Form: Course Syllabus	Form Number	EXC-01-02-02A
	Issue Number and Date	2/3/24/2022/2963 05/12/2022
	Number and Date of Revision or Modification	
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	Number of Pages	18

1.	Course Title	Musculoskeletal system & Skin
2.	Course Number	0500281
3.	Credit Hours (Theory, Practical)	6 (5,1)
	Contact Hours (Theory, Practical)	73 Lectures and 9 Labs
4.	Prerequisites/ Corequisites	--
5.	Program Title	Doctor of Medicine
6.	Program Code	05
7.	School/ Center	School of Medicine
8.	Department	Anatomy & Histology, Physiology, Pathology, Microbiology, Pharmacology, Internal medicine (Rheumatology) and Special surgery (Orthopedics)
9.	Course Level	Bachelor
10.	Year of Study and Semester (s)	Second year/ Second Semester
11.	Program Degree	Bachelor
12.	Other Department(s) Involved in Teaching the Course	Anatomy & Histology, Physiology, Pathology, Microbiology, Pharmacology, Internal medicine (Rheumatology) and Special surgery (Orthopedics)
13.	Learning Language	English
14.	Learning Types	☐Face to face learning ☒Blended ☐Fully online
15.	Online Platforms(s)	☒E-learning
16	Issuing Date	27/12/2023
17.	Revision Date	15/2/2026

18. Course Coordinator:

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20. Course Description:

A- Course Description:

This course covers the study of the locomotor system and skin including the anatomy and histology of bones and muscles; the histology of skin and its appendages; and the physiology of muscle contraction and neurotransmission. It also covers the diseases of the skin, muscles and skeletal tissues including bacterial, viral, parasitic and fungal infections, together with disturbances of metabolism and genetics of the locomotor system and tumors of muscles, bones, joints and skin. The course covers also the therapeutics of such diseases and their clinical aspects including signs and symptoms, and disease presentation. Experienced people are invited to give lectures or a variety of interactive activities.

B- Aims:

This course aims to equip the students with a deep understanding of the musculoskeletal and skin systems' various aspects. Throughout the course, the objectives aims to help 2nd year MD students to identify axial skeleton bones and their surface features, recognize the details of muscles within the head, neck, back, and thorax in terms of origin, insertion, and action, explore the developmental processes of muscle and bone tissues, recognize the histology of the integumentary system including the skin, hair, nails, and glands, understand the steps involved in muscle contraction, understand pathologic disorders impacting the skin, muscles, and bones, understand and analyze skin manifestations indicative of systemic diseases, understand the microbiological aspects associated with major skin, muscle, and bone infections, recognize the pharmaceutical interventions used in treatment of musculoskeletal and skin diseases, and develop initial proficiency to take the patient history and clinical examinations in the context of the musculoskeletal system and skin complaints

21. Program Intended Learning Outcomes: (To be used in designing the matrix linking the intended learning outcomes of the course with the intended learning outcomes of the program)

PLO's	*National Qualifications Framework Descriptors*		
	Competency (C)	**Skills (B)**	**Knowledge (A)**
1.	☐	☐	☒
2.	☐	☒	☐
3.	☒	☐	☐
4.	☐	☐	☒
5.	☐	☒	☐
6.	☒	☐	☐
7.	☐	☐	☒
8.	☒	☐	☐

* Choose only one descriptor for each learning outcome of the program, whether knowledge, skill, or competency.

1. Demonstrate basic knowledge of normal human structure and function at molecular, genetic, cellular, tissue, organ, system and whole-body levels in terms of growth, development, and health maintenance. Analyze the basic molecular and cellular mechanisms involved in the causation and treatment of human disease and their influence on clinical presentation and therapy.

2. Collect, interpret, document, and communicate accurately a comprehensive medical history, including the psychological and behavioral factors, and a thorough organ-system-specific physical examination inclusive of the mental status of the patient.

