-66	Syllabus/Knowing your profession	Lab rules to know	
		Working interprofessionally	Assessment & communication	
			Infection Control	
2	C: p.93-107	Medical Asepsis	(dirty vs. clean)	
	L: p.108-126	+ infection control handbook	Hand Hygiene, PPE,	
3	C: p.67-71,86-92	Body Mechanics		
	L:p.72-86	& patient transfers	Moving and transporting patients	
4	C: p.129-139	and the second second		
-	L:p.140-147	Vital Signs (5 th vital sign – pain)	Vital signs and oxygen therapy	
5	C: p.333-338			
	L: 338-342	Suctioning and ECG	Suctioning and ECG (SIM LAB)	
6	0	Tubes and attachments	Tubes and attachments	
	Chapters:11/12/13		Patient Transfers	
7	Review weeks 1-5	Class Midterm exam Patients with limited Abilities	Crash Cart (SIM LAB)	
8	Chapters: 7 & 8	Patients with limited Abilities	Consolidation in lab	
٥	<u>'</u>		Prep for midterm lab exam	
	L:177, 182, 185-191 <i>Midterm lab: evaluation grid to discuss in class</i> C:p.287-304 Introduction to parenteral drug			
9	L: p.311-332	Introduction to parenteral drug administration	Midterm lab exam (WT 212 A&B)	
	L. p.311-332		B	
10	C:p.304-310	Review midterm lab exam Contrast Media	Parenteral drug adm.	
		Contrast Wedia	& IV Set up /pumps	
11	B. '	Parenteral drug administration &	Parenteral Drug adm.	
	Review weeks 9-10	Contrast Media	& IV Set up/pumps	
12	C & L: p.199-213	Spinal Injuries	Moving & turning patients	
	C:p.265-270			
13	L:270-285	Surgical Asepsis and the OR	Sterile Fields, Dressings and the OR	
14	C: p.175-185	Monitoring and Medical Interventions	Consolidation in lab	
	Chapter 9	Your poster presentations	prep for final lab exam	
4.5	Finals :			
15	Class + Lab exams	Class Final term cumulative exam	Final lab cumulative exam	

Exam Period Dec.8-19(scheduled by registrar) - check CAMLINK.

Do not book trips until the final exam schedule is posted by the registrar.

 $^{^{2}\,}$ Legend: \boldsymbol{C} for Class time and \boldsymbol{L} for Lab time

6. Grading System

The	following two	grading systems	are used at	Camosun	College	This course	will use
1110	TOHOWING LAVO	grading systems	arc uscu at	Carriosuri	Concec.	THIS COULSE	will use.

X Standard Grading System (GPA)

Competency Based Grading System

Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	Α		8
80-84	A-		7
77-79	B+		6
73-76	В		5
70-72	B-		4
65-69	C+	Minimum level of achievement to use the course as a prerequisite.	3
60-64	С		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 Grading Policy E-1.5 at **camosun.ca** for information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description			
I	Incomplete: 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	In progress: 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			
cw	Compulsory Withdrawal: 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

http://www.camosun.bc.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 insomuch 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, including dress codes & lab safety procedures.

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

8. GENERAL INFORMATION

Suggested Study Time/Study Habits

You will probably need to spend 6-8 hours outside of class per week reading, completing
the chapter test and studying the content for this course to achieve full marks. Your
instructor and instructional assistant will be available during the scheduled "open lab" hours
for students needing additional support mastering the course content.

Attendance

- Each student is required to sign a Laboratory Safety Contract and give it to the instructor prior to commencing laboratory work in the course.
- You are expected to attend all classes, and be on time. It is your responsibility to keep up to
 date on all information given during a class missed, incl. notes, hand-outs, assignments,
 changed exam dates etc. Missed exams or quizzes cannot be made up except in case of
 documented illness (doctor's note required). Lab attendance is mandatory.

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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