Course Syllabus

RADT 100 - Survey of Medical Imaging - Syllabus

Section 8085

Summer 2025

INSTRUCTOR: **Professor Bonnie Patterson, BA, RT(R)(M)(CT), CRT**
Contact Information: The most effective method to get a quick response is to use my email address: bpatterson@santarosa.edu
Please remember that email is not the same as texting and I will respond within 48 hours.

Office Hours: Available via Zoom, or phone, if needed. Please contact me via email and leave: (1) times and dates that might work for you, (2) your phone number, and (3) your email address.

Class Meetings: Class begins **Wednesday May 28, 2025**. Class ends **Thursday, July 17, 2025**. Final exam is due on **July 17, 2025, at 12:00pm (NOON) P.S.T., NOT MIDNIGHT**. This is an online course. Students can access all material on Canvas.

Course Description: A survey of careers and programs in medical imaging. Discussion of American Registry
of Radiologic Technologists (ARRT) code of ethics, licensing eligibility, and impacts of medical imaging on
general patient care and trauma care.

Methods of Instruction: Lectures which include, but are not limited to audio/video presentations, power point presentations, group discussions and guest presenters.

Contact Hours: Lecture Scheduled 35.00.
Total Out of Class Hours: 70.00
Total Student Learning Hours: 105.00

Units: 2.00
Title 5 Category: AA Degree Applicable

Certificate/Major Applicable: Both Certificate and Major Applicable

KEY INSTRUCTIONAL RESOURCES: Introduction to Radiologic Technology, Current Edition. Author - William
J. Callaway. ISBN # 978-0-443-11726-8. **9th edition**. The instructor prepared materials.

You can locate and order the textbook online via the SRJC Bookstore. Note that if you

want to pick your books up
in Petaluma, you need to order them from the Petaluma Bookstore website, or you can
order from another online source like Amazon. The electronic version is ok to have.

COURSE WEB SITE: Students will use the Canvas course web site for assignment
instructions, submitting
assignments, viewing classmate's work, sharing resources, and viewing grades.

REQUIRED SOFTWARE: You will need the following software for this course.

- Adobe Acrobat
- Open Office

COURSE CONTENT:
Student Learning Outcomes:
Upon completion of the course, students will be able to:
1. Compare and contrast various career opportunities in medical imaging.
2. Discuss the impacts of medical imaging on the general and special populations.

COURSE OBJECTIVES:
Upon completion of this course, students will be able to:
1. List and compare careers in medical imaging.
2. Compare and contrast the health science programs in higher education institutions.
3. List and compare the Systems International units as used in health care.
4. Explain the production of x-rays and their effects on matter.
5. List the radiation protection measures for self, patients, and other medical personnel.
6. Compare and contrast the elements of practical applications for radiation protection.
7. Compare and contrast elements of the ARRT (American Registry of
Radiologic Technologists) code of ethics.
8. Identify the eligibility possibilities for those applying for a state and/or national license.
9. List the impacts of medical imaging on the adult population
10. List the impacts of medical imaging on the gerontologic population.
11. List the impacts of medical imaging on the pediatric population.
12. Compare patient care practices in a trauma environment.
The current course objectives and Student Learning Outcomes may be found online
using the following link
and typing in "RADT 100" for the course selection: [Course Outline of Record](#)
TOPICS AND SCOPE:
All topics presented in lecture:
I. Measurement Systems and Their Application in Radiology and Pharmacology Problems,
Conversions
within and between Systems
A. Radiation dose calculation
B. System International units

II. X-Rays
A. Discovery
B. Production
C. Interactions with matter
III. Radiation Protection
A. Patient
B. Self
C. Other personnel
IV. Overview of Careers in Medical Imaging
A. Radiography
B. Computerized tomography
C. Magnetic resonance imaging
D. Medical sonography
E. Nuclear medicine
V. Professional Licensing/Ethics
A. American Registry of Radiologic Technologists (ARRT) code of ethics
B. Licensing eligibility
1. State requirements
2. Registry requirements
C. Background check
D. Applicants with a criminal background
VI. Patient Care
A. Gerontology
B. Pediatrics
C. Trauma

GRADING: GRADE ONLY
GRADING SCALE:
Writing Assignments: Maximum 25 points for each assignment.
Discussion Forum: Maximum 10 points for each assignment discussion.
Quizzes: Maximum 25 points for each quiz.
Final: Maximum 50 points
GRADING POLICY
Visit the "Grades" in Canvas to keep track of your grades. Grades are entered once a week. Posted grades and comments are available on the online Canvas grade book. **Please allow at least one week for your grades to be posted after the assignment due date.**

The standard SRJC Rad Tech grading policy will prevail in this course. All courses within the Radiologic Technology Program utilize the same grading scale to create consistent program standards, to be in alignment with industry employment standards and with those of the professional entities responsible for administering the certification exams.