3. Integrate and communicate collected clinical information in the construction of appropriate diagnostic and therapeutic management strategies to identify life-threatening conditions ensuring prompt therapy, referral, and consultation with relevant disciplines and skillfully perform basic medical procedures for general practice on patients with common illness, acute and chronic, taking into account environmental, social, cultural and psychological factors.

4. Demonstrate in-depth knowledge of the epidemiology and biostatistics of common diseases, and analyze the impact of ethnicity, culture, socioeconomic factors and other social factors on health, disease and individual patient's health care.

5. Communicate effectively and professionally, both orally and in writing, with patients, their families, and with other healthcare providers utilizing information technology resources in his/her scholarly activities and professional development with the ability to teach others, and to

understand and respect other healthcare professionals 'roles, and apply the principles of multidisciplinary teamwork dynamics and collaboration.

6. Apply scientific methods including evidence –based approach to the medical practice including problem identification, data collection, hypothesis formulation, etc., and apply inductive reasoning to problem solving and ensure that clinical reasoning and decision making are guided by sound ethical principles.

7. Demonstrate knowledge of scientific research methods and ethical principles of clinical research and be able to write research proposals or research papers.

8. Demonstrate professionally the skills needed for Quality improvement, lifelong learning, and continuous medical education including the ability to identify and address personal strength and weakness, self-assess knowledge and performance, and develop a self-improvement plan.

22. Course Intended Learning Outcomes: (Upon completion of the course, the student will be able to achieve the following intended learning outcomes)

Course ILOs #	The learning levels to be achieved						Competencies
	Remember	Understand	Apply	Analyse	Evaluate	Create	
1.	✓	✓					Identify the bones and joints of axial skeleton and their key anatomical landmarks and summarize the origin, insertion and action of the muscles of head, neck, back, thoracic and abdominal walls and assess the cranial nerve function
2.		✓	✓	✓	✓	✓	Describe the development of muscle and bone tissues.
3.		✓	✓	✓	✓	✓	Outline the histology of the integumentary system (skin, hair, nails, and glands).

4.		✓	✓	✓	✓	✓	Outline the steps involved in the muscle contraction
5.		✓	✓	✓	✓	✓	Distinguish pathologic disorders of muscles, bones and skin, and group the most common skin manifestations of common systemic diseases.
6.		✓	✓	✓	✓	✓	Recognize the basic microbiological aspects of skin lesions and infections, bone and muscle infections, apply theoretical and practical knowledge in diagnosing and interpreting microbiological aspects of skin lesions, diabetic foot infections, osteomyelitis, and muscle infections
7.		✓	✓	✓	✓	✓	Illustrate the pharmacokinetics, classification, and adverse effects of drugs used in treating skin diseases, muscle relaxants, anti-

							inflammatory drugs, and medications used to treat gout, leprosy, and leishmaniasis
8.		✓	✓	✓	✓	✓	Integrate knowledge from various subjects (anatomy, histology, microbiology, physiology, pathology, and pharmacology) to refine the approach of patient care for the management of musculoskeletal and skin conditions
9.		✓	✓	✓	✓	✓	Exhibit behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers and society.

23. The matrix linking the intended learning outcomes of the course -CLO's with the intended learning outcomes of the program -PLOs:

PLO's * / CLO's	1	2	3	4	5	6	7	8	9	Descriptors**		
										A	B	C
1	✓	✓	✓	✓	✓	✓	✓			✓		

2								✓			✓	
3												✓
4										✓		
5									✓		✓	
6												✓
7										✓		
8												✓

***Linking each course learning outcome (CLO) to only one program outcome (PLO) as specified in the course matrix.**

****Descriptors are determined according to the program learning outcome (PLO) that was chosen and according to what was specified in the program learning outcomes matrix in clause (21).**

