STANDARD COURSE OUTLINE

PHTA 2231 & PHTA 2232: Theory and Treatment Techniques Lecture and Lab

PREREQUISITE:

MATH	1204	College Algebra OR
MATH		Math for AAS
BIOL	2214	Anatomy & Physiology I
BIOL		Anatomy & Physiology II
PSYC		General Psychology
		English Composition I
ENGL	1023	•
ENGL	2013	Technical Writing
AHSC		Medical Terminology
CISQ		Introduction To Computer Information
PHTA		Clinical Kinesiology

Admission into the Physical Therapist Assistant Program

COURSE DESCRIPTION PHTA 2231

This course is designed to provide the PTA student with a strong understanding of the theory and clinical application of various types of exercises, and treatment protocols for primarily orthopedic diagnoses.

COURSE DESCRIPTION PHTA 2232

Lab skills to accompany PHTA 2231

CREDIT HOURS:

PHTA 2231 Theory & Treatment Techniques 1 credit hour / non-transferable; 1 contact hour; 1 load hour PHTA 2232 Theory & Treatment Techniques Lab 2 credit hours / non-transferable; 6 contact hours; 6 load hours

TARGET AUDIENCE Students admitted to the PTA Program who successfully completed the 1st summer session.

INSTRUCTIONAL MATERIALS: See Instructor for Details

COURSE OBJECTIVES:

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

- 1. Utilize safe body mechanics while performing all physical therapy interventions.
- 2. Assess and instruct mock patients, and other medical personnel in proper body mechanics and simple ergonomics or energy conservation/ joint protection techniques.
- 3. Given a patient history and case scenario or interview of a mock patient, recognize cultural and individual differences, and develop a comprehensive home

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- exercise program to meet the goals set by the patient and physical therapist, while staying within the plan of care.
- 4. Utilize proper positioning and draping techniques to provide comfort, stability, and modesty during various physical therapy interventions.
- 5. Perform, teach, and assess Passive Range of Motion techniques utilizing both straight and combined patterns, Active Assistive techniques utilizing manual, and mechanical assistance, and Active Range of Motion.
- 6. Safely transport mock patients in wheelchairs on level and uneven surfaces, and instruct in independent wheelchair propulsion using bilateral upper extremities, bilateral lower extremities, and or unilateral upper and lower extremities.
- 7. Assess the fit of standard wheelchairs, and given case scenario, identify or recommend specialized chairs or cushions that may be appropriate for various conditions.
- 8. Demonstrate knowledge of special care equipment that enables the PTA student to identify equipment, recognize the significance of equipment, and work in an environment where such equipment is being used. (Ventilator, tracheal tubes, Nasal pharyngeal or oral tubes, IVs, Swan-Ganz catheters, urinary catheters, feeding tubes, ostomy devices, skeletal traction, and various other pieces of equipment)
- 9. Assist the therapist in the collection of pertinent patient information, such as: (Height and weight, limb length, girth, muscle strength, ROM, Special tests, and vital signs)
- 10. Demonstrate knowledge of exercise terminology that allows the student to identify and document exercises by their correct names.
- 11. Based on standard, indications, precautions, contraindications, patient strength and or flexibility, safely select common exercise techniques to meet physical therapy goals while staying within the plan of care. (ROM, Relaxation, stretching, strengthening, and endurance exercises)
- 12. Safely set up and utilize common aerobic equipment: (stationary bicycles, treadmills, elliptical equipment.)
- 13. Demonstrate a knowledge of Relaxation techniques that enables the student PTA to identify indications, and techniques; as well as to instruct mock patients in general relaxation exercises.
- 14. Perform, instruct, and assess, via MMT, patients/caregivers in a variety of strengthening exercises, including: (circuit training, DeLorme, Electrical and Mechanical devices, free weights, manual resistance, Oxford, plyometrics, pulley systems, thera-band and putty, and common gym equipment)
- 15. Perform, instruct, and assess, via goniometric measurement, patients/ caregivers in a variety of stretching protocols: (Active, Active inhibition, Passive, and Self stretching techniques)
- 16. Assess the safety and effectiveness of treatment strategies, using vital signs, cognition, skin appearance, pain and balance scales, and verbal and non-verbal patient communication.
- 17. Perform, instruct in, and assess patient tolerance of aerobic conditioning exercises, utilizing vital signs, exertion scales, and apnea scales)

