

**RAD - 312 Radiographic Pathology  
Spring 2016**

**Course Instructor:** Sandi Watts MSHA, RT(R), ARRT  
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leave name, message and phone number  
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Class Time: M,W 10-11:15 am, ASA Rm. 14

**Office:** ASA 131  
**Hours:** M & W 1-3  
T & H 1-3

**COURSE DESCRIPTION:**

Deals with the etiology and process of trauma and disease. Emphasis will be placed on radiographic pathology of the body systems and the manifestation of this pathology.

**PREREQUISITES:** RAD 332

**Co-Requisites:** RAD 322, RAD 342 and RAD 352

**REQUIRED TEXTBOOKS:**

Eisenberg, R.L. & Johnson, N.M. (2011). Comprehensive Radiographic Pathology, 5<sup>th</sup> edition. St. Louis, MO: Elsevier Science/Mosby Inc. ISBN-13: 978-0-323-03624-5

**Recommended Textbook:**

Eisenberg, R.L. & Johnson, N.M. (2011). Workbook for Comprehensive Radiographic Pathology, 5<sup>th</sup> edition. St. Louis, MO: Elsevier/Mosby

**Supplemental Textbook(s):**

Bushong, S.C. (2013). Radiologic Science for Technologists: Physics, Biology and Protection, 10<sup>th</sup> edition. St. Louis, MO: Elsevier Science/Mosby Inc. ISBN-13: 978-0-323-04837-8

**GENERAL COURSE OBJECTIVES:**

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

1. Distinguish between the different types of disease.
2. Acquire a basic understanding of the causes of disease.
3. Describe the clinical signs and radiographic appearance of trauma for each body system.
4. Describe the clinical signs and radiographic appearance of disease for each body system.
5. Define the medical terms related to pathology.
6. Describe imaging procedures used in diagnosing disease.

**COURSE OUTLINE:**

	<b>PERCENTAGE:</b>
1. Introduction to pathology	10%
2. Cardiovascular system	5%
3. Respiratory system	10%
4. Gastrointestinal system	15%
5. Hepatobiliary system	10%
6. Genitourinary system	15%
7. Musculoskeletal system	20%
8. Central nervous system	5%
9. Cancer	10%

## **ACADEMIC HONESTY:**

All students are expected to adhere to a strict code of academic honesty. Academic honesty is addressed according to the “Policies and Procedures Applicable to Academic Dishonesty” as stated in the “Important Information for Students, Faculty and Staff” booklet, available from the Office of Vice Chancellor for Student Affairs.

**ACTS OF ACADEMIC DISHONESTY**, from the “SIUC Student Conduct Code”, section II Violations, article A ([www.siuc.edu/~policies/conduct.html](http://www.siuc.edu/~policies/conduct.html)), but not limited to:

- A. Plagiarism, representing the work of another as one’s own work;
- B. Preparing work for another that is to be used as that person’s own work;
- C. Cheating by any method or measure;
- D. Knowingly furnishing false information to a University official relative to academic matters;
- E. Soliciting, aiding, abetting, concealing, or attempting conduct in violation of this code.

Penalties will be imposed for violations of this policy in accordance with the SIUC Student Conduct Code. These penalties may include one or more of the following disciplinary measures for a case of academic dishonesty:

- **A grade of zero (0) for the assignment, lab, quiz, or test.**
- **An “F” for the entire course.**
- **Recommendation of dismissal from the Program.**

## **METHODOLOGY:**

Students are required to keep current on the weekly reading assignments and to completely answer the related chapter objectives.

Each test is based upon the following materials:

- Textbook readings
- Chapter objectives
- Class lectures, presentations, and discussions
- Any/all supplemental readings

Each test will require the student to identify, apply knowledge, and make judgments based upon the learned material.

