

Montgomery County Community College
 RAD 230
 Radiographic Pathology
 2-2-0

COURSE DESCRIPTION:

This course introduces theories of disease causation and the pathophysiologic disorders that compromise healthy systems as applied to the radiographer. Etiology, responses and radiographic manifestations will be discussed. Each major body system will be included to address radiographic appearance of disease and disease management. The major emphasis of this course is how radiographic examinations demonstrate different pathologies.

REQUISITES:*Previous Course Requirements*

- RAD 221 Radiographic Procedures III
- RAD 214 Clinical Education IV
- RAD 103 Radiation Protection and Biology

Previous or Concurrent Course Requirements

- RAD 224 Clinical Education V
- RAD 251 Imaging Professionals and Professional Readiness

LEARNING OUTCOMES Upon successful completion of this course, the student will be able to:	LEARNING ACTIVITIES	EVALUATION METHODS
1. Define and use basic terms related to pathology.	Lecture/Discussion Case Study Student Presentation Research Resources Computer Technology	Pathology Oral Presentation Rubric Research Paper Exam Questions Small Group Projects
2. Describe the basic manifestations of pathological conditions and their relevance to radiologic procedures.	Lecture/Discussion Case Study Student Presentation Research Resources Computer Technology	Pathology Oral Presentation Rubric Research Paper Exam Questions Small Group Projects Image Evaluation

LEARNING OUTCOMES	LEARNING ACTIVITIES	EVALUATION METHODS
3. Compare and contrast the various systemic classifications of disease in terms of etiology, types, common sites, complications and prognosis.	Lecture/Discussion Case Study Student Presentation Research Resources Computer Technology	Pathology Oral Presentation Rubric Research Paper Exam Questions Small Group Projects
4. Describe the radiographic appearance of selected diseases.	Lecture/Discussion Case Study Student Presentation Research Resources Computer Technology	Pathology Oral Presentation Rubric Exam Questions Small Group Projects Image Evaluation
5. Evaluate imaging procedures and interventional techniques appropriate for diseases common to each body system.	Lecture/Discussion Case Study Student Presentation Research Resources Computer Technology	Pathology Oral Presentation Rubric Exam Questions Image Evaluation
6. Explain imaging procedures used in diagnosing disease.	Lecture/Discussion Case Study Student Presentation Research Resources Computer Technology	Pathology Oral Presentation Rubric Research Paper Exam Questions Image Evaluation

At the conclusion of each semester/session, assessment of the learning outcomes will be completed by course faculty using the listed evaluation method(s). Aggregated results will be submitted to the Associate Vice President of Academic Affairs. The benchmark for each learning outcome is that *70% of students will meet or exceed outcome criteria.*

SEQUENCE OF TOPICS:

1. Definitions/Terminology
2. Classifications, Definitions, Examples. Sites, Complications and Prognosis
3. Trauma Diagnosis
4. Causes of Disease
5. Radiologic Pathology
 - a. Definitions
 - b. Etiology
 - c. Examples
 - d. Sites/Body Systems
 - e. Complications
 - f. Prognosis
 - g. Radiographic Appearance
 - h. Procedural Considerations
 - i. Technical Considerations

LEARNING MATERIALS:

Text:

Kowalczyk, N., Mace, J.D. (2022). *Radiographic Pathology for Technologists* (8th ed.).
St. Louis, MO: Mosby.

Other learning materials may be required and made available directly to the student and/or via the College's Libraries and/or course management system.

COURSE APPROVAL:

Prepared by: Cheryl L. Weiss, M.S., R.T. and Dr. Victoria Bastecki-Perez	Date: 12/2002
Revised by: Debra Poelhuis, M.S., R.T.	Date: 1/2009
VPAA/Provost Compliance Verification: Dr. John C. Flynn, Jr.	Date: 9/11/2009
Revised by: Debra Poelhuis, R.T., M.S.	Date: 10/26/2012
VPAA/Provost or designee Compliance Verification: Victoria L. Bastecki-Perez, Ed.D.	Date: 10/26/2012
Revised by: Cheryl L. DiLanzo, M.S., R.T.	Date: 10/28/2016
VPAA/Provost or designee Compliance Verification: Victoria L. Bastecki-Perez, Ed.D.	Date: 11/5/2016
Revised by: Dana Smith, M.S., R.T.	Date: 10/27/2022
VPAA or designee Compliance Verification:	Date: 10/27/2022



This course is consistent with Montgomery County Community College's mission. It was developed, approved and will be delivered in full compliance with the policies and procedures established by the College.