



North Central State College

MASTER SYLLABUS

2025-2026

- A. Academic Division: Health Sciences
- B. Discipline: Physical Therapist Assistant
- C. Course Number and Title: PHTA1110 Neuromuscular Rehabilitation
- D. Assistant Dean: Heidi Kreglow, PT
- E. Credit Hours: 4
Lecture: 2 hours
Laboratory: 5 hours
- F. Prerequisites: PHTA1010, PHTA1040, PHTA1070
Co-requisite: PHTA1090 (M)
- G. Last Course/Curriculum Revision Date: Spring 2025 Origin date: 11/05/2014
- H. Textbook(s) Title:
- Neurological Interventions for Physical Therapy* (required)
- Authors: Suzanne Tink Martin and Mary Kessler
 - Copyright Year: 2021
 - Edition: 4th
 - ISBN #: 9780323661751
- Physical Rehabilitation - Assessment and Treatment* (required)
- Author: O'Sullivan and Schmitz
 - Copyright Year: 2024
 - Edition: 8th
 - ISBN #: 9781719646918
- Entry-Level Skills Checklists for Physical Therapist Assistant Students* (required, purchased in PHTA 1040)
- Author: Terry Larson
 - Copyright Year: 2023
 - Edition: 1st
 - ISBN: 9781630919986
- PTA Examination Review & Study Guide* (required)
- Authors: O'Sullivan, Siegelman & McGinty
 - Copyright Year: 2024
 - Edition: 7th
 - ISBN #: 9798989231416
- I. Workbook(s) and/or Lab Manual: None

J. Course Description: This is a continuation of didactic and technical instruction for clinical practice. This course covers normal and abnormal motor development, pediatric conditions affecting motor development, and interventions to address infant and pediatric conditions leading to motor delays and adult neurological disorders affecting motor function and interventions to address the motor deficits of individuals with neurological motor dysfunction. Wheelchair prescription and use as well as various transfers for pediatric and neurologically impaired individuals will also be covered.

K. College-Wide Learning Outcomes:

College-Wide Learning Outcome	Assessments - - How it is met & When it is met
Communication – Written	
Communication – Speech	Final lab practical
Intercultural Knowledge and Competence	
Critical Thinking	
Information Literacy	
Quantitative Literacy	

L. Course Outcomes and Assessment Methods:

Upon successful completion of this course, the student shall:

Outcomes	Assessments – How it is met & When it is met
1. Demonstrate understanding of components of normal motor development.	Quizzes beginning of term and Midterm exam
2. Demonstrate understanding of components of abnormal motor development.	Quizzes beginning of term and Midterm exam
3. Identify normal gross and fine motor milestones for 1 st 5 years.	Quizzes beginning of term and Midterm exam
4. Demonstrate components of righting reactions and mature equilibrium reactions in various positions/movements.	Pediatric skills checklist and Midterm lab practical exam.
5. Identify risk factors for motor development and neurological impairment.	Written midterm and final exams; Oral presentation during term
6. Identify signs/symptoms of over stimulation for infant in NICU or at risk.	Midterm exam
7. Identify common pediatric and adult neurological disorders, and the symptoms, as well as indications and contraindications for physical therapy intervention.	Written midterm and final exams; final lab practical exam
8. Implement treatment activities to address areas of concern listed on PT POC for pediatric and adult neurological patient.	Quizzes, Written midterm and final exams; Midterm and Final lab practical exams
9. Demonstrate positioning strategies, treatment strategies, and equipment usage to positively impact muscle tone, movement, and posture/alignment, skin integrity and function.	Midterm exam; Midterm Lab practical exam
10. Record simulated treatment in SOAP note format.	SOAP note assignment at midterm and final lab practical exam
11. Demonstrate simulated patient treatments in a technically correct manner.	Midterm and Final Lab practical exams
12. Synthesize information from patient. scenarios and PT plan of care to develop and carry out treatment activities which meet parameters of plan of care.	Midterm and Final lab practical exam Midterm and Final exams

Outcomes	Assessments – How it is met & When it is met
13. Interpret patient response to treatment and adjust treatment accordingly.	Midterm and Final lab practical exam
14. Complete W/C measurement	Lab skills checklist by midterm
15. Compare and contrast components of Ranchos Los Amigo Cognition Scale and Glasgow Coma Scale.	Final exam
16. Knowledgeably execute performance and balance assessments.	Mini-lab test at midterm
17. Perform PNF patterns in technically correct manor.	Mini-lab test at midterm

