

# R T 54C: RADIOGRAPHIC PATHOLOGY

## Foothill College Course Outline of Record

Heading	Value
<b>Effective Term:</b>	Summer 2021
<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 &amp; 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

## Student Learning Outcomes

- Determine proper exposure factors, patient care and anatomical positioning based on manifestations of pathological conditions related to respiratory, osseous, fractures, urinary, gastrointestinal, hepatobiliary, central nervous, hemopoietic and endocrine systems
- Evaluate radiographic images of pathology of the respiratory, skeletal, urinary, gastrointestinal, central nervous, hemopoietic and endocrine systems in order to recognize the clinical manifestations while in the clinical setting.

## Description

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.

## Course Objectives

The student will be able to:

- Define basic terms related to pathology.
- Describe the basic manifestations of pathological conditions and their relevance to radiologic procedures.
- Describe the various systemic classifications of disease in terms of etiology, types, common sites, complications and prognosis.
- Describe the radiographic appearance of selected diseases.
- Identify radiologic procedures and interventional techniques appropriate for diseases common to each body system.
- Describe the bone densitometry procedure, anatomy, terminology, and associated pathology.

## Course Content

- Definitions/terminology
  - Pathology
  - Disease
    - Acute
    - Chronic
  - Pathogenesis

- Etiology
- Trauma
- Syndrome
- Manifestations of pathology and relevance to radiographic procedures
  - Causes of disease (process, examples)
    - Pathological
    - Traumatic
    - Surgical
  - Procedural considerations
    - Technical considerations
    - Patient considerations
  - Disease classifications and examples associated with each
    - Hereditary conditions
    - Degenerative
    - Metabolic
    - Neoplastic
    - Traumatic
  - Radiologic appearance of pathology
    - Skeletal and articular
    - Muscular
    - Gastrointestinal
    - Hepatobiliary
    - Respiratory
    - Urinary
    - Reproductive (female)
    - Hematopoietic
    - Endocrine
    - Nervous
    - Osseous
    - Fractures
  - Radiologic procedures
    - Modality type
      - CT
      - MRI
      - Radiography
      - Densitometry
    - Procedural steps
      - Anatomy
        - Hip
        - Lumbar spine
        - Terminology
        - Pathology
          - Osteoporosis
      - Body system

## Lab Content

Not applicable.

## Special Facilities and/or Equipment

Multimedia classroom, visualizer, viewboxes, internet access.

## Method(s) of Evaluation

Pathology assignment/presentation  
 Weekly quizzes  
 Midterm  
 Comprehensive final exam  
 Discussion participation

## Method(s) of Instruction

Lecture

Discussion  
Cooperative learning exercises  
Oral presentations

## **Representative Text(s) and Other Materials**

Eisenberg, Ronald. Comprehensive Radiographic Pathology, 7th ed.. 2020.

## **Types and/or Examples of Required Reading, Writing, and Outside of Class Assignments**

- A. Research and planning of group creative projects, oral presentation.
- B. Weekly reading assignments from text and outside sources, approximately 20-30 pages.

## **Discipline(s)**

Radiological Technology