



مركز الاعتماد  
وَضْمَانُ الجُودَة  
ACCREDITATION & QUALITY ASSURANCE CENTER



**The University of Jordan**

**Accreditation & Quality Assurance Center**

## **Course Syllabus**

**Course Name:**  
Musculoskeletal  
system & Skin

1	Course title	Musculoskeletal system & Skin
2	Course number	500282
3	Credit hours (theory, practical)	3 theory, 2 practical
	Contact hours (theory, practical)	3 theory, 2 practical
4	Prerequisites/corequisites	Anatomy, biology.
5	Program title	Medical Doctor
6	Program code	
7	Awarding institution	The University of Jordan
8	Faculty	Medicine
9	Department	Anatomy
10	Level of course	bachelor
11	Year of study and semester (s)	second semester
12	Final Qualification	MD degree
13	Other department (s) involved in teaching the course	Anatomy, physiology, pathology, microbiology, biochemistry, pharmacology, internal medicine, orthopedics, ENT, neurosurgery and Ophthalmology.
14	Language of Instruction	English
15	Date of production/revision	2016

#### 16. Course Coordinator:

Dr. Amjad Shatarat.  
Office number: 05  
Office hours: Sunday 8am-10am  
Tuesday 8am-9am  
Thursday 8am-9am  
Phone numbers: 06-5355000/23434  
email addresses: [a.shatarat.ju.edu.jo](mailto:a.shatarat.ju.edu.jo)

**17. Other instructors:**

	<b>INSTRUCTOR</b>	<i>Office number</i>	<i>office hours</i>	<i>phone number</i>	<i>email address</i>
1	<b>Dr. Amjad Shatarat</b>	<b>05</b>	<b>Sunday 8am-10am, Tuesday 8am-9am, Thursday 8am-9am.</b>	<b>06-5355000/ 23434</b>	<b>a.shatarat@ju.edu.jo</b>
2	<b>Dr. mohammad khatatbeh</b>	<b>114</b>	<b>Monday &amp; Wednesday 11-11.30 am  Thursday 1-1:30 pm</b>	<b>23477</b>	<b>malessa@ju.edu.jo</b>
3	<b>Prof . Azmi mahafzah</b>	-	<b>Wednesday 1-2 pm</b>	<b>23478</b>	<b>mahafzaa@gmail.com</b>
4	<b>Prof .Asem shehabi</b>	-	<b>Sunday 9-12 am Wednesday 9-10 am</b>	<b>23488</b>	<b>ashehabi@ju.edu.jo</b>
5	<b>Dr. hasan abu alraghib</b>	-	<b>Sunday – Thursday 10-12 am</b>	<b>23495</b>	<b>Har1947@ju.edu.jo</b>
6	<b>Dr. Tariq Al-adeely.</b>				
7	<b>Dr. alia shatnawi</b>	-	<b>Sunday – Thursday 10-12 am</b>	<b>23458</b>	<b>a.shatanawi@ju.edu.jo</b>
8	<b>Dr. fadi alhadidi</b>	-	-	-	<b>f.hadidi@ju.edu.jo</b>
9	<b>Dr. nakhlih abu yagi</b>				<b>a.shatarat@ju.edu.jo</b>
10	<b>Dr. lubna alkhriha</b>				<b>a.shatarat@ju.edu.jo</b>
11	<b>Dr. tareq kanan</b>				<b>a.shatarat@ju.edu.jo</b>
12	<b>Dr. qusai saleh</b>				<b>a.shatarat@ju.edu.jo</b>

**18. Course Description:**

This course covers the study of the locomotor system and skin including the anatomy and histology of nerves, muscles and skin; the physiology of nerves and muscles, the biochemistry of muscle contraction and neurotransmission. It also covers the diseases of the skin, muscles and nervous tissues including bacterial, viral, parasitic and fungal infections, together with disturbances of metabolism and genetics of the locomotor system and tumours of muscles, bones and joints. In addition, The course covers also the therapeutics of such diseases and their clinical aspects including signs and symptoms, and disease presentation.

