Prefix and Course Number: PTA 103 Course Title: Applied Anatomy Seminar Version Date: 04/29/2019

Course Learning Outcomes

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

- 1. Identify and/or define nervous and musculoskeletal anatomy as it relates to the following: 7B
 - a. Musculoskeletal anatomical segments, bony structures, and joints as they relate to movements and planes, muscle contractures, and kinesiology.
 - b. Major bones and their landmarks, joints, ligaments, and muscles.
 - c. Musculoskeletal origins and insertions for all of the major muscle groups and ligaments.
 - d. Nervous system's innervation distribution patterns for all of the major muscle groups.
 - e. Actions and planes of motion of the major muscle groups of the musculoskeletal system
- 2. Explain the principles of kinesiology as they contribute to human motion and functional ability. (7A)
- 3. Contrast and/or explain joint integrity and mobility as it relates to the following: (7D24g)
 - a. Normal joint movement of all the major joints of the body
 - b. Abnormal changes in the joint and its effect on function.
 - c. The purpose of performing passive range of motion
- 4. Describe the phases of respiration and identify the muscles involved in each phase. (7D24n)
- 5. Identify appropriate procedures for assessing joint mobility and muscle length for the following areas: (7D24g)
 - a. Normal and abnormal ranges
 - b. Geriatric and Pediatric populations
- c. Range of Motion measurements using goniometry and measuring functional range. (7D24I)
- 6. Identify strategies as it pertains to the following professional evidence-based literature assignments:
 - a. Construct a pathway including describing search tools to locate an evidenced-based article, which contain statistical data. (7D10)
 - b. Complete an annotated bibliography referencing an evidence-based publication. (7D11)
- 7. Regarding muscle performance: (7D24h)
 - a. Compare and contrast the different levels of manual muscle testing and describe the positions for each test.
 - b. Describe the positions for testing deep tendon reflexes, the spinal cord level commensurate with each, reflex grading system and components of the reflex arc.
 - c. Describe the considerations for assessing muscle performance for geriatric and pediatric populations