- 18. Communicate verbally, through written home exercise programs, and via demonstration, how to perform a variety of common exercise programs, to the patient, caregiver, and other health care providers
- 19. Provide sound physiologic and/or kinesiologic rationales for a variety of common exercise protocols. (AROM, AAROM, PROM, aerobic conditioning, Codman's, Williams flexion, McKenzie, pelvic stabilizaiation, postural imbalances, relaxation, scoliosis, TMJ, total joint, wand exercise, and a variety of other common techniques and protocols)
- 20. Demonstrate knowledge of core strength and exercise progression that allows the patient to safely alter and progress exercises while staying within the plan of care.
- 21. Utilize the knowledge of normal arthrokinematics, for the shoulder, and knee, to perform PROM and stretching for specific orthopedic conditions of these joints.
- 22. Sequence and safely implement an entire treatment session that includes modalities, exercises, gait training, and functional mobility, while staying within the plan of care.
- 23. Provide a sound rationale for the sequence of treatment and technique choices, and then relate those to the PT and patient goals, patient condition, stage of healing, treatment cost, and environment.
- 24. Identify the mechanism of injury, indications, precautions, contraindications, and symptoms for a variety of common orthopedic conditions.
- 25. Recall the general guidelines and protocols for treating common orthopedic conditions, and be able to progress patients based on such protocols, while staying within the POC.
- 26. Understand common surgical techniques in a way that allows knowledgeable communication with the patient regarding: procedures and typical rehabilitation expectations.
- 27. Use healthcare literature to rationalize and justify exercise selections and condition specific protocols.
- 28. Recognize the significant role that common pharmaceuticals play in the treatment of physical therapy patients.
- 29. Given patient scenario select, apply, and assess the fit of common orthotics, braces, and simple taping techniques, and instruct the patient and or care giver in the use and care of such orthotics, as indicated and specified in the plan of care.
- 30. Accurately and thoroughly document each treatment session performed.
- 31. Perform or identify special tests as indicated via the patient's condition and alter, progress, or withhold treatment as appropriate and indicated within the POC.
- 32. Given an initial evaluation and POC, or a case scenario, select, implement, and assess the effectiveness and safety of basic treatment strategies for common orthopedic conditions of the TMJ, spine, shoulder, elbow, wrist, hand, hip, knee, ankle, and foot.
- 33. Assess the overall treatment session and the patient's medical status throughout the session, and progress, alter or discontinue the treatment as indicated, while staying within the plan of care.
- 34. Document and verbally communicate to the appropriate healthcare provider any changes in the patient's status and treatment session.

35. Given Patient Care Plans and patient scenarios, identify appropriate treatments and those that are outside the legal, ethical, or academic scope of an entry level PTA.

TOPICS

Body Mechanics, Draping, Simple Ergonomics, PROM, Wheelchair

AA-ROM, PROM diagonal patterns

Intro to Exercise

Special Equipment

Contraindications for exercise

Developing a HEP

Assessments for HEP

Wheelchair

Progressing Exercises

Stretching Techniques

Progressing Ex.

Resisted Exercises

Aerobic Exercise

Relaxation Exercises

Orthopedic Conditions

Postoperative Management

Postural Impairments

Protocols

Spinal conditions and protocols

Shoulder conditions

Adhesive Capsulitis

Elbow, wrist, and hand

Hip

Joint protection Hand

Total Hip

Total Knee

CPM

Ankle / Foot

Orthopedic Case Studies

METHODS OF ASSESSMENT:

Assignments

Quizzes

Exams

Lab Practical Exams

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