

## MASTER SYLLABUS

**COURSE NO. HOURS, AND TITLE:** RAD 374-3 - SECTIONAL ANATOMY and IMAGING APPLICATIONS

### **COURSE DESCRIPTION:**

This course focuses on identifying anatomical structures produced by Magnetic Resonance Imaging (MRI) and Computed Tomography (CT) scanners in the transverse, sagittal, coronal, and orthogonal planes. The MRI and CT images place emphasis on the head, neck, spine, chest, abdomen, pelvis, musculoskeletal (joints), and vascular system. Restricted to major.

**PREREQUISITES TO:** RAD 404 and 414

### **COURSE OBJECTIVES:**

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

1. Using CT and MRI images identify and label the pertinent anatomical structures of the brain, spine, head, neck, chest, abdomen, pelvis, musculoskeletal (joints), and vascular system.
2. Describe imaging applications used in CT and MRI to demonstrate the various anatomical structures.
3. Define the terminology used in sectional anatomy and imaging applications.

### **TOPICAL OUTLINE:**

<b>Topics</b>	<b>Percentage of Time</b>
I. Identify and Label Pertinent Anatomical Structures	80%
II. Describe Imaging Applications	10%
III. Define Pertinent Terminology	10%

### **TEXTBOOKS:**

#### **Required:**

Hofer, M. (2010). *CT teaching manual* (4<sup>th</sup> ed.). Germany: Georg Thieme Verlag

Weir, J. (2017). *Imaging atlas of human anatomy* (5<sup>th</sup> ed.). St. Louis: Mosby-Wolfe.