The grading scale for accumulated points is as follows:
95 - l00% = A
85 - 94% = B

75 - 84% = C
65 - 74% = D
0 – 64% = F

Students must receive a minimum score of 75 %(C) to be considered as having passed this course in consistence with the Radiologic Technology program. Therefore, any grade below 75% in this class is not considered a passing grade, in accordance with the grading policies of the Radiologic Technology program.

Grading will be based on: The cumulative course grade will be based on performance in the following areas:

1. Assignments
2. Participation in Discussion Forums
3. Quizzes
4. Final Exam

ATTENDANCE POLICY: Students who do not log in to an online class after the second day of the semester will be dropped from the class. It is strongly advised that if you need to miss more than one class/homework deadline in a row that you contact the instructor to avoid being dropped from the class.

In accordance with the SRJC policies as stated in the course catalog under "Attendance," "a student may be dropped from any class when that student's absences exceed 10% of the total hours of class time."

https://catalog.santarosa.edu/catalog-2019-2020/attendance-requirements The parameters outlined in this section are in accordance with the SRJC attendance policy. The Sonoma County Junior College District policy on attendance can be found online at https://catalog.santarosa.edu/book/export/html/291. Students will be held to these established standards consistent with State and local requirements.

Assignments:

1. Assignments: Completed assignments must be on time to receive credit. **NO EXCEPTIONS.**
2. Attendance demonstrated by login each week.
3. Responsibility/initiative in planning and executing individual work.
4. Participation: Students are expected to participate and contribute to group discussions on all topics.
5. Completion of 5 quizzes.
6. Textbook reading (10 -20 pages per week).
7. Final examination.

There will be assignments each week. All assignments will be submitted electronically only through the website. Completed assignments must be on time to receive credit. All assignments are due by **11:59 PST** on the due date. **Late Assignments are not accepted. NO EXCEPTIONS. It is your responsibility to submit assignments by the due date. If any quiz or exam is missed, a zero will be recorded as the score.**

Quizzes and Exams: There will be weekly quizzes in addition to one final exam. The material comes from the textbook associated with this course, class lectures and supplemental materials. Quizzes and exams are taken online through Canvas at a scheduled time. It is expected that you will take this quiz on your own and not use the

textbook or internet to help you. If you leave the Canvas site to look something up on the internet, that move is noted in Canvas. This is considered a form of academic dishonesty, and your quiz or exam grade will be an F. **Make-up quizzes or exams are not allowed. NO EXCEPTIONS. It is your responsibility to take the online exams by the due date. If any quiz or exam is missed, a zero will be recorded as the score.**

Final Exam: The final exam will be an online-format comprehensive test (covers all material presented during the semester-long course). The lecture notes will be the main focus, but the content of the test will also include any other reading or written assignments associated with the topics. The format may include any combination of multiple choice, true-false, matching, or other methods appropriate for the online format. Final exam is due by **12:00 pm (*NOON*) PST, NOT Midnight on July 18, 2024. Make-up quizzes or exams are not allowed. NO EXCEPTIONS. It is your responsibility to take the online exams by the due date. If any quiz or exam is missed, a zero will be recorded as the score.**

ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES: In compliance with SRJC policy, all reasonable accommodations are made so long as the course standards are not fundamentally altered. If you need disability-related accommodations for this class, please provide the Authorization for Academic Accommodations (AAA letter) from the Disability Resources Department (DRD) as soon as possible to your instructors. If you have not received authorization from DRD, it is recommended that you contact them directly at https://drd.santarosa.edu/ as soon as possible to better ensure such accommodations are implemented in a timely fashion.

