CAMOSUN COLLEGE	***School of Health & Human Services*** Medical Radiography Technology **Course Name:** **Anatomy & Physiology for the Radiographer** **Course Number:** **MRAD 106** **Term:** **Fall 2018**

COURSE OUTLINE

The Approved Course Description is available on the web:
http://camosun.ca/learn/calendar/current/web/mrad.html#MRAD106

Please note:

- *This outline will **not** be kept indefinitely.*
- *This outline will only be electronically stored for five (5) years.*
- *It is strongly recommended students keep this outline for your records; especially to assist in transfer credit to post-secondary institutions*
- *This course is only open to students in the Medical Radiography program.*

1. Instructor Information

(a)	Instructor:	Brent Mekelburg
(b)	Office Hours:	By Appointment
(c)	Location:	MRT 212D
(d)	Phone:	250-370-3992
(e)	Email:	mekelburgb@camosun.ca
(f)	Website:	http://online.camosun.ca/

2. Intended Learning Outcomes/Competencies

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

1. Identify and describe the anatomical structures and components of the musculoskeletal, respiratory, cardiovascular, digestive, and urinary systems using X-ray images and a variety of media.
2. Describe the functioning of the musculoskeletal, respiratory, cardiovascular, digestive, and urinary systems as it pertains to radiographic imaging.
3. Relate structure to physiological function of the musculoskeletal, pulmonary, and cardiovascular system as it pertains to radiographic imaging.
4. Identify and describe anatomical features of the skeleton to facilitate accurate radiographic positioning.
5. Identify and describe the relationships and movements of skeletal structures and joints to facilitate accurate radiographic positioning.

3. Required Materials

(a) Textbooks:

Required:

Patton, K. & Thibodeau, G. (2016). ***Anatomy & Physiology*** (10th ed.) Textbook & Lab Manual. Elsevier Health Sciences.

Optional:

Drake, R.L., Vogl, W., & Mitchell, A.W.M. (2015). ***Gray's Anatomy for Students*** (3rd ed.). Churchill Livingstone.

(b) Other

Desire-to-Learn (D2L):

D2L – the Camosun College online learning portal contains the remainder of the learning materials for this course. Students are expected to familiarize themselves with the online learning environment and all the features it has to make this course experience enriching. Log on at https://online.camosun.ca/ to access these materials.

Additional resources may include, but are not limited to: lecture notes, PowerPoint slides, Laboratory Manuals, and hyperlinks. You may prefer to download lectures notes ahead of time (when available) and then write your notes directly onto copies of the slides.

D2L materials ***must not*** be considered your sole source of information! They merely summarize the main points and provide direction for your learning experiences. You may need to write down additional information in each lecture. Additionally, not all details can be covered in a lecture, and you will be required to refer to textbook material that is not discussed specifically in class.

4. Course Content and Schedule:

Lecture Days/Times & Room Number:

MRT 212C

Tuesday 1030-1220

Lab Days/Times & Room Number:

Protected time: 1 hour each week

Friday 1630-1720

Course Schedule

Week	Dates	Lecture/Module	Chapter	Quiz	Labs
1	Sept 4-7 **(Labour Day)**	**Introduction to Radiographic Anatomy & Physiology**	**Organization of the body 1** **Skeletal Tissues 11**		**Organization of the body Lab 1** **Overview of the Skeleton Lab 11**
2	Sept 10-14	**Upper Extremities: Fingers to Elbow**	**Appendicular Skeleton 13** **Articulations 14**	**Quiz 1**	**Upper Extremities Lab 14** **Joints Lab 16**
3	Sept 17-21	**Upper Extremities: Humerus to Scapula**			
4	Sept 24-28	**Lower Extremities & Pelvis: Toes to Knee**		**Quiz 2**	**Lower Extremities Lab 15**
5	Oct 1-5	**Lower Extremities & Pelvis: Knee to Pelvis**			
6	Oct 9-12 **(Thanksgiving)**	**Midterm Exam 1**			
7	Oct 15-19	**Skull**	**Axial Skeleton 12**	**Quiz 3**	**The Skull Lab 12**
8	Oct 22-26				
9	Oct 29-Nov 2	**Spine**		**Quiz 4**	**The Vertebral Column and Thoracic Cage Lab 13**
10	Nov 5-9				
11	Nov 13-16 **(Remembrance Day)**	**Thoracic Viscera** **Bony Thorax**	**(Thorax from chapter 12)** **Respiratory Tract 35** **Heart 28**	**Quiz 5**	**Structure of the Heart Lab 35** **Respiratory Structures Lab 41**
12	Nov 19-23	**Midterm Exam 2**			
13	Nov 26-30	**Gastrointestinal System**	**Upper & Lower Digestive Tract 38 & 39**	**Quiz 6**	**Digestive Structures Lab 44**
14	Dec 3-7	**Urinary System**	**Urinary System 42**	**Quiz 7**	**Urinary Structures Lab 47**
15	Dec 10-14	**FINAL EXAM PERIOD**			

Do not book trips until the final exam schedule is posted by the registrar.

5. Student Assessment

Attendance/Participation	10%
Reading Quizzes	10%
Midterm Exam 1	25%
Midterm Exam 2	25%
Cumulative Final Exam	30%
TOTAL	**100%**

Students must achieve a minimum of 65% to use this course as a prerequisite.

