



North Central State College

MASTER SYLLABUS

2025-2026

- A. Academic Division: Health Sciences
- B. Discipline: Physical Therapist Assistant
- C. Course Number and Title: PHTA2090 Orthopedic Conditions and Interventions
- D. Assistant Dean: Heidi Kreglow, PTA
- E. Credit Hours: 3
Lecture: 2 hours
Laboratory: 3 hours
- F. Prerequisites: PHTA2110, PHTA2115
Co-requisites: PHTA2070 (m), PHTA2170 (m)
- G. Last Course/Curriculum Revision Date: Spring 2025 Origin date: 11/22/2010
- H. Textbook(s) Title:

Orthopaedics for the Physical Therapist Assistant

- Author: Mark Dutton
- Copyright Year: 2018
- Edition: 2nd
- ISBN: 9781284139310

Pathology for the Physical Therapist Assistant

- Authors: Lescher
- Copyright Year: 2012
- Edition:
- ISBN #: 9780803607866

- I. Workbook(s) and/or Lab Manual: None
- J. Course Description: This course is designed to provide more in-depth detail and knowledge involving clinical conditions and interventions related to orthopedic diagnoses. This more advanced subject matter will allow the physical therapist assistant student to integrate previous knowledge into more situations with greater understanding of the orthopedic client.
- 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	Exam 1 utilizing Critical Thinking VALUE rubric Weeks 4-5
Information Literacy	
Quantitative Literacy	Final lab practical

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. Discuss timeframes of healing of body tissues.	Exam 1 beginning of term and Final exam end of term
2. Explain the different types of fractures.	Exam 1 beginning of term and Final exam end of term
3. Explain signs and symptoms associated with fractures, degenerative joint disease/osteoarthritis and rheumatoid arthritis.	Exam 1 beginning of term, Exam 2 Middle of term and Final exam End of term
4. Differentiate the pathogenesis of the orthopedic and musculoskeletal conditions addressed.	Exam 2-3 middle of term and Final exam end of term
5. Explain the indications, contraindications and precautions for interventions in regards to the orthopedic and musculoskeletal conditions addressed.	Exam 1 beginning of term, Exam 2-3 middle of term and Final exam end of term
6. Identify the special tests used by the physical therapist for the orthopedic and musculoskeletal conditions addressed.	Exam 2-3 middle of term and Final exam end of term
7. Describe the diagnostic resources used with the orthopedic and musculoskeletal conditions addressed.	Exam 1 beginning of term, Exam 2-3 Middle of term and Final exam End of term
8. Identify components of orthotic devices.	Final Exam end of term
9. Explain principles of proper orthotic fitting.	Final Exam end of term
10. Discuss intervention philosophies throughout the stages of rehabilitation for orthopedic and musculoskeletal conditions addressed.	Exam 2-3 middle of term and Final exam end of term
11. Define medical interventions commonly utilized with the orthopedic and musculoskeletal conditions addressed.	Exam 1 beginning of term, Exam 2-3 Middle of term and Final exam End of term
12. Identify and administer selected standardized questionnaires	Exam 1 beginning of term, Exam 2-3 Middle of term and Final exam End of term
13. Integrate the anatomy and physiology principles to the orthopedic and musculoskeletal conditions addressed.	Exam 2-3 middle of term and Final exam end of term
14. Identify the level of intervention for the entry-level PTA in specialized orthopedic techniques.	Exam 2-3 middle of term and Final exam end of term
15. Demonstrate competence in application of interventions related to orthopedic and musculoskeletal conditions presented with simulated patient.	Midterm lab practical middle of term and final lab practical end of the term

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:	Health Sciences	Discipline:	PTA
Course Coordinator:	Laura Testrake, PT, DPT		
Course Number:	PHTA 2090	Course Title:	Orthopedic Conditions and Interventions
Semester / Session:	Fall 2025 / Session B	Start / End Date:	October 13, 2025 – December 12, 2025

Instructor Information

Name:	Laura Testrake	Credentials:	PT, DPT
Phone Number:	330-353-2303	E-Mail Address:	ltetrake@ncstatecollege.edu
Office Location:	HS-142	Office Hours:	T/R 9-10, 11:40-12, 2:30-4 or by appointment

