



North Central State College

MASTER SYLLABUS

2026-2027

- A. Academic Division: Health Sciences
- B. Discipline: Physical Therapist Assistant
- C. Course Number and Title: PHTA1040 Physical Agents Theory and Practice
- D. Assistant Dean: Dr. Jason Tucker, Ph.D.
- E. Credit Hours: 4
Lecture: 2 hours
Laboratory: 5 hours
- F. Co-Requisites: PHTA1010 and PHTA1070
- G. Last Course/Curriculum Revision Date: Fall 2023 Origin date: 11/5/2014
- H. Textbook(s) Title:

Mobility in Context: Principles of Patient Care Skills

- Authors: Charity Johansson and Susan A. Chinworth
- Copyright Year: 2022
- Edition: 3rd
- ISBN #: 9781719642866

Physical Agents: Theory and Practice

- Authors: Behnens and Michlovitz
- Copyright Year: 2021
- Edition: 4th
- ISBN #: 9780803676671

PTA Examination Review & Study Guide

- O'Sullivan, Siegelman, & McGinty
- Publisher: TherapyE
- Copyright 2024
- 7th Edition
- ISBN: 9798989231416

Entry Level Skills Checklists for Physical Therapist Assistant Students, 1st edition

- Author: Terry Larson
- Copyright Year: 2023
- Edition: 1st
- Publisher Routledge
- ISBN 978-1630919986

Workbook(s) and/or Lab Manual:

- J. Course Description: The course will cover the clinical application of physical agents to be administered by the physical therapist assistant. Included are the presentation of basic physiology and theory of vital signs, patient positioning, body mechanics, transfers, sterile procedures, massage, wound care, heat, cold, hydrotherapy, pneumatic compression, ultrasound, light, and motorized traction electrical safety as well as physiology, theory, and application of ultrasound, various forms of therapeutic electrical stimulation, transcutaneous electrical nerve stimulation, and biofeedback. Bed traction and patient instruction will also be included.

- K. College-Wide Learning Outcomes:

College-Wide Learning Outcome	Assessments - - How it is met & When it is met
Communication – Written	
Communication – Speech	
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 the ability to accurately assess and record vital signs which, include girth, length, weight, and height measurements in technically correct manner.	Lab mini tests throughout term and midterm and final practical exams Lab skills checklist and follow up Practical Exams
2. Recognizes absent or altered sensation, normal and abnormal integumentary changes, activities, positioning, and postures that aggravate or relieve, pain or altered sensations, or that can produce associated skin trauma and viable versus nonviable tissue.	Lab mini tests throughout term and midterm and final practical exams
3. Administers standardized questionnaires, graphs, behavioral scales, or visual analog scales for pain recognizes activities, positioning, and postures that aggravate or relieve pain or altered sensations.	Lab mini tests throughout term and midterm and final practical exams
4. Adjusts interventions within the plan of care established by the physical therapist in response to patient clinical indications and reports this to the supervising physical therapist.	Lab mini tests throughout term and midterm and final practical exams
5. Apply in a technically correct manner, dressings for simulated open wounds.	Lab mini tests throughout term and midterm and final practical exams
6. Distinguishes any changes in the patient's status to the supervising physical therapist	Lab mini tests throughout term and midterm and final practical exams
7. Identifies when the direction to perform an intervention is beyond that which is appropriate for a physical therapist assistant and initiates clarification with the physical therapist.	Lab mini tests throughout term and midterm and final practical exams
8. Contributes in educating patients and caregivers as directed by the supervising physical therapist.	Lab mini tests throughout term and midterm and final practical exams

Outcomes	Assessments – How it is met & When it is met
9. Completes thorough, accurate, logical, concise, timely, and legible documentation that follows guidelines and specific documentation formats required by state practice acts, the practice setting, and other regulatory agencies.	Lab mini tests throughout term and midterm and final practical exams by providing a S.O.A.P note
10. Identify purpose and use of pneumatic compression	Written final exam
11. Demonstrate edema control in a technically correct manner	Lab skills checklist
12. Employ in a technically correct manner, athermal agent, biofeedback, compression therapies, cryotherapy, electrotherapeutic agents, hydrotherapy, superficial and deep thermal agents and traction interventions used in simulated patient scenarios	Lab mini tests throughout term and midterm and final practical exams
13. Identify and respond constructively and respectfully to various individual and cultural differences, i.e. deafness, non-English speaking, etc. in simulated patient scenarios.	Midterm and final practical exams
14. Interpret indications, precautions, and contraindications for interventions covered.	Midterm and final practical exams and lecture midterm and final exams
15. Identify and differentiate between isolation techniques and universal precautions	Written midterm and final exams along with lab mini tests throughout term and midterm and final practical exams
16. Practice principles of proper body mechanics in simulated patient scenarios	Lab mini tests throughout term and midterm and final practical exams
17. Apply principles of patient positioning in simulated patient scenarios	Written midterm and final exams along with lab mini tests throughout term and midterm and final practical exams
18. Explain electrical safety in laboratory setting.	Lab mini tests throughout term and midterm and final practical exams
19. Interpret and collaborate with supervising PT when simulated interventions within plan of care are withheld, altered, or questioned.	midterm and final practical exams
20. Examine and monitor simulated patient response to identified physical agent or intervention	Lab mini tests throughout term and midterm and final practical exams
21. Explain and collaborate with supervising PT to determine proper parameters for simulated physical agents or interventions	Lab mini tests throughout term and midterm and final practical exams
22. Summarize physiological effects, parameters, indications, and contraindications for identified physical agents	Lab mini tests throughout term and midterm and final practical exams
23. Demonstrate technically correct application of identified physical agents, intervention, procedure	Lab mini tests throughout term and midterm and final practical exams
24. Collect and accurately record simulated patient response to physical agent or intervention for comparison to patients' expected outcomes in simulated plan of care.	SOAP note assignment at midterm and final lab practical exam
25. Apply behavior that is consistent with the understanding of laws, rules, ethics, and desired professional behavior in lab and community situations	Written midterm and final exams along with lab mini tests throughout term and midterm and final practical exams

