Medical Radiography Technology

Patient Care 2

COURSE INFORMATION

COURSE NUMBER	**MRAD 202**
TOTAL HOURS	**50**
THEORY	**25**
PRACTICAL	**25**
PREREQUISITES	**ANPH 202 - Anatomy and Pathology 1** **APPH 226 - Apparatus and Image Management** **MEDT 211 - Medical Terminology** **MRAD 204 - Radiologic Technique 1** **MRAD 223 - Patient Care 1** **RADP 215 - Radiation Protection** **PRCT 250 - Introduction to Clinical Placement**
CO-REQUISITES	**None**
ACADEMIC UNIT RESPONSIBLE FOR COURSE	**Allied Health Education**

STUDENTS, PLEASE NOTE

This course contains information that may be required to substantiate learning for professional recognition. It is your responsibility to retain a copy for your own use during your program and after graduation.

COURSE DESCRIPTION

Patient Care 2 prepares learners for working with isolation patients in a safe and respectful manner. Focus will be placed upon how radiographers address medical emergencies. Pharmaceuticals will be explored related to the systems of the body and the medications' purposes. The principles of vital signs will also be taught, and the patient care labs will allow learners with the opportunity to apply

their knowledge in a lab environment. The practical component for hands-on learning is conducted at the clinical environment.

COURSE OBJECTIVES

Following completion, the student will be able to:

1. Explain the role of the radiographer in assisting with medication administration.
    1.1 Identify the trade and generic names for commonly used drugs.
    1.2 Differentiate the types and effects of common medications used in the diagnostic imaging department
    1.3 Identify the required elements of a written and verbal medication order.
    1.4 Identify methods and routes of drug administration and the equipment required.
    1.5 Explain the selection and preparation of equipment used for the administration of pharmaceuticals.
    1.6 Classify the purpose of selected drugs that act upon various systems of the body.
    1.7 Describe the purposes and uses of anesthetics.
    1.8 State the purpose of drugs used for the treatment of pain.
    1.9 Identify the appropriate handling of contrast media using an ampulla and vial equipment.
    1.10 Describe the required equipment and preparation methods for pharmaceutical agents.

2.Assess a patient's vital signs considering their needs.
    2.1 Explain the purpose and methods of assessing the patient's physical and environmental needs.
    2.2 Detail the basic neurological assessment on a patient.
    2.3 Identify normal and abnormal vital signs.
    2.4 List the factors that affect normal vital signs.
    2.5 Obtain vital signs and blood pressure.
    2.6 Identify personal concerns of patients.
    2.7 Outline the guidelines used in taking a patient's history.

3. Summarize the technologist's course of action/management for patients experiencing common medical emergencies.
    3.1 Characterize the most common medical emergencies that may occur in the X-ray department.
    3.2 Explain an X-ray technologist's role in medical emergency situations.
    3.3 Identify the signs and symptoms that patients present during the occurrence of common medical emergencies in the X-ray department.
    3.4 Differentiate the key elements of situational awareness.
    3.5 Describe the communication barriers that impact situational awareness.
    3.6 Explain the techniques used for patient assessment.

4. Practice the isolation techniques required by a radiographer.
    4.1 List the different types of isolation techniques.

4.2 Explain the appropriate personal protective devices/equipment (PPD/PPE) required to perform an examination in an isolation environment.
4.3 Differentiate the various isolation techniques used with X-ray equipment and isolation patients.
4.4 Outline the guidelines that are required when x-raying an isolation patient.
4.5 Categorize contagious diseases and their modes of transmission.
4.6 Practice correct hand hygiene and donning and doffing of isolation attire.

5. Explain the types, purposes, and applications of the different advanced medical accessory equipment.
5.1 Distinguish the purpose and types of nasogastric (NG) and nasoesophageal (NE) tubes.
5.2 Discuss the precautions to follow when using intestinal/gastro stomas and ostomies.
5.3 Describe the equipment used in monitoring electrocardiograms (ECGs).
5.4 Describe how an X-ray technologist handles a chest tube drainage system.
5.5 List the different types and uses of specialty catheters.
5.6 Outline the handling of different types of specialty catheters.

6. Explain the influences different contrast media exams have on patient management.
6.1 Identify the different trade names of contrast media used in the diagnostic imaging department.
6.2 Compare the advantages and disadvantages of scheduling the same patient for multiple diagnostic exams.
6.3 Explain the scheduling of exams related to ultrasound, nuclear medicine, and contrast injections.

COMMON STUDENT LEARNING OUTCOMES

Upon successful completion of Edenbrook College programs, the student will:

Learn
Students will actively and independently acquire, apply, and adapt skills and knowledge to develop expertise and a broader understanding of the world as lifelong learners.

Think
Students will think analytically and creatively to explore ideas, make connections, draw conclusions, and solve problems.

Communicate
Students will exchange ideas and information with clarity and originality in multiple contexts.

Integrate
Students will demonstrate proficiency in the use of technologies in the broadest sense related to their field of study.

Act
Students will act purposefully, reflectively, and respectfully in diverse and complex environments.

EVALUATION

COLLEGE GRADING SYSTEM

The student must achieve an overall minimum grade of 70% on course assessments to be successful.