24. Topic Outline and Schedule:

Week	Lecture	Topic	Student Learning Outcome (SLO)	Descriptors **	Learning Methods (Face to Face/Blended/ Fully Online)	Platform	Synchronous / Asynchronous Lecturing	Evaluation Methods	Resources
1	1.1	Histology: Skin Histology 1	Describe the layers of epidermis and the cells that compose them Compare the composition of the papillary and reticular layers of the dermis. Explain the basis for different skin colors Contrast the structure, distribution, and functions of hair, skin glands and nails Compare structural and functional differences in thin and thick skin	K S	Face to face		Synchronous Lecturing	Written exam	28-A2, B3
	1.2	Histology: Skin Histology 2			Face to face		Synchronous Lecturing	Written exam	28-A2, B3
	1.3	Anatomy: Introduction to head and neck anatomy	Revise the cranial nerves, their functions, and review the organization of ganglia in the head and neck region		Face to face		Synchronous Lecturing	Written exam	28-A1,B1,B2

Week	Lecture	Topic	Student Learning Outcome (SLO)	Descriptors **	Learning Methods (Face to Face/Blended/ Fully Online)	Platform	Synchronous / Asynchronous Lecturing	Evaluation Methods	Resources
	1.4	Anatomy: Skull 1	Label the major bones and surface features on norma frontalis, lateralis, verticalis, basalis interna and externa.	K	Face to face		Synchronous Lecturing	Written exam	28-A1,B1,B2
	1.5	Anatomy: Skull 2	Label the foramina of the skull and the main structures passing through.	K	Face to face		Synchronous Lecturing	Written exam	28-A1,B1,B2
	1.6	Anatomy: Scalp 1	Describe the layers of the scalp, its muscle, sensory nerve supply and blood vessels	K	Face to face		Synchronous Lecturing	Written exam	28-A1,B1,B2
	1.7	Anatomy: Scalp 2		K	Face to face		Synchronous Lecturing	Written exam	28-A1,B1,B2
	1.8	Physiology: Action potential and neuromuscular junction	Review the basis of membrane excitability, neuromuscular synapse, action potential generation and conduction	K	Face to face		Synchronous Lecturing	Written exam	28-A4
	1.9	Physiology: Excitation – contraction coupling	Describe the properties of muscle proteins and define a motor unit	K	Face to face		Synchronous Lecturing	Written exam	28-A4
	1.10	Physiology: Skeletal muscle contraction-1	Explain the events of the sliding filament mechanism and the muscle contraction cycle	K S	Face to face		Synchronous Lecturing	Written exam	28-A4
	1.11	Physiology: Skeletal muscle contraction-2	Explain the concept of Excitation – contraction coupling	K S	Face to face		Synchronous Lecturing	Written exam	28-A4
	1.12	Pathology: Basic structure and function of the bone	Review the basic structure of bone and skeletal muscle tissue	K S	Face to face		Synchronous Lecturing	Written exam	28-A5
	1.13	Anatomy Lab 1	Label different bones, major foramina and surface markings using dry skull on norma frontalis, lateralis, occipitalis, verticalis and basalis interna of skull	K S C	Face to face		Synchronous Lecturing	Practical exam	28-A1,B1,B2
Week	**Lecture**	**Topic**	**Student Learning Outcome (SLO)**	**Descriptors ****	**Learning Methods (Face to Face/Blended/ Fully Online)**	**Platform**	**Synchronous / Asynchronous Lecturing**	**Evaluation Methods**	**Resources**
2	2.1	Anatomy: Anatomy of the face	Identify the major muscles of facial expression, their action and nerve supply, and describe the blood supply of the face	K	Face to face		Synchronous Lecturing	Written exam	28-A1,B1,B2