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	Average
67–69	D+	1.33	Below Average
63–66	D	1.00	Below Average
60–62	D-	0.67	Below Average
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:	Health Sciences	Discipline:	PTA
Course Coordinator:	Jennifer Lacey		
Course Number:	PHTA 1040-01B	Course Title:	Physical Agents
Semester / Session:	Fall 2026 / Session B	Start / End Date:	10/19/2026 thru 12/11/2026

Instructor Information

Name:	Jennifer Lacey, BAS, PTA	Credentials:	PTA, REHS
Phone Number:	419-755-5634	E-Mail Address:	jlacey@ncstatetcollege.edu
Office Location:	HS-140	Office Hours:	Mon/Wed: 8:15-8:30, Tues/Thurs: 8:15-8:30 & 12:20-2:20

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

WEEK	TOPIC	READING ASSIGNMENTS	Assignments
1a (10/19)	Intro, Universal Precautions/Sterile Processes/Isolation/Infection prevention/Pain	PA: Chapter 1 PCS: Chapters 1 & 4	Clinical Pattern Videos/Assessments Lab Skills Check-PPE
1b (10/21)	Vital Signs/Girth	PA: Chapters 2 (pages 13-24) & 3 (pages 42-48) PCS: Chapter 5	Clinical Pattern Videos/Assessments Lab Skills Check-Vitals
2a (10/26)	Patient Positioning/Draping/Transfers/Ergonomics	PCS- Chapters 6,7,8,10,11,12	Clinical Pattern Videos/Assessments Lab Skills Check-positioning/draping
2b (10/28)	Thermal Modalities (hot/cold), Laser, UV	PA: Chapters 3 (pages 39-42), 4, & 10 (pages 255-264)	Quiz #1 Clinical Pattern Videos/Assessments Lab Skills Check-Thermal/Cold Modalities
3a (11/2)	Hydro, Pool, Wounds, Dressings	PA: Chapters 2 (pages 25-30) & 6	Quiz #2 Clinical Pattern Videos/Assessments
3b (11/4)	Massage, Compression	PA: Chapters 8 & 9	Clinical Pattern Videos/Assessments Lab Skills Check-Massage/Compression
4a (11/9)	Midterm		Midterm Lecture Exam: (11/9) Midterm Lab Exam: TBD

Course Number: PHTA 1040-01
Semester / Session: Fall/Session B

Course Title: Physical Agents
Start / End Date: 10/19/2026 thru 12/11/2026

<u>WEEK</u>	<u>TOPIC</u>	<u>READING ASSIGNMENTS</u>	<u>Assignments</u>
4b (11/11)	Veterans Day-No Class/Lab		
5a (11/16)	Electrical Safety, Traction Lumbar and Cervical, Saunders Traction	PA: Chapters 7 & 11 (page 303-305, table 11-10)	Clinical Pattern Videos/Assessments Lab Skills Check: Traction
5b (11/18)	Ultrasound/Phonophoresis	PA: Chapter 5	Clinical Pattern Videos/Assessments Lab Skills Check: Ultrasound
6a (11/23)	Foundations of E-stim, Electrodes & Wires, NMES & FES	PA: Chapters 11 (pages 272-292 & pages 303-308), 12, & 13	Quiz #3 Clinical Pattern Videos/Assessments
6b (11/25)	Thanksgiving Break-No Class/Lab		
7a (11/30)	E-stim: Tissue Repair/Pain Management/IFC/MENS	PA: Chapters 14, 15, & 16	Clinical Pattern Videos/Assessments Lab Skills Check: E-stim
7b (12/2)	Iontophoresis, Biofeedback, Combo E-stim	PA: Chapters 11 (pages 292-303)	Clinical Pattern Videos/Assessment Lab Skills Check- Combo/Biofeedback
8a (12/7)	Diathermy, Clinical Decision Making Student Lead Review for Lecture Final	PA: Chapters 10 (250-255) & 17	Quiz #4 Clinical Pattern Videos/Assessment Lab Skills Check: Clinical Decision Making
8b (12/9)	Finals		Clinical Pattern Review Lecture Final (12/9) Lab Final: TBD

