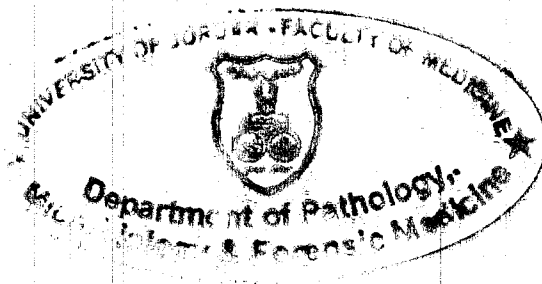




مركز التقييم / الأمانة

The University of Jordan
Accreditation & Quality Assurance Center

COURSE Syllabus



1	Course title	Pathology for rehabilitation
2	Course number	0504207
3	Credit hours (theory, practical)	1 theory, online course
	Contact hours (theoretical practical)	
4	Prerequisites/corequisites	
5	Program title	Undergraduate, rehabilitation
6	Program code	
7	Awarding institution	Jordan University
8	Faculty	medicine
9	Department	Histopathology, microbiology and forensic medicine.
10	Level of course	Undergraduate
11	Year of study and semester (s)	first semester, 2023/2024
12	Final Qualification	Bachelor's degree in rehabilitation
13	Other department (s) involved in teaching the course	None
14	Language of Instruction	English
15	Date of production/revision	September 2023

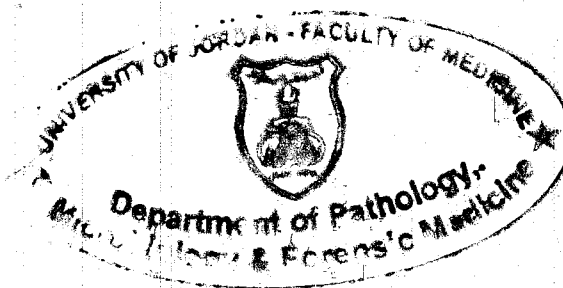
16. Course Coordinator:

Office numbers, office hours, phone numbers, and email addresses should be listed.

Dr Manar Hajeer, MD, FRCPath.
 Office hours: Monday and Wednesday 10-12
 Email: m.hajeer@ju.edu.jo, m.hajeer83@hotmail.com.

17. Other instructors:

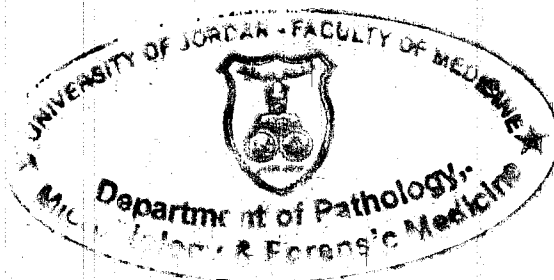
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18. Course Description:

As stated in the approved study plan.

This one credit hour course is mandatory for rehabilitation students. The course is designed to introduce students to pathology via online lectures, covering the basic pathology including cell injury, inflammation, neoplasia, and circulatory disorders, in addition to diseases of the cardiovascular, respiratory, gastrointestinal, musculoskeletal, renal, endocrine and breast diseases.

19. Course aims and outcome

A- Aims:

The overall objective is to:

- 1) Learn the pathophysiology of cell injury, inflammation, neoplasia and circulatory disorders.
- 2) know the causes of cell injury, inflammation (acute and chronic) along with knowing the genetic basis and environmental causes of neoplasms.
- 3) To know the morphological changes of necrotic and apoptotic cells, acute and chronic inflammation and how to differentiate morphologically between benign and malignant neoplasms.
- 4) To link the pathophysiology of these disorders with the clinical manifestations.
- 5) To know some important cardiovascular, respiratory, renal, endocrine, musculoskeletal, breast and gastrointestinal disorders.

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

- A. Knowledge and Understanding: Student is expected to

Introduction:

Difference between clinical and anatomic pathology
Types of specimens to the pathology lab
Definition of pathogenesis
Specimen processing and preparation in pathology lab

Cell injury:

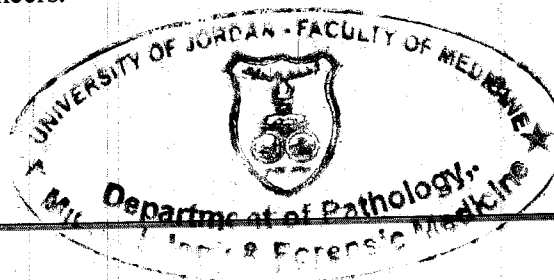
Adaptive cellular mechanisms to stresses (hypertrophy, hyperplasia, atrophy and metaplasia).
Causes of cell injury.
Morphology of reversible and irreversible cell injury.
Patterns of tissue necrosis.
Morphology of cellular apoptosis.

Inflammation:

Differences between acute and chronic inflammation.
Causes of inflammation.
Vascular events in acute inflammation (change in vascular caliber and permeability)
Cellular events in inflammation (margination, rolling, adhesion, transmigration and migration)
Chemotaxis and leukocyte activation.

Neoplasia:

Definition of neoplasia.
Nomenclature of benign and malignant epithelial and mesenchymal neoplasms and misnomers.
Characteristics of benign and malignant neoplasms (differentiation and anaplasia, rate of growth, local invasion and metastasis)
Definition of grading and staging of cancers.



