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	
	Deans Council Approval Decision Number	265/2024/24/3/2
	The Date of the Deans Council Approval Decision	2024/1/23
	Number of Pages	06

1.	Course Title	The Respiratory System
2.	Course Number	0500341
3.	Credit Hours (Theory, Practical)	4
	Contact Hours (Theory, Practical)	49 Lectures and 7 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, pediatrics and Internal medicine.
9.	Course Level	Bachelor
10.	Year of Study and Semester (s)	Third year/ First Semester
11.	Program Degree	Bachelor
12.	Other Department(s) Involved in Teaching the Course	-
13.	Learning Language	English
14.	Learning Types	☐Face to face learning ☒Blended ☐Fully online
15.	Online Platforms(s)	☒Moodle ☒Microsoft Teams
16	Issuing Date	21/11/2023
17.	Revision Date	29th November, 2025

18. Course Coordinator:

Name: Dr. Maram Abdaljaleel

Contact hours: Tuesdays 12.00pm-2.00pm and Thursday 11.00am- 1.00pm

Office number: Pathology lab/JUH Phone number: 065355000/23421

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19. Other Instructors:

	INSTRUCTOR	*Office number*	*office hours*	*phone number*	*email address*
1	Prof. Dr. Yanal Shafaqog	303	From Sunday to Thursday 14:00-16:00 pm	23478	yanals@ju.edu.jo
2	Prof. Dr. Mohamed Hisham Al-Muhtaseb	-	Tuesday, 12:00-14:00	-	mhmutseb@ju.edu.jo
3	Prof. Dr. Yaqoup Irshaid	-	Tuesday, 12:00-14:00	-	
4	Dr. Malik Sallam	-	Thursday , 11:30-1:30		malik.sallam@ju.edu.jo
5	Dr. Montaha Al-Iede	-	Sunday: 12:00-14:00 Tuesday: 11:00-1:00	-	M.al-iede@ju.edu.jo Montaha95@yahoo.com
6	Dr. Asma Albtoosh	-	Tuesday and Wednesday, 12:00-14:00	-	asmaalbtoosh@gmail.com
7	Dr. Manar Hajeer	-	Tuesday, 11:00-1:00	-	M.Hajeer@ju.edu.jo

20. Course Description:

A- Course Description:

This course covers the respiratory system from the standpoints of its anatomic and histologic structure, functions including respiration and its mechanisms and characteristics, airway resistance, gas diffusion in the lung, and gas exchange and transport, pulmonary function tests, chemical properties of oxygen, its transport and abnormalities and respiratory alkalosis and acidosis. It also covers diseases of the respiratory tract including infections, vascular, obstructive, occupational and immune-mediated diseases, tumors of the respiratory tract and pharmacologic treatment of these diseases. The course includes also studying the clinical aspects of the respiratory system including signs, symptoms, and disease presentation. Experienced people are invited to give lectures or a variety of interactive activities.

B- Aims:

The aim of this course at this level of medical education is to introduce the medical student to the basic structure and function of the respiratory system, how it is affected by disease, and how

drugs can modify these disease states, together with a glimpse of the clinical presentation of these diseases.

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.

Program Intended Learning Outcomes:

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, considering 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.	✓	✓					Describe the basic morphological characteristics and function of the respiratory system organs, their development and associated congenital anomalies.

2.		✓	✓	✓	✓	✓	illustrate the mechanics of lung ventilation, compliance, airway resistance, ventilation-perfusion relationship, gas exchange and transport, regulation of ventilation, and pulmonary function test and brief clinical application to pathophysiology
3.		✓	✓	✓	✓	✓	Distinguish a variety of diseases that affect the respiratory system, their types, pathophysiology, clinical presentation, macroscopic and microscopic findings. (skills)
4.		✓	✓	✓	✓	✓	List the commonly used drugs in the treatment of respiratory diseases, compare their mechanism of action, side effects, contraindications, and clinical uses.
5.		✓	✓	✓	✓	✓	Identify the common microbial species affecting the respiratory system, their

							structure, epidemiology, and mode of transmission and evaluate the respiratory diseases associated with them
6.		✓	✓	✓	✓	✓	Examine the normal histology of the respiratory system under the light microscope and evaluate light microscopic images of a variety of lung diseases to differentiate between them and highlight the characteristic findings.
7.		✓	✓	✓	✓	✓	Illustrate the general signs and symptoms related to respiratory diseases and value the major points in taking history, physical exam, and laboratory investigations
8.		✓	✓	✓	✓	✓	Exhibit behaviors and values that are consistent with the trust given to the profession by patients, other

							healthcare providers and society
9.		✓	✓	✓	✓	✓	Solve clinical cases by correlating and analyzing the provided clinical, histologic, and pathophysiology data