Week	Lecture	Topic	Student Learning Outcome (SLO)	Descriptors **	Learning Methods (Face to Face/Blended/ Fully Online)	Platform	Synchronous / Asynchronous Lecturing	Evaluation Methods	Resources
	2.2	Anatomy: Cranial cavity 1	Identify the three layers covering the brain, dura and its main septa and venous sinuses	K	Face to face		Synchronous Lecturing	Written exam	28-A1,B1,B2
	2.3	Anatomy: Cranial cavity 2		K	Face to face		Synchronous Lecturing	Written exam	28-A1,B1,B2
	2.4	Anatomy: Orbit 1	Identify the orbital walls, foramina, fissures, and fossae associated with the orbit. Identify the extrinsic and intrinsic ocular muscles, their major action and nerve supply	K	Face to face		Synchronous Lecturing	Written exam	28-A1,B1,B2
	2.5	Anatomy: Orbit 2	Identify the accessory structures of the eye (eyelids and lacrimal apparatus) and outline the main ocular vasculature.	K	Face to face		Synchronous Lecturing	Written exam	28-A1,B1,B2
	2.6	Pathology: Congenital diseases of bone and cartilage	Describe the pathological mechanisms underlying congenital diseases of bone and cartilage	K	Face to face		Synchronous Lecturing	Written exam	28-A5
	2.7	Pathology: Metabolic disorders of bone	Describe the pathological mechanisms underlying metabolic disorders of bone	K S	Face to face		Synchronous Lecturing	Written exam	28-A5
	2.8	Pathology: Paget disease of bone	Describe the pathological mechanisms underlying Paget disease	K S	Face to face		Synchronous Lecturing	Written exam	28-A5
	2.9	Pharmacology: Drugs For Skin Disease-1	Identify the main drugs for skin diseases, nomenclature, classification, pharmacokinetics and adverse effects	K S	Face to face		Synchronous Lecturing	Written exam	28-A6
	2.10	Pharmacology: Drugs For Skin Disease-2		K S	Face to face		Synchronous Lecturing	Written exam	28-A6
	2.11	Microbiology: Viral skin lesions	Acquire a basic understanding of the microbiological aspects of viral and fungal skin lesions Apply theoretical and practical knowledge in microbiological diagnosis, interpretation and evaluation of results	K	Face to face		Synchronous Lecturing	Written exam	28-A7
	2.12	Microbiology: Fungal skin lesions		S	Face to face		Synchronous Lecturing	Written exam	28-A7
	2.13	Histology lab 1	Examine a set of microscopic slides for skin and its accessory structures under the compound microscope and using light microscopic images, differentiate between them	K S C	Face to face		Synchronous Lecturing	Practical exam	28-A2, B3