II. Grading and Testing Guidelines:

This course includes both lecture and laboratory components:

1. Minimum passing requirements:
 - a. 77 % in each component (lecture and lab)
 - b. 80 % on all lab practicals and skills checks
 - Retake attempts and associated grade adjustments for lab practicals and test components are governed by the PTA Program Student Handbook. Please refer to the Student Handbook for this policy.
2. Grade Weighting:
 - a. Lecture: 60% of the total course grade
 - b. Laboratory: 40% of the total course grade

Course Number: PHTA 1040-01
Semester / Session: Fall/Session B

Course Title: Physical Agents
Start / End Date: 10/19/2026 thru 12/11/2026

3. Final Grade Calculation:
- Lecture and lab grades will be averaged only if the student achieves at least 77% in each component.

Activity: Lecture	Qty	Points	Percentage
Quizzes	4	100	25%
Mid-Term Exam	1	100	30%
Comprehensive Final Exam	1	100	35%
Weekly Assignments/Videos/Participation/Attendance	1	200	10%

Activity: Lab	Qty	Points	Percentage
Skill Checkoffs	10	100	30%
Mid-Term Lab Practical	1	100	30%
Final Lab Practical	1	100	40%

4. Progression Policy:
- A grade below 77% in either component means you will not meet the requirements to continue in the PTA program, so please reach out to your instructor right away if you're struggling.

III. Examination Policy:

- You may be excused from taking an exam for the following reasons:
 - Hospitalization (with documented verification)
 - Death in the immediate family (with documented verification)
 - Personal illness or illness in immediate family - (doctor's excuse required).
- If you miss an exam for any reason, you are responsible for:
 - Contacting/notifying your instructor immediately
 - Making up the exam per college policy, at the instructor's discretion, at the earliest available date
- You will not be given a makeup opportunity for a missed unscheduled quiz if you:
 - Do not notify your instructor
 - Do not coordinate with your instructor to schedule a make-up quiz

IV. Class Attendance and Homework Make-Up Policy:

- Attending class and lab regularly will help you:
 - Successfully complete lab skills checkoffs/tests with 80% or higher
 - Successfully pass lecture quizzes/tests and complete weekly assignments
- You are responsible for:
 - Weekly studying, completing assigned readings, finishing weekly assignments, and attending both lecture and lab regularly
 - Submitting assignments by the due dates posted in your weekly lecture and lab Canvas modules
 - Late assignments will lose an additional 10% for each day they are late (10% on day 1, 20% on day 2, 30% on day 3, and so on), up to a maximum penalty of 50%. Assignments submitted more than 5 days after the due date will receive a grade of 0, unless other arrangements have been made with the instructor.
 - Technical malfunctions will not be accepted as an automatic excuse for late work
 - Promptly notify your instructor as soon as you recognize any difficulty meeting the course requirements or maintaining a passing grade

Course Number: PHTA 1040-01
Semester / Session: Fall/Session B

Course Title: Physical Agents
Start / End Date: 10/19/2026 thru 12/11/2026

V. Classroom Expectations:

1. You are expected to attend all classes and labs, engage respectfully, and maintain professional behavior. Disruptive conduct may result in dismissal from class and a required meeting with the program director to review expectations.
2. Be sure to review your weekly lecture and lab Canvas modules for required readings, assignments, supplemental materials, preparation guidelines, quizzes, skill checks, and lab testing information.
3. Plan to set aside enough time outside of class to review course materials, complete assignments, and prepare for assessments. A minimum of 2–4 hours of study per week for each credit hour is recommended to help you master course content and build your skills.

VI. Instructor Communication and Grading Turnaround:

1. Grading Turnaround:
 - a. Assignments are typically graded within one week of the due date. Larger assignments may take longer.
 - b. If you submit an assignment early, it will not be graded until after the official due date, so don't worry if you don't see a grade right away.
2. Response Time:
 - a. Phone calls, emails, and Canvas messages will be answered within 1–2 business days.
 - b. Canvas message or email is the best way to reach me. Calling my office during posted office hours is also welcome.
3. Office Hours:
 - a. Use office hours to ask questions about course content, get feedback on assignments, talk through your grades or progress, or get extra help with lab skills. You're encouraged to stop by rather than wait until right before something is due.

VII. Academic Integrity:

1. You are expected to uphold the College's Academic Integrity Policy, which covers plagiarism, cheating, fabrication, and the acceptable use of AI tools. Please review the full [Academic Integrity Policy \(3357:13-14-65\)](#).
2. Course-Specific AI Statement: In this course, AI tools (such as ChatGPT) may be used to brainstorm ideas, explore concepts, or help organize your thinking. AI may not be used to complete assignments for you. Submitting AI-generated work as your own is considered a violation of academic integrity. If you are unsure whether a specific use of AI is appropriate for an assignment, please ask your instructor before submitting.
3. Hats, smart glasses or other AI-enabled wearable devices (e.g., Meta Ray-Ban glasses) are not permitted to be worn in class or during any exam, whether in person or online. Use of such devices during an exam will be treated as a violation of academic integrity.