

# RADIOLOGIC TECHNOLOGY (R T)

## R T 50 • ORIENTATION TO RADIATION SCIENCE TECHNOLOGIES

<b>Units:</b>	2
<b>Hours:</b>	2 lecture per week (24 total per quarter)
<b>Prerequisite:</b>	AHS 52; BIOL 40A, 40B and 40C or equivalent; R T 200L.
<b>Corequisite:</b>	R T 53.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Overview of Radiologic Technology as a career. Radiographic terminology, positioning for abdomen, vital sign assessment, introduction to x-ray protection and production, radiographic image formation, patient care, basic computer operation and Internet application. Overview of program structure and student services. Intended for students in the Radiologic Technology Program; enrollment is limited to students accepted in the program.

## R T 51A • FUNDAMENTALS OF RADIOLOGIC TECHNOLOGY I

<b>Units:</b>	4
<b>Hours:</b>	4 lecture per week (48 total per quarter)
<b>Prerequisite:</b>	R T 50.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Medical and radiographic terms. Basic positioning and anatomy, related to chest, abdomen, upper and lower extremities. Intended for students in the Radiologic Technology Program; enrollment is limited to students accepted in the program.

## R T 51B • FUNDAMENTALS OF RADIOLOGIC TECHNOLOGY II

<b>Units:</b>	4
<b>Hours:</b>	4 lecture per week (48 total per quarter)
<b>Prerequisite:</b>	R T 51A.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Continuation of R T 51A; radiographic anatomy, positioning and procedures, related to shoulder girdle, hip/pelvis, gastrointestinal tract, genitourinary system, and biliary system. Intended for students in the Radiologic Technology Program; enrollment is limited to students accepted in the program.

## R T 51C • FUNDAMENTALS OF RADIOLOGIC TECHNOLOGY III

<b>Units:</b>	4
<b>Hours:</b>	4 lecture per week (48 total per quarter)
<b>Prerequisite:</b>	R T 51B.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Continuation of R T 51B; radiographic anatomy, positioning and terminology, related to the skull, vertebral column, bony thorax, surgical, pediatric and trauma radiology. Intended for students in the Radiologic Technology Program; enrollment is limited to students accepted in the program.

## R T 52D • DIGITAL IMAGE ACQUISITION & DISPLAY

<b>Units:</b>	3
<b>Hours:</b>	3 lecture per week (36 total per quarter)
<b>Prerequisite:</b>	R T 55B.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Imparts an understanding of components, principles, and operation of digital imaging systems found in diagnostic radiology. Factors that impact image acquisition, display, archiving, and retrieval are discussed. Compare/contrast different types of digital systems. Principles of digital system quality assurance and maintenance. Intended for students in the Radiologic Technology Program; enrollment is limited to students accepted in the program.

## **R T 53 • ORIENTATION TO RADIOLOGIC TECHNOLOGY**

<b>Units:</b>	4
<b>Hours:</b>	150 laboratory per quarter (150 total per quarter) This is a 7 week clinical laboratory course.
<b>Corequisite:</b>	R T 50.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Orientation to radiation sciences, with emphasis on clinical participation. Intended for students in the Radiologic Technology Program; enrollment is limited to students accepted in the program.

## **R T 53A • APPLIED RADIOGRAPHIC TECHNOLOGY I**

<b>Units:</b>	4.5
<b>Hours:</b>	176 laboratory per quarter (176 total per quarter) This is an 11 week course - 16 hours clinical laboratory per week.
<b>Prerequisite:</b>	COMM 2 and R T 53.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

First of four courses that includes clinical participation and application of basic positioning, patient care, equipment manipulation, radiation protection, and image analysis. Emphasis is placed on chest, abdomen, and upper and lower extremity radiography. A clinical presentation is also required with the same emphasis. Intended for students in the Radiologic Technology Program; enrollment is limited to students accepted in the program.

