



North Central State College

MASTER SYLLABUS

2025-2026

- A. Academic Division: Health Sciences
- B. Discipline: Physical Therapist Assistant
- C. Course Number and Title: PHTA1070 Functional Anatomy
- D. Assistant Dean: Heidi Kreglow, PTA
- E. Credit Hours: 3
Lecture: 2 hours
Laboratory: 2 hours
- F. Co-requisites: PHTA1010 (M) and PHTA1040 (M)
- G. Last Course/Curriculum Revision Date: Fall 2022 Origin date: 11/22/2010
- H. Textbook(s) Title:

Required:

Trail Guide to the Body

- Author: Biel, Andrew
- Year: 2019
- Edition: 6th
- ISBN: 9780998785066

PTA Examination Review & Study Guide

- Author: McGinty, Patrick
- Year: 2024
- Edition: 7th
- ISBN: 9798989231416

PhysioU Access Plan (2-Year Access Code required)

- Author: Unknown
- Copyright Year: 2025
- ISBN: 9200604022222
- <https://clinicalpattern.com/physical-therapy/>

- I. Workbook(s) and/or Lab Manual:

Trail Guide to the Body Student Workbook

- Author: Biel, Andrew
- Year: 2019
- Edition: 6th
- ISBN: 9780991466672

- J. Course Description: A course involving a study of human movement, principles of mechanics, musculoskeletal anatomy and neuromuscular physiology as it relates to the development of physical therapy exercise and those forces creating human activity. The time, space and mass aspects of human motion are also presented. Laboratory activities include location and palpation of muscles.

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. Integrate the axes and the planes of joint motions.	Exam 1 Beginning of term
2. Use kinetic principles in human applications.	Exam 1 Beginning of term
3. Describe kinematic principles related to joint structures and components.	Exam 1 Beginning of term
4. Explain the principles of human joint motion.	Exam 1 Beginning of term
5. Explain principles of active and passive insufficiency.	Exam 2 Beginning of term
6. Identify components of movement.	Exam 2 Beginning of term
7. Differentiate the major motor and sensory pathways for human movement.	Exam 2 Beginning of term
8. Describe the difference between an upper motor neuron and lower motor neuron.	Exam 2 Beginning of term
9. Describe major functions of the components of the central nervous system.	Exam 2 Beginning of term
10. List the spinal cord levels for major nerve plexi.	Exams 2, 3, 4, 5 and Final exam end of term
11. Define the functional characteristics of muscle tissue.	Exam 2 Middle of term
12. Illustrate roles of muscle during joint motion.	Exam 3, 4, 5 and Final exam end of term
13. Identify origin, insertion, innervations and action for major muscles of the human body.	Exams 3, 4, 5 and Final exam end of term
14. Determine function of muscle based on movement analysis.	Exams 3, 4, 5 and Final exam end of term
15. Correlate primary peripheral nerve injury to gross muscle function.	Exams 2, 3, 4, 5 and Final exam end of term
16. Demonstrate types of muscle contractions.	Exams 2, 3, 4, 5 and Final exam end of term
17. Define normal postural alignment.	Exam 5 end of term
18. Identify deviations from normal postural alignment.	Exam 5 end of term
19. Define normal gait pattern.	Final exam end of term
20. Identify components of gait cycle.	Final exam end of 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		
Course Number:	PHTA 1070-01	Course Title:	Functional Anatomy
Semester / Session:	Fall 2025/ Session A	Start / End Date:	08/11/2025 thru 10/03/2025

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:	M/W 8:30-9, 12:50-2:50, by appointment

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

II.

