

### Jordan University of Science and Technology

# Faculty of Applied Medical Sciences Physical Therapy Department

P.T201 Musculoskeletal Anatomy - JNQF Level: 7

First Semester 2023-2024

#### **Course Catalog**

2 Credit Hours. An experientially based course that uses lecture, computer medical applications, partner interaction, and digital images to study the three-dimensional structure and function of the osseous, articular, muscular, nervous and supportive tissues of the human body. A major focus of this course will be laboratory-based learning and will incorporate the use of surface anatomy, land-marking, and diagnostic imaging. This course is designed to provide students an applied experience into the study of human musculoskeletal anatomy and gain an appreciation for the application of anatomical and mechanical functions as they relate to human movement.

Teaching Method: On Campus

Text Book							
Title Functional anatomy: musculoskeletal anatomy, kinesiology, and palpation for manual therapists							
Author(s)	Cael, Christy.						
Edition	2nd Edition						
Short Name	REF#1						
Other Information							

#### Course References

Short name	Book name	Author(s)	Edition	Other Information
Ref#2	Sobotta Atlas of Anatomy: General Anatomy and Musculoskeletal System	Paulsen, Friedrich, and Jens Waschke, eds.	1st Edition	

Instructor					
Name	Dr. Mohammad Etoom				
Office Location	-				
Office Hours	Sun: 08:00 - 08:30 Mon: 08:00 - 12:00 Tue: 08:00 - 08:30 Tue: 15:30 - 16:30 Thu: 08:00 - 09:00				
Email	msetoom@just.edu.jo				

## Class Schedule & Room

Section 1:

Lecture Time: Sun, Tue : 08:30 - 09:30

Room: SB13

Prerequisites							
Line Number	Line Number Course Name						
1112180	P.T218 Gross Anatomy & Histology	Prerequisite / Study					

	Tentative List of Topics Covered						
Weeks	Topic	References					
Week 1	Course introduction	From <b>REF#1</b>					
Week 2	Musculoskeletal Terminology	From <b>REF#1</b>					
Week 3	Shoulder joint ligaments, bony, & muscular structure	From <b>REF#1</b> , From <b>Ref#2</b>					
Week 4	Shoulder joint muscular structure 1	From <b>REF#1</b> , From <b>Ref#2</b>					

Week 5	Shoulder joint muscular structure 2	From <b>REF#1</b> , From <b>Ref#2</b>
Week 6	Elbow joint ligaments, bony, & muscular structure	From <b>REF#1</b> , From <b>Ref#2</b>
Week 7	Wrist and hand ligaments, bony, & muscular structure	From <b>REF#1</b> , From <b>Ref#2</b>
Week 9	Face & Neck-muscular structure	From <b>REF#1</b> , From <b>Ref#2</b>
Week 10	Vertebral column bony structure & Back, Thoracic & abdominal muscles	From <b>REF#1</b> , From <b>Ref#2</b>
Week 11	Pelvic region ? bony structure	From <b>REF#1</b> , From <b>Ref#2</b>
Week 12	Hip & thigh bony & muscles structure 1	From <b>REF#1</b> , From <b>Ref#2</b>
Week 13	Hip & thigh bony & muscles structure 2	From <b>REF#1</b> , From <b>Ref#2</b>
Week 14	Knee Joint ? ligaments & bony structure	From <b>REF#1</b> , From <b>Ref#2</b>
Week 15	Ankle & foot Joint ? ligaments, bony, & muscular structure	From <b>REF#1</b> , From <b>Ref#2</b>

Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Study the structure and function of the human body using a variety of resources (i.e., 3D medical applications, partner interaction, models, digital images, atlas of human anatomy, etc.) [1PLO1 -K1] [1L7K1]	10%	Midterm Exam, Final Exam, Quiz, Homework
Describe the attachments, action(s), and function(s) of selected muscles in the upper and lower extremity, and spine [1PLO1 - K1] [1L7K1, 1L7S2]	30%	Midterm Exam, Final Exam
Describe the functions and pathways of the major peripheral nerves supplying the upper and lower extremity [1PLO1 -K1] [1L7K1, 1L7S2]	15%	Midterm Exam, Final Exam
Identification of Musculoskeletal Structures: Students will be able to identify and describe the major bones, muscles, joints, and related structures of the human musculoskeletal system. [1PLO1 -K1] [1L7K1, 1L7S2]	20%	Midterm Exam, Final Exam, Quiz, Homework
Identify the primary actions (agonists), antagonists, synergists, and fixators of major muscles in various movements of the body. [1PLO1 -K1] [1L7K1, 1L7S2]	10%	Midterm Exam, Final Exam
Illustrate the differences between prime and accessory muscles for each joint movement of the body. [1PLO1 -K1] [1L7S2]	15%	Midterm Exam, Final Exam

	Relationship to Program Student Outcomes (Out of 100%)															
PLO1 -K1	PLO8-	PLO9- C2	PLO5- S1	PLO2- K2	PLO3- K3	PLO6- S2	PLO4- K4	PLO10- C3	PLO7- S3	MS_PLO1	MS_PLO2	MS_PLO3	MS_PLO4	MS_PLO5	MS_PLO6	MS_PLO7
100	0.	02	0.			02										

Relationship to NQF (	Outcomes (Out of 100%)
L7K1	L7S2
47.5	52.5

Evaluation						
Assessment Tool	Weight					
Midterm Exam	30%					
Final Exam	50%					
Quiz	10%					
Homework	10%					

Date Printed: 2024-02-17