## **R T 53AL • APPLIED RADIOGRAPHIC TECHNOLOGY LABORATORY I**

<b>Units:</b>	1
<b>Hours:</b>	3 laboratory per week (36 total per quarter)
<b>Prerequisite:</b>	R T 50.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

First of three courses that include laboratory participation and application of basic positioning, patient care, equipment manipulation, radiation protection, image analysis and technical radiographic experiments. Emphasis on abdomen, chest, upper and lower extremities, as learned in the companion lecture course, R T 51A. Intended for students in the Radiologic Technology Program; enrollment is limited to students accepted in the program.

## **R T 53B • APPLIED RADIOGRAPHIC TECHNOLOGY II**

<b>Units:</b>	4.5
<b>Hours:</b>	176 laboratory per quarter (176 total per quarter) This is an 11 week course - 16 hours clinical laboratory per week.
<b>Prerequisite:</b>	R T 53A.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Second of four courses that includes clinical participation and application of basic positioning, patient care, equipment manipulation, radiation protection, and image analysis. Emphasis is placed on the biliary tract, upper and lower gastrointestinal system, urinary system, and reproductive system. A clinical presentation is also required with the same emphasis. Intended for students in the Radiologic Technology Program; enrollment is limited to students accepted in the program.

## **R T 53BL • APPLIED RADIOGRAPHIC TECHNOLOGY LABORATORY II**

<b>Units:</b>	1
<b>Hours:</b>	3 laboratory per week (36 total per quarter)
<b>Prerequisite:</b>	R T 53AL.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Second of three courses that include laboratory participation and application of basic positioning, patient care, equipment manipulation, radiation protection, image analysis and technical radiographic experiments. Emphasis on shoulder girdle, hip/pelvis, esophagus, stomach, colon and urinary system, as learned in the companion lecture course, R T 51B. Intended for students in the Radiologic Technology Program; enrollment is limited to students accepted in the program.

## **R T 53C • APPLIED RADIOGRAPHIC TECHNOLOGY III**

<b>Units:</b>	4.5
<b>Hours:</b>	176 laboratory per quarter (176 total per quarter) This is an 11 week course - 16 hours clinical laboratory per week.
<b>Prerequisite:</b>	R T 53B.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Third of four courses that includes clinical participation and application of basic positioning, patient care, equipment manipulation, radiation protection, and image analysis. Emphasis is placed on the cervical, thoracic, and lumbar spines; sacrum and coccyx; and thorax and skull. A clinical presentation is also required with the same emphasis. Intended for students in the Radiologic Technology Program; enrollment is limited to students accepted in the program.

## **R T 53CL • APPLIED RADIOGRAPHIC TECHNOLOGY LABORATORY III**

<b>Units:</b>	1
<b>Hours:</b>	3 laboratory per week (36 total per quarter)
<b>Prerequisite:</b>	R T 53BL.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Third of three courses that include laboratory participation and application of basic positioning, patient care, equipment manipulation, radiation protection, image analysis and technical radiographic experiments. Emphasis on vertebral column, sacrum and coccyx, ribs, skull, trauma, surgical and pediatric, as learned in the companion lecture course, R T 51C. Intended for students in the Radiologic Technology Program; enrollment is limited to students accepted in the program.

## **R T 53D • APPLIED RADIOLOGIC TECHNOLOGY IV**

<b>Units:</b>	9
<b>Hours:</b>	27 laboratory per week (324 total per quarter) This is a clinical laboratory course.
<b>Prerequisite:</b>	R T 53C.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Fourth of four courses that includes clinical participation and application of basic positioning, patient care, equipment manipulation, radiation protection and image analysis. Emphasis is placed on pediatric radiography, venipuncture and fluoroscopy. A clinical presentation is also required with the emphasis on pathology. Intended for students in the Radiologic Technology Program; enrollment is limited to students accepted in the program.

