

Idaho State University
Radiographic Science Program
R.S. 1105 Introduction to Radiographic Science
Course Syllabus

Course Credit: 1 Credit

Time: This is a WEB COURSE

Instructor: Christopher Wertz, MSRS, RT(R)

Phone: (208) 282-2871

Email: wertchr2@isu.edu

Required Textbook: Introduction to Radiologic Technology, 7th Ed., Gurley and Callaway

Course Description: This course will provide the student with insight into a career in radiography by examining the historical foundation to the present status in the health care delivery system. The course is taught online; therefore, it is recommended for the motivated self paced student. It will introduce the student to the professional organizations in radiography and provide an understanding of future career mobility. Radiation protection, professional, moral and legal ethics and radiation measurement and exposure will be presented to provide the student an introduction to radiography. The internet is used to navigate through several Web sites, and culminates by taking quizzes and tests online. The most current version of Mozilla Firefox is the recommended browsers for this course. The software used is called Moodle. This course is an interesting pedagogical adventure.

Method of Presentation: Internet, ISU elearning (Moodle).

Code of Ethics: RS 1105 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.

Course Learning Objectives/Goals: This course has been designed to allow students to gain an understanding of the role of a radiographer in the health care environment. Basic radiology vocabulary, simple machine characteristics, positioning nomenclature, legal/ethical standards, and radiation protection practices will be presented. The student will learn the process to become accepted in the Radiographic Science Program at Idaho State University and will discover the alternate career paths available in this field of study.

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."

Idaho State University
 Radiographic Science Program
 R.S. 1105 Introduction to Radiographic Science
 Course Syllabus

<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 meet the competency or skill set described above. The student should become familiar with each objective and be able to answer all questions at the end of each chapter.

Course Learning Outcomes:

Chapter I

Upon completion of this chapter the student will be able to:	SCANS
Explain the importance of having a thorough understanding of the technical aspects of radiologic technology.	1,2,8
Name the sources of information that most patients use when choosing a hospital.	2,3,4,6
List the inside and outside customers served by the health care facility.	2,3
Describe quality care from the patient's perspective.	1,2,6
List high-tech and high-touch aspects of health care.	1,2,5,6
Explain what is meant by a "moment of truth."	1,2
Outline a customer service cycle for a radiologic examination.	1,2,7
List ways to enhance telephone conversations.	1,2,3,5,7
Define empathy.	1,2,5

Idaho State University
 Radiographic Science Program
 R.S. 1105 Introduction to Radiographic Science
 Course Syllabus

Be able to use the conflict resolution model in customer service and high-stress situations.	1,2,4,5,7
--	-----------

Chapter II

Upon completion of this chapter the student will be able to:	SCANS
Identify needs common to all human beings.	1,2,5
Describe physiologic needs and their effect on learning.	1,2,3
Describe psychological needs and how you maintain a healthy social interaction with others.	1,2,3,4,5
Describe the way you perceive the world and your unique pattern of behavior for satisfying your needs.	1,2
Examine your lifestyle to identify causes of stress and conflict.	1,2,5
Examine your values and determine what is and what is not important to you.	1,2,3,4,5
Describe ways in which conflict may be resolved.	1,2,5,7
Set goals and plan for a lifestyle that has meaning, serenity, and a sense of wholeness.	1,2,3,4,5,7

The above objectives were written by the author of the textbook. Similar objectives can be found at the end of each chapter.

The following objectives are specific to the Web material taught in this course.

Upon completion of Web material course the student will be able to:	SCANS
Recall historical persons and their relationships to early discoveries.	1,2
Discuss the circumstances surrounding the discovery of x-rays, their early use, and development over the years since their discovery.	1,2,7,8
Understand the role of the radiographer as part of the medical team and be aware of ethical as well as medical and legal concerns regarding health care delivery.	1,2,3,5
Appreciate the roles of various agencies in regard to certification, accreditation, and continuing education.	1,2,6
Understand the uses and operation of various types of x-ray equipment to include an understanding of various x-ray procedures and the fundamentals of exposure technique.	1,4,6,7

Idaho State University
 Radiographic Science Program
 R.S. 1105 Introduction to Radiographic Science
 Course Syllabus

Appreciate and understand the need for safe radiation protection habits to include an understanding of the dangers of radiation, and radiation sensitivity.	1,2,6
Become familiar with various career options available to the graduate radiographer.	1,4,6
Demonstrate an appreciation for the Radiography program at Idaho State University by passing several quizzes designed to test your knowledge of the program.	1,3,7,8
Develop an understanding of several Imaging Modalities by navigating through a Web site designed for this purpose.	1,2,3,4,6,7,8
Be able to answer several questions that students ask concerning the profession by visiting the FAQ section on the Radiographic Science Program website.	1,2,3,4,6,8
Understand the process of matriculation at Idaho State University by navigating a Web site which contains the program guide.	2,6
Develop a working knowledge of the Moodle software.	1,2,4,6,7,8

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, 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.