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	descriptors	Learning Methods (Face to Face/Blended/ Fully Online)	Platform	Synchronous / Asynchronous Lecturing	Evaluation Methods	Reference	
1	1.1	Anatomy Anatomy of nose and paranasal sinuses	Recognize the anatomy, blood supply, nerve supply and lymphatic drainage of the nasal septum, nasal wall, and paranasal sinuses.	K	Face to face		Synchronous Lecturing	Written exam	28-A1,10, 11, 12	
	1.2	Anatomy Histology of the upper respiratory tract	Describe the histology of the larynx, trachea, bronchi, and bronchioles.	K	Face to face		Synchronous Lecturing	Written exam	28-A1,10, 11, 12	
	1.3	Anatomy Anatomy of the larynx	Recognize the anatomy of the larynx, it's Membranes, muscles, blood supply, lymphatic drainage nerve supply and nerve injuries	K	Face to face		Synchronous Lecturing	Written exam	28-A1,10, 11, 12	
	1.4	Anatomy Blood and nervous supply of the larynx			blended		Synchronous Lecturing	Written exam and online activity	28-A1,10, 11, 12	
	1.5	Anatomy Pterygopalatine fossa	Recognize the anatomy, blood supply, nerve supply of pterygopalatine fossa	K	blended	Moodle	Asynchronous Lecturing	Written exam and online activity	28-A1,10, 11, 12	
	1.6	Physiology overview	Recognize why O2 and CO2 are perfusion-limited and not diffusion-limited. Describe the Anatomic and physiologic dead space	K	blended		Synchronous Lecturing	Written exam and online activity	28-A2,3	
	1.7	Physiology Mechanics of Breathing (Lung Ventilation)	Recognize the mechanics of breathing. Know, using spirometry tracing: lung volumes and capacities	K	blended		Synchronous Lecturing	Written exam and online activity	28-A2,3	
	1.8	Microbiology Normal Respiratory Tract Flora and Host Defenses	1. Describe the normal microbiota of the upper and lower respiratory tract and its role to maintain respiratory mucosal immunity. (1) 2. Explain mechanical, cellular, and immunological defense mechanisms that prevent respiratory tract infections (1, 4) 3. Discuss how changes of the normal microbiota and impaired defenses predispose to respiratory tract infections. (1, 4, 6)	K	Face to face		Synchronous Lecturing	Written exam	28-A7,8,9	
	1.9	Microbiology Streptococcus pneumoniae, Haemophilus influenzae, and Moraxella catarrhalis	1. Describe the morphology, virulence factors, and pathogenesis of *S. pneumoniae*, *H. influenzae*, and *M. catarrhalis*. (1) 2. Correlate *S. pneumoniae*, *H. influenzae*, and *M. catarrhalis* virulence with clinical presentations such as community-acquired pneumonia, otitis media, sinusitis, and COPD exacerbations. (1, 3) 3. Interpret laboratory diagnostic methods and anti-microbial	K	Face to face		Synchronous Lecturing	Written exam	28-A7,8,9	

