Middlesex Community College
School of Radiologic Technology
SYALLBUS CRN 3141

I. Course Title: **RAD*215 Radiographic Pathology**

II. Credits: **3**

III. Prerequisites: **RAD*240, RAD* 200**

IV. Semester: **Fall 2016**

V. Instructor:
Donna J. Crum, MS, RT (R) (CT)
Office: 2nd floor of the Bardenheier Medical Training Center at Middlesex Hospital
Phone: 860-358-6923 7:30 – 4:30
Off- hours for school business only 860-262-1812
Fax: 860-358-8887
Email: donna.crum@midhosp.org

VI. Course Description: This course provides an overview of pathological conditions that are demonstrated by diagnostic imaging. Lecture material will include the cause and treatment of the disease process. Pediatric radiology is also presented. A research paper and presentation are required. Prerequisites Prerequisites: RAD* 240, RAD* 200. This is an "L" course.

VII. Course Text: ***Radiographic Pathology,*** **2nd Edition, Linn-Watson, Wolters Kluwer 2014.**

Radiographic Pathology Workbook**, 2nd Edition, Linn-Watson, Wolters Kluwer 2014.**

Introduction to Radiologic Sciences and Patient Care**, 5th Edition, Adler and Carlton, Elsevier 2012.**

Textbook of Radiographic Positioning and Related Anatomy, 8th Edition, Bontrager, Elsevier 2014.

VIII. Course Objectives: Upon completion of this course, the student will be able to:

1. Discuss and explain special considerations for pediatric and geriatric population.
2. Discuss and explain medication administration and contrast media utilized in imaging.
3. Discuss and explain pathology related to circulatory, skeletal, respiratory, gastrointestinal, urinary and reproductive systems.
4. Discuss and explain special imaging modalities.
5. Demonstrate information literacy skills to access, evaluate, and use resources to stay current in the field of radiography.

6. Develop a vocabulary of appropriate terminology to effectively communicate information related to radiography.

IX. Course Goals:

1. Provide students the opportunity to investigate and understand special considerations for pediatric and geriatric patients.
2. Provide student the opportunity to study medication administration utilized in imaging.
3. Provide the students the opportunity to understand the pathological conditions of multiple body systems.
4. Provide the students the opportunity to observe special imaging modalities.
5. Provide the students the opportunity to research and communicate using information literacy skills.

X. General Unit Outline:

A. Medication Administration
   1. medication reconciliation
   2. premedication
   3. contraindications
B. Contrast Media
   1. types
   2. properties
   3. appropriate types for specific examinations
C. Body Systems (Circulatory, Reproductive, Gastrointestinal, Urinary, Skeletal, and Respiratory)
   1. Anatomy
   2. Pathology
   3. Imaging modalities
D. Computerized Tomography
   1. overview of CT physics
   2. overview of CT image production
   3. beginning sectional anatomy

XI. Course Presentation: This course consists of the following components:

1. **Lecture**
2. **Exams:** Tests account for **40%** of the total course grade.
3. **Quizzes:** Quizzes may or may not be announced. Students should always be prepared for the possibility of a quiz. Quizzes account for **15%** of your total course grade.
5. **Homework and Miscellaneous Assignments:** Homework and other miscellaneous assignments should be completed and turned in by the established deadline date on the schedule. The Homework and miscellaneous assignments account for **15%** of the total course grade.
6. **Research Paper:** Research paper on a pathological condition that can be identified and/or treated using radiographic imaging. A rubric specific to the research paper will be distributed to the students. Research paper accounts for **25%** of the total course grade.

7. **Final Examination**: A comprehensive final covering all topics addressed during the semester. The final examination will account for **5%** of the total course grade.

XII. Grade Scale :

A = 97	B- = 86
A- = 93	C+ = 85
B+ = 91	C = 84
B = 88	F = 83

***** A grade of (C) or above must be maintained in order to progress in the Program*****

XIII. Studying:

This course may be challenging for some students. Some materials will be familiar but much of the material will seem very foreign. The volume of information is great, building on itself as each week passes. If you fall behind it will be very difficult to catch up. Schedule your time to allow yourself to adequately review the textbook information.

