OTA 123 Applied Anatomy Lab

COURSE LEARNING OUTCOMES (CLOs)
1. Define a variety of terms related to anatomical segments, bony structures, joints, movements and planes, muscle contractures, and kinesiology.
2. Identify, locate, and palpate all the major bones in the UE and trunk and their landmarks, joints, ligaments, and muscles.
3. Identify origins and insertions for all of the major muscles groups and ligaments in the upper extremity and trunk.
4. Identify the innervation distribution patterns for all of the major muscle groups in the upper extremity and trunk.
5. Describe and demonstrate actions and planes of motion of the major UE muscle groups of the body.
6. Describe the principles of the kinesiology as they contribute to human motion and functional ability.
7. Demonstrate competence in performance of passive range of motion in the UE.
8. Demonstrate competence in the performance of measurement of joint range of motion (goniometry) in the UE.
9. Demonstrate competence in the performance of manual muscle testing in the UE.

Outline

I. Skeletal Anatomy Review
   A. Bones and bony structures
   B. Articular system
   C. Terminology related to position, planes and axis of motion, movements and kinesiology
   D. Palpation of landmarks, palpation skills

II. Introduction/practice Goniometry
   A. Range of motion and joint movements
   B. Limitation of movement
   C. Systems, types of instruments
   D. Procedures: positioning, stabilization, goniometer alignment, recording

III. Introduction/practice Muscle Testing
   A. Muscle anatomy and basic principles of kinesiology
   B. Principles/procedures of manual muscle testing

IV. Basic Review of Nervous System
   A. Segmental distribution for muscles-motor
   B. Sensory dermatomes
   C. Abnormal muscle function

V. The Shoulder
   A. Goniometry
   B. Muscle Testing
   C. Kinesiology

VI. The Elbow
   A. Goniometry
   B. Muscle Testing

VII. The Wrist and Hand
   A. Goniometry
B. Muscle Testing
C. Grasp and pinch strength
D. Dynamometer
E. Pinch Meter

VIII. The Spine
A. Cervical Range of Motion
B. Cervical Manual Muscle Testing

IX. Respiration
A. Anatomy of the thoracic cavity
B. Phases of respiration
C. Muscles of respiration
D. Use of inspirometer