			susceptibility testing for *S. pneumoniae*, *H. influenzae*, and *M. catarrhalis* (3, 6) 4. Discuss preventive strategies, including conjugate vaccines and antibiotic stewardship aimed at addressing the burden of *S. pneumoniae*, *H. influenzae*, and *M. catarrhalis* (4, 8)								
	1.10	Microbiology Staphylococcus aureus and Klebsiella pneumoniae	1. Compare mechanisms of pathogenicity, virulence, and antibiotic resistance among *S. aureus* and *K. pneumoniae*. (1, 3) 2. Explain *S. aureus* and *K. pneumoniae* clinical syndromes and complications, including hospital-acquired pneumonia and empyema (3, 4) 3. Discuss preventive strategies and antibiotic stewardship aimed at addressing the burden of *S. aureus* and *K. pneumoniae* (6, 8)	K	Blended		Asynchronous Lecturing	Written exam and online activity	28-A7,8,9		
	1.11	Anatomy lab 1	Illustrate the anatomy of the nasal cavity, paranasal sinuses / nasopharynx, and pterygopalatine fossa.	S, C	Face to face		Synchronous Lecturing	Written exam	28-A1,10, 11, 12		
	1.12	Physiology Airway Resistance-1	Describe the elastic and non-elastic Forces. COPDs and RDS.	K	Face to face		Synchronous Lecturing	Written exam	28-A2,3		
Week	**Lecture**	**Topic**	Student Learning Outcome		**Learning Methods (Face to Face/Blended/ Fully Online)**	**Platform**	**Synchronous / Asynchronous Lecturing**	**Evaluation Methods**	**Reference**		
2	2.1	Anatomy Anatomy of the lungs	Recognize the anatomy of the lungs, parts, surfaces, bronchopulmonary segments, hilum of the lung, blood supply, nerve supply and clinical notes	K	Face to face		Synchronous Lecturing	Written exam	28-A1,10, 11, 12		
	2.2	Anatomy Development of the respiratory tract	Describe the development of the respiratory tract including respiratory bud, larynx trachea, bronchi, pleura, and lung.	K	Face to face		Synchronous Lecturing	Written exam	28-A1,10, 11, 12		
	2.3	Anatomy Histology of the lower respiratory tract	Recognize the histology of the lower respiratory tract including respiratory bronchioles, alveoli, and the structure of respiratory membrane	K	Blended	Moodle	Asynchronous Lecturing	Written exam and online activity	28-A1,10, 11, 12		
	2.4	Anatomy Malformation of the respiratory system	Recognize the malformations of respiratory organs including respiratory distress syndrome. ectopic lung, and other diseases.	K	Face to face		synchronous Lecturing	Written exam	28-A1,10, 11, 12		
	2.5	Physiology Airway Resistance-2	Recognize the coupling between lungs and thorax and understand the role of surface tension in hysteresis. Analyze Laplace's law	K, S	Face to face		Synchronous Lecturing	Written exam	28-A2,3		
	2.6	Physiology Lung compliance	Draw the lung compliance curves, including Hysteresis, COPD and RDS.	S, C	Face to face		Synchronous Lecturing	Written exam	28-A2,3		
	2.7	Physiology Ventilation-Perfusion Ratio pneumococcus and H.influenza	Recognize the nature of venous admixture, including V/Q ratio between base and apex. Draw PO2-PCO2 V/Q diagram	K, S	Face to face		Synchronous Lecturing	Written exam	28-A2,3		

Week	Lecture	Topic	Student Learning Outcome		Learning Methods (Face to Face/Blended/ Fully Online)	Platform	Synchronous / Asynchronous Lecturing	Evaluation Methods	Reference		
	2.8	Pathology Atelectasis and ARDS	Recognize the pathophysiology of atelectasis and ARDS and demonstrate ARDS histologic findings, causes and complications	K S	Face to face		Synchronous Lecturing	Written exam	28-A5		
	2.9	Pathology Obstructive lung diseases 1 (emphysema and chronic bronchitis)	Recognize, discuss, and contrast the definitions, pathogenesis, types, associations, morphology, clinical presentation and outcome of emphysema, chronic bronchitis, asthma, and bronchiectasis.	K, S	Face to face		Synchronous Lecturing	Written exam	28-A5		
	2.10	Pathology Obstructive lung diseases 2 (asthma and bronchiectasis)			Blended	Moodle	Asynchronous Lecturing	Written exam and online activity	28-A5		
	2.11	Anatomy Anatomy of the pleura	Describe the surface anatomy of the pleura, types of pleura, blood supply, nerve supply, and clinical notes	K	Blended	Moodle	asynchronous Lecturing	Written exam and online activity	28-A1,10, 11, 12		
	2.12	Anatomy lab 2	Illustrate the anatomy of the larynx	S, C	Face to face		Synchronous Lecturing	Written exam	28-A1,10, 11, 12		
	2.13	Physiology lab	Perform a spirometry test and interpret the reports and curves	S	Face to face		Synchronous Lecturing	Written exam	28-A2,3		
3	3.1						asynchronous Lecturing	Written exam and online activity	28-A1,10, 11, 12		
	3.2	Physiology Gas Exchange and Transport-1	- Describe the O_2 and CO2 transport system. Draw the O2-Hb dissociation curve. and recognize the difference between HbA and HbF.	K	Face to face		Synchronous Lecturing	Written exam	28-A2,3		
	3.3	Physiology Gas Exchange and Transport-2	Explain the following: Bohr's effect, Hadane's effect and CO poisoning.	S	Face to face		Synchronous Lecturing	Written exam	28-A2,3		
	3.4	Physiology Regulation of Respiration-1	Describe the respiratory center and the accessory centers. Explain what drives ventilation during exercise. Explain why pure O2 should not be administered to COPD patient. Speculate what limit VO2max?	K, S	blended	Moodle	asynchronous Lecturing	Written exam and online activity	28-A2, A3		
	3.5	Microbiology Mycobacterium tuberculosis and Non-tuberculous Mycobacteria	1. Explain structural and biochemical properties of *Mycobacterium tuberculosis* and related species. (1) 2. Describe immunopathogenesis and host response mechanisms leading to latent and active disease. (1, 3, 4) 3. Interpret diagnostic techniques (AFB staining, GeneXpert, TB culture). (3, 6) 4. Discuss national and global TB control strategies, vaccination, and drug resistance. (4, 8)	K, S	Face to face		Synchronous Lecturing	Written exam	28-A7,8,9		
	3.6	Microbiology Atypical Pneumonia (Mycoplasma,	1. Compare microbiological and pathogenic characteristics of *M. pneumoniae*, *C. pneumoniae*, and *L. pneumophila*. (1)		Blended	Moodle	asynchronous Lecturing	Written exam and online activity	28-A7,8,9		