Week	Lecture	Topic	Student Learning Outcome (SLO)	Descriptors **	Learning Methods (Face to Face/Blended/ Fully Online)	Platform	Synchronous / Asynchronous Lecturing	Evaluation Methods	Resources
	2.14	Anatomy lab 2	Label different bones using dry skull on Norma basalis externa of skull, Mandible Label foramina for cranial nerves Outline and locate the bones forming Temporal and infratemporal fossae	K S C	Face to face		Synchronous Lecturing	Practical exam	28-A1,B1,B2
Week	**Lecture**	**Topic**	**Student Learning Outcome (SLO)**	**Descriptors ****	**Learning Methods (Face to Face/Blended/ Fully Online)**	**Platform**	**Synchronous / Asynchronous Lecturing**	**Evaluation Methods**	**Resources**
3	3.1	Anatomy: Eyeball 1	Identify the structural components of the eyeball (layers and chambers), and describe the basic histology of retina and cornea.	K	Face to face		Synchronous Lecturing	Written exam	28-A1,B1,B2
	3.2	Anatomy: Eyeball 2		K	Face to face		Synchronous Lecturing	Written exam	28-A1,B1,B2
	3.3	Anatomy: Ear 1	Distinguish between the major anatomical components of the outer, middle and inner ear. Define the borders, bony ossicles, muscles and the anatomical relations of the middle ear.	K	Face to face		Synchronous Lecturing	Written exam	28-A1,B1,B2
	3.4	Anatomy: Ear 2			Face to face		Synchronous Lecturing	Written exam	28-A1,B1,B2
	3.5	Anatomy: Temporal and infratemporal fossae 1	Identify the muscles of mastication, origin, insertion, action and nerve supply Describe the topography and contents of the infratemporal fossa	K	Face to face		Synchronous Lecturing	Written exam	28-A1,B1,B2
	3.6	Pathology: Fractures	Determine the pathophysiology of Fractures	K	Face to face		Synchronous Lecturing	Written exam	28-A5
	3.7	Pathology: Osteonecrosis	Describe the pathogenesis of Osteonecrosis	K	Face to face		Synchronous Lecturing	Written exam	28-A5
	3.8	Pathology: Osteomyelitis	List the drugs used in thromboembolic diseases, their mechanism of action, side effects, and contraindications	K	Face to face		Synchronous Lecturing	Written exam	28-A5
	3.9	Pharmacology: Skeletal Muscle Relaxant-1	Identify the main skeletal muscle relaxant, nomenclature, classification, pharmacokinetics and adverse effects.	K S	Face to face		Synchronous Lecturing	Written exam	28-A6
	3.10	Pharmacology: Skeletal Muscle Relaxant-2			Face to face		Synchronous Lecturing	Written exam	28-A6
	3.11	Microbiology: Bacterial skin	Mention the microbiological aspects	K	Face to face		Synchronous Lecturing	Written exam	28-A7

Week	Lecture	Topic	Student Learning Outcome (SLO)	Descriptors **	Learning Methods (Face to Face/Blended/ Fully Online)	Platform	Synchronous / Asynchronous Lecturing	Evaluation Methods	Resources
		lesions	of bacterial skin lesions Apply theoretical and practical knowledge in microbiological diagnosis, interpretation and evaluation of results						
	3.12	Microbiology: Diabetic foot	Determine the microbiological aspects of diabetic foot infections Apply theoretical and practical knowledge in microbiological diagnosis, interpretation and evaluation of results	S	Face to face		Synchronous Lecturing	Written exam	28-A7
	3.13	Anatomy lab 3	Label the muscles of face on plastinated cadavers Label locations of dural folds and sinuses on dry skull Label different parts of ear using ear model	K S C	Face to face		Synchronous Lecturing	Practical exam	28-A1,B1,B2
	3.14	Histology lab 2	Examine a set of microscopic slides for skin and its accessory structures under the compound microscope and using light microscopic images, differentiate between them	K S C	Face to face		Synchronous Lecturing	Practical exam	28-A2, B3
Week	**Lecture**	**Topic**	**Student Learning Outcome (SLO)**	**Descriptors ****	**Learning Methods (Face to Face/Blended/ Fully Online)**	**Platform**	**Synchronous / Asynchronous Lecturing**	**Evaluation Methods**	**Resources**
4	4.1	Anatomy: Temporal and infratemporal fossa-2	Describe the topography and contents of the temporal fossa Describe the topography of the pterygopalatine fossa	K	Face to face		Synchronous Lecturing	Written exam	28-A1,B1,B2
	4.2	Anatomy: Neck-1 (Muscles and cervical plexus)	Identify the major muscles of the neck, action and nerve supply.	K	Face to face		Synchronous Lecturing	Written exam	28-A1,B1,B2
	4.3	Anatomy: Neck-2 (Fascial layers of the neck, compartments		K	Face to face		Synchronous Lecturing	Written exam	28-A1,B1,B2

