

STANDARD COURSE OUTLINE

PHTA 2102 Clinical Kinesiology

PREREQUISITE Admission into the Physical Therapist Assistant Program

COURSE DESCRIPTION

This course provides comprehensive coverage of the muscles, ligaments, joints, bones and peripheral nerves of the body, and application of biomechanical and kinesiological principles to analyze movement and muscle function.

CREDIT HOURS: 2 credit hours / non-transferable

TARGET AUDIENCE Students admitted to the PTA Program

INSTRUCTIONAL MATERIALS

Required:

Lippert LS. *Clinical Kinesiology for Physical Therapist Assistants*. Philadelphia: F.A.Davis Company; 2000.

Minor MAD, Lippert LS. *Kinesiology Laboratory Manual for Physical Therapist Assistants*. Philadelphia: F.A. Davis Company, 1998

COURSE OBJECTIVES

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

Course Objectives

1. Apply basic biomechanical principles to movement and to anatomical structures
2. Identify basic joint and muscle characteristics.
3. Given a diagram locate and name bones and bony landmarks of the UE's, LE's, and spine.
4. Given a diagram locate, describe and/or identify ligaments and joints of the UE's, LE's, and spine.
5. Identify muscles of the UE, LE, and trunk to include: origins and insertions, muscle action, muscle name.
6. Given a written description of a functional activity or limb movement, assess the following:
 - a. muscle(s) working
 - b. type muscle contraction (eccentric, concentric, isotonic, isometric etc.)
 - c. agonist and antagonist muscles

- d. influence of gravity (against gravity, gravity assisted, gravity eliminated)
 - e. differentiate between open and closed chain activities
 - f. MMT grade using 0-5 scale
7. Identify peripheral nerve innervation for each muscle covered in the UE, LE, and trunk.
 8. Describe and/or identify the purpose and procedures of selected special tests.