



Master Course Syllabus

Multiplanar Sectional Imaging – RTE 2055

Purpose of Document

This document contains important information for transfer. It may be helpful for you to retain a copy for your records, along with the class specific syllabus. This document will be especially helpful if you decide to later change your course of study.

Pikes Peak State College and the Colorado Department of Higher Education have determined that graduates should have a broad range of learning skills as well as discipline related skills. Both types of skills are detailed below.

Course Description

Offers advanced knowledge in multi-planar/multi-modality sectional anatomy for medical imaging professionals.

Credit Hours: 2

Contact Hours: 30

Required Course Learning Outcomes

1. Review body planes and landmarks as seen on multi-planar images.
2. Identify normal anatomy as demonstrated on multi-modality sectional images (CT, MRI, Ultrasound).
3. Differentiate between normal anatomical structures and common pathological variations in sectional planes.
4. Apply knowledge of relational anatomy to accurately localize structures within the head, thorax, abdomen, and pelvis.
5. Analyze the appearance of anatomical structures across different imaging modalities.

Topical Outline

- I. Introduction to Sectional Anatomy
 - a. Terminology and body planes (Axial, Sagittal, Coronal, Oblique)
 - b. Imaging modalities and their sectional characteristics (CT, MRI, US)
 - c. Relational anatomy principles
- II. Sectional Anatomy of the Head and Neck
 - a. Cranium and facial bones
 - b. Brain and sensory organs
 - c. Vascular structures of the head and neck
- III. Sectional Anatomy of the Thorax
 - a. Mediastinum and heart
 - b. Lungs and airway
 - c. Thoracic vasculature and bony thorax
- IV. Sectional Anatomy of the Abdomen and Pelvis
 - a. Digestive and accessory organs (Liver, Pancreas, Spleen)
 - b. Urinary system and adrenal glands

- c. Male and female reproductive systems
- d. Abdominal and pelvic vasculature
- V. Sectional Anatomy of the Musculoskeletal System
 - a. Spine and spinal cord
 - b. Major joints (Shoulder, Hip, Knee)
 - c. Soft tissue structures and musculature