A POLYTECHNIC INSTITUTION

Course Outline

School of Health Sciences
Program: Medical Radiography
Option:

MRAD 2217
Pathology for Radiographers

Start Date:	September, 2004					**End Date:**	December, 2004		
Total Hours:	21	**Total Weeks:**	7			**Term/Level:**	2	**Course Credits:**	2
Hours/Week:		**Lecture:**	2	**Lab:**	2	**Shop:**		**Seminar:**	**Other:**

Prerequisites		**MRAD 2217 is a Prerequisite for:**	
Course No.	**Course Name**	**Course No.**	**Course Name**
Level 1 Courses		**Level 3 Courses**	

Course Description

The content covered in Level 2 is an introduction to general pathology and bone pathology.

- To provide the students with the knowledge necessary to make informed decisions about technique changes and patient care associated with different pathological processes.
- To identify a select group of pathologies as they appear radiographically.
- To give students a broad knowledge of the more common pathological processes.

Evaluation

Weekly Quizzes	10%	Comments:	The pass mark for all subjects in the Medical Radiography program is 60%.
Midterm Exam	45%		
Final Exam	45%		
TOTAL	100%		
Optional Project	10%		

Course Learning Outcomes/Competencies

Each of the following student outcomes are identified with the relevant critical task (CT) for competency according to the CAMRT published guidelines (Oct. 1999 revised):

Upon successful completion, the student will be able to:

1. correctly use terminology relevant to the study of pathology.

A1.4	Correlate clinical information to the prescribed examination.
A3.2	Verify clinical information with the patient or clinical staff.
A3.6	Explain the procedure to the patient.
C2.3	Explain the procedure at an appropriate level of understanding for the patient.

Course Learning Outcomes/Competencies (cont'd.)

2. explain the relationship between a pathology and its effect on the body as a whole.

   A3.6 Explain the procedure to the patient.
   A3.2 Verify clinical information with the patient or clinical staff.
   A3.11 Facilitate patient transport using good body mechanics.
   A4.1 Plan the examination according to patient condition, to minimize patient discomfort.
   A4.6 Position the patient to demonstrate the required anatomical structures.
   A4.8 Direct the central ray to the correct anatomical landmark(s).
   A4.9 Align the imaging system with the required anatomical structures.

3. identify the signs and symptoms associated with common type disease processes.

   A5.6 Select the fastest film/screen/grid combination for optimum image quality appropriate for the examination.
   A5.7 Select appropriate kV, mA and time or automatic exposure control parameters.
   A5.8 Modify exposure factors on the basis of the patient's age, physique and condition.
   A7.3 Identify anatomy and patient position on the image.
   A7.4 Verify that required structures are demonstrated.
   A7.6 Determine whether the diagnostic quality of the image is acceptable.
   A7.9 Confirm that any pathologies or anomalies are adequately visualized.

4. describe the radiographic appearance of selected pathological conditions.

   A7.3 Identify anatomy and patient position on the image.
   A7.4 Verify that required structures are demonstrated.
   A7.6 Determine whether the diagnostic quality of the image is acceptable.

5. identify a selected group of pathologies as they appear radiographically.

   A7.3 Identify anatomy and patient position on the image.
   A7.4 Verify that required structures are demonstrated.
   A7.6 Determine whether the diagnostic quality of the image is acceptable.
   A7.7 If image is unacceptable, determine the reason.
   A7.9 Confirm that any pathologies and anomalies are adequately visualized.

6. plan changes in radiographic technique to best demonstrate the presence of disease processes.

   A5.6 Select the fastest film/screen/grid combination for optimum image quality appropriate for the examination.
   A5.7 Select appropriate kV, mA and time or automatic exposure control parameters.
   A5.8 Modify exposure factors on the basis of the patient's age, physique and condition.
   A7.3 Identify anatomy and patient position on the image.
   A7.4 Verify that required structures are demonstrated.
   A7.6 Determine whether the diagnostic quality of the image is acceptable.

■ Course Learning Outcomes/Competencies (cont'd.)

A7.7 If image is unacceptable, determine the reason.
A7.12 Determine whether additional views are required.

7. discuss a plan for patient care during radiography based on the pathology involved.

