

RADT 100 - Survey of Medical Imaging - Syllabus

Section 5372 Fall 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, using the inbox in Canvas will get a slower response.

Please remember that email is not the same as texting and I will respond within 48 hours.

Office Hours: Available via Zoom, phone or by appointment, 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 **Monday August 18, 2025**. Class ends **Friday, December 19, 2025 at NOON**. Final exam is due on Friday December 19, 2025 at 12:00pm (**NOON**). This is an online course. Students can access all material and activities anytime.

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: Canvas modules which include, but are not limited to audio/video presentations, power point presentations, group discussions, text reading assignments, written assignments, research papers and chapter question assignments.

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, 9th Edition. Author - William J. Callaway. ISBN # 978-0-443-11726-8.** Paperback or eBook version can be used. Instructor prepared materials.

You can locate and order textbooks 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.

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 course:

- 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.

Midterm: Maximum 100 points

Final: Maximum 100 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 - 100% = 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. Midterm Exam
5. Final Exam

ATTENDANCE POLICY: Students who do not log in and initiate participation by 11:59 p.m. Pacific Time to an online class by the second day of class (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 (5 -20 pages per week).
7. Two research papers
8. One midterm examination.
9. 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 **5:00 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 quizzes in addition to online midterm and final exam. The material comes from the textbook 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.**

Midterm: The midterm will be an online format test on specific material covered from the beginning of the course until a specified date which will be announced. The Canvas modules and text will be the main focus of the test, but the test content may also include any other reading or written assignments associated with the topic. The format may include any combination of multiple choice, true-false, matching, or other methods appropriate for online format. **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 Canvas modules and text will be the main focus, but the content of the test may 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 on December 19 , 2025. 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 accommodation is made so long as the course standards are not fundamentally altered. If you need disability-related accommodation 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: **Monday August 18, 2025**

Day Class Ends: **Friday, December 19, 2025 at NOON**

Last Day to Add without instructor's approval: 8/24/2025

Last Day to Add with instructor's approval: 9/7/2025

Last Day to Drop and be eligible for enrollment/course fee refund: 9/17/2025

Last Day to Drop without a 'W' symbol: 9/7/2025

Last Day to Drop with a 'W' symbol: 11/16/2025

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 grammar and spelling errors.

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 in this course is considered plagiarism and will be reported as academic dishonesty.

The assignments in this course assess student knowledge of the material presented.

With your grade, I certify that you understand the course material. The community and your future patients rely on this. When Artificial Intelligence apps are used to complete any of the course material, the learning and grading structure is compromised.

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 another 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.