Week	Lecture	Topic	Student Learning Outcome (SLO)	Descriptors **	Learning Methods (Face to Face/Blended/ Fully Online)	Platform	Synchronous / Asynchronous Lecturing	Evaluation Methods	Resources
		and spaces Lymphatic drainage of head and neck)							
	4.4	Anatomy: Neck-3 (Triangles, borders and contents)	Describe the boundaries and major contents of neck triangles.	K	Face to face		Synchronous Lecturing	Written exam	28-A1,B1,B2
	4.5	Anatomy: Extracranial course of cranial nerves/ Clinical case presentations	Outline the extracranial anatomical course of cranial nerves, discuss the clinical presentations of cranial nerve injury and summarize the major blood vessels and lymphatic drainage of the head and neck region	K	Face to face		Synchronous Lecturing	Written exam	28-A1,B1,B2
	4.6	Clinical 1: Extra and intracranial hematoma	Analyze and present clinical cases, particularly in conditions such as epidural and subdural hematoma, skull fractures	C	Face to face		Synchronous Lecturing	Written exam	
	4.7	Pathology: Bone tumors and tumor-like conditions	Summarize the pathological mechanisms underlying bone and joint tumors and tumor-like conditions	K S	Face to face		Synchronous Lecturing	Written exam	28-A5
	4.8	Pathology: Arthritis	Outline the pathogenesis of Arthritis (Osteoarthritis; RA; Juvenile Idiop A, Seronegative Spondyloarthropathies, Infectious arthritis; Lyme arthritis, Crystal-induced arthritis)	K S	Face to face		Synchronous Lecturing	Written exam	28-A5
	4.9	Microbiology: Osteomyelitis	Revise the microbiological aspects of osteomyelitis Apply theoretical and practical knowledge in microbiological diagnosis, interpretation and evaluation of results	K S	Face to face		Synchronous Lecturing	Written exam	28-A7
	4.10	Microbiology: Muscle infections	Revise the microbiological aspects of muscle infections and septic arthritis Apply theoretical and practical knowledge in microbiological diagnosis, interpretation and evaluation of results	K S	Face to face		Synchronous Lecturing	Written exam	28-A7

Week	Lecture	Topic	Student Learning Outcome (SLO)	Descriptors **	Learning Methods (Face to Face/Blended/ Fully Online)	Platform	Synchronous / Asynchronous Lecturing	Evaluation Methods	Resources
	4.11	Pharmacology: Drugs for Gout	Identify the main drugs for gout, nomenclature, classification, pharmacokinetics and adverse effects	K	Face to face		Synchronous Lecturing	Written exam	28-A6
	4.12	Anatomy lab 4:	Locate Orbital walls, foramina and fissures on dry skull Identify Extra ocular muscles on eye model Perform sheep eyeball dissection	K	Face to face		Synchronous Lecturing	Written exam	
	4.13	Physiology lab	Define the concepts of simple muscle twitch, Summation, Treppe phenomenon, Tetanization and Fatigue	K S C	Face to face		Synchronous Lecturing	Written exam	28-A4
Week	**Lecture**	**Topic**	**Student Learning Outcome (SLO)**	**Descriptors ****	**Learning Methods (Face to Face/Blended/ Fully Online)**	**Platform**	**Synchronous / Asynchronous Lecturing**	**Evaluation Methods**	**Resources**
	5.1	Anatomy: Vertebral column & Muscles of the back	Identify the regions and normal curves of the vertebral column and describe the structural and functional features of the bones in various regions of the vertebral column Identify the major muscles of the back	K	Face to face		Synchronous Lecturing	Written exam	28-A1,B1,B2
	5.2	Anatomy: Abdominal wall-1	Outline the layers of anterolateral and posterior abdominal walls, and demonstrate the extent of the inguinal canal, its boundaries and contents.	K	Face to face		Synchronous Lecturing	Written exam	28-A1,B1,B2
	5.3	Anatomy: Abdominal wall-2	Explain the relationships of the fascial layers to the muscles and peritoneum and describe the relevant neurovascular structures of the abdominal wall.	K	Face to face		Synchronous Lecturing	Written exam	28-A1,B1,B2