Many components RS 1105 are designed to be highly interactive. Students are encouraged to take full advantage of the many resources available including internet sites, textbooks and journals, faculty, and peers. This interactive collegial learning environment is conducive for life-long learning.

What does this mean: I have allowed "printed material" from the Web site to be available to the student. This can present problems if not used properly. Material from quizzes and tests should be used for your OWN study endeavors. Because the quizzes are open book, you should not obtain the answers from other students prior to taking the quizzes. This defeats the intended learning methodology. Also, DO NOT obtain material (quizzes and tests) from previous students who have taken this course. I will consider this cheating and could result in an automatic 'F' for the quiz and the course. You may print the quizzes at your discretion, but I DO NOT allow PRINTING of tests.

Idaho State University
Radiographic Science Program
R.S. 1105 Introduction to Radiographic Science
Course Syllabus

When students submit their efforts for grading, they are attesting that they have abided by these rules. Instructions and Grading Procedures:

Again, this course is a Web course; therefore, we will not meet during the semester.

Personal correspondence to me should be via my personal email at wertchr2@isu.edu

Tests and Quizzes will be administered through the Moodle (ISU elearning) software. Failure to take a test or quiz prior to the deadline will result in an 'F' for that test. *Again, all correspondence to me should be via email, wertchr2@isu.edu .*

Grading of tests and quizzes will automatically be done upon completion as you submit them. This means you will know your grade on each test or quiz immediately after taking them. There will be six quizzes and three tests. Information for the quizzes can be obtained from the Web site material (see the outline for the course). Information for test questions comes directly from the textbook. You may use your book and notes when taking tests/quizzes, but the tests and quizzes are timed. ***The password to enter all of the tests and quizzes is "xray"***. This word must be typed in lowercase before you will be able to enter a quiz or test. This alerts me to the fact that you willingly are ready to participate in the testing process. Entering a quiz or test without taking it will result in an "F".

There is a practice test in the "testing section" of the course. Use this test to become familiar with the testing mechanism of Moodle. This grade will not be recorded in your grade book; however, there is valuable information in this test and I recommend taking it.

If the time expires while you are taking a test you will not be able to answer additional questions.

When taking QUIZZES the questions will be administered simultaneously. Students WILL HAVE the option to change answers prior to submitting the quiz.

If your computer fails while taking a test, restart your computer and go back into the test. The test will resume where you left off if you have not run out of time. If you have problems send me an email at wertchr2@isu.edu.

Additional Instructions for taking this Web Course: Here is the time breakdown for the quizzes and tests.

- Quiz #1--Tour Quiz---10 questions, 15 minutes
- Quiz #2--Imaging Modalities Quiz--33 questions, 40 minutes
- Quiz #3--Frequently Asked Questions Quiz--20 questions, 15 minutes
- Quiz #4--Program Guide Quiz-- 10 questions, 15 minutes
- Quiz #5--Web Image Review-- 20 questions, 30 minutes
- Quiz #6--Cross Word-- 10 questions, 15 minutes

Idaho State University
 Radiographic Science Program
 R.S. 1105 Introduction to Radiographic Science
 Course Syllabus

Test #1-- Chapters 1-8, 40 questions, 45 minutes
 Test #2-- Chapters 9-16, 40 questions, 45 minutes
 Test #3-- Chapters 17-26, 40 questions 45 minutes

Tests or Quizzes not taken by the deadline will receive a "ZERO". There will be no make up quizzes or tests unless you have **PREARRANGED** this with me prior to the deadline. Additionally, quizzes and tests can be reviewed by the student immediately after taking the quiz/test, but cannot be reviewed at a later time.

This is the breakdown of worth for each of the quizzes and tests and how it is applied to your final grade:

Grading:

Assessment Method	Percentage Value
6 online Quizzes over material the instructor has posted on the Web within Moodle	60%
3 unit exams on material from the textbook	40%

This grading Scale will be used:

+/- 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 Radiographic Science Program.

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/>