



BRITISH COLUMBIA INSTITUTE OF TECHNOLOGY

Course Outline Part A

School of Health Sciences

Program: Medical Radiography Technology

Option:

**MRAD 3305**  
**Case Studies**

<b>Hours/Week:</b>	3	<b>Total Hours:</b>	24	<b>Term/Level:</b>	3
<b>Lecture:</b>		<b>Total Weeks:</b>	8	<b>Credits:</b>	1.5
<b>Lab:</b>					
<b>Other:</b>					

**Prerequisites**

**MRAD 3305 is a Prerequisite for:**

Course No.    Course Name

Course No.    Course Name

Successful completion of Level 2

Clinical Level 4

**Course Goals**

To assist the student to integrate the content from all the program courses taken to this point while focusing on a radiographic case study. The discussions are also intended to develop or improve critical thinking, problem-solving and communication skills.

**Course Description**

The course will examine issues and concerns related to the application of knowledge of anatomy and physiology, positioning, patient care, pathology, radiation protection, equipment, technique and other areas of concern in the solution of real life problems in medical radiography using selected case studies in chest, abdomen, extremity, pelvic, urinary and vertebral radiography. Course readings, writing assignments, seminar discussions and exam questions will be used to develop and evaluate the skills.

In addition, this course is designed to provide the bridge between classroom theory and clinical work through group discussions and presentations and allow the student the opportunity to develop critical thinking and problem-solving skills.

**Evaluation**

Final Examination	40%
Mid Term Exam	30%
Participation & Team Work	30%
<b>TOTAL</b>	<b>100%</b>

### Course Outcomes and Sub-Outcomes

1. Apply factual knowledge to the solution of problems in medical radiography given a concrete situation.
2. Use critical thinking and problem-solving skills to provide creative and alternative explanation of and/or solutions to selected case studies in medical radiography.
3. Justify recommended action when solving real life issues in medical radiography.
4. Work effectively in a team environment.

The course outcomes and suboutcomes correspond with the following competency profiles of the CAMRT

- |   |   |
|---|---|
| A1 Utilize the request for consultation                           | D1 Monitor and maintain processing equipment and facilities |
| A2 Prepare the room for radiographic imaging procedures           | D2 Monitor radiographic equipment                           |
| A3 Prepare the patient  | D3 Perform quality control tasks                            |
| A4 Position the patient   | E1 Function within legal and ethical guidelines             |
| A5 Operate imaging equipment                                      | E2 Demonstrate professional behavior                        |
| A6 Process images   | E3 Demonstrate professional responsibility                  |
| A7 Critique images and implement corrective measures              |   |
| A8 Complete post-procedural tasks                                 |   |
| B1 Protect the patient  |   |
| B2 Protect the technologist                                       |   |
| B3 Protect others required to be present during the procedure     |   |
| B4 Monitor personal radiation exposure                            |   |
| C1 Ensure patient safety  |   |
| C2 Establish patient trust and confidence                         |   |
| C3 Attend to the patient's physical comfort and needs             |   |
| C4 Perform patient care duties                                    |   |
| C5 Assist in the administration of contrast media and other drugs |   |
| C6 Ensure the confidentiality of patient information              |   |

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### Course Record

Developed by: Shirley Hundvik, R.T., M.Ed. Date: \_\_\_\_\_  
Instructor Name and Department (signature)

Revised by: Dori Kaplun ACR, M.Ed. Date: \_\_\_\_\_  
Instructor Name and Department (signature)

Approved by: Shirley Hundvik, R.T., M.Ed. Start Date: \_\_\_\_\_  
Associate Dean / Program Head (signature)



BRITISH COLUMBIA INSTITUTE OF TECHNOLOGY  
School of Health Sciences  
Program: Medical Radiography Technology  
Option:

Course Outline **Part B**

**MRAD 3305**  
**Case Studies**

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**Effective Date**

January to April 1999

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**Instructor(s)**

Dori Kaplun, ACR, M.Ed.

Office No.: SW3 - 4084  
Office Hrs.: As Posted

Phone: 432-8743

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**Text(s) and Equipment**

Required:

Hundvik, Shirley. *Case Studies*, MRAD 3305.

Recommended:

Buschong, Stewart. *Radiologic Science for Technologists*.

Cullinan, Cullinan. *Producing Quality Radiography*. 2nd Edition, Lippincott Company.

Carlton, Adler. *Principles of Radiographic Imaging*.

Internet

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**Course Notes (Policies and Procedures)**

See manual.

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**Assignment Details**

## Case Studies Schedule 1999

A/C Date (week of)	Topic	B/D Date (week of)
Jan 4	Scoliosis	Jan 18
Jan 11	Ankylosing Spondylitis	Jan 25
Feb 1	Darkroom	Feb 15
Feb 8	Midterm	Feb 22
Mar 1	Legg-Perthe	Mar 22
Mar 8	Pulmonary Embolism	
	Good Friday /Tutorial	Mar 29
Apr 5	Easter Monday/Tutorial	
	Foot	April 12

Spring break March 15-19