

# 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) and ALH A115 or concurrent enrollment.

**Co-requisite(s):** RADT A105

**Grading Mode:** Standard Letter

**Transfer Credit:** CSU.

This course consists of clinical lab experience and the application of radiologic technology skills. The course is a competency-based curriculum emphasizing radiologic technology skills in the thoracic and abdominal regions of the body.

## **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.

This course consists of clinical lab experience and the application of radiologic technology skills. The course utilizes a competency-based curriculum emphasizing radiologic technology skills in the upper and lower extremity regions of the body. Radiographic skill development includes 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.

This course consists of clinical lab experience and the application of radiologic technology skills. The course utilizes a competency-based curriculum emphasizing radiologic technology skill development. 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 lab hours)**  
**Clinical Lab 4**  
**Prerequisite(s):** Acceptance into the OCC Radiologic Technology Program (Cohort restriction).

**Grading Mode:** Standard Letter  
**Transfer Credit:** CSU.

This course consists of clinical lab experience and the application of radiologic technology skills. The course utilizes a competency-based curriculum emphasizing radiologic technology skill development. 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** **2 Units (36 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 A195** **1 Unit (18 lecture hours; 18 lab hours)**  
**Fluoroscopy**  
**Co-requisite(s):** Enrollment in the Radiologic Technology Program.

**Grading Mode:** Standard Letter  
**Transfer Credit:** CSU.

Study of knowledge and skills required to qualify student for fluoroscopy component of state permit. Review of imaging concepts (analog and digital), x-ray beam quantity and quality, and radiation protection of fluoroscopy.

**RADT A211** **2 Units (128 lab hours)**  
**Advanced Clinical Mammography Lab**  
**Prerequisite(s):** RADT A221.

**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. Students will need to successfully pass the RADT A221 course before starting the RADT A211 course.

**RADT A212** **2 Units (128 lab hours)**  
**Advanced Clinical Lab Computed Tomography (CT)**  
**Prerequisite(s):** RADT A222.

**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 independent radiography and decision making. Professional growth and program exit skills are expected. Sixteen hours of clinical per week. RADT A222 allows for students to be assessed prior to beginning clinical training.

**RADT A213** **2 Units (128 lab hours)**  
**Advanced Clinical Lab 2 Computed Tomography**  
**Prerequisite(s):** RADT A212.

**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. This is the last course in the sequence and builds on the skills from the previous two courses.

**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; 9 lab 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  
Not Transferable.

This course will help prepare the student for the American Registry of Radiologic Technologists (ARRT) certification examination in Mammography. NOT DEGREE APPLICABLE.

**RADT A222 1 Unit (18 lecture hours; 9 lab 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  
Not Transferable.

This course will help prepare the student for the American Registry of Radiologic Technologists (ARRT) certification examination in Computed Tomography. NOT DEGREE APPLICABLE.

**RADT A265 2 Units (45 lecture hours)****Principles of Digital Imaging and Computer Applications**

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

**Grading Mode:** Standard Letter  
**Transfer Credit:** CSU.

Introduction to computer aided medical images 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.

**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 lab hours)****Clinical Lab 5**

**Prerequisite(s):** Acceptance into the OCC Radiologic Technology Program (Cohort restriction) and RADT A177.

**Co-requisite(s):** RADT A270.

**Grading Mode:** Standard Letter  
**Transfer Credit:** CSU.

This course consists of clinical lab experience and the application of radiologic technology skills. The course is a competency-based curriculum emphasizing radiologic technology skills, with an emphasis on independent critical thinking and decision making. Advanced cranial studies and torso exams will be emphasized.

**RADT A275 2 Units (36 lecture 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 lab hours)****Clinical Lab 6**

**Co-requisite(s):** RADT A275.

**Grading Mode:** Standard Letter  
**Transfer Credit:** CSU.

This course consists of clinical lab experience and the application of radiologic technology skills. The course utilizes a competency-based curriculum emphasizing radiologic technology skills development. Radiographic skills emphasized are advanced contrast media procedures, trauma, portable radiography, pediatric and surgical exams.

**RADT A277 7 Units (384 lab hours)****Clinical Lab 7**

**Prerequisite(s):** RADT A276 or concurrent enrollment.

**Grading Mode:** Standard Letter  
**Transfer Credit:** CSU.

This course consists of clinical lab experience and the application of radiologic technology skills. The course utilizes a competency-based curriculum emphasizing radiologic technology skills. Emphasis on independent radiography and decision making. Professional growth and program exit skills are expected.

**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 1 Unit (18 lecture hours; 18 lab hours)**

**Applied Physics & Quality Control**

**Co-requisite(s):** RADT A277.

**Grading Mode:** Standard Letter

**Transfer Credit:** CSU.

Applied principles of physics for current radiographic equipment including image viewing and recording systems, and tomography. Understanding of the process and concepts of quality control as it relates to radiologic technology. Review of imaging concepts (analog and digital), x-ray beam quantity and quality, and radiation protection.