



Jordan University of Science and Technology
Faculty of Applied Medical Sciences
Department of Rehabilitation Sciences
Program of Physiotherapy
PT201&PT203 Course Syllabus

Course Information	
Course Title	Musculoskeletal Anatomy& Lab
Course Code	PT 201, PT 203
Prerequisites	
Course Website	E-learning

Course Description, Aims and Objectives
<p>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.</p> <p>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.</p>

Textbook/s	
Title	Functional Anatomy Musculoskeletal anatomy, kinesiology, and palpation for manual therapist.
Author(s)	Christy Cael
Publisher	Lippincott Williams and Wilkins
Year	2010
Edition	1st
Book Website	

Useful Resources
<ul style="list-style-type: none">• E-learning website: students should check their E-learning accounts. Each student should be responsible for studying the materials, articles, and other resources posted on E-learning.• JUST university Library.• Lectures hand outs; Gerard J. Tortora. Principles of Human Anatomy

Assessment		
Assessment	Expected Due Date	Percentage
Midterm Exam	30/11/2020	50%
Final Exam	End of the semester	50%
TOTAL		100%
Teaching and Learning Methods		
Online lectures and discussions, Medical applications and practical labs.		

Learning Objectives:

After studying the material covered in lectures, practical sessions, clinical seminars and case presentations of this course, the student is expected to achieve the following learning objectives:

Learning objectives	Weight
1. Identify 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.)	30%
2. Improve their self-directed learning skills	10%
3. learn how to palpate, approximate or demonstrate the location of selected muscles in the upper and lower extremity	20%
4. Learn to palpate, approximate or demonstrate the location of primary connective tissues (ligaments, capsules, menisci) of selected peripheral joints in the upper and lower extremity	20%
5. Learn to palpate, approximate or demonstrate the location of selected skeletal landmarks	20%

Learning outcomes:

After studying the material covered in lectures, practical sessions, clinical seminars and case presentations of this course, the student is expected to achieve the following learning outcomes:

	Learning outcome	References
1.	Be able to describe the structure and function of the skeletal system	Textbook & handouts
2.	Be able to describe the functions and pathways of the major peripheral nerves supplying the upper and lower extremity	Textbook & handouts
3.	Be able to identify the attachments and function(s) of primary connective tissues (ligaments, capsules, menisci) supporting the selected peripheral joints of the upper and lower extremity, and of the spine	Textbook & handouts
4.	Be able to describe the attachments, action(s), and function(s) of selected muscles in the upper and lower extremity, and spine	Textbook & handouts

Lectures/topics:

Dates Or Weeks	Lecture Topic	Specific learning objectives	References
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1	Course Introduction Musculoskeletal Terminology	Improve their self-directed learning skills	Textbook & handouts
2	Shoulder jt.- ligaments & bony structure Shoulder jt.- muscular structure 1	Identify 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.)	Textbook & handouts
3	Shoulder jt.- muscular structure 1	Learn to palpate, approximate or demonstrate the location of selected skeletal landmarks	Textbook & handouts
4	Elbow jt.- Ligaments, bony & muscular structure	Identify 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.)	Textbook & handouts
5	Wrist jt.& hand- ligaments & bony structure	Identify 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.)	Textbook & handouts
6	Wrist jt.& hand- ligaments & bony structure	Learn to palpate, approximate or demonstrate the location of primary connective tissues (ligaments, capsules, menisci) of selected peripheral joints in the upper and lower extremity	Textbook & handouts

7	Face & Neck- muscular structure	Identify 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.) Learn to palpate, approximate or demonstrate the location of selected skeletal landmarks	Textbook & handouts
8	Midterm Exam		
9	Vertebral column bony structure Back, Thoracic & abdominal muscles	Identify 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.) Learn to palpate, approximate or demonstrate the location of selected skeletal landmarks	Textbook & handouts
10	Pelvic region – bony structure Hip jt.- ligaments & bony structure	Identify 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.)	Textbook & handouts
11	Knee jt.- ligaments & bony structure Knee jt. – muscular structure	Identify 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.) Learn to palpate, approximate or demonstrate the location of selected skeletal landmarks	Textbook & handouts

12	Ankle jt. & Foot – ligaments & bony structure Ankle jt. & Foot – muscular structure	Identify 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.) Learn to palpate, approximate or demonstrate the location of selected skeletal landmarks	Textbook & handouts
13	Final Exam		

Additional Notes	
Statement on Professionalism	Professional behavior is expected of students at all times. Attitude and professional behavior are a minimum criterion for passing this class. Examples of unprofessional behavior include but are not limited to: missing classes, tardiness, lack of attention for a speaker, talking to others during lecture, leaving a lecture prior to its completion without prior authorization of the instructor, working on other class material during class, and sleeping during class.
Cheating	University regulations will be applied on cases of cheating and/or plagiarism
Cell phone:	The use of cellular phone is prohibited in class rooms and during exams. The cellular phone must be switched off in class rooms and during exams.
Attendance	No points will be count for points attendance of this class, however attending the lectures will greatly enhance your grade. The student is responsible for any information discussed in lecture sessions. It is imperative to attend all classes!
Absences:	University regulations will be applied. Students are not allowed to be absent for more than 20% of lectures for any reason or excuse. If a student exceeds the absence limit, he or she will not be allowed to sit for future course exams. (Please review university regulation for more details)
Make-up Exam	Make-up exams is entitled for students who miss the exam with accepted legal or medical excuse endorsed by the instructor within 24 hours after the scheduled exam (Please review university regulation for more details)
Feedback	Concerns, complaints, questions, and/or feedback are appreciated and will be important for the instructor. You can contact your instructor using the e-mail or during office hours

Kindest Regards

Functional Anatomy of the Human Visual Pathway. U. Schiefer and W. Hart. Nearly a half of all cortical neurons are devoted to the processing of visual information. The afferent visual pathway from the retina to the primary visual cortex has four neuronal elements (â– Fig. 3.1). â– First neuron: photoreceptors â– Second neuron: bipolar cells â– Third neuron: retinal ganglion cells (and their axonal processes, including the chiasm. and optic tracts) â– Fourth neuron: geniculocalcarine neurons. LGB Volume = 14 x 8 x 4 mm³.
Functional Range Conditioning®. Mobility Development, Articular Strength & Neurological Control. Become a Provider. Learn More.
Functional Range Assessment®. Advanced Measurement Procedures, Clinical Assessment & FRC Programming. Become a Provider.
Anatomy is the first stage of the basic science that medical students have to study. Study of human anatomy starts from study of skeletal system and can be only by using preparation in the museum and laboratory class. In this book you can get good knowledge about skeletal system of human being, methods which we used to study structure of human body. Under this topic (Skeletal System) you can get enough information about anatomy of all bones and their clinical value.