

**STATE UNIVERSITY OF NEW YORK  
COLLEGE OF TECHNOLOGY  
CANTON, NEW YORK**



**MASTER SYLLABUS**

**COURSE NUMBER – COURSE NAME  
PHTA 205 - Neuromuscular Pathologies**

**Created by: Jennifer McDonald**

**Updated by: Jennifer McDonald**

**School of Science, Health, and Criminal Justice**

**Department: Physical Therapist Assistant**

**Semester/Year: Fall 2021**

- A. **TITLE:** Neuromuscular Pathologies
- B. **COURSE NUMBER:** PHTA 205
- C. **CREDIT HOURS:** (Hours of Lecture, Laboratory, Recitation, Tutorial, Activity)

# Credit Hours: 4  
# Lecture Hours: 2 per week  
# Lab Hours: 4 per week  
Other: per week

Course Length: 15 Weeks

- D. **WRITING INTENSIVE COURSE:** Yes  No
- E. **GER CATEGORY:** None:  Yes: GER  
*If course satisfies more than one:* GER
- F. **SEMESTER(S) OFFERED:** Fall  Spring  Fall & Spring

G. **COURSE DESCRIPTION:**

In this course, students will study neuroanatomy as applied to peripheral and central nervous system disorders. Principles of neurological rehabilitation and management of patients with neurological conditions are discussed and applied. Students learn about normal motor development, theories of motor control, and motor learning as applied to the rehabilitation of patients with neuromuscular conditions.

- H. **PRE-REQUISITES:** None  Yes  If yes, list below:

PHTA 104, BIOL 217, BIOL 281 or permission of instructor

**CO-REQUISITES:** None  Yes  If yes, list below:

**I. STUDENT LEARNING OUTCOMES: (see key below)**

By the end of this course, the student will be able to:

<b><u>Course Student Learning Outcome</u></b> <b><u>[SLO]</u></b>	<b><u>Program Student Learning Outcome</u></b> <b><u>[PSLO]</u></b>	<b><u>GER</u></b> <b><u>[If Applicable]</u></b>	<b><u>ISLO &amp; SUBSETS</u></b>	
1. Apply knowledge of neuroanatomy to understand clinical presentation, medical management, and principles of rehabilitation for central and peripheral neuromuscular pathologies.	PSLO5 Communicate an understanding of the plan of care developed by the physical therapist to achieve short and long term goals and intended outcomes.		5-Ind, Prof, Disc, Know Skills ISLO ISLO	None Subsets Subsets Subsets
2. Appropriately instruct patients with neuromuscular pathologies in rehabilitation techniques based on the physical therapy plan of care.	9. Participate in educating and providing patient-related instruction to patients, family members, and caregivers based on the plan of care.		5-Ind, Prof, Disc, Know Skills ISLO ISLO	None Subsets Subsets Subsets
3. Differentiate between concepts of motor control, motor learning, and motor development as applied to rehabilitation.	PSLO5 Communicate an understanding of the plan of care developed by the physical therapist to achieve short and long term goals and intended outcomes.		5-Ind, Prof, Disc, Know Skills ISLO ISLO	None Subsets Subsets Subsets
4. Demonstrate comprehension of the physical therapy plan of care for patients with neurological pathologies through case study implementation.	PSLO5 Communicate an understanding of the plan of care developed by the physical therapist to achieve short and long term goals and intended outcomes.		5-Ind, Prof, Disc, Know Skills ISLO ISLO	None Subsets Subsets Subsets
5. Demonstrate awareness of changes in patient status when working with a patient with a neurological pathology and make appropriate decisions using the Problem-Solving Algorithm for the PTA.	PSLO8. Demonstrate sound clinical problem solving in the provision of physical therapy services.		2-Crit Think ISLO ISLO	None Subsets Subsets Subsets
6. Demonstrate effective communication skills while acting as a student PTA during lab competencies & practicals.	PSLO1. Communicate verbally and non-verbally with the patient, the physical therapist, health care delivery personnel, and others in an effective, appropriate, and capable manner.		1-Comm Skills ISLO ISLO	0 Subsets Subsets Subsets