A1.4 Correlate clinical information to the prescribed examination.
A1.6 Plan the radiographic imaging procedure.
A3.2 Verify clinical information with the patient or clinical staff.
A3.6 Explain the procedure to the patient.
A3.11 Facilitate patient transport using good body mechanics.
A4.1 Plan the examination according to patient condition, to minimize patient discomfort.
A4.5 Touch the patient at the anatomical landmark(s) required for positioning for the examination.
A4.7 Use immobilization and positioning aids as required.

■ Verification

I verify that the content of this course outline is current.

Authoring Instructor	Date

I verify that this course outline has been reviewed.

M. Filippelli Program Head/Chief Instructor	Sept 3/04 Date

I verify that this course outline complies with BCIT policy.

Allan Bell Dean/Associate Dean	Sept. 3/04 Date

Note: Should changes be required to the content of this course outline, students will be given reasonable notice.

Instructor(s)

Mary Filippelli

Office Location: SW3 4086
Office Hrs.: TBA

Office Phone: 604-452-6918
E-mail Address: Mfilippe@bcit.ca

Learning Resources

Required:

Pathology for Medical Radiography Student Manual

Recommended:

Mosby's Medical and Nursing Dictionary, C.V. Mosby Co.

Boyd's Introduction to the Study of Disease, 9th ed., Shelton, Huntington, Lea and Febiger, Philadelphia

Outline of Fractures, 6th ed., J.C. Adams, Churchill Livingstone, London

Fractures and Dislocations in Children, A.G. Pollen, Churchill Livingston, London

The Bones and Joints, G.S. Lodwick, Year Book Medical Publishers

The Language of Fractures, 2nd ed., Robert J. Schultz, Williams and Wilkins, Baltimore

Information for Students

(*Information below can be adapted and supplemented as necessary.*)

Assignments: Late assignments, lab reports or projects will **not** be accepted for marking. Assignments must be done on an individual basis unless otherwise specified by the instructor.

Makeup Tests, Exams or Quizzes: There will be **no** makeup tests, exams or quizzes. If you miss a test, exam or quiz, you will receive zero marks. Exceptions may be made for **documented** medical reasons or extenuating circumstances. In such a case, it is the responsibility of the student to inform the instructor **immediately**.

Ethics: BCIT assumes that all students attending the Institute will follow a high standard of ethics. Incidents of cheating or plagiarism may, therefore, result in a grade of zero for the assignment, quiz, test, exam, or project for all parties involved and/or expulsion from the course.

Attendance: The attendance policy as outlined in the current BCIT Calendar will be enforced. Attendance will be taken at the beginning of each session. Students not present at that time will be recorded as absent.

Illness: A doctor's note is required for any illness causing you to miss assignments, quizzes, tests, projects, or exam. At the discretion of the instructor, you may complete the work missed or have the work prorated.

Course Outline Changes: The material or schedule specified in this course outline may be changed by the instructor. If changes are required, they will be announced in class.

MRAD 2217 RADIOGRAPHIC PATHOLOGY SCHEDULE

		LECTURE	LABS
Sept 7-10	C/D	Intro to Pathology	Intro to Pathology and Fractures
Sept 13-17	A/B	Intro to Pathology	Intro to Pathology and Fractures
Sept 20-24	C/D	Fractures of Upper Extremities	Upper Extremities
Sept 27- Oct 1	A/B	Fractures of Upper Extremities	Upper Extremities
Oct 4-8	C/D	Fracture of Lower Extremities	Lower Extremites Mid Term
Oct 11-15	C/D	Fractures of Pelvis, Ribs and Sternum	Pelvis, Ribs, and Sternum Oct 11 – Thanksgiving day
Oct 18-22	A/B	Fracture of Lower Extremities	Lower Extremites Mid Term
Oct 25-29	A/B	Fractures of Pelvis, Ribs and Sternum	Pelvis, Ribs, and Sternum Oct 11 – Thanksgiving day
Nov 1-5	C/D	Fractures of Vertebrae	Vertebrae
Nov 8-12	A/B	Fractures of Vertebrae	Vertebrae Thanksgiving
Nov 15-19	C/D	Inflammatory Disorders	Inflammatory Disorders
Nov 22-26	A/B	Inflammatory Disorders	Inflammatory Disorders
Nov 29- Dec 3	A/B C/D	Epiphyseal Disorders	Epiphyseal Disorders
Dec 6-10		**Exam Week**	