

## STANDARD COURSE OUTLINE

**PHTA 2103                      Clinical Kinesiology Lab**

**PREREQUISITE      Admission into the Physical Therapist Assistant Program**

### **COURSE DESCRIPTION**

This course provides measure techniques, which include goniometric and functional manual muscle test procedures; and the development of manual palpation skills of bone and soft tissue structures.

**CREDIT HOURS:**                      3 credit hours / non-transferable

**TARGET AUDIENCE**                      Students admitted to the PTA Program

### **INSTRUCTIONAL MATERIALS**

Required:      Clarkson, H., (2000). Musculoskeletal Assessment. Baltimore:  
Williams & Wilkins

### **COURSE OBJECTIVES:**

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

1. Communicate verbally and nonverbally the required positions and patient responsibilities for the completion of goniometric measurement and manual muscle testing.
2. Communicate verbally and through written documentation the outcome of manual muscle tests and goniometric measurements, including any deviations from the standard procedure.
3. Use medical terminology to describe resting posture in any position.
4. Use medical terminology to describe the alignment of the trunk and extremities at rest and during activities.
5. Utilize safe body mechanics while handling patients, for the purpose of positioning and assessing range of motion, muscle length, and muscle strength.
6. Utilize appropriate handling techniques while assessing active/passive range of motion and muscle length/strength.
7. Assess normal and abnormal spinal posture, using a plumb line.
8. List the normal range of motion and end feel for each major joint.
9. Use a goniometer to assess range of motion and muscle length at each major joint.
10. Visually assess functional range of motion without the use of a goniometer.
11. Identify and differentiate between normal and abnormal joint movements.

12. Identify the normal end feel of each major joint, and explain the probable cause for any alterations.
13. Recognize muscle atrophy and hypertrophy.
14. Palpate and verbally identify superficial muscles, tendons, ligaments, and various other landmarks needed to accurately assess posture, strength, and range of motion.
15. Recognize indications, precautions, and contraindications for manual muscle test and range of motion assessments.
16. Assess the strength of every major muscle group, using the standard manual muscle test and scoring.
17. Develop a patient chart for a classmate, which will include height, weight, vital signs, body fat composition (using an impedance scale), and muscle length and strength for all major muscle groups.
18. Perform a comprehensive assessment of muscle length, strength, and joint range of motion on a mock patient, with minimal positional changes and within a reasonable time frame to reduce the risk of patient fatigue.
19. Use critical thinking skills to safely modify ROM and MMT positions, without compromising the validity of the test.
20. Relate musculoskeletal abnormalities to the abnormal posture that accompany them
21. Assess Q-angle and leg length