In the name of GOD

Tabriz University of Medical Sciences

Course Guide for Anatomical Sciences – Musculoskeletal System

Course Code: 102

Course Instructor: Dr. Hamid Taifi **Contact Number / Student Access: 33342086**

Prerequisite or Corequisite: Introduction to Anatomical Sciences

Course Credits: 2.4 **Course Type: Theoretical / Practical**

Program Level: Doctor of Medicine (M.D.) **Number of Sessions: 30**

Course Duration: According to the academic calendar

Class Schedule: Saturday and Sunday and Tuesday

Classroom Location: School of Medicine classrooms **Virtual Class Link: — (M.D.)**

Other Instructors:

First Name	Last Name	Academic Rank	Department	Preferred Method of Contact
Hamid	Taifi	Professor	Anatomical Sciences	In-person

General Objective of the Course

By the end of this course, students should be able to recognize the following and understand the importance of their surface and radiological findings under normal and clinical conditions:

1. Bones of the upper and lower limbs, their positions, and the attachments of muscles and ligaments.
2. Types of joints, joint structures, and their functions.
3. Anatomical structure and function of the muscular system, associated vessels, nerves, and neighboring structures.
4. Dominant myotomes of muscles and joints, and sensory innervation of different limb regions.
5. Clinical, surface, applied, and radiological anatomy of the musculoskeletal system.
6. Development of the musculoskeletal system.
7. Vertebral column anatomy.

Additionally, students should be able to:

1. Identify the bones of different limb regions and their clinically important features on a skeleton.
2. Recognize bones of different limb regions and their clinically important features on radiographs.
3. Identify key bony landmarks on a living person and on cadavers.
4. Identify clinically important muscles of different limb regions and their functions on a living person (accessible muscles), cadaver, and model.
5. Perform limb movements at different joints on a living person.
6. Determine clinically important sensory innervation in limbs on a living person or cadaver.
7. Identify important superficial vessels and nerve positions in limbs on cadavers and models.
8. Palpate the pulse of major arteries in various limb regions on a living person.

Specific Objectives of the Course

It is expected that upon completion of this course, learners will be able to:

a. Explain the vertebral column in detail.
b. Describe the osteology of the upper limb in detail.
c. Explain the shoulder girdle, axillary walls, and their contents in detail.
d. Describe the anterior and posterior regions of the arm and the elbow cavity in detail.
e. Explain the anterior and posterior regions of the forearm in detail.
f. Describe the anatomy of the hand in detail.

g. Explain the surface, clinical, and radiological anatomy of joints in detail.
h. Describe the osteology of the lower limb in detail.
i. Explain the anterior and medial regions of the thigh in detail.
j. Describe the gluteal region and posterior thigh in detail.
k. Explain the popliteal fossa and posterior leg in detail.
l. Describe the distal leg and foot in detail.
m. Explain the surface, clinical, and radiological anatomy of joints in detail.
n. Describe the development of the musculoskeletal system in detail.

Method of Instruction

1. The theoretical sessions are held in the classroom in the form of lectures according to the schedule announced at the beginning of the course.

2. The practical sessions are conducted through hands-on work with cadavers, anatomical models, and osteology specimens.

Student Evaluation Method

- Written and MCQ Exam: 12 points
- Practical Exam (Cadaver Work): 8 points
- Minimum Passing Grade: 10
- Allowed Absence Hours: 0
- Allowed Excused Absence Hours (with instructor's approval):
  According to the approved educational regulations, the maximum excused absence is:
  - 4/17 of total hours for theoretical courses
  - 2/17 of total hours for practical and laboratory courses
  - 1/17 of total hours for apprenticeship and internship courses

Educational Resources

- Clinical Anatomy by Region. R.S. Snell, 11th Edition, 2024

Contact Information

Instructor and Course Coordinator: Dr. Hamid Taiefi

Educational Officer: Ms. Nadia Keyvani – 33342086

Full Name and Signature of the Course Instructor	Full Name and Signature of the Department Head	Full Name and Signature of the Office of Development Coordinator