Week	Lecture	Topic	Student Learning Outcome		Learning Methods (Face to Face/Blended/ Fully Online)	Platform	Synchronous / Asynchronous Lecturing	Evaluation Methods	Reference		
		Chlamydia, Legionella)	2. Correlate *M. pneumoniae*, *C. pneumoniae*, and *L. pneumophila* with clinical and radiologic features of atypical pneumonia. (3, 4) 3. Evaluate laboratory diagnostic techniques and interpret molecular test results of *M. pneumoniae*, *C. pneumoniae*, and *L. pneumophila* (3, 6) 4. Apply rational antimicrobial therapy and infection control principles to address the burden of *M. pneumoniae*, *C. pneumoniae*, and *L. pneumophila* (3, 6, 8)								
	3.7	Pathology restrictive lung diseases 1 (granulomatous diseases)	Recognize, discuss, and contrast the definitions, pathogenesis, types, associations, morphology, clinical presentation, and outcome of chronic restrictive lung diseases and solve clinical cases.	K, S, C	Face to face		Synchronous Lecturing	Written exam	28-A5		
	3.8	Pathology Restrictive lung diseases 2 (fibrosing diseases)			Blended	Moodle	Asynchronous Lecturing	Written exam and online activity	28-A5		
	3.9	Pathology Restrictive lung diseases 3 (pneumoconiosis)			Blended	Moodle	Asynchronous Lecturing	Written exam and online activity	28-A5		
	3.10	Microbiology Bordetella pertussis and Corynebacterium diphtheriae	1. Describe the virulence factors and toxin mechanisms of *B. pertussis* and *C. diphtheriae*. (1) 2. Correlate *B. pertussis* and *C. diphtheriae* toxins with disease manifestations and complications (1, 3) Discuss diagnostic and public health control measures including vaccination and outbreak management. (4, 6, 8)		Face to face		Synchronous Lecturing	Written exam	28-A7,8,9		
	3.11	Pharmacology Anti-cough drugs	Identify the drugs used as anti-cough	K	Face to face		Synchronous Lecturing	Written exam	28-A6		
	3.12	Anatomy lab 3	Illustrate the anatomy of the Trachea, Bronchi/ Bronchial tree, and Bronchopulmonary segments.	S, C	Face to face		Synchronous Lecturing	Written exam	28-A1,10, 11, 12		
	3.13	Anatomy lab 4	Illustrate the anatomy of the Plura/ diaphragm, Lung's anatomy/ hilum of lungs, Impression on the Right.and left lung	S, C	Face to face		Synchronous Lecturing	Written exam	28-A1,10, 11, 12		
4	4.1	Pathology Lung cancer 1	Discuss and compare lung cancer types in terms of epidemiology, location, morphology, precursor lesions, clinical features, and outcome	K, S	Face to face		Synchronous Lecturing	Written exam	28-A5		
	4.2	Pathology Lung cancer 2			Face to face		synchronous Lecturing	Written exam	28-A5		
	4.3	Pathology Tuberculosis	Recognize the pathogenesis, diagnosis, and clinical features of tuberculosis and compare it's types	K, S	Blended	Moodle	Asynchronous Lecturing	Written exam and online activity	28-A5		