## **R T 54A • BASIC PATIENT CARE FOR IMAGING TECHNOLOGY**

<b>Units:</b>	2
<b>Hours:</b>	2 lecture per week (24 total per quarter)
<b>Prerequisite:</b>	R T 50.
<b>Advisory:</b>	Not open to students with credit in R T 50B.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Basic concepts of patient care, including consideration for the physical and psychological needs of the patient and family. Routine and emergency patient care procedures and techniques as well as infection control protocols. Intended for students in the Radiologic Technology Program; enrollment is limited to students accepted in the program.

## **R T 54B • LAW & ETHICS IN MEDICAL IMAGING**

<b>Units:</b>	2
<b>Hours:</b>	2 lecture per week (24 total per quarter)
<b>Prerequisite:</b>	R T 54A; one of the following: ENGL 1A or 1AH or ESL 26.
<b>Advisory:</b>	Not open to students with credit in R T 50A.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

A fundamental background in ethics, historical and philosophical basis of ethics, as well as elements of ethical behavior, in regard to clinical practice. Misconduct, malpractice, legal and professional standards and the ASRT scope of practice. Intended for students in the Radiologic Technology Program; enrollment is limited to students accepted in the program.

## **R T 54C • RADIOGRAPHIC PATHOLOGY**

<b>Units:</b>	3
<b>Hours:</b>	3 lecture per week (36 total per quarter)
<b>Prerequisite:</b>	R T 54B.
<b>Advisory:</b>	Not open to students with credit in R T 51D.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Radiographic pathology of the respiratory, osseous, fractures, urinary, gastrointestinal, hepatobiliary, central nervous, hemopoietic and endocrine systems, bone densitometry and associated pathologies. Intended for students in the Radiologic Technology Program; enrollment is limited to students accepted in the program.

## **R T 55A • PRINCIPLES OF RADIOLOGIC TECHNOLOGY I**

<b>Units:</b>	3
<b>Hours:</b>	3 lecture per week (36 total per quarter)
<b>Prerequisite:</b>	R T 50; CHEM 25 or 30A.
<b>Advisory:</b>	Not open to students with credit in R T 52A.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Introduction to elementary principles of x-ray physics, technique, radiation protection and digital radiography. Intended for students in the Radiologic Technology Program; enrollment is limited to students accepted in the program.

## **R T 55B • PRINCIPLES OF RADIOLOGIC TECHNOLOGY II**

<b>Units:</b>	3
<b>Hours:</b>	3 lecture per week (36 total per quarter)
<b>Prerequisite:</b>	R T 55A.
<b>Advisory:</b>	Not open to students with credit in R T 52C.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Continuation of R T 55A. Expansion of the principles of x-ray physics, technique and radiation protection. This course emphasizes the circuitry of the x-ray machine, automatic exposure control devices, quality management, radiographic quality and the resulting effect on radiation protection. Intended for students in the Radiologic Technology Program; enrollment is limited to students accepted in the program.

## **R T 55C • PRINCIPLES OF RADIOLOGIC TECHNOLOGY III**

<b>Units:</b>	3
<b>Hours:</b>	3 lecture per week (36 total per quarter)
<b>Prerequisite:</b>	R T 55B.
<b>Advisory:</b>	Not open to students with credit in R T 52B.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Continuation of R T 55B, including physics and technique with the main focus on radiation protection of the patient and the occupational worker. Intended for students in the Radiologic Technology Program; enrollment is limited to students accepted in the program.

## **R T 61A • RADIOLOGY RESEARCH PROJECT I**

<b>Units:</b>	1
<b>Hours:</b>	1 lecture per week (12 total per quarter)
<b>Prerequisite:</b>	R T 53D.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Collaborative research project on a specialized area of radiography or other imaging modality. Submission of scientific poster display board at ACERT conference is required. Selected research topics to be approved by the instructor. This course is part 1 of 2 of the research project for students in the Radiologic Technology Program; enrollment is limited to students accepted in the program.