Week	Lecture	Topic	Student Learning Outcome (SLO)	Descriptors **	Learning Methods (Face to Face/Blended/ Fully Online)	Platform	Synchronous / Asynchronous Lecturing	Evaluation Methods	Resources
	5.4	Embryology: Craniofacial development/ Branchial arches	Describe the major steps in craniofacial development and the derivatives of branchial arches	K	Face to face		Synchronous Lecturing	Written exam	28-A3
	5.5	Embryology: Craniofacial development/ Face and palate	Describe the morphogenesis of the face and palate, including interactions of the five facial primordia. Describe clefting anomalies of the face and palate.	K S	Face to face		Synchronous Lecturing	Written exam	28-A3
	5.6	Clinical 2: Spine disorders	Analyze and evaluate clinical case presentations of spine disorders	C	Face to face		Synchronous Lecturing	Written exam	
	5.7	Pathology: Joint tumors and tumor-like conditions/ Soft tissue tumors	Summarize the pathological mechanisms underlying soft tissue tumors and tumor-like conditions (adipose tissue; fibrous tissue; skeletal muscle, Smooth muscle; tumors of uncertain origin)	K S	Face to face		Synchronous Lecturing	Written exam	28-A5
	5.8	Pathology: Skin and skin adnexal tumors	Outline the most common tumors originating from the skin and its accessory structures	K	Face to face		Synchronous Lecturing	Written exam	28-A5
	5.9	Microbiology: Septic arthritis	Revise the microbiological aspects of muscle infections and septic arthritis Apply theoretical and practical knowledge in microbiological diagnosis, interpretation and evaluation of results	K	Face to face		Synchronous Lecturing	Written exam	28-A7
	5.10	Pharmacology: Antiinflammatory Drugs-1	Identify the main anti-inflammatory drugs, nomenclature, classification, pharmacokinetics and adverse effects Identify the main drugs for leprosy and leishmania, nomenclature, classification, pharmacokinetics and adverse effects.	K	Face to face		Synchronous Lecturing	Written exam	28-A6
	5.11	Pharmacology: Antiinflammatory Drugs-2		K	Face to face		Synchronous Lecturing	Written exam	28-A6

Week	Lecture	Topic	Student Learning Outcome (SLO)	Descriptors **	Learning Methods (Face to Face/Blended/ Fully Online)	Platform	Synchronous / Asynchronous Lecturing	Evaluation Methods	Resources
	5.12	Anatomy lab 5	Locate muscles of the neck, muscles of Mastication on plastinated cadavers Locate and label the bones forming the vertebral column on skeleton Identify and label the muscles of Abdominal wall	K S C	Face to face		Synchronous Lecturing	Practical exam	28-A1,B1,B2
** K: Knowledge, S: Skills, C: Competency									

25. Evaluation Methods:

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

Evaluation Activity	Mark	Topic(s)	CLOs	Descriptors **	Period (Week)	Platform
Midterm exam	40	Histology, physiology, pathology, pharmacology, microbiology	1.1/ 1.2/1.3/ 1.4/ 1.5/ 1.6/1.7/1.8/1.9/1.10/1.11/1.12/2.1/2.2/2.3/2.4/2.5/2.6/2.7/2.8/2.9/ 2.10/2.11/2.12/ 3.1/3.2/3.3/3.4/3.5/3.6	K S	End of third week	Written
Practical	20	Histology, Physiology, Pathology	1.13/2.13/2.14/3.13/3.14/4.12/4.13/5.12	C	End of fifth week	Written
Final exam	40	Pathology, pharmacology, microbiology, Embryology, clinical	3.7/3.8/3.9/3.10/1.11/ 3.12/ 4.1/4.2/4.3/4.4/4.5/4.6/4.7/4.8/4.9/4.10/4.11/5.1/5.2/5.3/5.4/5.5/ 5.6/5.7/5.8/5.9/5.10/5.11	K S C	End of fifth week	Written
** K: Knowledge, S: Skills, C: Competency						