## **STUDENT EVALUATION & GRADING:**

Assignments, quizzes, Pathology presentations, tests: 75% of total grade

Final test: 25% of total grade

-----Total

100%

### **Grading Scale:**

93 - 100 = A

85 - 92 = B

75 - 84 = C

0 - 74 = F

\*\*Tests are normally given as “multiple choice”. Partial credit is NOT given for incorrect answers. Students are **NOT** permitted to use the restroom during a TEST. If you leave the classroom for any reason during a test, you will forfeit the test and receive a score from the questions you have answered ***only***, with that number divided by the TOTAL number of questions on the test.

All students must pass each of their Radiologic Sciences prefix courses (RAD) with a grade of “C” or better in order to satisfy Program requirements, to graduate, and to pass the National Board Exam in Radiography. This grade of “C” or better is based upon the Radiologic Sciences grading scale.

Any student that fails a Radiologic Sciences course will not continue in our Program. When course failure occurs, the student will meet with the appropriate faculty member and academic advisor to discuss the student’s future educational goals. This discussion may include referring the student to the University Career Services office ([www.siu.edu/~ucs](http://www.siu.edu/~ucs); Woody Hall B 204; Ph: 618-453-2391) for testing via the “Strong Interest Inventory” to identify the academic majors that best fit the student’s personality, values, interests, and skills.

During the summer between the junior and senior years, each radiography student will take the National Board Exam in Radiography, administered by the American Registry of Radiologic Technologists (ARRT). This 200 question test has a minimum passing score of 75%. Therefore, to better prepare our students to take and pass this National Board Exam, the Radiologic Sciences Program uses a grading scale that is more stringent than the rest of the University.

### **PASSING THE ARRT BOARDS:**

***\*\* Students have to take and pass the ARRT Board exam by July 1<sup>st</sup> before they begin their fall semester of specialization classes (CT/MRI and Radiation Therapy). \*\****

### **ADA Accommodations:**

Under the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act, educators and students have both rights and responsibilities. It should be the mutual goal of the student and university to maximize the likelihood that students with disabilities succeed.

Accommodation sometimes is necessary.

If you think you have a learning disability, or know you have a disability but have not been tested, then please contact SIUC Disability Support Services (618-453-5738) for an appointment for the evaluation of your learning disability.

Once you have been diagnosed as having a learning disability, we, the faculty of the Radiologic Sciences Program, strongly encourage you to tell us what type of learning disability and what type of accommodation is needed to help you succeed in our Program. If you do not notify us (prior to the end of the first week of the semester) that you have a disability, **and** you do not

request accommodation during this course, then you accept full responsibility for your own success or failure in this course. **Ultimately, YOU are responsible for your own success or failure, and the resulting consequences.**

## **ATTENDANCE:**

**Please note:**

- 1. Due to the frequently graphic content presented in this course, bringing infants and/or children to class is not allowed.**
- 2. No Lap Top computers allowed in class.**
- 3. Blogging, Tweeting, texting, sexting and all other electronic communications during class time is prohibited.**
- 4. Please turn off all cell phones/smart phones, MP3 players, PDAs, iPads, Kindle-like devices, headsets, pagers, beepers, all other personal communication devices, and remove all types of earbuds/earphones.**
- 4. If it's necessary to be in constant communication with your children, their school, business associates, spouse, friends, etc., then now is not the right time for you to be in our RADS Program!**

A record of daily attendance will be kept. Attendance is mandatory for this course. Habitual tardiness to class will result in points being deducted from the final grade. Each late arrival or absence will result in 0.5 point, daily deduction from the student's semester grade.

Any student that misses class is responsible for the material covered.

Whenever it is possible, **advance notice of absence is appreciated.** An email message is generally adequate. If you are unable to contact me prior to class, please do so as soon as possible.

**Missed Quizzes/Exams:** If absences occur on days when exams are scheduled the ability to make up the exam will lie solely with the instructor. No guarantee is made, nor given, about the possibility of making up missed examinations. I must be notified in advance of your absence for a make-up exam to be considered. Quizzes may not be made up and may not be announced.