Attendance/Participation

It is expected that you show up on time and participate in both labs and classroom lectures. We learn from each other, and I highly encourage you to willingly contribute to our group learning environment. We highly value interaction, appreciative inquiry, and active engagement.

If you attend all of the lectures, you will get 5%. For every un-communicated or un-excused absence, you will lose a mark. If you communicate your absence and it is for a legitimate reason ahead of time, you will not lose a mark.

The participation mark is worth 5%. If you're wondering how this will be marked, here is a simple way to self-reflect and guide your level of participation: Ask yourself, when given the opportunity to answer questions in class, share my knowledge, insights or contribute positively in a relevant manner, I participated actively:

0-never

1-rarely, if ever (1/semester)

2-sometimes (1/month)

3-consistently (1/week)

4-always (1/class)

5-always, but also constructively in a manner that deepened the discussion and furthered the level of interaction of the class with the material in a beneficial manner.

Reading Quizzes

In order to gain the most from lectures, students should come to class prepared. This means having done the assigned reading beforehand. In order to assess your understanding of the material, there will be a short 5-10 question reading quiz at the beginning of class that covers the general concepts addressed in the readings.

Midterm Exams

There will be two midterm exams to assess your level of knowledge as it relates to the theory of Anatomy & Physiology for Radiographers. The purpose of the midterm exams is to provide you with feedback about your level of knowledge **during** the term. The midterm exams are non-cumulative. Beyond a grade, I encourage you to use the exams as an assessment ***for*** learning, not simply ***of*** your learning. As such, I highly encourage you to reflect on your results by identifying areas of weakness and celebrating successful integration of knowledge. The midterm exams should provide confidence, decrease anxiety, and expose you to the type of questions you can expect on the final exam.

Final Exam

The final examination is cumulative and includes material from all modules covered in the course. This final examination will occur during the regularly scheduled final exam week. In emergency circumstances, a student may write a test or final examination before or after the scheduled time if the student would otherwise be unable to complete the program or course. Exceptions due to emergency circumstances, such as unavoidable employment commitments, health problems, or unavoidable family crises, require the approval of the instructor. Holidays or scheduled flights are not considered to be emergencies. The student may be required to provide verification of the emergency circumstance. Camosun Academic Policy retrievable from: http://camosun.ca/learn/calendar/current/pdf/academic-policies.pdf) Missed quizzes or examinations cannot be made-up except in the case of documented illness (doctor's note).

6. Grading System

The following two grading systems are used at Camosun College. This course will use:

[X] Standard Grading System (GPA)

[ ] Competency Based Grading System

7. Recommended Materials or Services to Assist Students to Succeed Throughout the Course

STUDENT CONDUCT POLICIES

It is the student's responsibility to become familiar with the content of these policies. The policies are available in each School Administration Office, Registration, and on the College web site in the Policy Section.

Academic Policies and Procedures
Student Conduct Policy

LEARNING SUPPORT AND SERVICES FOR STUDENTS

There are a variety of services available for students to assist them throughout their learning. This information is available in the College Calendar, Registrar's Office or the College web site at

http://www.camosun.bc.ca

MRT PROFESSIONAL CODE OF ETHICS

Camosun College Medical Radiography Technology students are expected to abide by the Canadian Association of Medical Radiation Technologist (CAMRT) Code of Ethics insomuch as it applies to them in the learning and clinical environments. This information is available on the CAMRT website at:

CAMRT Code of Ethics

MRT Department Policies & Procedures

Camosun College Medical Radiography Technology students are responsible for knowing all of the MRT Department Policies and must abide by them, including dress codes & lab safety procedures.

http://camosun.ca/learn/programs/mrt/handbook.pdf

Grading Systems

Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	A		8
80-84	A-		7
77-79	B+		6
73-76	B		5
70-72	B-		4
65-69	C+	Minimum level of achievement to use the course as a prerequisite.	3
60-64	C		2
50-59	D	Minimum level of achievement for which credit is granted.	1
0-49	F	Minimum level has not been achieved.	0

Temporary Grades

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy E-1.5 at **camosun.ca** for information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description
I	*Incomplete*: A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or
IP	*In progress*: A temporary grade assigned for courses that, due to design may require a further enrollment in the same course. No more than two IP grades will be assigned for the same course. *(For these courses a final grade will be assigned to either the 3rd. course attempt or at the point of*
CW	*Compulsory Withdrawal:* A temporary grade assigned by a Dean when an instructor, after documenting the prescriptive strategies applied and consulting with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum,

8. GENERAL INFORMATION

Students are expected to attend all classes and labs. If you are unable to attend the lecture it is your responsibility to acquire all information given during a missed class including notes, hand-outs, assignments, changed examination dates, etc.

The Medical Radiography Technology program is committed to promoting competence, professionalism and integrity in our students and developing their core skills to succeed throughout their academic programs and in their careers. The purpose of Academic Honesty Guidelines is to provide clear expectations of appropriate academic conduct and to establish processes for discipline in appropriate circumstances. It is the student's responsibility to become familiar with the content and the consequences of academic dishonesty. Before you begin your assignments, review the Academic Policies on the Camosun College website: http://camosun.ca/learn/becoming/policies.html