

**Course Objectives/Course Outline  
Spokane Community College**

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**Course Title: Radiation Pathology**

**Prefix and Course Number: RAD 223**

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**Course Learning Outcomes:**

**By the end of this course, a student should be able to:**

- Identify signs and symptoms of various tumors and disease as presented on images from CT, MRI, nuclear medicine, ultrasound, general diagnostics and angiography
- Explain the course of treatment from images found on the various imaging modalities
- Identify body system disease, anomalies and organ injuries as shown on imaging procedures
- Describe the difference between a normal and abnormal image
- Describe the principles used in the identification of anatomical and physiological disorders

**Course Outline:**

- I. Pathology Principles
  - A. Disease
  - B. Disease Classification
  - C. Causes of Diseases
  - D. Injuries
  - E. Inflammation
  - F. Repair
  - G. Fundamental Tissue
  - H. Altered Tissue Growth
- II. Contrast Media
  - A. Classifications
  - B. Characteristics
  - C. Composition Radiopaques
  - D. Nonionic vs. Ionic Contrast Media
  - E. Selection of a Contrast Medium
  - F. Procedures and Contrast Media
  - G. Reactions to Contrast Media and Their Treatment
- III. Skeletal System
  - A. Anatomy
  - B. Physiology and Function
  - C. Special Radiographic Procedures
  - D. Pathology
  - E. Joint Pathology
  - F. Dislocations

- IV. Nervous System
  - A. Anatomy
  - B. Physiology and Function
  - C. Special Imaging Procedures
  - D. Pathology
- V. Hepatobiliary System
  - A. Anatomy
  - B. Physiology and Function
  - C. Special Radiographic Procedures
  - D. Pathology
- VI. Gastrointestinal System
  - A. Anatomy
  - B. Physiology and Function
  - C. Special Radiographic Procedures
  - D. Pathology
- VII. Respiratory System
  - A. Anatomy
  - B. Physiology and Function
  - C. Special Radiographic Procedures
  - D. Pathology
- VIII. Reproductive System
  - A. Anatomy
  - B. Physiology and Function
  - C. Special Radiographic Procedures
  - D. Pathology
- IX. Urinary System
  - A. Anatomy
  - B. Physiology and Function
  - C. Special Radiographic Procedures
  - D. Pathology
- X. Endocrine System
  - A. Anatomy, Physiology and Function
  - B. Special imaging Procedures
- XI. Circulatory and Lymph Systems
  - A. Anatomy
  - B. Physiology and Function
  - C. Special Radiographic Procedures
  - D. Pathology