IMPORTANT DATES:

Day Class Begins: **Wednesday, May 28, 2025**

Day Class Ends: **Thursday, July 17, 2025**

Last Day to Add without instructor's approval: 5/30/2025

Last Day to Add with an add code: 6/6/2025

Last Day to Drop for refund: 6/1/2025

Last Day to Drop without a 'W' symbol: 6/6/2025

Last Day to Drop with a 'W' symbol: 7/3/2025

DROPPING THE CLASS:

If you decide to discontinue this course, it is your responsibility to officially drop it to avoid getting no

refund (after 10% of course length), a W symbol (after 20%), or a grade (after 60%). Also, for several

consecutive, unexplained absences, the instructor may drop a student.

INSTRUCTOR ANNOUNCEMENTS:

The instructor will post announcements on the "Instructor Announcements" page in Canvas throughout the semester. Canvas notifies students according to their preferred Notification Preferences as soon as the instructor creates an Announcement.

HOW TO BE SUCCESSFUL IN RADT 100:

When submitting assignments please pay close attention to grammar and spelling. Points are deducted for incorrect grammar and spelling.

Keep up with your work by following the schedule.

Complete all assignments, quizzes and exams on time. **Late assignments are not accepted. There are no make-up quizzes in this course. NO EXCEPTIONS!** If you are having difficulty with any aspect of the course at any point during this semester, contact the instructor sooner rather than later.

STANDARDS OF CONDUCT

We will conduct ourselves in a manner that reflects our awareness of common standards of decency and the rights of others. Students who register in SRJC classes are required to abide by the SRJC Student Conduct Standards https://student-conduct.santarosa.edu . Violation of the Standards is basis for referral to the Vice President of Student Services or dismissal from class or from the College. Collaborating on or copying of tests or homework in whole or in part will be considered an act of academic

dishonesty and result in a grade of 0 for that test or assignment. We encourage students to share information and ideas, but **not** their work.

OTHER IMPORTANT POLICIES AND PRACTICES ACADEMIC INTEGRITY: Although most students have likely heard about plagiarism during their years of schooling, it still is prevalent even in higher education. All written work is to be original; plagiarism of any kind will result in a failing grade on that assignment. The student will be referred to the Vice President of Student Services for discipline sanction, in cases of egregious violation. Please read the college policy/procedure on academic integrity at: https://rightsresponsibilities.santarosa.edu/academic-integrity

The use of any Artificial Intelligence Apps such as Chatbot, ChatGPT or OpenAI to complete any assignment is not allowed in this course.

SRJC Policy on Academic Honesty: Academic dishonesty is a violation of the Student Conduct Standards, and academic or administrative sanctions may be applied.

TYPES OF ACADEMIC DISHONESTY include, but are not limited to the following:

- Cheating: Any act of obtaining or attempting to obtain credit for academic work through the use of dishonest, deceptive or fraudulent means.
- Plagiarism: Any act of submitting the work of another, in whole or in part, as one's own without properly referencing the source. This includes use of direct quotations, paraphrases, ideas and facts that are not common knowledge, whether the sources are published or unpublished.
- Collusion: Any act where a student knowingly or intentionally helps or is helped by other student(s) to commit an act of academic dishonesty.
- Other Academic Misconduct: Any act such as stealing, altering grades, forging, sabotaging the work of others, lying or any other acts of academic dishonesty as deemed by instructor.

NETIQUETTE, OR WHY IS IT HARDER TO BE POLITE ONLINE?

Netiquette refers to using common courtesy in online communication. All members of

the class are expected to follow netiquette in all course communications. Use these guidelines

- Use capital letters sparingly. THEY LOOK LIKE SHOUTING.
- Forward emails only with a writer's permission.
- Be considerate of others' feelings and use language carefully.
- Cite all quotations, references, and sources (otherwise, it is plagiarism).
- Use humor carefully. It is hard to "read" tone; sometimes humor can be misread as criticism or personal
  attack. Feel free to use emoticons like :) for a smiley face to let others know you are being humorous.
- Use complete sentences and standard English grammar to compose posts. Write in proper paragraphs.
- Review work before submitting it.
- Text speech, such as "ur" for "your" or "ru" for "are you" etc., is only acceptable when texting

RESPECT: The best way to learn is through active participation. Therefore, we respect others by being polite even when we disagree with another's viewpoint.