## **R T 61B • RADIOLOGY RESEARCH PROJECT II**

<b>Units:</b>	1
<b>Hours:</b>	1 lecture per week (12 total per quarter)
<b>Prerequisite:</b>	R T 61A.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

The second course in the R T 61 series will focus on expanding the depth and breadth of learning through the creation of a professional level oral presentation. Utilizing presentation software and other visual aids, groups will collaboratively display their mastery and understanding of the specialized imaging topic selected in R T 61A. This course also places emphasis on group collaboration and critical reflection of individual and group contributions to the project as a whole. Intended for students in the Radiologic Technology Program; enrollment is limited to students accepted in the program.

## **R T 62A • ADVANCED MODALITIES IN IMAGING**

<b>Units:</b>	3
<b>Hours:</b>	3 lecture per week (36 total per quarter)
<b>Prerequisite:</b>	R T 55B.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Specialized radiographic procedures related to magnetic resonance imaging and computerized tomography. Computer applications related to image capture, display, storage, and distribution. Sectional anatomy of the head, neck, thorax, abdomen, pelvis, vertebral column, and extremities. Intended for students in the Radiologic Technology Program; enrollment is limited to students accepted in the program.

## **R T 62B • SPECIAL PROCEDURES & EQUIPMENT**

<b>Units:</b>	3
<b>Hours:</b>	3 lecture per week (36 total per quarter)
<b>Prerequisite:</b>	R T 62A.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Continuation of R T 62A with emphasis on radiography of the skull, facial bones, mandible, and sinuses. Advanced radiographic procedures with emphasis on angiographic, cerebral, heart and interventional procedures, angiographic equipment, radiographic anatomy and pathology. Intended for students in the Radiologic Technology Program; enrollment is limited to students accepted in the program.

## **R T 62C • PROFESSIONAL DEVELOPMENT IN RADIOLOGY**

<b>Units:</b>	3
<b>Hours:</b>	3 lecture per week (36 total per quarter)
<b>Prerequisite:</b>	R T 62B.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Professional development in radiography, continuing education, and advanced modality opportunities. Intended for students in the Radiologic Technology Program; enrollment is limited to students accepted in the program.

## **R T 63 • ADVANCED RADIOGRAPHIC PRINCIPLES**

<b>Units:</b>	3
<b>Hours:</b>	3 lecture per week (36 total per quarter)
<b>Prerequisite:</b>	R T 62B.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Special emphasis on reviewing the content specifications for the ARRT Examination in Radiography; radiation protection, equipment operation and quality control, image acquisition and evaluation, imaging procedures, patient care and education. Intended for students in the Radiologic Technology Program; enrollment is limited to students accepted in the program.

## **R T 63A • RADIOGRAPHIC CLINICAL PRACTICUM I**

<b>Units:</b>	10.5
<b>Hours:</b>	32 laboratory per week (384 total per quarter) This is a clinical laboratory course.
<b>Prerequisite:</b>	R T 53D.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

First of three courses that includes clinical participation and application of basic positioning, patient care, equipment manipulation, radiation protection and image analysis. Emphasis on utilizing advanced modalities, including MRI/CT. Intended for students in the Radiologic Technology Program; enrollment is limited to students accepted in the program.

## **R T 63B • RADIOGRAPHIC CLINICAL PRACTICUM II**

<b>Units:</b>	10.5
<b>Hours:</b>	32 laboratory per week (384 total per quarter) This is a clinical laboratory course.
<b>Prerequisite:</b>	R T 63A.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Second of three courses that includes clinical participation and application of basic positioning, patient care, equipment manipulation, radiation protection and image analysis. Emphasis on advanced radiographic examinations of the skull, mandible, orbits, nasal bones, facial bones, para-nasal sinuses, mastoids and on special procedures. Intended for students in the Radiologic Technology Program; enrollment is limited to students accepted in the program.

## **R T 63C • RADIOGRAPHIC CLINICAL PRACTICUM III**

<b>Units:</b>	10.5
<b>Hours:</b>	32 laboratory per week (384 total per quarter) This is a clinical laboratory course.
<b>Prerequisite:</b>	R T 63B.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Third of three courses that includes clinical participation and application of basic positioning, patient care, equipment manipulation, radiation protection and image analysis. Emphasis on radiographic techniques and positioning in trauma radiology. Intended for students in the Radiologic Technology Program; enrollment is limited to students accepted in the program.

