



**MERCER**  
COUNTY COMMUNITY COLLEGE

## COURSE OUTLINE

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| <b>Course Number</b><br>RAD224          | <b>Course Title</b><br>Introduction to Pathology   | <b>Credits</b><br>2  |
| <b>Hours:</b><br>Lecture/Lab/Other<br>2 | <b>Co- or Pre-requisite</b><br>Pre-requisites: RAD217, RAD228<br>Co-requisites: RAD232, RAD240 | <b>Implementation<br/>Semester &amp; Year</b><br>Spring 2022 |

**Catalog description:**

Provides a survey of the disease process and pathological conditions. An in-depth study of diseases commonly demonstrated radiographically is presented.

**General Education Category:**  
Not GenEd

**Course coordinator:**  
Sandra L. Kerr, 609-570-3337, kerrs@mccc.edu

**Required texts/Supplements:**

**REQUIRED:** Title: Radiographic Pathology  
Author: Terri Ann Linn-Watson  
Publisher: Wolter Kluwer  
Edition: Second

**Course Student Learning Outcomes (SLO):**

**Upon completion of this course the student will be able to:**

1. Describe the pathology of physiologic processes and conditions that can affect tissues, organs, and body systems. [Supports ILG # 3]
2. Utilize pathology and radiologic imaging principles to develop the technical competence to perform diagnostic imaging procedures on patients afflicted with disease. [Supports ILG# 3, 11]
3. Develop an understanding of the intricacies associated with providing direct patient care with patients afflicted with disease in today's health care setting. [Supports ILG # 1, 3, 11]
4. Apply pathology principles to recognize the difference between abnormal and normal radiographic appearances. [Supports ILG # 3, 11]
5. Analyze the significance of the variety of imaging and medical procedures used in diagnosing diseases. [Supports ILG # 3, 11]

### **Course-specific Institutional Learning Goals (ILG):**

**Institutional Learning Goal 1. Written and Oral Communication in English.** Students will communicate effectively in both speech and writing.

**Institutional Learning Goal 3. Science.** Students will use the scientific method of inquiry, through the acquisition of scientific knowledge.

**Institutional Learning Goal 11. Critical Thinking:** Students will use critical thinking skills understand, analyze, or apply information or solve problems.

### **Units of study in detail – Unit Student Learning Outcomes**

**Unit I:** Pathology Principles, Neoplasia & Genetic Disorders [Supports Course SLO #1]

#### **Learning Objectives:**

The student will be able to:

- Define basic terms related to pathology.
- Discuss the classifications of disease.
- List the causes of tissue disruption.
- Describe the healing process.
- Identify complications connected with the repair and replacement of tissue.
- Identify diseases caused by or contributed to by genetic factors.

**Unit II - IV** Skeletal System [Supports Course SLOs #1, 2, 3, 4, 5]

**Unit V – VIII** Respiratory and Circulatory Systems [Supports Course SLOs #1, 2, 3, 4, 5]

**Unit IX –XII** Gastrointestinal and Urinary Systems [Supports Course SLOs #1, 2, 3, 4, 5]

#### **Learning Objectives:**

The student will be able to:

- Describe the various systemic classifications of disease in terms of etiology, manifestations, diagnosis, treatment, common sites, and prognosis.
- Classify diseases in terms of their attenuation of x-ray photons; correlate to technical factor selection.
- Describe the radiographic appearance of common diseases of the skeletal, respiratory, circulatory, gastrointestinal, and urinary system.
- Correlate diagnostic imaging procedures with medical procedures used to diagnose disease.
- Identify radiographic positions, imaging procedures, and interventional techniques appropriate for diseases common to each body system.
- Discuss the role of the radiographer when performing radiographic procedures on patients diagnosed with disease.

### **Evaluation of student learning:**

A grade of "C+" (77%) or higher must be achieved in the course to progress to RAD242. The following grading policy will be utilized:

Tests = 45%

Web Quest Project = 25%

Homework = 15%

Assessment Quizzes = 15%