M. Recommended Grading Scale:

NUMERIC	GRADE	POINTS	DEFINITION
93–100	A	4.00	Superior
90–92	A-	3.67	Superior
87–89	B+	3.33	Above Average
83–86	B	3.00	Above Average
80–82	B-	2.67	Above Average
77–79	C+	2.33	Average
73–76	C	2.00	Average
70–72	C-	1.67	Below Average
67–69	D+	1.33	Below Average
63–66	D	1.00	Below Average
60–62	D-	0.67	Poor
00–59	F	0.00	Failure

N. College Procedures/Policies:

North Central State College believes that every student is a valued and equal member of the community.* Every student brings different experiences to the College, and all are important in enriching academic life and developing greater understanding and appreciation of one another. Therefore, NC State College creates an inclusive culture in which students feel comfortable sharing their experiences. Discrimination and prejudice have no place on the campus, and the College takes any complaint in this regard seriously. Students encountering aspects of the instruction that result in barriers to their sense of being included and respected should contact the instructor, assistant dean, or dean without fear of reprisal.

* *Inclusive of race, color, religion, gender, gender identity or expression, national origin (ancestry), military status (past, present or future), disability, age (40 years or older), status as a parent during pregnancy and immediately after the birth of a child, status as a parent of a young child, status as a foster parent, genetic information, or sexual orientation*

Important information regarding College Procedures and Policies can be found on the syllabus supplement located at

<https://ncstatecollege.edu/documents/President/PoliciesProcedures/PolicyManual/Final%20PDFs/14-081b.pdf>



North Central State College
SYLLABUS ADDENDUM

Academic Division: <u>Health Sciences</u>	Discipline: <u>PTA</u>
Course Coordinator: <u>Jennifer Lacey, PTA, REHS</u>	
Course Number: <u>PHTA 1110</u>	Course Title: <u>Neuromuscular Rehabilitation</u>
Semester / Session: <u>Spring 2026 / Session B</u>	Start / End Date: <u>03/16/2026-05/08/2026</u>

Instructor Information

Name: <u>Jennifer Lacey</u>	Credentials: <u>PTA, REHS</u>
Phone Number: <u>419-755-5634</u>	E-Mail Address: <u>jlacey@ncstatecollege.edu</u>
Office Location: <u>HS-140</u>	Office Hours: <u>Mon/Wed: 8:30-9 & 1:45-2:30 & Thurs: 8:15-9:30, 11:20-12:00, 1:50-2:30</u>

I. Topical Timeline / Course Calendar (Subject to Change):

This is a continuation of didactic and technical instruction for clinical practice. This course covers normal and abnormal motor development, pediatric conditions affecting motor development, and interventions to address infant and pediatric conditions leading to motor delays and adult neurological disorders affecting motor function and interventions to address the motor deficits of individuals with neurological motor dysfunction. Wheelchair prescription and use as well as various transfers for pediatric and neurologically impaired individuals will also be covered.

Weeks	Topics	Assignment	Due Date
1	Wheelchair Components/Positioning & Neuro Anatomy	Wheelchair worksheet Discussion Question & Response Weekly Physio U Assignment Neuro Anatomy Worksheet Lab: W/C Fitting Skills Check	3/17 3/17 & 3 /19 3/20 3/24 3/19
2	Motor Control/Motor Learning & Pediatric Motor Development/Primitive Reflexes	Motor Control/Learning Worksheet Quiz # 1: Neuro Anatomy Primitive Reflexes Worksheet Weekly Physio U Assignments Lab: Nero Test Skills Check	3/24 3/24 3/26 3/27 3/26
3	Pediatric Positioning/Handling and Cerebral Palsy	Quiz #2: Motor Control/Primitive Reflexes CP Lecture Worksheet Quiz # 3: Peds Positioning & Handling Weekly Physio U Assignments Lab: CP Case Study	3/31 4/2 4/2 4/3 4/2
4	Pediatric Presentations and Midterm Exam/Lab Practical	Mid-Term Exam Weekly Physio U Assignments Lab: Peds Conditions Case Study Mid-Term Lab Test	4/8 4/10 4/2 4/9
5	Balance and PNF	Quiz #4: Balance Weekly Physio U Assignments Lab: Balance & PNF Skills Check	4/14 4/17 4/14
6	CVA and TBI	Weekly Physio U Assignments Lab: TBI Case Study CVA Lab Test	4/24 4/21 4/23
7	SCI and Adult Presentations	Quiz #5: PNF & CVA Weekly Physio U Assignments Lab: SCI Case Study & Adult Neuro Test	4/27 5/1 4/28 & 4/30