*** According to the instructions for granting a Bachelor's degree.**

****According to the principles of organizing semester work, tests, examinations, and grades for the bachelor's degree.**

(Tables below are completed on a separate form by course coordinators prior to conduction of each exam according to Accreditation and Quality Assurance Centre procedures and forms)

Mid-term exam specifications table*

No. of questions/ cognitive level						No. of questions per CLO	Total exam mark	Total no. of questions	CLO/ Weight	CLO no.
Create **%10**	Evaluate **%10**	analyse **%10**	Apply %20	Understand **%20**	Remember %30					
1	1	1	4	2	1	10	100	100	10%	1

Final exam specifications table

No. of questions/ cognitive level						No. of questions per CLO	Total exam mark	Total no. of questions	CLO Weight	CLO no.
Create **%10**	Evaluate **%10**	analyse **%10**	Apply %20	Understand **%20**	Remember %30					
										1
										2
										3
										4
										5

26. Course Requirements:

- ✓ **Class room Lectures**
- ✓ **Internet connection**
- ✓ **Online educational material using Moodle (Electronic Videos and Activities)**
- ✓ **Histology and physiology Lab sessions**
- ✓ **Lab sessions (cadaveric prosections, plastinated cadavers, plastic human models, sheep eyeball dissection)**
- ✓ **Anatomical visual materials (illustrations and cadaveric images)**
- ✓ **Anatomy Three-dimensional software (Anatomy TV)**

Teaching Methods and Assignments:

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

- ✓ **Class room Lectures**
- ✓ **Supplementary Videos and Animations**
- ✓ **Laboratory sessions**
- ✓ **Discussion sessions and forums**
- ✓ **Game- based learning**

27. Course Policies:

A- Attendance policies:

Attendance will be monitored by the course coordinator. Attendance policies will be announced at the beginning of the course.

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

Will be managed according to the University of Jordan regulations. Refer to http://registration.ju.edu.jo/Documents/daleel.pdf

C- Health and safety procedures:

Faculty Members and students must at all times, conform to Health and Safety rules and procedures.

D- Honesty policy regarding cheating, plagiarism, misbehavior:

As a student in this course (and at this university) you are expected to maintain high degrees of professionalism, commitment to active learning and participation in this course and also integrity in your behavior in and out of the classroom. Students violate this policy would be subjected to disciplinary action according to University of Jordan disciplinary policies

E- Grading policy:

Grade-point average, Rules are preset by the Faculty and Department Councils

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

Availability of comfortable lecture halls, data show, internet service and E learning website https://elearning.ju.edu.jo/ .

28. References:

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

1. Clinical Anatomy by Snell, R., 7th edition.
2. Junqueira's Basic Histology, Text and Atlas by Anthony L. Mescher, 14th edition.
3. Langman's Medical Embryology by Sadler, 12th edition.
4. Guyton and Hall Textbook of Medical Physiology (Guyton Physiology) by by John E. Hall, 13th edition.
5. Robbins Basic Pathology by Kumar, Abbas, Aster, 10th edition.
6. Modern Pharmacology with clinical applications by Craig & Stitzel, 6th edition.
7. Jawetz, Melnick, & Adelberg's Medical Microbiology by Carroll, Butel & Morse, 27th edition (LANGE).

B- Recommended books, materials, and media:

1. Gray's Anatomy for Students, 3rd edition, by Richard Drake, A. Wayne Vogl, Adam W. M. Mitchell
2. Anatomy TV powered by primal pictures
3. Web based **resources:** http://www.histologyguide.org/index.html

Name of the Instructor or the Course Coordinator: Dr. Alia Shatanawi	Signature: ……..……	Date: ……..……
Name of the Head of Quality Assurance Committee/ School or Center	Signature: ……..……	Date: ……..……
Name of the Dean or the Director Professor Ayman Wahbeh	Signature: ……..……	Date: ……..……