1. 19. Course aims and outcomes:

2.

A- Aims:

1. Describe the orientation of the body in the anatomical position.
2. Relate the common names of the corresponding anatomical descriptive terms of various regions of the human body.
3. Define the anatomical planes and sections used to describe the human body.
4. Describe the structure and function of bones, joints, ligaments and skeletal muscles.
5. Analyze the movements of individual joints and the body as a whole.
6. Describe the development of muscle and bone tissues.
7. Describe the microscopic anatomy of bones, ligaments, muscles and skin.
8. Mention skin manifestations of systemic diseases.
9. Describe the properties of muscle proteins.
10. Outline the steps involved in the muscle contraction.
11. Describe the structure and functions of neurons and nerve supply of muscles and bones.
12. Describe mechanisms of movement and its control.
13. Mention pathologic disorders of skin, muscles, bones and peripheral nerves.
14. List drugs used in the treatment of diseases of the skin, muscles and bones.
15. Take proper history and perform clinical examination of the Musculoskeletal system.

B- Intended Learning Outcomes (ILOs): Upon successful completion of this course students will be able to:

Anatomy

- 1- Know anterior compartment of thigh and its major muscles, nerves and blood vessels.
- 2- Know medial compartment of thigh and its major muscles, nerves and blood vessels.
- 3- Know gluteal region and its major muscles, nerves, blood vessels and structures under the cover of gluteus maximus muscle & Back of the thigh.
- 4-Popliteal Fossa. Know its borders and main contents.
- 5- Know the major muscles of the anterior and lateral compartments of the leg, nerves and blood vessels.
- 6- Know the major muscles of the posterior compartment of the leg its nerves and blood vessels
- 7- Hip Joint. Identify its major ligaments, blood supply, nerve supply and main movements.
- 8- Knee and Ankle Joints, Identify their major ligaments, blood supply, nerve supply and main movements.
- 9- Identify the main muscles of the sole & know the Arches of foot and mechanism of flat foot
- 10- Identify the norma frontalis and face its main bones and anatomical landmarks.
- 11- Know the main fossa of the cranial cavity and its borders. Identify different layers covering the brain, dura and its main septa and venous sinuses.
- 12- Identify the norma verticalis and scalp.

- 13- Identify norma basalis ,foramina and structures pass through.
- 14- Know muscles of mastications and TMJ.
- 15- Identify temporal and infratemporal fossae and main contents in them.
- 16- Identify the orbit and eye ball-1; borders, walls , and foramina in the orbit .
- 17- Identify the orbit and eye ball-2; eye ball extrinsic and intrinsic muscles, and eye ball structures .
- 18- Identify neck and anterior triangle; cervical vertebrae, neck muscles ,blood vessels ,nerves , borders ,floor ,roof ,and contents of the anterior triangle.
- 19- Identify neck and posterior triangle.
- 20- Identify back muscles ,nerves ,and blood vesseles .
- 21- Identify vertebral column, vertebrae, intervertebral disc , curves , and abnormality in vertebral column.
- 22- Identify ear ; external ear , bones of middle ear, and internal ear .
- 23- Know development of the face.
- 24- Know development of branchial System.
- 25- Identify the diaphragm and intercostal muscles ,blood vessels and nerves .

**Physiology :**

- 26- Study action potential in excitable cells.
- 27- Study the excitation contraction coupling.
- 28- Study sliding Filament Theory
- 29- Study Muscle Mechanics

**Microbiology :**

- 30- Study papilloma.
- 31- Know viral infections
- 32- Know viral exanthemata.
- 33- Study nocardia .
- 34- Study staph. aureus
- 35- Know leishmania..
- 36- Study skin infections.

**Pathology**

- 37- Identify diseases with abnormal matrix.
- 38- Identify osteomyelitis.
- 39- Identify bone tumors.
- 40- Identify arthritis.
- 41- Know skeletal muscle disorders.
- 42- Study skin pathology.