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

WEEK	TOPIC	READINGS
1 a (10/14)	Lecture/lab-Introduction/Tissue Injury & Healing	Dutton ch.1 & 4 pp 93-107
1 b (10/16)	Lecture/lab-Pain/Questionnaires/Modality practice	Lescher pp 26-28
2 a (10/21)	Lecture/lab-Fractures-assistive device practice	Dutton ch. 4 pp 107-116
2 b (10/23)	Written Exam 1 (covers tissue injury/healing, pain, and fractures)	
	Lecture-DJD & RA	Lescher 5 & 6/Dutton ch 5
3 a (10/28)	Lecture/lab-Spine	Dutton ch 16-19
3 b (10/30)	Lecture-geriatrics	Dutton ch 27
4 a (11/4)	Written Exam 2 (covers DJD, RA, Spine, and geriatrics)	
4 b (11/6)	***Midterm lab testing covers weeks 1-3***	
	Lecture/lab-Shoulder	Dutton Ch. 20
5 a (11/11)	No class-veteran's day	
5 b (11/13)	Lecture/lab-Elbow, wrist and hand	Dutton Ch. 21 and 22
6 a (11/18)	Written Exam 3 (covers shoulder, elbow, wrist, and hand)	
	Lecture/lab-hip	Dutton ch. 23
6 b (11/20)	Lecture/lab-knee	Dutton ch. 24
7 a (11/25)	Lecture/lab case study	
7 b (11/27)	No class-Thanksgiving	
8 a (12/2)	Lecture/lab ankle and foot	Dutton ch. 25
8 b (12/4)	***Final lab testing covers weeks 4-7***	
Final exam week 12/8 – 12/12	FINAL Written EXAM (this exam is heavy on hip, knee, ankle, and foot, but is also comprehensive with the other course content from the semester)	

Course Number: PHTA 2090
Semester / Session: Fall 2025 session B

Course Title: Orthopedic Conditions and Interventions
Start / End Date: October 13, 2025 – December 12, 2025

II. Grading and Testing Guidelines:

II. Course Assignments:

1. Lecture: (60% of the final course grade once combined with lab)
 - a. 3 exams worth 60% of course grade (20% each)
 - b. One comprehensive final exam worth 25% of course grade
 - c. Discussion posts/assignments 10%
 - d. Lecture participation worth 5% of course grade
2. Lab: (40% of the final course grade once combined with lecture)
 - a. One mid-term lab practical worth 25% of lab grade
 - b. One case study worth 20% of lab grade
 - c. One final full lab practical examination which is comprehensive worth 25% of lab grade.
 - d. Pre-lab assignments/lab assignments 20% of lab grade
 - e. Lab participation worth 10% of lab grade

III. Grading and Testing Guidelines:

This is a lecture/lab course which requires an overall passing grade of 77% in both the lecture and lab components. Lab practicals must be passed with an 80%. Lecture is worth 60% of the total grade and lab is worth 40% of the total grade. Once each component has been passed with a 77% grade the two components will be averaged for the final course grade. Students falling below 77% in either component will have failed to meet the requirements to continue in the PTA program.

V. Class Attendance and Homework Make-Up Policy:

The PTA program is a series of sequential courses developed to build from one class session and course to the next. It is imperative that the student attend all class and laboratory sessions based on the progressive sequence and amount of educational material to be presented in six semesters. All instructors will maintain attendance records and will follow college attendance guidelines and policies.

It will be the responsibility of the student to obtain lecture notes and to make up laboratory sessions. Any student missing two or more classes will be required to meet with the Program Director. Students have a primary responsibility for notifying their instructors about anticipated or planned absences.

VI. Classroom Expectations:

Students are expected to attend every lecture and lab session and listen attentively and interact and behave in a professional manner conducive to learning. If a student is found to be disrupting a class session he/or she may be asked to leave the classroom upon the discretion of the instructor and then be required to meet with the Program Director discuss professional behavior and expectations. Class and lab participation is expected and will be considered for 5% of the overall course grade.

PHTA 2090 Orthopedic Conditions & Interventions**Fall Semester 2025****Lecture: T/R 10-11:40****Labs: T/R 12-2:30**

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2 a (10/21)	Lecture/lab-Fractures-assistive device practice	Dutton ch. 4 pp 107-116
2 b (10/23)	<u>Written Exam 1</u> (covers tissue injury/healing, pain, and fractures)	
	Lecture-DJD & RA	Lescher 5 & 6/Dutton ch 5
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