

PHYT 8902 - Functional Anatomy

Fall 2026 Syllabus, Section 01, CRN 41667,

Credit hours: 4

Instructor

Cathy Bieber Parrott

Professional Qualifications:

Ph. D., Health & Rehab Science, YSU, 2023

MS. PT, Advanced Msk and Orthop PT, University of Pittsburgh, 1994

BS. PT, University of Texas, Medical Branch, Galveston, 1984

Assistant Professor

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Communication Expectations:

I will respond to emails within 24 hours during weekdays and 48 hours over a weekend.

How to Refer to me:

Cathy

Course Description

8902. Functional Anatomy. Study of kinetics, kinematic variables, and mechanical properties of tissue; motion analysis: posture, gait and functional activities; environmental contexts and constraints, and life span applications. Four hour lecture per week. 4 s.h.

Course Readings

Group	Title	Author	ISBN
Required	Joint Structure and Function, A Comprehensive Analysis, 6th ed. 2019.	Levangie, Norkin, Lewek	10 9 8 7 6 5 4 3 2 1

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

Schedule of Topics and Assignments

Day	Date	Reading(s)	Proposed Topic	Due/To Prepare for Class
Mon	8/24	Ch 1	Biomechanical application to body functions.	
Wed	8/26	Ch 2	Joint Function	Mech Prop of Human Materials, PPT
Mon	8/31	Ch 2 & 3	Joint and muscle function for production of posture and movement	
Wed	9/2	Ch 13	Neurologic control of posture and movement	
Mon	9/7		Lab: Manipulation of force and effect on posture and movement Gait Observation	Due: first 3 items on kinetic assignment

Wed	9/9	Ch 14	Typical Gait Production	Gait quiz
Mon	9/14	Ch 14	Typical Gait Production	Due: Muscle Function During Movement
Wed	9/16	Ch 4 Ch 6	Joint Function: C-spine Joint Function: TMJ	Joint quiz
Mon	9/21	Ch 7	Joint Function: Shoulder complex	Joint quiz
Wed	9/23	Ch 8	Joint Function: Elbow and Forearm	joint quiz
Mon	9/28	Ch 9	Joint Function: Wrist and Hand.	joint quiz
Wed	9/30	Ch 4 Ch 5	Joint Function: Chest wall and T-spine	Joint quiz Due: Kinetic Application to Posture & Movement
Mon	10/5	Ch 4	Joint Function: L-spine and Pelvis	Joint quiz
Wed	10/7		Midterm Exam	
Mon	10/12	Ch 10	Joint Function: Hip	Due: 1/2 of skills checked off
Wed	10/14	Ch 11	Joint Function: Tibiofemoral joint	
Mon	10/19	Ch 11	Joint Function: Patellofemoral joint	
Wed	10/21	Ch 12	Joint Function: Ankle	
Mon	10/26	Ch 12	Joint Function: Foot	
Wed	10/28		Lab: Measuring posture and movement	Due: Gait Analysis Documentation
Mon	11/2	APTA Neuro Academy Movement Analysis Framework.	In class activity: Analyze assigned functional activity and prepare peer teaching	
Wed	11/4		In class activity: Analyze assigned functional activity and prepare peer teaching	Due: Skill Check- all skills completed
Mon	11/9		Peer teaching of functional movment: Chewing reaching, hand/finger object manipulation.	Due: Peer teaching of Human movement
Wed	11/11	Veteran's Day Holiday		
Mon	11/16		Peer teaching of functional movment: Supine to sit, sit to stand, stand to sit	Due: Develop Human Movement Resource
Wed	11/18		Peer teaching of functional movment: Stair ascent, stair descent, throwing	
Mon	11/23		Peer teacin gof functional movement: Kicking, running	
Wed	11/25	Thanksgiving recess		
Mon	11/30		Immobilization, environment and aging impact on posture and movement	
Wed	12/2		Manipulation of forces to modify postue and movement dysfunction	
Mon	12/7		Final Exam	

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