



A POLYTECHNIC INSTITUTION

School of Health Sciences

Program: Medical Radiography

Option:

**MRAD 2214****Radiographic Anatomy and Physiology****Start Date:** September, 2002**End Date:** December, 2002**Total Hours:** 28 **Total Weeks:** 7**Term/Level:** 2 **Course Credits:** 2**Hours/Week:** 4 **Lecture:** 2 **Lab:** 2**Shop:** **Seminar:** **Other:****Prerequisites****Course No. Course Name**

BHSC 1113 Basic Anatomy and Physiology

MRAD 1104 Radiographic Anatomy and Physiology

**MRAD 2214 is a Prerequisite for:****Course No. Course Name**

MRAD 3314 Radiography Anatomy and Physiology

**■ Course Description**

During Level 2 of this course the lecture and laboratory material will cover vertebrae, thoracic cage and organs in the human body. Emphasis will be placed on location, external landmarks and radiographic identification and application. Identification of organs with contrast/no contrast and cross-sectional anatomy will also be covered.

**■ Detailed Course Description**

1. describe structure, function and relative positions of bony structures and organs in the body.
2. locate internal structure using surface landmarks.
3. relate changes in organ position to changes in body position.
4. recognize and relate variations in organ locations based on bodily habitus.
5. identify on radiographs body organs including both contrast and noncontrast procedures.
6. identify major structures displayed on sectional images.

**■ Evaluation**

Weekly Quiz	20%
Midterm: Lecture/Lab	40%
Final: Lecture/Lab	40%
<b>TOTAL</b>	<b>100%</b>

**Comments:** The pass mark for all subjects in the Medical Radiography program is 60%.

**■ Course Learning Outcomes/Competencies**

Each of the following statements is identified with the relevant critical task (CT) for competency according to the CAMRT published guidelines.

Upon successful completion, the student will be able to:

1. describe structure, relationship and position of vertebrae and thoracic cage.
2. describe structure, position and function of gastrointestinal, urinary, biliary and upper respiratory systems.

■ **Course Learning Outcomes/Competencies (Cont'd)**

3. locate bony and non-bony structures using surface anatomy and landmarks.
4. evaluate radiographs for variation in organ and bony structures.
5. identify on radiographs all structures covered in course.
6. identify major internal structures presented in a sectional imaging format.
7. identify pathologies covered in the course when presented on radiographs.

■ **Verification**

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

M. Filippelli  
Authoring Instructor

Aug 30, 2002  
Date

I verify that this course outline has been reviewed.

M. Filippelli  
Program Head/Chief Instructor

Aug 30, 2002  
Date

I verify that this course outline complies with BCIT policy.

John H. Enns  
Dean/Associate Dean

Aug 30 2002  
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.: Open

Office Phone: 604-451-6918

E-mail Address: MFilippe@bcit.ca

## ■ Learning Resources

### Required:

*Principles of Anatomy and Physiology*, Tortora and Anagnostakos

*Radiographic Anatomy and Physiology*, (manual)

*CAMRT Curriculum Guide for Radiography Programs*

### Recommended:

(As listed for CAMRT exam validation)

*Basic Physiology and Anatomy*, Chaffee and Lytle

*Atlas of Human Cross Sectional Anatomy*, Cahill and Orland

*The Anatomy Coloring Book*, Kapit and Elson

## ■ 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.

■ Assignment Details

### Schedule

	Week of	Set	Lecture	Lab
1	Sept 2	C/D	<b>Labor Day</b> Trachea, Pharynx/Larynx, Ribs, Sternum	Trachea, Pharynx/Larynx, Ribs, Sternum
2	Sept 9	A/B	Trachea, Pharynx/Larynx, Ribs, Sternum	Trachea, Pharynx/Larynx, Ribs, Sternum
3	Sept 16	A/B	Vertebrae	Vertebrae
4	Sept 23	C/D	Vertebrae	Vertebrae
5	Sept 30	C/D	GI	GI
6	Oct 7	A/B	<b>Thanksgiving Day</b> GI	GI
7	Oct 14	A/B	Urinary, Biliary	Urinary, Biliary
8	Oct 21	C/D	Urinary	<b>MIDTERM</b>
9	Oct 28	A/B	Biliary System	<b>MIDTERM</b>
10	Nov 4	A/B	Biliary System	Biliary System
11	Nov 11	C/D	<b>Remembrance Day</b> Biliary System	Urinary, Biliary
12	Nov 18	C/D	Biliary System	Biliary System
13	Nov 25	A/B	REPRODUCTIVE	REPRODUCTIVE
14	Dec 2	C/D	REPRODUCTIVE	REPRODUCTIVE
15	Dec 9	ALL	<b>FINAL EXAM</b>	