**Pharmacology :**

- 43- Know drugs for skin disease.  
 44- Know drugs for skin disease.  
 45- Know skeletal muscle relaxant.  
 46- Know antiinflammatory drugs -1  
 47- Know antiinflammatory drugs-2  
 48- Know drug For gout.  
 49- Know drugs for leprosy and leishmania.

**20. Topic Outline and Schedule:**

TOPIC	WEEKS	INSTRUCT OR	ACHIEVED ILOs	EVALUATION METHODS	REFERENC E
ANATOMY	1-7	Dr.Amjad shatarat	1-25	Written and practical exam	1,8,9,10,11,12
Physiology	1	Dr. mohammad khatatbeh	26-29	Written and practical exam	2
Microbiology	2,3	Prof . Azmi mahafzah	30-32	Written and practical exam	3
Microbiology	3,4	Prof Asem shehabi	33-34	Written and practical exam	4
Microbiology	4	Dr. hasan abu alraghib	35-36	Written and practical exam	5
Pathology	2-5	Dr. Nisreen abu shaheen.	37-42	Written and practical exam	6
Pharmacology	5-7	Dr. alia shatnawi	43-49	Written	7

**21. Teaching Methods and Assignments:**

Development of ILOs is promoted through the following teaching and learning methods:

Lectures.  
Labs sessions.  
clinical Skills lab

**22. Evaluation Methods and Course Requirements:**

Opportunities to demonstrate achievement of the ILOs are provided through the following assessment methods and requirements:

2 exams, theoretical and practical in both :  
Midterm (40%)  
Final practical (20%)  
Final theory (40%)

**23. Course Policies:**

A- Attendance policies:

Attendance will be taken by the course coordinator.

B- Absences from exams and handing in assignments on time:

Will be managed according to the University of Jordan regulations.

C- Health and safety procedures:

D- Honesty policy regarding cheating, plagiarism, misbehavior:

Will be managed according to the University of Jordan regulations.

E- Grading policy:

0-44	<b>F</b>
45-46	<b>D<sup>-</sup></b>
47-50	<b>D</b>
51-53	<b>D<sup>+</sup></b>
54-57	<b>C<sup>-</sup></b>
58-63	<b>C</b>
64-70	<b>C<sup>+</sup></b>
71-75	<b>B<sup>-</sup></b>
76-79	<b>B</b>
80-84	<b>B<sup>+</sup></b>
85-89	<b>A<sup>-</sup></b>

90-100      A

F- Available university services that support achievement in the course:

Availability of comfortable lecture halls, data show and internet service.

#### 24. Required equipment:

Data show for power point presentation.

Lab equipments :

Anatomy labs : flesh cadavers , plastinated cadavers, plastic modeles.

Microscopes.

#### 25. References:

A- Required book (s), assigned reading and audio-visuals:

1. Snell, R.: Clinical Anatomy, 7<sup>th</sup> edition, 2002  
Lippincott, Williams & Wilkins.
2. Guyton & Hall: Textbook of Medical physiology, 10<sup>th</sup> edition  
Saunders, 2002.
3. Kumar, Cotran, Robins: Basic Pathology 7<sup>th</sup> edition, 2003 Saunders.
4. Craig, CR. & Stitzel, RE: Modern Pharmacology  
with clinical applications 6<sup>th</sup> edition 2004
5. Devlin K: Textbook of Biochemistry with clinical applications 5<sup>th</sup> edition  
Willey liss
6. JAWETZ, Melnick & Adelberg: Medical Microbiology. 5<sup>th</sup> edition, LANGE

B- Recommended books, materials, and media:

C- Re

D- Re

#### 26. Additional information:



First and second examination marks will be announced by the faculty to the students. Final marks will be given to the students through the registrar after being approved by the faculty council.

Name of Course Coordinator: -----Signature: ----- Date: -----

--- Head of curriculum committee/Department: ----- Signature: -----

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Head of Department: ----- Signature: -----

Head of curriculum committee/Faculty: ----- Signature: -----

Dean: ----- -Signature: -----

Assurance

Copy to:  
Head of Department  
Assistant Dean for Quality  
  
Course File