## **EMERGENCY PROCEDURES:**

Southern Illinois University Carbondale is committed to providing a safe and healthy environment for study and work. Because some health and safety circumstances are beyond our control, we ask that you become familiar with the SIUC Emergency Response Plan and Building Emergency Response Team (BERT) program. Emergency response information is available on posters in buildings on Campus, available on the BERT website ([www.bert.siu.edu](http://www.bert.siu.edu)), the Department of Public Safety's website ([www.dps.siu.edu](http://www.dps.siu.edu); disaster drop down) and in the Emergency Response Guidelines pamphlet, "Know how to respond to each type of emergency".

Instructors will provide guidance and direction to students in the classroom in the event of an emergency affecting your location. It is imperative that you follow these instructions and stay with your instructor during an evacuation of sheltering emergency. The Building Emergency Response Team (BERT) will provide assistance to your instructor in evacuating the building or sheltering within the facility.

## **EXPECTATIONS**

Students are expected to be present, punctual, and prepared to discuss the assigned readings.

Tests will cover text, handouts, lectures, assignments, discussions and PowerPoint's. Students should be prepared to answer questions not only from current chapters, but from previous chapters as well. Any item covered in class is fair game for quiz and test questions. There may be a number of **unannounced quizzes**; be prepared at any time for the administration of a quiz without prior notice.

**SIU Online (D2L)**: Students are expected to have a functioning @siu.edu email address. I am not responsible for servers, or email addresses, from any provider other than the university. Assignments, notes, course material, and grades may be posted electronically through D2L; therefore frequent checks of your D2L and SIU email will be expected.

## **ASSIGNMENTS:**

### **Readings:**

Students are required to keep current on the weekly reading assignments as outlined in the course schedule. Changes in the course schedule will be announced in class.

### **Power Point Presentations:**

Students will be responsible for two (2) Multiple Choice questions covering material from each chapter. Place the questions in a power point presentation WITH the correct answer attached. This assignment will be submitted via an assignment drop box in D2L in RAD 342. See drop box for the deadline date. No late assignments accepted. All assignments must be submitted to receive a grade for the course. Failure to submit all assignments will result in an incomplete for the course and the student will not be allowed to advance in the program.

### **Pathology Presentations:**

Each student will be required to research and report two (2) pathologies during the course of the semester. The pathologies will be randomly assigned; therefore, the due dates will vary. Reports must include the following information:

- disease name(s)
- classification
- etiology

- signs and symptoms
- general information
- radiographic presentation
- diagnosis
- treatment
- prognosis

Presentations will be given orally in class, at the time appropriate to the chapter and disease being discussed. Be prepared to discuss and answer any questions posed by the instructor or the class.

Students will also prepare and print a concise, well-organized, single-page, one sided, typed summary to be handed out to the instructor and each classmate at the time of the presentation. Students are encouraged to create a pathology binder from the handouts in order to help prepare for the ARRT examination. I do not need a copy of your presentation script; only the handout given to the class.

Each presentation must also include AT LEAST two images which clearly identify the pathology being presented. The computer will be available for PowerPoint presentations, flash drives, links to images, etc.

### **Evaluation and Point Value of Pathology Presentations:**

- Assignments earning an “A” grade will be of excellent quality, reflecting critical thinking, creativity and mastery of course material. They will be well organized and clear. They will be free of errors in syntax, grammar and format and will be typed. The standard percentile rank for an “A” grade is 93-100.
- Assignments earning a “B” will be of good quality, reflecting a solid grasp of course material. They will be well organized, but may contain some errors in syntax, grammar and format. They may be handwritten. The standard percentile range for a “B” grade is 85-92.
- Assignments earning a “C” will be of acceptable quality, reflecting familiarity with course material. They may be weak in syntax, grammar or formatting. The standard percentile range for a “C” is 77-84.
- Assignments earning a “D” will be of barely acceptable quality, they will contain weakness in syntax, grammar and formatting. They will be almost unacceptable, reflecting little understanding of course materials. The standard percentile range for a “D” is 70-76.