- Study in a quiet place with no distractions (food, people, cell phone, etc…)
- Re-write your notes not to memorize words but to memorize concepts. Your text is one of many texts available with same information but the wording may be different. The national exam is built upon concepts not how a particular author writes.
- Read your information out loud to yourself. Using more than one sense increases your retention.
- Join/form a study group to practice in the laboratory.

ADDITIONAL COLLGE INFORMATION:

IMPORTANT COLLEGE POLICIES!! PLEASE READ CAREFULLY!

For information about the college's policies and procedures regarding academic honesty, accessibility/disability services, attendance, audio-recording in the classroom, grade appeals, religious accommodations, weather and emergency closings, and more, please go to the following website: www.mxcc.edu/catalog/syllabus-policies. Also, please become familiar with the policies regarding nondiscrimination, sexual misconduct, and general student conduct at the following website: www.mxcc.edu/nondiscrimination/.

CELL PHONE POLICY: *Whether in clinical or class, personal cell phones should be placed on silent mode and put away so that professional activities are not disrupted. Students are not permitted to "text" during class or clinic. Non-compliance with this policy will result in Administrative Action up to and including dismissal.

RAD* 215 Radiographic Pathology

Course Topic Schedule

Week	Study Topic(s)	Assignment(s)
1 8/30	Pharmacology	Chapter 20, Carlton and Adler
9/1	Contrast Media	Chapter 11, Linn-Watson
2 9/6		
9/8	Pathologic Process	Chapter 1 Linn-Watson
3 9/13	Skeletal System	Chapter 2 Linn-Watsonb

9/15		
4 9/20		`
9/22		
5 9/27	**Test**	
9/29	**Respiratory System**	**Chapter 3 Linn-Watson**
6 10/4		
10/6	**Gastrointestinal and Hepatobiliary Systems**	**Chapters 4 & 5 Linn-Watson**
7 10/11		
10/13		
8 10/18	**Test**	
10/20	**Urinary System System**	**Chapter 6 Linn-Watson**
9 10/25		
10/27	**Reproductive and Endocrine Systems**	**Chapter7 & 10 Linn-Watson**
10 11/1		
11/3	**Circulatory System**	**Chapter 8 Linn-Watson**
11 11/8		
11/10	**Nervous System**	**Chapter 9 Linn-Watson**
12 11/15		
11/17	**Test**	
13 11/22	**Overview of Computed Tomography**	**Chapter 18 Bontrager RESEARCH PAPER DUE**
14 11/29		
12/1	**Introduction to Sectional Anatomy**	**Handouts**
15 12/6		
12/8	**Test**	
16 12/13	**FINAL EXAM**	

SUBJECT TO CHANGE WITH NOTIFICATION

UEST SPEAKER SCHEDULE

	NAME AND TOPIC	**DATE/TIME**
1.	**Richard Palma - Hoffman Heart and Vascular Institute - Echocardiography Jeff Hill - Hoffman Heart and Vascular Institute - Cardiac Interventional**	**September 15, 2016 9:00 am**
2	**Donna Spencer - MH - OPC - Bone Density**	**September 20, 2016 11:00 am**
3.	**Sandra Phillips - MH Radiology Department Administrator - Management**	**October 6, 2016 11:00 am**
4.	**Della Strickland - SMC Manager - Magnetic Resonance Imaging**	**October 18, 2016 11:00 am**
5.	**Trish Hatin - OPC Manager - Mammography and QM**	**October 20, 2016 11:00 am**
6.	**Nora Urrichio - MMC Radiation Therapy Program**	**October 27, 2016 1:30 pm at MMC**
7.	**Lisa Catala - MH RIS/PACS Administrator - RIS/PACS**	**November 1, 2016 11:0 0am**
8.	**Wendy Violissi - MH IR Supervisor - Interventional Radiology**	**November 10, 2016 11:00 am**
9.	**Bridget Hill - MH CT Supervisor - Computed Tomography**	**November15, 2016 11:00 am**
10.	**Carissa Carta - MH NM Supervisor - Nuclear Medicine**	**November 29, 2016 11:00 am**
11.	**Melanie Caruso, MH Sonography Supervisor - Sonography**	**December 8, 2016 11:00am**