



MERCER
COUNTY COMMUNITY COLLEGE

COURSE OUTLINE

Course Number RAD224	Course Title Introduction to Pathology	Credits 2
Hours: Lecture/Lab/Other 2	Co- or Pre-requisite Pre-requisites: RAD217, RAD228 Co-requisites: RAD232, RAD240	Implementation Semester & Year Spring 2025

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%