#### **SYLLABUS**

LECTURE TITLE: Real Life Radiology

**LECTURER:** Alicia M. Yochum RN, DC, DACBR, RMSK

**LOCATION:** Wisconsin

**MODE OF** 

**PRESENTATION:** Power Point presentation with X-rays, MRI and CT images with

selected case studies

**TIME ALLOCATED:** 4 Hours

**DESCRIPTION OF PROGRAM:** This is a case-based lecture pulling from cases read for chiropractors across the nation. We will review a wide range of pathology from sports injury, arthritis, infection and neoplasm all of which have come through practicing Chiropractors doors. Proper utilization of imaging will be covered, and this will remind the practicing doctor that arthritis is not the only pathology that could come through their door!

### **HOUR 1**

- Search pattern identification
  - o A- natomy
  - o B- one
  - o C- artilage
  - o S- oft tissue
- We will review the search pattern for looking at x ray cervical, thoracic, lumbar spine.
- Arthritis
  - Ankylosing spondylitis
    - Differential diagnosis for sacroiliitis
    - Diffuse idiopathic skeletal hyperostosis.
- Tumor
  - Metastasis
  - o Multiple myeloma
  - o Lung Bronchogenic carcinoma
- Biomechanics
  - Lumbar spine radiography
  - o Leg length inequality-functional related to foot pronation, anatomical.
  - o Lovett curve in spine-Lovett reverse, Lovett failure
  - o Anterior or posterior shift in weight bearing.

### HOUR 2

- Soft tissue sports injury
  - Ultrasound rotator cuff tear
  - o Ultrasound Nerve impingement
- Fracture

- o Stress
  - Fibular stress fracture
- Acute- hand and foot
- Active vs Inactive Spondylolysis
  - o X ray, MRI, Clinical presentation and treatment
  - Pending Spondylolysis

## **HOUR 3**

- Infection
  - o Spinal
- Congenital
  - o Hip dysplasia
  - Slipped Epiphysis
- Spinal cord lesion
- Fibroid uterine
- Calcified granulomas
- Bone infarction
- Sickle cell anemia-Avascular Necrosis

# **HOUR 4**

- Medicolegal cases
  - Myelopathy
  - Acute spinal cord trauma

# Objectives

- 1. Identify the search pattern used for reading plain film radiography.
- 2. Implement search pattern identification to see pathology on the cases provided.
- 3. Better understanding of how to manage multiple different pathological conditions.
- 4. Have a good understanding of MRI sequences and signal intensities.