<u>WEEK</u>	<u>TOPIC</u>	<u>READINGS</u> <i>Trail Guide to the Body</i>
1 a (8/11)	Lecture-Basic info, Articular System	Ch. 1
	Lab-Basic info, Articular System	
1 b (8/13)	Lecture-Muscular System and Nervous System	Ch. 1
	Lab-Muscular System and Nervous System	
2 a (8/18)	Lecture- Exam 1	Ch. 2
	Lab-Shoulder Girdle Lecture	
2 b (8/20)	Lecture-Shoulder Joint	Ch. 2
	Lab-Shoulder Joint	
3 a (8/25)	Lecture-Elbow	Ch. 2
	Lab-Elbow	
3 b (8/27)	Exam 2 (shoulder girdle, shoulder, elbow)	Ch. 2 and 3
	Lab-shoulder check off, forearm/wrist lecture/lab	
4 a (9/1)	NO SCHOOL HAPPY LABOR DAY!	
4 b (9/3)	Lecture-review UE, answer questions, hand lecture/lab	Ch. 3
	Lab-Midterm Lab Practical	
5 a (9/8)	Lecture-neck and trunk	Ch. 4 and 5
	Lab neck and trunk	
5 b (9/10)	Lecture-pelvic girdle/Hip	Ch. 6
	Lab pelvic girdle/hip	
6 a (9/15)	Lecture-Knee	Ch.7
	Lab knee	
6 b (9/17)	Exam 3 (pelvis, hip, knee)	Ch. 7
	Lab ankle and foot lecture	
7 a (9/22)	Lecture-ankle and foot lab, posture	
7 b (9/24)	Review day	
8 (9/29, 10/1) (9/29, 10/1)	FINAL Comprehensive Written Exam FINAL Lab Practical	

Grading and Testing Guidelines:

Final Grade Calculation

1. Lecture: (60% of the final course grade once combined with lab)
 - a. 3 exams worth 45% of course grade (15% each)
 - b. One comprehensive final exam worth 25% of course grade
 - c. Discussion posts 10%
 - d. Quizzes 15%
 - e. Lecture participation worth 5% of course grade
2. Lab: (40% of the final course grade once combined with lecture)
 - a. One mid-term full lab practical examination worth 35% of lab grade.
 - b. One final full lab practical examination which is comprehensive worth 40% of lab grade.
 - c. Pre-lab assignments 20% of lab grade
 - d. Lab participation worth 5% of lab grade

II. Examination Policy:

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.

1. The reasons for which a student will be excused from taking an examination
 - a. Hospitalization (with documented verification)
 - b. Death in the immediate family (with documented verification)
 - c. Personal illness or illness in immediate family - (doctor's excuse required).
2. A student who misses an examination for any reason is responsible for
 - a. Alerting the professor immediately
 - b. Providing documentation
 - c. Rescheduling within 3 days of missed examination

III. 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.

V. 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 1070 Functional Anatomy**Fall Semester 2025****Lecture: Mondays and Wednesdays 9-10:50am****Labs: Mondays & Wednesdays 11-12:50pm**

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1 a (8/11)	Lecture-Basic info, Articular System	Ch. 1
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1 b (8/13)	Lecture-Muscular System and Nervous System	Ch. 1
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	Lab-Shoulder Joint	
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PHTA 1070 Functional Anatomy**Fall Semester 2025****Lecture: Mondays and Wednesdays 9-10:50am****Labs: Mondays & Wednesdays 11-12:50pm**

<u>WEEK</u>	<u>TOPIC</u>	<u>READINGS</u> <i>Trail Guide to the Body</i> <i>Workbook</i>
1 a (8/11)	Lab-Basic info, articular system	Ch. 1
1 b (8/13)	Lab-Muscular System and Nervous System	Ch. 1
2 a (8/18)	Lab- shoulder girdle	Ch. 2
2 b (8/20)	Lab-Shoulder joint	Ch. 2
3 a (8/25)	Lab-Elbow, wrist, and hand	Ch. 2 & 3
3 b (8/27)	<u>MIDTERM LAB PRACTICAL</u>	
4 a (9/1)	NO SCHOOL HAPPY LABOR DAY!	
4 b (9/3)	Lab-Neck and trunk	Ch. 4 & 5
5 a (9/8)	Lab-pelvic girdle	Ch. 6
5 b (9/10)	Lab-Hip	Ch. 6
6 a (9/15)	Lab-Knee	Ch. 7
6 b (9/17)	Lab-Ankle and foot	Ch. 7
7 a (9/22)	Lab-posture	
7 b (9/24)	Lab-review day	
8 (9/29 – 10/1)	<u>FINAL LAB PRACTICAL</u>	