Students who achieve a failing grade of less than 70% may be eligible to write a supplemental examination to gain course credit. Remedial assistance will be required prior to writing the supplemental examination. Students will not progress in the program without achieving a passing grade in the course.

COURSE EVALUATION

Mid Term Exam	15%
Quizzes (4)	65%
Final Exam	20%
TOTAL	**100%**

ASSESSMENT RATIONALE/ CRITERIA

Achievement of learning outcomes will be assessed through class participation, class work, group activity, assignment, tests, project, mid-semester examination, and end of semester examination. Assessment will require students to demonstrate understanding and application of all the topics taught.

LEARNING MATERIALS

REQUIRED TEXTS

Ehrlich, R. A. & Coakes, D. M. (Last Published). Patient Care in Radiography - with an Introduction to Medical Imaging (Current ed.). St. Louis, MO: Mosby Elsevier.

SUGGESTED READINGS

To be determined by the instructor.

REFERENCE TEXTS AND MATERIALS

To be determined by the instructor.

TEACHING/LEARNING STRATEGIES

Lectures on all the topics, power point presentations, video presentations, classwork, assignments, groupwork. All the students are expected to familiarise themselves with foundational knowledge prior to class. Personal study before and after classes and use of online resources are essential.

COLLEGE POLICY STATEMENTS

Refer to the Edenbrook College Student Handbook for more information on the following policies.

ACADEMIC RESPONSIBILITY – STUDENTS

1. Each student must know the due dates for assignments, tests, and examinations.
2. Each student must maintain their own academic record of work covered each Unit/term.
3. Each student must maintain paper and electronic copies of assignments for the academic year.
4. Each student must arrange academic discussion time with a faculty member to discuss progress.
5. Each student must perform self-evaluation on progress in the course.

PERSONAL CONDUCT – STUDENTS

1. Students must arrive on time for class and be prepared to work when the instructor begins.
2. Students must be courteous to faculty and classmates.
3. Eating in classrooms and clinic is not allowed.
4. Cell phones, Text messengers and other electronic devices must be turned off during class time.

ACADEMIC ADVANCEMENT

At mid-point and at the end of each academic term, the members of the Faculty Team (FT) for the Medical Radiography Technology program meet to review the progress of all students. Following these meetings each student is advised orally and in writing of their status in the program.

Students experiencing difficulty will be counseled regarding assistance available to foster academic success.

At the end of each term, the Medical Radiography Technology Program Instructor and or Director of Education will make recommendations after deliberating on all relevant information. Decisions regarding each student may include (but are not limited to) the following. S/he has:

- Successfully completed all program requirements and can graduate.
- Successfully completed all requirements and is promoted to the next academic level in the program.
- Been granted supplemental privileges for courses not successfully completed and if successful will graduate or be promoted to the next academic level. **Supplemental privileges are not automatically granted and will be limited in number.**

- Not successfully completed all elements in the academic level but may remain in the program to repeat failed portions and continue toward program completion according to an individualized timetable.
- Experienced such difficulty that repetition of the entire academic level is required, and a space will be provided for the student in the program at the earliest opportunity if the student wants to return.
- Experienced such difficulty that the student is asked to leave the school and if s/he desires readmission must complete the admissions process in competition with other applicants.

ATTENDANCE

Attendance is mandatory – The College reserves the right to determine whether absences are excused or unexcused (may affect student funding) and to request any medical evidence that may be required. Student tardiness is unacceptable, and students are expected to demonstrate professional behaviour at all times, in class or on a clinical placement. Students are entirely responsible for catching up on their own or for missed material and demonstrations. A doctor's note may be requested for each absence.

Absence from Missed Test/Assignment Due Protocol

Upon return to school, the student is to provide a doctor's note or approved excusable absence to the instructor prior to admission to the make-up test/submission of late assignments. Failure to submit an approved excuse within 5 school Units upon return, the student will receive a zero for all missed, tests and late assignments.

Absence from Class Protocol

The College monitors attendance closely. A student who is absent from a class more than 3 times in a term, will be identified at risk and required to submit a doctor's note or approved excusable absence to their instructor(s) and the Program Instructor prior to readmission to the class.

Make-Up Procedure

All students are expected to take exams at the scheduled time. Make-up exams will be arranged only in recognized emergency cases. The instructor must be informed before or during the exam, to be eligible. Refer to the Edenbrook College Student Handbook for protocols. Quizzes are taken in class and at the time specified by the instructor. Late students will be given no extra time for the quiz. Quizzes given in the
classroom cannot be made-up.

CHEATING AND PLAGIARISM

Any evidence of cheating will result in a failure for the course. Evidence of plagiarism will result in a failure for all students involved in the plagiarism. Plagiarism is turning in the work of someone else as if it was your own. When working on assignments in a group setting, students must submit their assignments

using their own words. Identically worded assignments submitted by multiple students are acts of plagiarism.

MOBILE PHONES

Mobile phones are to be turned completely OFF while class is in session. Please use laptop computers responsibly. Web browsing, messaging, emailing, and recording are otherwise prohibited during class. Students who abuse the privilege of using their laptops will be asked to put it away for the duration of the class.