Course Number: PHTA 1110
Semester / Session: Spring 2026/Session B

Course Title: Neuromuscular Rehabilitation
Start / End Date: 03/16/26-05/08/26

Weeks	Topics	Assignment	Due Date
8	Review and Final Exam	Quiz #6: SCI & TBI Comprehensive Final Exam Lab: Final Lab Test	5/4 5/6 5/5

II. Grading Guidelines:

This is a combined lecture and laboratory course. Students must achieve a passing grade of 77% or higher in both the lecture and laboratory components to pass the course. Lecture comprises 60% of the total course grade and laboratory comprises 40%. Once both components have been passed at 77% or higher, the two components will be averaged to calculate the final course grade. Students who fall below 77% in either component will have failed to meet the requirements to continue in the PTA program.

- Lecture: (60% of the final course grade once combined with lab)
 - 6 quizzes worth 30% of course grade (5% each)
 - One mid-term exam worth 30% of course grade
 - One comprehensive final exam worth 30% of course grade
 - Weekly assignments worth 10% of course grade
- Lab: (40% of the final course grade once combined with lecture)
 - Lab skills checks/activities worth 30% of grade
 - One mid-term full lab practical examination worth 30% of lab grade
 - One final full lab practical examination which is comprehensive worth 40% of lab grade.

III. Examination Policies/Guidelines:

1. **Excused Absences from Examinations:**

A student may be excused from a scheduled examination under the following circumstances, provided that appropriate documentation is submitted:

- Hospitalization (documented verification required)
- Death in the immediate family (documented verification required)
- Personal illness or illness of an immediate family member (physician's excuse required)

Any student who misses an examination for any reason is responsible for contacting the instructor immediately upon absence. Make-up examinations will be scheduled at the earliest available date in accordance with college policy and at the discretion of the instructor. Please note that no make-up opportunity will be granted for missed quizzes if the student failed to notify the instructor of the absence or failed to coordinate with the instructor to schedule a make-up in a timely manner.

2. **Lab Skills Checks/Tests (per PTA program policy):**

Students must obtain a score of 80% or higher to pass any unit-specific lab skills check or test. The following attempt structure applies:

- First attempt: Full credit available.
- Second attempt (same day): A 15% grade reduction is applied. The highest achievable score on the second attempt is 85%.
- Third attempt (future date set by faculty): The maximum achievable score is 80%.

If the third attempt is unsuccessful: The student receives a zero for that skills check or test and will be dropped from the PTA program.

3. **Lab Midterm and Final Practical (per PTA program policy):**

Students must obtain a score of 80% or higher to pass the lab midterm and final practical examinations. The following attempt structure applies:

Course Number: PHTA 1110
Semester / Session: Spring 2026/Session B

Course Title: Neuromuscular Rehabilitation
Start / End Date: 03/16/26-05/08/26

- First attempt: Full credit available.
- Second attempt (at faculty discretion): The maximum achievable score is 80%.
- If the second attempt is unsuccessful: The student receives a zero for that practical and will be dropped from the PTA program.

IV. Class Attendance and Homework Make-Up Policy:

The PTA program is a series of sequential courses designed to build progressively from one class session and course to the next. Given the volume and complexity of material presented across five semesters, attendance at all lecture and laboratory sessions is imperative. Attendance records will be maintained by all instructors in accordance with college attendance guidelines and policies.

Students bear primary responsibility for notifying instructors in advance of any anticipated or planned absences. Any student missing two or more classes will be required to meet with the Program Director. In the event of an absence, it is the student's responsibility to obtain missed lecture notes and to arrange make-up of any missed laboratory sessions.

All assignments are due according to the dates established in the weekly Canvas modules. Assignments submitted after the established due date will receive a deduction of 10% per day late.

V. Classroom Expectations:

Students are expected to engage in weekly studying and assigned readings, attend all scheduled lectures and laboratory sessions, and submit all assignments and activities on time. Success in this program requires consistent preparation and active participation throughout each semester.

Students are expected to listen attentively and conduct themselves in a professional manner conducive to learning during lecture and lab session. Should a student be found disrupting a class session, the instructor reserves the right to ask the student to leave the classroom. The student will then be required to meet with the Program Director to discuss professional behavior and expectations.