IDAHO STATE UNIVERSITY
Radiographic Science Program
RS 3320L Radiographic Imaging Applications Laboratory Practicum
Course Syllabus

Course Credit:	1 Credit	
Time and Location:	Monday	1:00 p.m. - 2:50 p.m. (sec. 1)
		3:00 p.m. - 4:50 p.m. (sec. 2)
	Nursing Building, Rm 120	

Instructor:	Wendy Mickelsen, MHE, RT (R)(M)
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Overview:
This course is structured to provide the practical application of theory and principles covered in RS 3320 for image acquisition and processing a variety of different types of radiographic recording media including: computed radiography (CR), and direct-capture radiography (DR).

Students will make x-ray exposures utilizing several phantoms. There will be several separate lab assignments.

In this course students will be instructed in the utilization of imaging equipment, accessories, optimal exposure factors, and proper patient positioning to minimize radiation exposure to the patients, themselves, and others. These practices assure radiation exposures are kept as low as reasonably achievable (ALARA).

Course Learning Objectives/Goals: This lab uses a "hands on approach" which prepares students to practice as a radiographer. Students have the opportunity to simulate in a laboratory setting the skills needed to efficiently process diagnostic radiographic images utilizing computed radiography (CR), and direct-capture radiography (DR). Additionally, the technical aspects of processing each type of radiographic recording media will be presented and phantoms will be utilized to make exposures. Radiographic images will be critiqued, which gives the student the opportunity to interact and to be quizzed by the course instructor. Upon completion of the course the student will be ready to competently process radiographic images in a clinical setting.

The **Secretary's Commission on Achieving Necessary Skills (SCANS)**: This commission was appointed by the Secretary of Labor to determine the skills people need to succeed in the work place. The Commission's fundamental purpose is to encourage a high-performance economy characterized by high-skill, high-wage employment. The Commission's research found that effective job performance is what business calls *workplace know-how*. This know-how has two elements: competencies and a foundation. The SCANS report identifies five competencies and a three-part foundation of skills and personal qualities that lie at the heart of job performance. While the Commission's work ended with the report, its recommendations must be implemented; as the report stated, "...defining competencies and a foundation is not enough. Schools must teach them. Students must learn them."

http://www.academicinnovations.com/report.html

Description of SCANS competencies are as follows:

A Three Part Foundation	
1. Basic Skills	reads, writes, performs arithmetic and mathematical operations, listens and speaks
2. Thinking Skills	thinks creatively, makes decisions, solves problems, visualizes, knows how to learn, and reasons
3. Personal Qualities	displays responsibility, self-esteem, sociability, self-management, and integrity and honesty
The Five Competencies	
4. Resources	identifies, organizes, plans and allocates resources
5. Interpersonal	works with others
6. Information	acquires and uses information
7. Systems	understands complex interrelationships
8.Technology	works with a variety of technologies

Each of these foundations and competencies are listed after the objective that meets the competency or skill set described above.

Course Learning Outcomes:

Upon completion of these laboratory sessions the student will be able to:	**SCANS**
Demonstrate the proper warm up procedure for radiographic room 1 & 2 in the lab.	1,2,4,5,6,7,8
Perform all steps necessary for radiographic image acquisition utilizing CR & DR technology.	1,2,6
Demonstrate the proper procedure used to imprint patient demographic information when using CR, and DR.	1,2,6
Identify proper exposure indicator values and discuss the importance of each: lgM, S, EI	1,2,6
Perform image duplication.	1,2,6
Analyze radiographs for accuracy of positioning and/or technique.	1,2,3,6
Critique radiographs based on evaluation criteria provided in the textbook and provided by the instructor.	1,2,3,5,6

Code of Ethics: RS 3320L adheres to the ISU Code of Conduct. In particular, academic dishonesty, however small, creates a breach in academic integrity. A student's participation in this course comes with the expectation that his or her work will be completed in full observance of the ISU Code of Student Conduct.

Academic Dishonesty Policy: Academic dishonesty (cheating, plagiarism, etc.) will not be tolerated in this class and may result in suspension or dismissal from this course and from the

program. Cases will also be referred to the Dean of Students for possible dismissal from the university.

Cheating includes, but is not limited to, (1) use of any unauthorized assistance in taking quizzes, tests, or examinations; (2) dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or completing other assignments; or (3) the acquisition of tests or other academic materials belonging to the university faculty or staff without permission.

Plagiarism includes, but is not limited to, the use of, by paraphrase or direct quotation without correct recognition, the published or unpublished works of another person. The use of materials generated by agencies engaged in "selling" term papers is also plagiarism.

Many components RS 3320L are designed to be highly interactive. Students are encouraged to take full advantage of the many resources available including Internet sites, handouts and workbooks, other textbooks and journals, faculty, and peers. This interactive collegial learning environment is conducive for life-long learning.

Classroom Procedure

1. **Attendance:** You are expected to attend lab 100% of the time during your scheduled section. If something urgent arises you may trade lab sections with another student. **There are no make-up sessions for missed labs, if you miss it you will receive a 0.**

2. **Grading Procedure:**

There are several lab assignments each worth 100 points. Each assignment must be completed and turned in prior to leaving. Laboratory assignments handed in late will be deducted 10% for each day past the scheduled turn in date, resulting in a 0% if one week or more late.

Radiographic images are taken and labeled individually. This is a mandatory requirement to receive all of the points possible during each lab session.

In addition, it is a requirement to complete all of the labs offered during the semester. An incomplete will be issued if this requirement is not met.

Letter grades will be awarded as follows:

+/- System			
93-100%	A	73-76%	C
90-92%	A-	70-72%	C-
87-89%	B+	67-69%	D+
83-86%	B	63-66%	D
80-82%	B-	60-62%	D-
77-79%	C+	59% Below	F

Note: A grade of C or better is required in this course in order to receive a degree from the Department of Radiographic Science.

6. **Radiation Monitoring:** Students must wear their TLD during each lab session. Failure to wear the TLD will result in the student being required to remain OUTSIDE of the lab during each radiographic exposure.

7. **Cell phone policy:** Cell phones should not be used in class. They should be place in silent or vibrating mode or turned off. Additionally receiving and retrieving text messages should not occur during class or in labs. If you need to communicate to someone outside of the class in an emergency situation please inform the instructor so accommodations to this policy may be made.

Disability Services: Students with disabilities who wish to have accommodations provided by the University must self-identify with Disability Services (236-3599) in order to have accommodations provided. Information and applications are available in the Center and may be picked up in person or requested by telephone. The URL is http://www.isu.edu/ada4isu/