



BRITISH COLUMBIA INSTITUTE OF TECHNOLOGY

School of Health Sciences  
Program: Medical Imaging  
Option: Medical Radiography

Course Outline Part A

**MRAD 1100**  
**Clinical Education**

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<b>Hours/Week:</b> 1A-3, 1B: 35	<b>Total Hours:</b> 189	<b>Term/Level:</b> 1
<b>Lecture:</b>	<b>Total Weeks:</b> 21	<b>Credits:</b> 9
<b>Lab:</b>		
<b>Other:</b>		

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**Prerequisites**

MRAD 1100 is a Prerequisite for:

MRAD 2200

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**Course Goal**

To introduce the student to the hospital Imaging Department while gaining experience in basic radiographic procedures together with contrast media preparation.

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**Course Description**

Upon successful completion of clinical orientation — Part 1A, the student will be assigned to a clinical facility to gain experience in skeletal radiography, injectable contrast procedures, fluoroscopy and other relevant areas where they will participate in basic radiographic procedures.

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**Evaluation**

Upon completion of MRAD 1100 the student will have:

1. Satisfactorily completed the following evaluations:
  - A. Department Orientation
  - B. one ambulatory chest examination
  - C. one supine abdomen examination
  - D. Contrast Media Preparation (Ba mixing; syringe loading)
2. Complete the clinical experience requirements as stated in the Student Manual.

The following schedule must be adhered to for completion of the evaluations.

The following evaluations **MUST** be completed by each of the following dates:

Department Orientation by May 16th  
Complete abdomen and chest by May 30th

**Evaluation (cont'd.)**

The grading scheme for Clinical Evaluation is as follows:

Clinical Education requirements must be complete including the eight required evaluations, and a mark of 60 acquired if a *passing* clinical grade is to be achieved.

Clinical Education mark granted will equal the number of credits earned.

Credits for the course will be allocated as follows:

**45 credits** for completion of clinical evaluation requirements.

**25 credits** maximum for Mid Term examination.

Credits allocated as follows:	30 credits:	90 – 100%
	25 credits:	80 – 89%
	20 credits:	70 – 79%
	15 credits:	60 – 69%
	10 credits:	50 – 59%
	0 credits:	below 50

**8 credits** for achieving 1 unassisted case in each of 15 different examinations not including the cases previously entered or credited.

**1 credit** for every 15 assisted/unassisted cases entered in the Work Experience Record to a maximum of 10 credits. (Maximum 50 chests.)

**1 credit** for every 6 unassisted cases entered on the Unassisted Additional Credit Sheet and not previously entered to a maximum of 7 credits.

**-5 credits** for every repeat evaluation required.

**-5 credits** for each missed Department Orientation Recall Objective.

**-5 credits** for each and every discrepancy with the Student Policies.

**-5 credits** for commencing or carrying out a radiographic procedure without at R.T. present.

**-2 credits** for tardiness

A single-area examination cannot be used to meet more than *one* objective, e.g., a request for left hip that required AP pelvis and a transfemoral view of left hip would be entered only as a “hip with transfemoral” or an abdomen series exam that included a single AP/PA chest is entered only as an abdomen series.

## Course Outcomes and Sub-Outcomes

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

1. Orient themselves to the radiographic area of the imaging department.
  - Locate and explain department protocols, documentation requirements, safety features, office procedures, and department workflow.
  - Participate in available hospital orientation programs.
  - Complete the WHMIS program.
2. Prepare contrast medium for an upper and lower gastrointestinal examination.
3. Prepare a syringe with contrast medium for an IVP examination.
4. Provide patient care that will insure safety of patient, co-workers and others.
5. Prepare the x-ray room for basic skeletal radiographic procedures.
6. Communicate effectively with the patient prior to, during, and after a radiographic examination.
7. Handle equipment in a competent manner.
8. Demonstrate appropriate interpersonal skills.
9. Apply satisfactory positioning and technical skills during basic examinations of the chest, abdomen, upper and lower extremities.
10. Carry out acceptable radiation protection practices.
11. Critique radiographs of the upper and lower extremities, chest, abdomen, shoulder and pelvic girdles.
12. Document required information pertinent to radiograph procedures.
13. Demonstrate professional attitudes and behaviors.

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## Withdrawal from Clinical Education

### Mandatory Withdrawal

Students will be withdrawn from the clinical environment when they *consistently* fail to achieve the minimum acceptable standards in one or all of the following areas:

- Adherence to assigned department policies and procedures
- Patient care
- Positioning skills
- Interpersonal relationships
- Professional behaviors and attitudes
- Radiation safety
- Equipment handling

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## Withdrawal from Clinical Education (cont'd)

### Voluntary Withdrawal

Students may voluntarily withdraw from Clinical Education MRAD 1100. Counselling with respect to the career choices is available to all students.

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### Course Record

Developed by: A. McMillen, Clinical Coordinator Date: October, 1996  
Instructor Name and Department (signature)

Revised by: \_\_\_\_\_ Date: \_\_\_\_\_  
Instructor Name and Department (signature)

Approved by: \_\_\_\_\_ Start Date: \_\_\_\_\_  
Associate Dean / Program Head (signature)



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School of Health Sciences  
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Course Outline Part B

**MRAD 1100**  
**Clinical Education**

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**Effective Date**

January, 1997

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**Instructor(s)**

TBA

Office No.: SW3-4077  
Office Hrs.:

Phone: 5417

The student will gain experience under the *direct supervision* of the Instructor/hospital technologist.

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**Text(s) and Equipment**

Required:

- Clinical Education Manual – Level 1
- R & L markers
- Tape measure
- Pens, felt tip and ball point
- Student Positioning Notebook from MRAD 1101

Recommended:

Ballinger, Philip W.M.S., P.T. (R). (1986). Merrill's atlas of radiographic positions and radiologic procedures (6th ed.). (Vol. 1, 2, 3). Toronto: C.V. Mosby Co.

Kozier, B., & Erb, G. (1987). Fundamentals of nursing concepts and procedures (3rd ed.). Addison Wesley.

Cullinan, Cullinan. (1994). Producing Quality Radiographs (2nd ed.). J.B. Lippincott Company.