Northwest Arkansas Community College

Health Professions Division Physical Therapy Assistant Program

Discipline Code

PHTA

Course Number

2114

Course Title

Basic PT Tests and Measures Lecture

Catalog Description

This course provides contraindications and precautions for goniometric measurement and functional manual muscle test procedures, the location of commonly used bony landmarks and soft tissue structures, and normal and abnormal postural alignment assessment.

Prerequisites

Planned application to the Physical Therapist Assistant Program with completion of all PTA Program pre-requisites.

Credit Hours

4 credit hours

Contact hours

52.5 lecture contact hours

Load hours

4 load hours

Semesters Offered

Summer

ACTS Equivalent

None

Grade Mode

A-F

Learning Outcomes

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

- 1. Describe, list, and/or identify the required patient positions for the completion of goniometric measurement and manual muscle testing.
- 2. Describe, list, and/or identify the bony landmarks utilized for goniometric

measurement for the axis, stationary arm and moveable arm.

- 3. Given a patient scenario assess the manual muscle grade and/or correct patient position for the manual muscle test, and the muscle(s) assessed.
- 4. Use medical terminology to describe resting posture in any position.
- 5. Given a picture or diagram assess normal and abnormal spinal posture.
- 6. List and/or identify the normal range of motion and end feel for major joints.
- 7. Given a diagram or picture visually assess functional range of motion without the use of a goniometer.
- 8. Given a written description identify and differentiate between normal and abnormal joint movements.
- 9. Identify the normal end feel of each major joint, and explain the probable cause for any alterations.
- 10. Recognize muscle atrophy and hypertrophy.
- 11. List and/or identify indications, precautions, and contraindications for manual muscle test and range of motion assessments.
- 12. List the description and corresponding name of each MMT grade from 0-5.
- 13. Given a scenario, assess the strength of major muscle groups, using the standard manual muscle test and scoring.
- 14. Relate musculoskeletal abnormalities to the abnormal posture that accompany them.
- 15. Apply basic biomechanical principles to movement and to anatomical structures
- 16. Identify basic joint characteristics.
- 17. Given a bone or diagram identify and name bones and bony landmarks of the UE's, LE's, TMJ and spine.
- 18. Given a muscle name identify the muscle: origins and insertions, and muscle action.
- 19. 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
- 20. Differentiate between the cervical, thoracic, and lumbar spine for function of vertebral curves, movement available.

- 21. Given a written description differentiate between quiet inspiration, deep inspiration, forced inspiration, forced inspiration, forced expiration and identify and/or list the muscles working.
- 22. Demonstrate basic understanding of the TMJ joint to include: muscles, muscle actions, joint type, and function.
- 23. Identify loose-packed and closed-packed position for selected joints
- 24. Recognize definitions for various end feels.
- 25. Identify &/or describe a variety of common joint deformities
- 26. Identify and provide the correct terminology for a variety for positions. Supine, Prone, Quadruped, Half sitting, Long sitting, Tall kneeling, Half kneeling.

General Education Outcomes Supported

- Students develop higher order thinking skills.
- Students can employ a variety of sources to locate, evaluate, and use Information.
- Students gain greater awareness of cultural perspectives.
- Students can write clear, coherent, well-organized documents, substantially free of errors.
- Students develop effective oral communication skills.