## **R T 64 • FLUOROSCOPY**

<b>Units:</b>	3
<b>Hours:</b>	40 lecture, 15 laboratory per quarter (55 total per quarter) This course does not meet a full 12 weeks.
<b>Prerequisite:</b>	R T 55C or current certification in Radiologic Technology or Radiation Therapy Technology.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Principles of radiation protection and fluoroscopic equipment, application of special equipment, illumination, anatomy and physiology of the eye and relationship of internal organs. Intended for students in the Radiologic Technology Program; enrollment is limited to students accepted in the program.

## **R T 65 • MAMMOGRAPHY**

<b>Units:</b>	3
<b>Hours:</b>	2.5 lecture, 1.5 laboratory per week (48 total per quarter)
<b>Prerequisite:</b>	R T 62A or current certification in Radiologic Technology.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Technical and procedural aspects of mammography including breast anatomy, physiology, positioning, compression, quality assurance techniques, implant imaging and mass localization. Successful completion of this course entitles the student to a Certificate of Completion of a 40 hour course in mammography education. Intended for students in the Radiologic Technology Program; enrollment is limited to students accepted in the program.

## **R T 70A • ADVANCED CLINICAL EXPERIENCE: INTERVENTIONAL RADIOGRAPHY**

<b>Units:</b>	13
<b>Hours:</b>	40 laboratory per week (480 total per quarter) This is a clinical laboratory course.
<b>Prerequisite:</b>	Current ARRT and CRT certification as a Radiologic Technologist; R T 62B and 62C.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade (Request for Pass/No Pass)
<b>Repeatability:</b>	Not Repeatable

Designed as a practicum in an interventional radiology department. Practical experience is implemented to expose the student to the principles of angiography with emphasis on mastery of the knowledge, insight, and skills required to perform angiographic procedures, with emphasis on the history of angiography, central venous access procedures, genitourinary and gastrointestinal nonvascular procedures and peripheral procedures.

## **R T 70B • ADVANCED CLINICAL EXPERIENCE: INTERVENTIONAL RADIOGRAPHY II**

<b>Units:</b>	13
<b>Hours:</b>	40 laboratory per week (480 total per quarter) This is a clinical laboratory course.
<b>Prerequisite:</b>	R T 70A.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade (Request for Pass/No Pass)
<b>Repeatability:</b>	Not Repeatable

Continuation of R T 70A, with emphasis on patient care, abdominal and pelvic procedures, thoracic procedures and neurological procedures.

## **R T 71 • ADVANCED CLINICAL EXPERIENCE: MAGNETIC RESONANCE IMAGING**

<b>Units:</b>	13
<b>Hours:</b>	40 laboratory per week (480 total per quarter) This is a clinical laboratory course.
<b>Prerequisite:</b>	Current ARRT and CRT Certification as a Radiologic Technologist; R T 62A and 62C.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

A practicum in a magnetic resonance department. Practical experience is implemented to expose the post-graduate radiologic technology student to the principles of MRI, with emphasis on mastery of the knowledge, insight, and skills required to perform MRI procedures.

## **R T 72 • VENIPUNCTURE**

<b>Units:</b>	1.5
<b>Hours:</b>	1 lecture, 1.5 laboratory per week (30 total per quarter)
<b>Prerequisite:</b>	R T 51C or current Certification in Radiologic Technology; current Health Care Provider CPR card.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Principles and practices of intravenous injection. Includes theory, demonstration, and application of venipuncture equipment and solutions, puncture techniques, complications, and post-puncture care. Meets state of California qualifications for didactic certification in venipuncture for Radiologic Technologists. Intended for students in the Radiologic Technology Program and/or currently certified Radiologic Technologists; enrollment is limited to students accepted in the program.