- Assignments earning an “F” grade will be of unacceptable quality. They will reflect little or no understanding of the course material. They may contain grievous errors in syntax, grammar and formatting. Any percentage below 70 will be considered failing.

**TENTATIVE SCHEDULE RAD 312 SPRING 2016**

DATE	LECTURE	ASSIGNMENT
Jan. 18, 2016	<u>Week 1</u> NO School SIUC Holiday: Martin Luther King, Jr. Birthday	
Jan. 20, 2016	Introduce course & syllabus. Introduction to Pathology	Chapter 1
Jan. 25	<u>Week 2</u> Continue Chapter 1	<i>Pathology Presentations (3)</i>
Jan. 27	Continue Chapter 1;	<i>Pathology Presentations (3)</i> <b>Omit Chapter 2</b>
Feb. 1, 2016	<u>Week 3</u> Finish Chapter 1	Chapter 3- “Respiratory System” <i>Pathology Presentations (3)</i>
Feb. 3	Begin/Continue Chapter 3	<i>Pathology Presentations (3)</i>
Feb. 8	<u>Week 4</u> Continue Chapter 3	<i>Pathology Presentations (2)</i>
Feb. 10	Finish Chapter 3	<i>Pathology Presentations (2)</i>
<b>Feb. 15<sup>th</sup></b>	<b><u>Week 5</u></b> <b>Test #1 over Chapters 1 &amp; 3</b>	
Feb. 17	Begin Chapter 4 “Skeletal System”	<i>Pathology Presentations (2)</i>
Feb. 22	<u>Week 6</u> Continue Chapter 4	<i>Pathology Presentations (2)</i>
Feb. 24	Finish Chapter 4	<i>Pathology Presentations (2)</i>
Feb. 29	<u>Week 7</u> Finish Chapter 4 if needed; Begin Chapter 5 “Gastrointestinal System”	<i>Pathology Presentations (2)</i>
March 2, 2016	Continue Chapter 5	<i>Pathology Presentations (2)</i>
March 7	<u>Week 8</u> Continue Chapter 5	<i>Pathology Presentations (2)</i>
March 9	<b>Test #2 over Chapters 4 &amp; 5</b>	
<b>March 14 - 18</b>	<b><u>Week 9</u></b> <b>SPRING BREAK – NO CLASS</b>	



DATE	LECTURE	TOPIC/ASSIGNMENT
March 21	<u>Week 10</u> Begin Chapter 6 “Urinary System”	<i>Pathology Presentations (2)</i>
March 23	Continue Chapter 6	<i>Pathology Presentations (2)</i>
March 28	<u>Week 11</u> Finish Chapter 6 if needed Begin Chapter 7 “Cardiovascular System”.	<i>Pathology Presentations (2)</i>
March 30	Begin/Continue Chapter 7	<i>Pathology Presentations (2)</i>
April 4, 2016	<u>Week 12</u> Continue Chapter 7	<i>Pathology Presentations (2)</i>
<b>April 6</b>	<b>Test #3 over Chapters 6 &amp; 7</b>	
April 11	<u>Week 13</u> Begin Chapter 8 “Nervous System”	<i>Pathology Presentations (2)</i>
April 13	Continue Chapt. 8	<i>Pathology Presentations (2)</i>
April 18	<u>Week 14</u> Finish Chapter 8 if needed; Begin Chapter 9 “Hematopoietic System”	<i>Pathology Presentations (2)</i>
April 20	Continue Chapter 9	
April 25	<u>Week 15</u>	<i>Pathology Presentations (4)</i> <i>Pathology Presentations (4)</i>
April 27		<i>Pathology Presentations (4)</i> <i>Pathology Presentations (4)</i>
<b>May 2, 2016</b>	<b><u>Week 16</u></b> <b>Test #4 over selected pages in Chapters 8-12</b>	
May 4	Review for FINAL	
<b>May 11 (tentative)</b>	<b>Week 17</b> <b>Final Comprehensive Exam</b>	