

## Anatomy of Musculoskeletal system course plan

<b>Semester:</b> 1 <sup>nd</sup>	<b>Year:</b> 2024-2025
<b>M.D. program Course Syllabus</b>	
<b>Course Title:</b> Musculoskeletal anatomy. Theoretical	<b>Department:</b> Department of Anatomical Sciences
<b>Course Code:</b> 1234069	<b>Instructor:</b> Dr. Vajihe Asgari
<b>Location of teaching the course:</b>	<b>Credit Hours:</b> 30 hours
<b>Prerequisite:</b> none	<b>Credit Units:</b> 0.4 (1.76)
<b>Office address:</b> Faculty of Medicine, Department of Anatomical Sciences	
Tel: 031-37929155	Email: v.asgari@med.mui.ac.ir
<b>Number of student:</b>	
<b>Brief course description:</b> This course covers the upper and lower limbs anatomy	
<b>Learning outcomes:</b> On satisfying the requirements of this course, students will have the knowledge and skills to: <ol style="list-style-type: none"> <li>1. Skeletal system, joint and ligaments of upper and lower limbs.</li> <li>2. Identify and describe the muscles of upper and lower limbs (origin and insertion).</li> <li>3. Explain the anatomical spaces of the upper and lower limbs.</li> <li>4- Describe the arteries and nerves of the upper and lower limbs.</li> <li>6- Discuss some clinical points related to upper and lower limbs.</li> <li>7- Limbs growth and development.</li> <li>8-Muscular system of limbs, vertebral column and sternum development.</li> </ol>	
<b>References (Text books):</b> <ol style="list-style-type: none"> <li>1- Gray's Anatomy for Students)</li> <li>2- CD of ADAM Interactive Grants Method of anatomy, Clinical Atlas (Netter),</li> </ol>	
<b>ASSESSMANT TOOLS</b> (The assessment tools that will be used to test students ability to understand the course material and gain the skills and competencies stated in learning outcomes)	
<b>ASSESSMENT TOOLS</b>	<b>From 20</b>
Midterm Exam	10
Final Exam	10
<b>TOTAL MARKS</b>	<b>20</b>
<b>Students responsibilities:</b>	

- 1- Prepare for the class in advance
- 2- Break down every system into its basic components.
- 3- Use the lectures outline (PowerPoint presentations) and handouts (if any) as a guideline for your study.
- 4- Study the course components using the required book, atlas and the websites.
- 5- Reconstruct the system so that it is functional and understandable.
- 6- Students are expected to spend 2-3 hours studying for each hour in class.
- 7-By now the students are expected to end up with an understanding of the subject.

#### ATTENDANCE RULES

Attendance and participation are extremely important, and the usual University rules will apply. Attendance will be recorded for each class.

Absence of one session will result in a first written warning. Absence of two sessions or more will result in a 0.25 point deduction on the final score for each session.

Absence of more than three sessions will result in forfeiting the course and the student will not be permitted to attend the final examination. Should a student encounter any special circumstances (i.e. medical or personal), he/she is encouraged to discuss this with the instructor and written proof will be required to delete any absences from his/her attendance records.

Use of Mobile Devices, Laptops, etc. During Class, unexpected noises and movement automatically divert and capture people's attention, which means you are affecting everyone's learning experience if your cell phone, laptop, etc. makes noise or is visually distracting during class. For this reason, students are required to turn off their mobile devices and close their laptops during class.

#### Department's Attitudes

##### Ethics, Critical thinking, hard work and discipline:

Examination attitudes Any evidence of cheating on a test will result in the student receiving (0 mark) for the test and will be announced through the lectures so all the students will be informed.

The instructor will be the final authority on whether cheating has occurred.

Cellular phones and notebooks are band and disruptive and are not allowed during the exam periods because they mean an act of cheating, therefore students are advised to enter the exams without them.

Mid exam date: 9/11/2021

Final exam date:

### COURSE SYLLABUS

	Chapter	Page	Course topics	Time (Hour)	Date
1	1	4-10	The purpose of teaching musculoskeletal anatomy, definitions and terms	2	10/09/2024
2	1 7	17-19 709-722	Continue the topics of anatomy base information about muscle and osteology of upper limb bones including clavicle, scapula and Humerus.	2	17/09/2024
3	7	802-808 759-761	Forearm bones (radius and ulna), wrist, hands and fingers. Axillary cavity (position, walls, muscle	2	24/09/2024

		729-739	specifications) The contents of the axillary cavity (arterial and vesicle axillary lymphatic complexes)		
4	7	739-758	(First Quiz) Continue the contents of the cavity (brachial network) - scapular muscles (deltoid, trapezius, rotator cuff) triangular and quadrangular spaces	2	1/10/2024
5	7	758-780	Arm area (vessels and superficial nerves), anterior and posterior department muscles (muscle characteristics) arm vessels (artery and vein brachial), arm nerves (musculocutaneous, median, ulnar, radial)	2	8/10/2024
6	7	781-794	The anterior forearm compartment muscles (surface and deep muscle) of the forearm region and nerves of the forearm (Medina, Ulnar and Radial)	2	15/10/2024
7	7	795-801	(Second Quiz) The posterior compartment muscles of the forearm (surface and superficial muscle characteristics), radial and ulnar arteries, wrist retinaculum (flexor and extensor retinaculum) and their contents	2	22/10/2024
8	7	802-825	The importance of its hand and performance in everyday life, hand creases. Hand muscle muscles: hypothenar, thenar, lumbrical muscles and their bones and their characteristics, hand vessels (surface archs and deep), hands nerves	2	29/10/2024
			midterm exam		
9	6	546- 574	General look at lower limb skeletons - pelvic girdle (hip bone) - femur		5/11/2024
10	6	595-600 647- 662	Legal bones (Tibia and fibula), general look at foot bones (Talus, calcaneus, etc.)	2	12/11/2024

11	6	574-581 582-584 585-593	The gluteal region (surface muscle characteristics) arteries and nerves (sacral network) of gluteal area, fascia lata and tensor fascia lata muscles, superficial and deep fascia of the femur	2	19/11/2024
12	6	594-595 600-628	(third Quiz), anterior, posterior and medial compartment of femur (muscles, vessels and nerves)	2	26/11/2024
13	6	601-616	Anatomical spaces of the anterior and medial region (femoral triangle, adductor canal) and their contents	2	3/12/2024
14	6	629-646	Superficial and deep fascia, anterior, posterior and lateral compartment of leg (muscle characteristics), popliteal cavity, and its contents, vessels and nerves of the calf region of lower leg.	2	10/12/2024
15	6	662-671	(Fourth Quiz) Ankle retinaculum (executor, flexor and proneal) and their contents. The characteristics of the dorsal and plantar muscles (first to fourth layers), vessels and nerves of the foot.	2	17/12/2024
16	10	186-197	Limbs growth and development.	2	24/12/2024
17	10, 11	178-183 175-197	Muscular system of limbs, vertebral column and sternum development.	2	31/01/2024