## **R T 74 • ADVANCED CLINICAL EXPERIENCE: COMPUTED TOMOGRAPHY**

<b>Units:</b>	14
<b>Hours:</b>	16 lecture, 480 laboratory per quarter (496 total per quarter) 2 hours lecture per week for the first 8 weeks; 40 hours clinical laboratory per week for 12 weeks. This is a clinical laboratory course with 16 hours of didactic content.
<b>Prerequisite:</b>	Current ARRT and CRT certification as a Radiologic Technologist; R T 62A and 62C.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

This course focuses on patient care, safety, image production and procedures related to computed tomography as well as clinical practicum in a computed tomography department. Practical experience is implemented to expose the post-graduate radiologic technology student to the principles of CT with emphasis on mastery of the knowledge, insight and skills required to perform CT procedures.



**R T 75 • SECTIONAL ANATOMY**

<b>Units:</b>	3
<b>Hours:</b>	3 lecture per week (36 total per quarter)
<b>Prerequisite:</b>	BIOL 40A, 40B and 40C or equivalent.
<b>Advisory:</b>	Not open to students with credit in DMS 51A.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable
<b>Cross-Listed:</b>	DMS 51A

Human anatomy of the head and body cavities is presented for the health care professional in transverse, sagittal and coronal imaging planes, with specific correlation to sonographic, computed tomographic and magnetic resonance imaging modalities. Anatomic reference points, intersecting planes and medical terminology are used to identify relationships of organs as well as pathologic alterations. DMS 51A and R T 75 deliver the same content: DMS 51A is intended for students in the Diagnostic Medical Sonography Program, and R T 75 is intended for students in the Radiologic Technology Program; enrollment is limited to students accepted in these programs.

**R T 200L • RADIOLOGIC TECHNOLOGY AS A CAREER**

<b>Units:</b>	1.5
<b>Hours:</b>	18 lecture per quarter (18 total per quarter)
<b>Degree and Credit Status:</b>	Non-Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	None
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Introduction to the radiological sciences and its role in health care. Focus on the use of ionizing radiation in the diagnosis and treatment of disease and on the health professionals responsible for providing this medical specialty. Discussion of requirements for the Radiologic Technology Program. Three hours hospital observation included.

**R T 201 • DIGITAL RADIOGRAPHY FOR RADIOLOGIC TECHNOLOGISTS**

<b>Units:</b>	0.5
<b>Hours:</b>	6 lecture per quarter (6 total per quarter)
<b>Prerequisite:</b>	Current certification in Radiologic Technology.
<b>Degree and Credit Status:</b>	Non-Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	None
<b>Grade Type:</b>	Letter Grade (Request for Pass/No Pass)
<b>Repeatability:</b>	Unlimited Repeatability

Exploration of how digital radiography allows for the reduction of patient dose. Various manufacturers' equipment and exposure indicators will be reviewed to align technical factor manipulation focusing on dose reduction, image quality factors, and patient safety. Restricted to licensed California Radiologic Technologists to meet continuing education requirements set forth by the Department of Public Health's Radiologic Health Branch.

**R T 202 • RADIATION SAFETY IN FLUOROSCOPY FOR RADIOLOGIC TECHNOLOGISTS**

<b>Units:</b>	0.5
<b>Hours:</b>	6 lecture per quarter (6 total per quarter)
<b>Prerequisite:</b>	Current certification in Radiologic Technology.
<b>Degree and Credit Status:</b>	Non-Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	None
<b>Grade Type:</b>	Letter Grade (Request for Pass/No Pass)
<b>Repeatability:</b>	Unlimited Repeatability

Exploration of radiation safety measures in the field of fluoroscopy for both fixed and mobile units. Emphasis will be placed on time, distance, shielding, radiobiology, isometric curves, and inverse square law, as well as reduction of radiation exposure to both patients and personnel. Restricted to licensed California Radiologic Technologists to meet continuing education requirements set forth by the Department of Public Health's Radiologic Health Branch.