

RADIOLOGIC TECHNOLOGY (RADT)

RADT A100 **2 Units (36 lecture hours)**

Radiologic Physics

Advisory: Proficiency in math skills up to intermediate algebra.

Grading Mode: Standard Letter

Transfer Credit: CSU.

The fundamentals of radiation and radiological physics. Operation of medical radiographic X-ray units. Study of the effects of radiation in humans. Introduction to health-physics instrumentation.

RADT A105 **1 Unit (13.5 lecture hours; 13.5 lab hours)**

Radiation and Imaging Safety

Prerequisite(s): Acceptance into the OCC Radiologic Technology Program (Cohort Restriction).

Grading Mode: Standard Letter

Transfer Credit: CSU.

A study of the effects of radiation in humans and the principles of protection as applied to radiography. Introduction to health-physics instrumentation with a study of radiation control regulations.

RADT A165 **1.5 Units (27 lecture hours)**

Beginning Radiologic Practice

Prerequisite(s): Acceptance into the OCC Radiologic Technology Program (Cohort restriction).

Grading Mode: Standard Letter

Transfer Credit: CSU.

Introduction to the radiology environment, emphasizing professionalism, humanistic approach to patients, medical/radiology records responsibilities, and medical/legal principles. Student obligations to clinical education are identified.

RADT A170 **3 Units (36 lecture hours; 72 lab hours)**

Radiographic Positioning and Critique

Prerequisite(s): Acceptance into the OCC Radiologic Technology Program (Cohort Restriction).

Grading Mode: Standard Letter

Transfer Credit: CSU.

Introduction to radiographic positioning principles, study of contrast media, acquaintance with x-ray apparatus, and laboratory practice and film critique of chest, abdominal studies and upper extremities.

RADT A171 **2 Units (128 lab hours)**

Clinical Lab 1

Prerequisite(s): Acceptance into the OCC Radiologic Technology Program (Cohort Restriction).

Co-requisite(s): RADT A105 and ALH A115.

Grading Mode: Standard Letter

Transfer Credit: CSU.

Clinical experience in an affiliated radiology department under the supervision of certified radiology and health care personnel. Radiographic skills in chest and abdomen procedures will be emphasized.

RADT A172 **2 Units (128 lab hours)**

Clinical Lab 2

Prerequisite(s): Acceptance into the OCC Radiologic Technology Program (Cohort restriction).

Grading Mode: Standard Letter

Transfer Credit: CSU.

Clinical experience in an affiliated radiology department under the supervision of certificated radiology and health care personnel utilizing a condensed format. Radiographic skills to include assisting with routine contrast media studies of the GI and GU tracts.

RADT A175 **3 Units (36 lecture hours; 72 lab hours)**

Radiographic Positioning and Critique 2

Prerequisite(s): RADT A170.

Grading Mode: Standard Letter

Transfer Credit: CSU.

Radiographic positioning principles, laboratory practice, and image analysis of the lower extremities, vertebral column, and basic skull. Overview of common pathologies of identified areas.

RADT A176 **7 Units (384 lab hours)**

Clinical Lab 3

Co-requisite(s): RADT A175.

Grading Mode: Standard Letter

Transfer Credit: CSU.

Clinical experience in an affiliated radiology department under the supervision of certified radiology and health care personnel. Radiographic skills to be emphasized will be fluoroscopic procedures, GU tract, upper and lower extremities, and routine spinal column.

RADT A177 **4.5 Units (256 other hours)**

Clinical Lab 4

Prerequisite(s): Acceptance into the OCC Radiologic Technology Program (Cohort restriction).

Grading Mode: Standard Letter

Transfer Credit: CSU.

Clinical experience in an affiliated radiology department under the supervision of certificated radiology and health care personnel. Radiographic skills to be emphasized will be routine skull radiography, portable radiography, minor special procedures, and introduction to pediatric and trauma radiography.

RADT A180 **3 Units (36 lecture hours; 54 lab hours)**
Radiographic Imaging
Prerequisite(s): Acceptance into the OCC Radiologic Technology Program (Cohort restriction).

Grading Mode: Standard Letter
Transfer Credit: CSU.

An introductory course to the factors influencing radiographic image formation, principles of film processing, digital imaging, exposure techniques, and essentials of radiographic image quality. Radiographic image critique skills will be developed.

RADT A185 **1 Unit (18 lecture hours)**
Radiographic Pathology
Prerequisite(s): Acceptance into the OCC Radiologic Technology Program or completion of a community college radiologic technology program and current or pending application.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Advanced study, identification, and critique of common radiographic pathologies in major body systems. Assists the learner in providing quality patient care.

RADT A211 **2 Units (128 lab hours)**
Advanced Clinical Mammography Lab
Prerequisite(s): Completion of a community college radiologic technology program and current or pending application for radiologic technologist licensure/certification.

Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Clinical experience in an affiliated radiology department under the supervision of certified radiology and health care personnel. Emphasis on independent radiography and decision making in clinical mammography. Professional growth and program exit skills are expected. Sixteen hours of clinical per week.

RADT A212 **2 Units (128 lab hours)**
Advances Clinical Lab Computed Tomography (CT)
Prerequisite(s): Graduate of a radiologic technology program and/or possession of a California Radiologic Technologist License or ARRT Radiologic Technologist certification.

Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Clinical experience in an affiliated radiology department under the supervision of certified radiology and health care personnel. Emphasis on independent radiography and decision making. Professional growth and program exit skills are expected. Sixteen hours of clinical per week.

RADT A213 **2 Units (128 lab hours)**
Advanced Clinical Lab 2 Computed Tomography
Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Clinical experience in an affiliated radiology department under the supervision of certified radiology and healthcare personnel. Emphasis on advanced imaging skills in Computed Tomography to include biopsies, drainage procedures, vascular exams, and other interventional exams in the Computed Tomography area. Professional growth and program exit skills are expected. Sixteen hours of clinical per week. PREREQUISITE: Graduate of a radiologic technology program and/or possession of a California Radiologic Technologist License or ARRT Radiologic Technologist certification.

RADT A216 **2 Units (27 lecture hours; 27 lab hours)**
Advanced Radiologic Patient Care
Grading Mode: Standard Letter
Transfer Credit: CSU.

Multi-skill preparation for the allied health professional including management communication skills and business management concepts, and contrast media administration limited to the upper extremity. 27 lecture hours, 27 lab hours.

RADT A221 **1 Unit (18 lecture hours)**
Topics in Mammography
Prerequisite(s): Students will need to be graduates of the OCC Radiologic Technology Program or licensed radiographers by the State of California.

Grading Mode: Pass/No Pass
This course will help prepare the student for the American Registry of Radiologic Technologists (ARRT) certification examination in Mammography.

RADT A222 **1 Unit (18 lecture hours)**
Topics in Computed Tomography
Prerequisite(s): Students will need to be graduates of the OCC Radiologic Technology Program or licensed radiographers by the State of California.

Grading Mode: Pass/No Pass
This course will help prepare the student for the American Registry of Radiologic Technologists (ARRT) certification examination in Computed Tomography.

RADT A265 **2 Units (45 lecture hours)**
Principles of Digital Imaging and Computer Applications
Grading Mode: Standard Letter
Transfer Credit: CSU.

Introduction to computer aided medical imagings as used in radiology departments. Applications include computed and digital radiography (CR/DR), CT, MRI, and other modalities. Basic imaging principles are applied, including physics, imaging protocols, and systems electronics. Software and display strategies for varying modalities will be discussed. Course does not include clinical experience. PREREQUISITE: Acceptance into the OCC Radiologic Technology Program (Cohort Restriction).

RADT A270 2.5 Units (36 lecture hours; 36 lab hours)**Radiographic Positioning and Critique 3****Prerequisite(s):** RADT A175.**Grading Mode:** Standard Letter**Transfer Credit:** CSU.

Radiographic positioning, film critique of advanced skull to include sinuses, TMJs, mastoid, mandible, facial bones, bony thorax and pelvic girdle. Introduction to ancillary imaging modalities including sectional anatomy.

RADT A271 9 Units (512 other hours)**Clinical Lab 5****Prerequisite(s):** RADT A177 or concurrent enrollment.**Grading Mode:** Standard Letter**Transfer Credit:** CSU.

Clinical experience in an affiliated radiology department under the supervision of certified radiology and health care personnel. Emphasis on independent radiography and decision making. Advanced cranial studies and torso exams will be emphasized.

RADT A275 3 Units (36 lecture hours; 36 lab hours)**Radiographic Positioning and Critique 4****Prerequisite(s):** RADT A270.**Co-requisite(s):** RADT A277.**Grading Mode:** Standard Letter**Transfer Credit:** CSU.

Introduction to advanced imaging principles and procedures to include diagnostic specials, interventional angiography CT and MR sectional anatomy as related to these imaging procedures. Principles of mammographic imaging per California state (RHB) regulations. Introduction to quality assurance principles and techniques. Elements of professional development.

RADT A276 2 Units (128 other hours)**Clinical Lab 6****Co-requisite(s):** RADT A270.**Grading Mode:** Standard Letter**Transfer Credit:** CSU.

Clinical experience in an affiliated radiology department under the supervision of certified radiology and health care personnel. Radiographic skills emphasized are advanced contrast media procedures, trauma, portable radiography, pediatric and surgical exams.

RADT A277 7 Units (384 other hours)**Clinical Lab 7****Prerequisite(s):** RADT A276 or concurrent enrollment.**Grading Mode:** Standard Letter**Transfer Credit:** CSU.

Clinical experience in an affiliated radiology department under the supervision of certified radiology and health care personnel. Emphasis on independent radiography and decision making. Professional growth and program exit skills are expected. Twenty-four hours clinical.

RADT A285 1 Unit (18 lecture hours)**ARRT Board Preparation****Grading Mode:** Standard Letter**Transfer Credit:** CSU.

Comprehensive categorical review of diagnostic radiologic technology in preparation for State and National Certification boards.

RADT A290 2.5 Units (45 lecture hours)**Applied Physics & Fluoroscopy****Grading Mode:** Standard Letter**Transfer Credit:** CSU.

Applied principles of physics for current radiographic equipment including fluoroscopy, image viewing and recording systems, and tomography. Study of knowledge and skills required to qualify student for fluoroscopy component of state licensure exam. Review of imaging concepts (analog and digital), x-ray beam quantity and quality, and radiation protection.