

Northwest Arkansas Community College Health Professions Division: Physical Therapy Program Course Outline

Course Number and Title

PHTA 2361 & 2371: Pediatrics Lecture & Lab

Catalog Description

PHTA 2361: This course is designed to provide the PTA student with an entry level understanding of the theory and clinical application of various types of exercises, neuro-physiological treatment techniques, and equipment needs for the pediatric patient with emphasis on lesions of the central nervous system.

PHTA 2371: This laboratory course provides the PTA student skills to provide safe, legal, ethical and appropriate use of neuromuscular rehabilitation, assessing equipment needs, and screening assessment procedures, including physiological and therapeutic effects and indications and contraindications for treatment and rehabilitation of the Pediatric patient. It provides video case assessments, field trips for observations, and safe handling techniques to accompany PHTA 2361

Prerequisites

Completion of PHTA 2214, 2212, 2101, 2121, 2222, 2241, 2242, 2252, 2231, 2232, 2283, 2202, 2271, and 2213

Credit Hours/Contact Hours/Load Hours

1/15/1

1/75/3

Target Audience

Students admitted to the PTA Program

Student Learning Outcomes

LECTURE OBJECTIVES:

1. Describe the developmental progression of normal motor behavior in terms of:
 - a. patterns of gross and fine motor development
 - b. reflex development and integration

- c. righting and equilibrium reactions
 - d. sequence of neurodevelopmental postures
 - e. development of motor control skills
 - f. mobility and ambulation skills
2. Explain in written and verbal form the typical sensory motor characteristics of each of the following diagnosis. Identify common goals and treatment approaches for children with:
- a. Spastic CP h. Autism spectrum disorders
 - b. Athetoid CP i. Duchenne muscular dystrophy
 - c. Ataxic CP j. Developmental Delay/Coordination Dysfunction
 - d. Clumsy Child k. Scoliosis (idiopathic)
 - e. Spina Bifida l. Juvenile Idiopathic Arthritis
 - f. Down Syndrome m. Prader-willi syndrome
 - g. Mental Retardation n. Vater Syndrome
3. Explore options in the use of equipment and positions for learning and play.
4. List the areas of the child's family life that are considered when implementing a treatment program.
5. Explain the effects of muscle tone, obligatory reflexes, sensory disturbance, weakness, instability and poor coordination on movement.
6. Identify appropriate treatment procedures for commonly treated neuromuscular clinical signs of pediatric patients.
7. Demonstrate understanding of pediatric vital signs to include appropriate vital sign ranges.
8. Identify various types of orthotics, their indications, skin integrity concerns, and safety concerns for use in the pediatric population.

LAB COURSE OBJECTIVES:

1. Demonstrate 2-3 treatment strategies to address each of these clinical signs: abnormal muscle tone, obligatory reflexes, sensory disturbance, weakness, instability, and poor coordination.
2. Given a case scenario, select appropriate treatment strategies to meet goals within POC for neurological pediatric patients.
3. Given a case scenario demonstrates the ability to adjust therapy interventions within the POC.
4. Demonstrate the ability to perform documentation for chosen treatment interventions from pediatric scenarios or videos of pediatric interventions.
5. Demonstrate expertise in the attainment of pediatric vital signs.
6. Demonstrate appropriate interventions for neuromuscular issues of pediatric patients.

SCENERIO TOPICS

Developmental progression of normal pediatric motor behavior Gross and fine motor development,

Reflex development and integration Righting and equilibrium skills Mobility/ambulation skills Prematurity

Abnormal development Abnormal muscle tone

Sequence of neuro-developmental postures Cerebral Palsy

Types of CP

Basic principles of treatment. Neuro-developmental techniques Abnormal Gait

Orthotics

Case Presentations Treatment Planning Orthopedic Disorders Surgical Interventions Chromosomal Disorders Treatment Strategies Traumatic Injuries Pediatric Vital Signs Cognitive Disorders Emotional Disorders

Sensory-Integrative Therapy Adaptive Equipment

Positions and Toys for Learning and Play Role of the PTA in the Pediatric Setting

Rules and Requirements in the Public School Setting Family Intervention and Home Program Planning Documentation

Hands-on Intervention

Forms of Assessment

- Lab Practical examinations
- Written Examinations
- Homework
- Participation
- Lab Activities
- Case Based Problem Solving Activities