



BRITISH COLUMBIA INSTITUTE OF TECHNOLOGY

Course Outline Part A

School of Health

Program: Medical Radiography

Option:

MRAD 1103

Radiographic Techniques and Evaluation

Hours/Week:	2	Total Hours:	34	Term/Level:	1
Lecture:		Total Weeks:	17	Credits:	2.5
Lab:					
Other:					

Prerequisites

MRAD 1103 is a Prerequisite for:

Course No. Course Name

N/A

Course No. Course Name

N/A

Course Goals

- To assist to the student to develop the necessary skills to competently critique radiographs of the upper extremity, chest, abdomen, pelvis, lower extremity and spine.
 - To help students understand technical and physical principles affecting the radiographic image.
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Course Description

Radiographic Technique and Evaluation

(1 Lecture and 2 Lab Hours per week)

Instruction will be given as to the proper approach to film evaluation and identification of the pertinent structures demonstrated on each radiograph as well as the technical considerations for each area. The student will become aware of all factors affecting radiographic quality and develop the necessary ability to adjust technical factors to produce optimum quality radiographs. During the lab periods the student will have the opportunity to review and evaluate radiographs.

Evaluation

Final Examination	50%
Mid-Term Examination	25%
Laboratory Mid-Term Exam	25%
TOTAL	<hr/> 100%

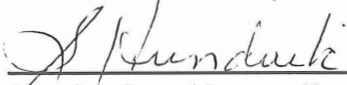
Course Outcomes and Sub-Outcomes

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

1. identify on radiographs of the chest, abdomen, extremities, shoulder, pelvis and hip the structures related to correct positioning and density.
2. explain how factors in each of the following categories influence the radiographic image:
 - A. technical
 - B. geometric.
 - C. processing.
 - D. patient.
3. differentiate between the appropriate and inappropriate use of technical factors for routine radiography of the chest, abdomen, extremities, pelvis and spine.
4. evaluate radiographs of the chest, abdomen, extremities, pelvis and spine for technical quality and diagnostic acceptability.

The above objectives must be met with 60% accuracy.

Course Record

Developed by:	_____	Date:	_____
	Instructor Name and Department (signature)		
Revised by:	_____	Date:	_____
	Instructor Name and Department (signature)		
Approved by:	 _____	Start Date:	_____
	Associate Dean / Program Head (signature)		



BRITISH COLUMBIA INSTITUTE OF TECHNOLOGY

School of Health

Program: Medical Radiography

Option:

Course Outline Part B

MRAD 1103

Radiographic Techniques and Evaluation

Effective Date

January 1997

Instructor(s)

Gisela Paches, A.C.R.

Office No.: SW3 4084

Phone: 5750

Office Hrs.: As Posted

Text(s) and Equipment

Required:

McQuillen-Martensen. *Radiographic Critique*. (1996).

MRAD 1103 Workbook.

Recommended:

Bushong, S. *Radiologic Science for Technologists*. 5th Edition.

Course Notes (Policies and Procedures)

Assignment Details



BRITISH COLUMBIA INSTITUTE OF TECHNOLOGY

School of Health

Program: Medical Radiography

Option:

Schedule

MRAD 1103

Radiographic Techniques and Evaluation

Week of		Lecture Topic	Lab Topics
Jan.	6	Introduction The Radiographic Image	How to View a Radiograph
	13	Introduction to the Bit System	How to Critique a Radiograph
	20	Radiographic Density	Chest Radiographs
	27	Radiographic Density	Abdomen Radiographs
Feb.	3	Radiographic Contrast	Finger/Thumb/Hand
	11	Radiographic Contrast	Wrist/Scaphoid/Forearm Elbow/Humerus
	17	MID-TERM EXAM	Toes/Feet, Ankle/Calcaneus, Tibia and Fibula
	24	Recorded Detail	Knee/Patella/Femur Pelvis/S.I. Jts.
Mar.	3	Recorded Detail	LAB MIDTERM
	10	SPRING BREAK	
	17	Distortion	Cervical Spine
	24	GOOD FRIDAY HOLIDAY	Thoracic/Lumbar Spine
	31	Distortion	Sacrum and Coccyx
Apr.	7	Technical Factor Selection AEC Techniques	Calculating Bit Values Density Bit Comparison
	14	Types of Charts	Review
	21	FINAL EXAMINATION WEEK	