



BRITISH COLUMBIA INSTITUTE OF TECHNOLOGY

School of Health Sciences

Program: Medical Radiography

Option:

Course Outline

MRAD 3306

Radiographic Procedures 3

Start Date: January, 2001

End Date: April, 2001

Course Credits: 4

Term/Level: 3

Total Hours: 64

Total Weeks: 8

Hours/Week:	Lecture: 3	Lab: 5	Shop:	Seminar:	Other:
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Prerequisites

MRAD 3306 is a Prerequisite for:

Course No. Course Name

Course No. Course Name

MRAD 2206 Radiographic Procedures 2

MRAD 4400 Level 4 Clinical

MRAD 2204 Radiographic Anatomy and Physiology 2

Course Calendar Description

Course instruction will cover positioning techniques in combination with appropriate technical factors and imaging theory required to produce diagnostic skull radiographs. Students will also learn how to evaluate the diagnostic acceptability of skull radiographs. Labs will reinforce theoretical components of the course.

Course Goals

- To provide students with knowledge of positioning techniques for radiographs of the skull.
- To give students an understanding of the relationships among skull anatomy, beam direction and radiographic anatomy.
- To enable students to evaluate the diagnostic acceptability of skull radiographs.

Evaluation

Final Examination	40%	All labs must be satisfactorily completed before a course mark will be given.
Mid Term	25%	
Video	10%	60% is considered as a pass.
Junior Video	5%	
Quizzes	15%	
Lab	5%	
TOTAL	100%	

Course Learning Outcomes/Competencies

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

Competency Profile

- | | |
|-------------------|---|
| A4 | 1. list and locate the surface landmarks, localizing lines and planes of the skull. |
| A3–A5, A7 | 2. describe the routine and specialized projections for the various aspects of the skull and be able to differentiate between them. |
| A4 | 3. describe and discuss beam direction and centering points for the various views/projections of the skull. |
| A4, A5, D2 | 4. demonstrate the ability to correctly position the patient for the required projections/views of the skull. |
| A4 | 5. demonstrate the ability to adapt positioning in order to accommodate patient limitations |
| A3, A4, C1–C3, E2 | 6. demonstrate the ability to integrate patient care, communication and organizational skills when positioning for skull views. |
| A3, A4, C1–C3, E2 | 7. evaluate organizational, communication and positioning skills and provide appropriate feedback. |
| A7 | 8. evaluate sample skull radiographs for diagnostic acceptability. |
| A7 | 9. assess main contributing factors to the overall radiographic quality. |
| A7 | 10. propose possible solutions to poor radiographic quality. |
| A5 | 11. discuss formulas and relationships of the principles of radiography as they apply to mA time, kV and distance. |

The course outcomes and suboutcomes correspond with the following competency profiles of the CAMRT (Dec. 96):

- | | |
|----|---|
| A3 | Prepare the patient. |
| A4 | Position the patient. |
| A5 | Operate imaging equipment. |
| A7 | Critique images and implement corrective measures. |
| C1 | Ensure patient safety. |
| C2 | Establish patient trust and confidence. |
| C3 | Attend to the patient's physical comfort and needs. |
| D2 | Monitor radiographic equipment. |
| E2 | Demonstrate professional behaviour. |

Course Content Verification

I verify that the content of this course outline is current, accurate, and complies with BCIT Policy.

W. J. J. J. J.
Program Head/Chief Instructor

Dec 2000
Date

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



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Instructor(s)

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Mon.-Fri. and by
appointment

Learning Resources

Required:

1. "Merrill's Atlas of Radiographic Positions and Radiologic Procedures" — 9th Edition — Volume 2.
2. Medical Radiography Positioning/Laboratory Manual — Level 3.
2. "Radiographic Critique" — Martenden/McQuillen.

Recommended:

1. "Textbook of Radiographic Positioning and Anatomy" — Bontrager and Anthony.
2. "Radiography of the Skull and Brain" — DuPont.

BCIT Policy Information for Students

Assignment Details

Video projects have a new importance in Level 3. Skull procedures are not often done in the clinical area and therefore competence in this area of positioning is required prior to attempting it in the clinical area. In order to attempt to ensure competency, stringent regulations and marking have been adapted. It is the objective of this assignment to have each student practice his or her positioning skills prior to attempting the video project process.

The production of the video and marking will be as follows:

Video Assignment

- video cannot be repeated, however a new requisition envelope may be requested and a new video completed.
 - ▶ prior to receiving a new requisition, a completed self-evaluation form must be submitted on the first video, then a new video project envelope will be issued.

- the envelopes are dated and numbered and must be completed prior to the next positioning lab.
- the procedure must be completed within 30 minutes.
- the requisition envelope must be opened in front of the camera and be recorded .
 - requisition must be completed with patient history, date and signature, etc.
- the camera must be recording from the time the envelope is opened until the conclusion of the video.
 - projects not adhering to this rule are considered *unacceptable*.
- details such as technique, cassette sizes and screen/film combinations can be recorded on video as a brief summary at the end of the video.
- emphasize that the patient should really “act” the part. This makes it far easier for you to role play as a technologist and makes the video project fun.
- instructor interviews must be booked at the completion of the video (i.e., booking must be done prior to next positioning lab however actual interview can take place anytime during the term).
- interviews can be booked with any instructor involved in MRAD 3306.
- **REMEMBER, DO NOT SPEAK TO THE CAMERA, but rather SPEAK TO THE PATIENT.**

Patient Feedback Form

- forms are to be filled out by the patient at the end of the video, placed in the envelope, sealed and returned to the student.
- please encourage patients to give written, honest and complete feedback, rather than checkmarks.
- envelopes will be opened during the instructor interview and the patient’s feedback will be reviewed.
- patient feedback will not be worth any marks.

Evaluation Forms

- forms must be completed, including comprehensive personal feedback prior to instructor review.
 - an X will be levied for incomplete documentation.
- there are no free X's.
- the marking scheme will be as follows:

PART A – GENERAL SKILLS

- an X will count as 1 mark off of the total mark.
- if an adequate analysis is made of the area receiving an X, only 1/2 mark will be taken off.

PART B

- an X in any one of the 4 areas listed under each projection/view will result in the loss of all marks for that entire view.
- if an adequate analysis is made of that view/projection, 2 marks can be earned back.

PART C

- an X in any one of the areas will result in a loss of marks for that entire section.
- if an adequate analysis is made, half the marks can be earned back.