7. Produce clear, accurate, concise, timely, and legible documentation.	PSLO10. Complete accurate and timely documentation in accordance with regulatory guidelines to support the delivery of physical therapy services.		5-Ind, Prof, Disc, Know Skills ISLO ISLO	None Subsets Subsets Subsets
8. Demonstrate competence in performing data collection techniques necessary for management of patients with neuromuscular pathologies.	PSLO7. Demonstrate competency in performing components of data collection skills essential for carrying out the plan of care		5-Ind, Prof, Disc, Know Skills ISLO ISLO	None Subsets Subsets Subsets
9. Demonstrate the ability to adjust components of treatment as necessary within the guidelines of the plan of care through case scenario implementation.	PSLO5 Communicate an understanding of the plan of care developed by the physical therapist to achieve short and long term goals and intended outcomes.		5-Ind, Prof, Disc, Know Skills ISLO ISLO	None Subsets Subsets Subsets
10. Recognize individual differences and needs and respond appropriately through case study implementation.	PSLO2. Recognize individual differences, values, preferences, and expressed needs and respond appropriately in all aspects of physical therapy services.		4-Soc Respons ISLO ISLO	IK Subsets Subsets Subsets
12. Maintain a safe working environment & ensure safety of patient and self during all interactions.	PSLO4. Demonstrate safe practice in all situations.		5-Ind, Prof, Disc, Know & Skills ISLO ISLO	None Subsets Subsets Subsets
13. Describe considerations for discharge planning for a patient with a neurological pathology.	PSLO5 Communicate an understanding of the plan of care developed by the physical therapist to achieve short and long term goals and intended outcomes.		5-Ind, Prof, Disc, Know & Skills ISLO ISLO	None Subsets Subsets Subsets
14. Describe effective interaction with members of the interprofessional team when working with patients with neuromuscular pathologies.	PSLO12. Participate in activities that contribute to the effective function of the healthcare environment.		5-Ind, Prof, Disc, Know & Skills ISLO ISLO	None Subsets Subsets Subsets
15. Provide accurate billing following case scenario implementation.	PSLO13. Participate in practice management functions within a physical therapy service, including billing and organizational planning.		5-Ind, Prof, Disc, Know & Skills ISLO ISLO	None Subsets Subsets Subsets

<p>16. Demonstrate competence in performing physical therapy interventions related to rehabilitation of the patient with a neuromuscular pathology, including:</p> <ol style="list-style-type: none"> <li>Peripheral nerve disorders</li> <li>Spinal cord injury</li> <li>Stroke</li> <li>Brain Injury</li> <li>Multiple Sclerosis</li> <li>Parkinson Disease</li> <li>Amyotrophic Lateral Sclerosis</li> <li>Genetic &amp; Developmental Disorders</li> </ol>	<p>PSLO #6 Demonstrate competence in implementing and adjusting selected components of interventions identified in the plan of care established by the physical therapist.</p>		<p>5 – Ind, Prof, Disc, Know Skills</p>	<p>None</p>
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KEY	<b><u>Institutional Student Learning Outcomes [ISLO 1 – 5]</u></b>
ISLO #	ISLO & Subsets
1	<b>Communication Skills</b> Oral [O], Written [W]
2	<b>Critical Thinking</b> <i>Critical Analysis [CA], Inquiry &amp; Analysis [IA], Problem Solving [PS]</i>
3	<b>Foundational Skills</b> <i>Information Management [IM], Quantitative Lit./Reasoning [QTR]</i>
4	<b>Social Responsibility</b> <i>Ethical Reasoning [ER], Global Learning [GL], Intercultural Knowledge [IK], Teamwork [T]</i>
5	<b>Industry, Professional, Discipline Specific Knowledge and Skills</b>

\*Include program objectives if applicable. Please consult with Program Coordinator

**J. APPLIED LEARNING COMPONENT:**

Yes  No

If YES, select one or more of the following categories:

- Classroom/Lab
- Internship
- Clinical Placement
- Practicum
- Service Learning
- Community Service

- Civic Engagement
- Creative Works/Senior Project
- Research
- Entrepreneurship  
(program, class, project)

**K. TEXTS:**

Neurological Interventions for Physical Therapy, 4th ed, Martin S, Kessler M., Saunders Elsevier, 2019.  
Physical Rehabilitation: Assessment and Treatment, 7th Ed., O'Sullivan, S.B. and Schmitz, T.J., F.A. Davis, 2019.

**L. REFERENCES:**

Physical Therapy Clinical Handbook for PTAs, 3rd Ed., Cikulin-Kulinski, Jones & Bartlett, 2018.  
Clinical Kinesiology & Anatomy, 6th Ed, Lippert, L., F.A. Davis, 2017.  
Therapeutic Exercise: Foundations & Techniques, Kisner, C., Colby, L., Borstad, J, 7th ed. FA Davis, 2018  
Pathology for the Physical Therapist Assistant, 2nd Ed, Goodman, C., Marshall, C., Saunders, 2016.

**M. EQUIPMENT: None  Needed:**

**N. GRADING METHOD:**

**O. SUGGESTED MEASUREMENT CRITERIA/METHODS:**

**P. DETAILED COURSE OUTLINE:**

**Q. LABORATORY OUTLINE: None  Yes**