4.4	Pharmacology asthma1	Describe asthma, and recognize the drugs used to treat asthma and evaluate the importance of choosing the correct anti asthmatic medication.		Face to face		Synchronous Lecturing	Written exam	28-A6
	Pharmacology Asthma 2			Blended	Moodle	Asynchronous Lecturing	Written exam and online activity	28-A6
4.5	Pharmacology Tuberculosis -1	Identify the drugs used to treat tuberculosis.	K	Face to face		Synchronous Lecturing	Written exam	28-A6
4.6	Microbiology Common Viral Respiratory Pathogens (Influenza, Parainfluenza, Adenovirus, RSV, Rhinovirus)	1. Describe the genomic structure, replication, and pathogenesis of major viral agents causing upper and lower respiratory infections. (1) 2. Explain the epidemiology, seasonality, and clinical features of influenza, RSV, and parainfluenza infections. (1, 4) 3. Interpret molecular diagnostic tests, antigen detection, and serologic assays for these viruses (3, 6) 4. Evaluate prevention and control strategies, including vaccines, antivirals, and infection prevention. (4, 8)	K S	Face to face		Synchronous Lecturing	Written exam	28-A7,8,9
4.7	Microbiology Emerging and Re-emerging Respiratory Viruses (SARS-CoV-2, MERS-CoV, Avian Influenza)	1. Analyze molecular evolution and zoonotic transmission of novel coronaviruses and avian influenza strains. (1, 4) 2. Apply epidemiologic and biostatistical principles to assess outbreak data and transmission dynamics. (4, 7) 3. Discuss innovations in diagnostic tools, vaccine platforms, and ethical considerations in pandemic response. (6, 7, 8) 4. Reflect on the role of interdisciplinary collaboration and global surveillance on the prevention (5, 8)	K S	Blended	Moodle	Asynchronous Lecturing	Written exam and online activity	28-A7,8,9
4.8	Problem based learning. Respiratory tract case discussion in adults	Illustrate the clinical presentations of obstructive lung diseases	S	Blended	Moodle	Asynchronous Lecturing	Written exam and online activity	28-B1
4.9	Microbiology Fungal Respiratory Infections (Aspergillus, Histoplasma, Cryptococcus, Pneumocystis)	1. Describe the morphology, life cycle, and pathogenic mechanisms of key fungal pathogens affecting the respiratory tract. (1) 2. Relate disease severity to host immune status (e.g., immunocompromized vs. immunocompetent) (3, 4) 3. Interpret mycological diagnostic tests and imaging correlations. (3, 6) 4. Discuss anti-fungal therapies, resistance, and preventive strategies in high-risk patients. (3, 6, 8)	K S	Blended		Asynchronous Lecturing	Written exam and online activity	28-A7,8,9
4.10	Physiology	Describe the respiratory center and the accessory centers. Explain what drives ventilation during	K, S	Face to face		Synchronous Lecturing	Written exam	28-A2, A3

		Regulation of Respiration-2	exercise. Explain why pure O2 should not be administered to COPD patient. Speculate what limit VO2max?							
	4.11	Physiology Pulmonary function tests	Interpret pulmonary diseases according to PFTs	K	Face to face		Synchronous Lecturing	Written exam	28-A2, A3	
	4.12	Histology lab	Illustrate the histology of the upper respiratory organs Illustrate the histology of the lower respiratory organs and cells	S	Face to face		Synchronous Lecturing	Written exam	28-A1,10, 11, 12	
Week	**Lecture**	**Topic**	Student Learning Outcome	**descriptors**	**Learning Methods (Face to Face/Blended/ Fully Online)**	**Platform**	**Synchronous / Asynchronous Lecturing**	**Evaluation Methods**	**Reference**	
5	5.1	Pathology Vascular lung diseases	Recognize and understand the pathogenesis of selective vascular diseases	K	blended	Moo dle	Asynchronou s Lecturing	Written exam and online activity	28-A5	
	5.2	Pharmacology Tuberculosis -2	Identify the drugs used to treat tuberculosis	K	blended	Moo dle	Asynchronou s Lecturing	Written exam and online activity	28-A6	
	5.3 5.4	Pharmacology Drugs for bacteria pneumonia-1 Drugs for bacteria pneumonia-2	Identify the drugs used to treat bacteria pneumonia	K	blended	Moo dle	Asynchronou s Lecturing	Written exam and online activity	28-A6	
	5.5	Problem based learning. Respiratory tract case discussion in pediatrics	Illustrate the causes of stridor in children	S	blended	Moo dle	Asynchronou s Lecturing	Written exam and online activity	28-B1	

