

STANDARD COURSE OUTLINE

PHTA 2241 & 2242 GAIT ANALYSIS & TRAINING, & LAB

PREREQUISITE Admission into the Physical Therapist Assistant Program (PTA)

COURSE DESCRIPTION

This course is designed to provide practical clinically based gait analysis used to implement and assess the effectiveness of gait training techniques. Instruction in gait and transfer training techniques and treatment protocols for specific diagnosis. Upon completion of this course, students will be proficient with various ambulatory devices, analysis of gait patterns, measuring and fitting ambulatory aids and special equipment.

CREDIT HOURS:

PHTA 2241 Gait Analysis & Training
1 credit hour / non-transferable
PHTA 2242 Gait Analysis & Training Lab
2 credit hours / non-transferable

TARGET AUDIENCE Students admitted to the PTA Program

INSTRUCTIONAL MATERIALS

Required:

1. Pierson, Frank (2002). Principles and Techniques of Patient Care
W.B. Saunders
2. O'Sullivan, Schmitz (2001). Physical Rehabilitation: Assessment & Treatment.
4th edition W.B. Saunders

COURSE OBJECTIVES:

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

GAIT ANALYSIS & TRAINING

1. Given a PT evaluation with goals and POC and/or mock patient demonstrate:
 - a. The ability to perform the following assessments: MMT, ROM, balance and coordination assessments, patient's cognitive status and alertness,

patient's and/or caregivers ability to follow instructions, safety and safety issues, architectural barriers in home, work and community, need for assistive devices, orthotics, or prosthetics, gait deviations and abnormalities, transfers, gait, and other ADL's.

- b. The ability to utilize information gained from assessments performed to assess and implement appropriate treatment strategies to include; assistive devices, gait patterns, strengthening exercises, stretching exercises, balance and coordination activities, recommendations for equipment, patient and/or caregiver education, recommendations for home modifications for a variety of diagnoses within the plan of care outlined by the supervising Physical Therapist to achieve short and long term goals.
- c. Provide instruction utilizing good verbal and non-verbal communication and terminology the patient and/or caregiver can understand to the patient and/or caregiver in the use of assistive devices, gait patterns, weight bearing status, prosthetic device care, residual limb care, orthotics, transfers, ambulation, wheelchair management, ADL's, safety issues in the home, work, and community, body mechanics, strengthening and stretching exercises within the plan of care established by the Physical therapist to achieve short and long term goals.
- d. Assess and recognize changes in the following: patient's cognition and mentation, physiological response to treatment and activity, degree of assistance needed for ADL's to include transfers and gait, skin condition while using orthotic and prosthetic devices; and take appropriate action which may include notifying the Physical Therapist prior to implementing the treatment.
- e. Identify stages of normal gait to include names of each state, muscles acting in each stage, type of muscle contraction, and ROM of various joints in each stage.
- f. Assess gait deviations and gait abnormalities and assess possible causes of these deviations and/or abnormalities and treatment strategies to improve the gait pattern, and patient's safety.
- g. Basic knowledge of function of variety of prosthetic and orthotic devices and their indications.
- h. Appropriate treatment strategies for each of the 4 stages of PT management of a patient who is undergoing an amputation to include: patient and/or caregiver education in any of the following: residual limb care, phantom limb sensation, sensory changes, stretching exercises, strengthening exercises, positioning, transfer and gait training, balance and

coordination training, w/c mobility and management, prosthetic care and management, ADL's, safety issues, architectural barriers and recommendations to improve safety and function, usual progression following an amputation,

- i. Meet discharge planning needs and follow-up care as outlined by the Physical Therapist in the plan of care within the legal and ethical abilities of the PTA outlined in the practice act.
- j. Understanding and utilization of universal precautions during lab practice and lab practicals.
- k. Recognize when the direction to perform an intervention is beyond the scope of a PTA and report and discuss with the Physical Therapist.
- l. Adjust interventions with in the plan of care established by the Physical Therapist in response to the patients signs and symptoms and report to supervising Physical Therapist.
- m. Complete documentation accurately, concisely, timely, and legibly following the guidelines required by state practice acts, and other regulatory agencies.
- n. Demonstrate appropriate verbal and non-verbal communication with the patient, caregivers, and Physical therapist in an effective, appropriate, capable manner.
- o. Knowledge of practice standards and ethics by following the plan of care outlined, notifying the Physical Therapist when appropriate, and practicing with in the PTA Practice Act and Ethics.
- p. Demonstrate ability to organize and provide education to other health care providers via inservice on assistive devices, gait, and transfers.

LAB PRACTICAL MODULE AND COURSE OBJECTIVES:

- 1. Given a mock patient, and PT initial evaluation, demonstrate the ability to assess appropriate treatment techniques for this particular patient and perform them correctly to meet the goals set by the PT within the parameters of the plan of care.
- 2. Demonstrate good communication skills to include verbal and non-verbal with a mock patient, and the ability to discuss and explain your treatment, the goals your addressing, and your rationale to the supervising PT.

3. Demonstrate ability to recognize when the direction to perform a patient treatment intervention is beyond the scope of the PTA practice act and/or standards of normal and ethical practice and report this to the PT.
4. Demonstrate good body mechanics during mock patient treatments and transfers.
5. Demonstrate conduct that reflects knowledge of practice standards that are legal, ethical, and safe in lab practical examinations.
6. Demonstrate ability to recognize changes in a patient's cognitive, mental or arousal level and appropriate action to take if there is a change.
7. Demonstrate safety awareness and correct guarding techniques, keeping the patient safe during all aspects of the treatment session.
8. Demonstrate ability to accurately document treatment in a SOAP note format.
9. Demonstrate ability to establish a therapeutic relationship with the patient using verbal and non-verbal communication, and instructing the patient clearly and concisely in terminology the patient can understand.
10. Be able to provide the rationale for your treatment selections based on knowledge of the developmental sequence, treatment strategies available, patient's functional level, patient's cognitive status, objective findings, goals, and parameters of the plan of care.
11. Demonstrate ability to adjust interventions within the POC established by the P.T. in response to patient clinical indications and changes in patients status and take appropriate action to include reporting to the P.T..
12. Recognize the impact of cultural and individual differences on treatment, communication and discharge planning.