A POLYTECHNIC INSTITUTION

Course Outline

School of Health Sciences
Program: Medical Radiography Technology
Option:

MRAD 3314
Radiographic Anatomy and Physiology

Start Date:	January, 2005					**End Date:**	April, 2005		
Total Hours:	45	**Total Weeks:**	16			**Term/Level:**	3	**Course Credits:**	3.0
Hours/Week:	3	**Lecture:**	1	**Lab:**	2	**Shop:**		**Seminar:**	**Other:**

Prerequisites

Course No.	Course Name
MRAD 2214	Radiographic Anatomy & Physiology

MRAD 3314 is a Prerequisite for:

Course No.	Course Name

Course Description

This course continues on from MRAD 2214 and begins with the skull. Skull topics include surface landmarks, radiographic planes, lines, and bony anatomy. The cranial and facial bones will be covered in detail. The body organs, glands, vessels and nerves are studied according to region. Throughout the course, emphasis is on surface anatomy, the radiographic appearance of structures, and the details of structure and function that are pertinent to radiographic procedures. Basic cross-sectional anatomy of the head, thorax, abdomen, pelvis and spine will also be covered this term.

Course Goals

- To provide students a detailed outline of the skull anatomy.
- To provide students an overview of the central nervous system, and cardiovascular system.
- To provide students the knowledge of basic radiographic cross-sectional anatomy.

Evaluation

Quizzes X 6	20%
Midterm Examinations X 2	30%
Cross-Section Assignment	10%
Final Examination	40%
TOTAL	100%

Comments: 60% is the required pass mark in this course.

■ Course Learning Outcomes/Competencies

Upon successful completion, the student will be able to:

(Each of the following statements are identified with the relevant Critical Task for Competency (CT) according to the CAMRT publication January, 1997).

	Learning Outcome	CT
1	Identify and describe the structure and function of the cardiovascular system.	A7
2	Identify and describe the structure and function of the central nervous system.	A7
3	Identify and describe the structure of the skull.	A7
4	Identify anatomical structures of cardiovascular and nervous systems as seen radiographically.	A4, A7
5	Identify human anatomical structures as shown on cross-sectional radiographs, including: • head • chest • abdomen and pelvis • spine	A7
6	Correlate cross-sectional anatomy seen on an image to the slice location in the body area. The course outcomes and sub-outcomes align with the following Competency Profiles of the CAMRT: • Position the patient to demonstrate the required anatomical structures. • Identify anatomy and patient position on the image. • Verify that required structures are demonstrated. • Collimate only to the area of interest to minimize patient dose.	 A4.6 A7.3 A7.4 B1.6

■ Verification

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

Authoring Instructor — Date: Jan. 20, 2005

I verify that this course outline has been reviewed.

Program Head/Chief Instructor — Date: Jan 20/05

I verify that this course outline complies with BCIT policy.

Dean/Associate Dean — Date: Jan. 20/05

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

■ Instructor

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■ Learning Resources

Required:

- *Radiographic Skeletal Anatomy*, Glenda Bryan
- *Principles of Anatomy and Physiology*, Tortora & Grabowski

Material to be distributed as required.

Recommended:

The Anatomy Coloring Book, Kapit & Elson

Basic Physiology and Anatomy, Chafee & Lytle

Cross-sectional anatomy texts

Current Journals, news articles

Gel pens for lab material work

Internet site references:

http://daphne.palomar.edu/ccarpenter/Movies/csf_unlab.mov
http://www.mic.ki.se/MEDIMAGES.html.
http://www.vh.org/adult/provider/radiology/NormalRadAnatomy/index.html
Great orbit site: http://mywebpages.comcast.net/wnor/lesson3.htm
Interactive 3D skull: http://www.csuchico.edu/tlp/info/projects/skull/
CT Teaching files: http://www.ctisus.com/tf/
The Visible Human Project: http://www.nlm.nih.gov/research/visible/frozen_ct.html
http://www.ect.downstate.edu/courseware/rad_atlas

■ Information for Students

(Information below can be adapted and supplemented as necessary.)

The following statements are in accordance with the BCIT Student Regulations Policy 5002. To review the full policy, please refer to: http://www.bcit.ca/~presoff/5002.pdf.

Attendance/Illness:
In case of illness or other unavoidable cause of absence, the student must communicate as soon as possible with his/her instructor or Program Head or Chief Instructor, indicating the reason for the absence. Prolonged illness of three or more consecutive days must have a BCIT medical certificate sent to the department. Excessive absence may result in failure or immediate withdrawal from the course or program.

Academic Misconduct:
Violations of academic integrity, including dishonesty in assignments, examinations, or other academic performances are prohibited and will be handled in accordance with the 'Violations of Standards of Conduct' section of Policy 5002.