25. Evaluation Methods:

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

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

Evaluation Activity	Mark	Topic(s)	CLOs	Descriptors**	Period (Week)	Platform
Midterm exam	40	Histology, physiology, microbiology, and pathology	1.1/ 1.2/1.3/ 1.4/ 1.5/ 1.6/ 1.7/ 1.8/ 1.9/ 1.10/ 2.1/ 2.3/ 2.4/ 2.5/ 2.6/ 2.7/2.8/ 2.9/ 2.10/ 2.11/ 2.12/	**K** **S**	Beginning of 3rd week	Exambuilder

Online assignments, activities, and discipline	5	All blended topics	1.5/ 1.10/ 2.3/ 2.4/ 2.9/ 2.10/ 2.13/ 3.8/ 3.9/ 4.2/ 4.3/ 4.6/ 4.9/ 5.4/ 5.5/ 5.7/	K S C	1st- 5th week	Moodle
Practical	15	Anatomy, physiology, microbiology, and pathology	1.11/ 2.14/ 2.15/ 3.10/ 4.13/ 5.8/ 5.9/ 5.10	S, C	End of 6th week	Exambuilder
Final exam	40	Anatomy, Physiology, pathology, pharmacology, microbiology, problem-based learning	2.2/ 2.13/ 3.1/ 3.2/ 3.3/ 3.4/ 3.5/ 3.6/ 3.7/ 3.8/ 3.9/ 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	K S C	End of 6th week	Exambuilder
** 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.**

Mid-term exam specifications table*

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

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					

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:

- ✓ **Classroom Lectures**
- ✓ **Internet connection**
- ✓ **Online educational material using Moodle (Electronic Videos and Activities)**
- ✓ **Anatomy, Histology and physiology Lab sessions**

Teaching Methods and Assignments:

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

- ✓ **Classroom Lectures**
- ✓ **Interactive Videos and Animations**
- ✓ **Online activities and assignments**
- ✓ **Laboratory sessions**

27. Course Policies:

A- Attendance policies:

Attendance will be monitored by the course teachers.

Students are required to attend all lectures and lab sessions. Please refer to the JU regulations regarding attendance.
Attendance will be recorded via QR code on E-learning, and it is your responsibility to ensure that any technical issues are addressed ahead of time.

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. Junqueira's Basic Histology, Text and Atlas by Anthony L. Mescher, 15th edition.
2. Guyton and Hall Textbook of Medical Physiology (Guyton Physiology) by by John E. Hall, 13th edition.
3. Ganong's review of medical physiology, 25th edition. Barrett, Barman, Boitano, Brooks.
4. Lippincott illustrated reviews series, 6th edition, Farrier.
5. Robbins & Cotran Pathologic Basis of Disease, 11th edition, Kumar, Abbas, Aster.
6. Basic and Clinical Pharmacology, 13th edition, Katzung, Trevor.
7. Basic clinical parasitology. F. A. Neva & H.W. Brown. Prentice Hall, International Editions.
8. Sherries Medical Microbiology, 6th edition, Ryan, Ray, Ahmad, Drew.
9. Jawetz, Melnick, & Adelberg's -Medical Microbiology, Twenty-Sixth Edition
10. SNELL CLINICAL ANATOMY BY SYSTEM, RICHARD S. SNELL, 10TH EDITION.
11. GRAYS ANATOMY, INTERNATIONAL EDITION, LAST EDITION
12. EMBRYOLOGY, LANGMANN, LAST EDITION

B- Recommended books, materials, and media:

Web based **resources:**

https://medilib.ir/uptodate/show/6380

Name of the Instructor or the Course Coordinator: **Dr. Maram Abdaljaleel**	Signature: ……..……	Date: 29th /11 /2025

Name of the Head of Quality Assurance Committee/ Department	Signature: ……..……	Date: ……..……
Name of the Head of Quality Assurance Committee/ School or Center Professor Ayman Wahbeh	Signature: ……..……	Date: ……..……
Name of the Dean or the Director Professor Ayman Wahbeh	Signature: ……..……	Date: ……..……