Northwest Arkansas Community College

Health Professions Division Physical Therapy Assistant Program

Discipline Code PHTA

Course Number 2241

**Course Title** Gait Analysis and Training

## **Catalog 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 training techniques and treatment protocols for specific diagnosis. Upon completion of the course students will be proficient with various ambulatory devices, analysis of gait patterns, measuring and fitting ambulatory aids, transfer techniques, and special equipment.

#### **Prerequisites**

A list of required general education courses for each program is available on the PTA website and must be passed with a grade of C or better for students to be considered eligible for acceptance into the PTA program

**Credit Hours** 

1 credit hour

## **Contact hours**

15 lab contact hours

Load hours

1 load hour

Semesters Offered

Grade Mode A-F

# **ACTS Equivalent**

None

#### **Learning Outcomes**

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

1. Given a PT evaluation: a. Provide written recommendations on 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.

b. Provide written instruction utilizing appropriate terminology the patient and/or caregiver can understand to the patient and/or caregiver in the use of assistive devices, gait patterns, strengthening exercises, stretching exercises, 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, within the plan of care established by the Physical therapist to achieve short and long term goals.

c. When provided a written patient scenario, 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.

d. Identify stages of normal gait to include names of each stage, muscles acting in each stage, type of muscle contraction, and ROM of various joints in each stage.

e. 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.

f. Basic knowledge of function of variety of prosthetic and orthotic devices and their indications.

g. Appropriate treatment strategies for the 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,

h. 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.

i. Understanding and utilization of universal precautions

j. Recognize when the direction to perform an intervention is beyond the scope of a PTA and report and discuss with the Physical Therapist.

k. Adjust interventions within the plan of care established by the Physical Therapist in response to the patient's signs and symptoms and report to supervising Physical Therapist.

I. Complete documentation accurately, concisely, timely, and legibly following the guidelines required by state practice acts, and other regulatory agencies.

m. 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.

n. Demonstrate ability to organize and provide written education to other health care providers via inservice on assistive devices, gait, ROM, and transfers. o. Demonstrate your ability to form a response to an ethical situation based on reasoning congruent with core professional ethics and values

## **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.