

Virginia Western Community College
PTH 121
Therapeutic Procedures I

Prerequisites

PTH 151 and PTA program placement

Course Description

Prepares the students to properly and safely administer basic physical therapy procedures utilized by physical therapist assistants. The procedures include therapeutic modalities. Procedures may include therapeutic exercise, electrotherapy and cardiopulmonary rehabilitation. Part I of II.

Semester Credits: 5 Lecture Hours: 3 Lab: 4

Required Materials

1. *Therapeutic Exercise: Foundations and Techniques, 7th edition* by Carolyn Kisner and Lynn Allen Colby; ISBN: 0803658508
2. PhysioU Subscription
3. APTA Student Membership (this membership will be used to access required resources for the course and courses throughout the remainder of the program).

Course Outcomes

At the completion of this course, the student should be able to correctly:

1. Identify the principles of therapeutic exercise.
2. Compare normal and abnormal responses to therapeutic exercise.
3. Compare the types of therapeutic exercise including their physiological effects.
4. Identify the steps in motor learning as it applies to the instruction of therapeutic exercise.
5. Describe the role of the PTA in prevention, health, and wellness.
6. Identify the indications, contraindications, precautions, and principles of the following types of therapeutic exercise:
 - a. Stretching
 - b. Strengthening
 - c. Aerobic exercise
 - d. Aquatic exercise/hydrotherapy
7. Given a patient scenario, select the most appropriate therapeutic exercise intervention from within the physical therapist's plan of care and appropriate evidence-based resources.
8. Given a patient scenario, design a treatment session and treatment progression for a patient with an orthopedic diagnosis utilizing therapeutic exercise from within the physical therapist's plan of care and appropriate evidence-based resources.
9. Demonstrate the ability to appropriately adjust a treatment session for a simulated patient utilizing therapeutic exercise from the physical therapist's plan of care due to a change in patient status and communicate this change to the supervising physical therapist.
10. Based on clinical indications and the physical therapist's plan of care, recognize when therapeutic exercise interventions should not be used in patients with orthopedic diagnoses.

11. Recognize red flag signs and symptoms for patients with orthopedic disorders which would result in stopping treatment and initiating communication with the supervising physical therapist or other healthcare providers.
12. Demonstrate competence in performing the following types of therapeutic exercise:
 - a. Stretching
 - b. Strengthening
13. Recognize the indications, contraindications, and the principles of proprioceptive neuromuscular facilitation of the peripheral joints.
14. Outline the modifications to therapeutic exercise required across the lifespan.
15. Demonstrate competence in performing upper and lower extremity PNF patterns.
16. Compare reciprocal inhibition and autogenic inhibition.
17. Differentiate the repair phases of soft tissue injury and the appropriate physical therapy treatment within each phase.
18. Recognize common musculoskeletal conditions, including appropriate physical therapy assessment techniques and treatment interventions.
19. Identify common musculoskeletal surgeries, including appropriate post-operative physical therapy treatment.
20. Develop an appropriate home exercise program for specific case examples utilizing interventions from within the physical therapy plan of care and integrating function-related exercises.
21. Demonstrate the ability to educate a simulated patient on a home exercise program.
22. Demonstrate the ability to perform an appropriate interview with a simulated patient with an orthopedic diagnosis prior to treatment to assess prior and current level of function, current health status, and current level of pain.
23. Identify the impairments, activity and participation limitations for a patient with an orthopedic diagnosis using the International Classification of Functioning, Disability and Health (ICF).
24. Compose accurate documentation and billing information for scenarios of patients with orthopedic diagnoses.
25. Display appropriate professional behaviors in all interactions with classmates and instructors by displaying at least three professional behaviors at an intermediate level.

Topical Description

This course will cover the following topics:

- Principles of, normal and abnormal responses to, indications, contraindications, and application of therapeutic exercise including:
 - Stretching
 - Strengthening
 - Aerobic exercise
 - Aquatic exercise/hydrotherapy
 - PNF
- The role of the PTA in prevention, health, and wellness
- Development of treatment plans for patients with orthopedic diagnoses based on the PT plan of care

- Principles of tissue repair and healing of soft tissue injuries.
- Common musculoskeletal conditions and surgeries, including appropriate physical therapy assessment techniques and treatment interventions.
- Development of home exercise programs.
- Application of the ICF model to patients with orthopedic diagnoses
- Documentation of treatment session for patients with orthopedic diagnoses.
- Communication with supervising PT regarding therapeutic exercise and patients with orthopedic diagnoses.

Notes to Instructors

- This course should follow all PTA program policies.