Hemodynamic disorders:

Definition and causes of edema.

Definition and causes of hyperemia and congestion.

Forms of hemorrhage (Petechiae, purpura and ecchymosis).

Thrombus formation and morphology.

Different types of embolism (pulmonary and systemic thromboembolism)

Brief discussion of infarction.

Cardiovascular diseases:

Definition, risk factors and morphology of atherosclerosis.

Hypertension and vascular disease in hypertension.

Congestive heart failure (left and right sided).

Ischemic heart disease (myocardial infarction).

Respiratory diseases:

Definition, types and general features of obstructive lung diseases (emphysema, asthma and

Chronic bronchitis.

Different types of asthma

Gastrointestinal diseases:

Diseases of the esophagus (GERD, esophagitis)

Diseases of the stomach (chronic gastritis and its types, peptic ulcer disease)

Diseases of the small and large intestine (hemorrhoids, celiac disease)

Acute appendicitis.

Joint diseases:

To know about the pathophysiology of osteoarthritis, preventive measures and clinical manifestations.

To know about rheumatoid arthritis clinical manifestations, diagnostic criteria, joint distribution.

To know about the causes and clinical manifestations of infectious arthritis).

Diseases of the bone

To know about the distribution of osteoporosis and underlying pathogenesis

To know about the causes and clinical manifestations of osteomalacia and rickets)

To know about the causes and clinical manifestation of Osteomyelitis.

Endocrine diseases:

Discuss hypo and hyperthyroidism

Discuss graves disease, thyroiditis, and multinodular goiter

Discuss hyperpituitarism,

Pituitary adenomas subtypes

Discuss type 1 and type 2 diabetes.

The long-term complications of diabetes.

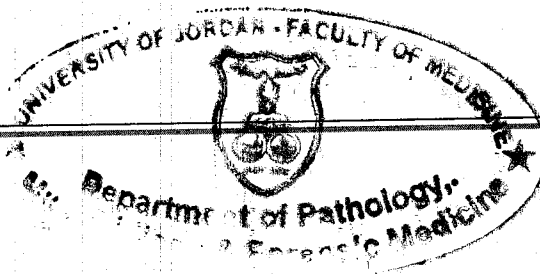
Renal diseases:

Discuss the renal stones

renal obstruction

Urinary tract infections.

Interstitial kidney diseases

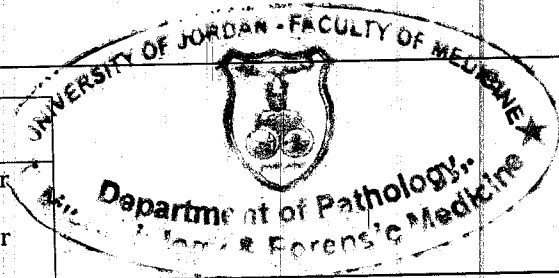


Breast diseases:
 Discuss normal breast
 Discuss gynecomastia and causes
 Discuss mastitis and inflammations of the breast
 Fibrocystic diseases.
 Benign neoplasms of the breast (fibroadenoma)
 Malignant tumors of the breast , subtypes, diagnosis, causes.

B. Intellectual Analytical and Cognitive Skills: Student is expected to
 B1- Ability to understand pathophysiology of diseases
 B2- Ability to make approach to disease from clinical signs and symptoms
 B3- Ability to differentiate diseases from each other

20. Topic Outline and Schedule:

Topic	Number of lectures	Instructor
Introduction to pathology	1	Dr manar hajeer
Cell injury	1	Dr manar hajeer

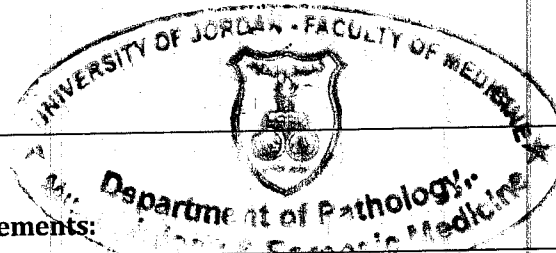


Inflammation	1	Dr M. hajeer
neoplasia	1	Dr M. hajeer
Circulatory system and hemodynamics	1	Dr M. hajeer
cardiovascular	1	Dr M. hajeer
Respiratory	1	Dr M Hajeer
Gastrointestinal disorders	1	Dr M Hajeer
Bone diseases	1	Dr M. hajeer
joint diseases	1	Dr M. hajeer
Endocrine system	1	Dr M. hajeer
Renal diseases	1	Dr manar hajeer
Breast pathology	1	Dr manar hajeer

21. Teaching Methods and Assignments:

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

Online Lectures.
Exams



22. Evaluation Methods and Course Requirements:

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

Two exams : midterm(40%) , and final(60%)

All MCQ style

23. Course Policies:

A- Attendance policies:

According to the faculty and university regulations.

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

According to the faculty and university regulations

C- Health and safety procedures:

No issues related to safety

D- Honesty policy regarding cheating, plagiarism, misbehavior:

According to the faculty and university regulations

E- Grading policy:

According to the faculty and university regulations

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

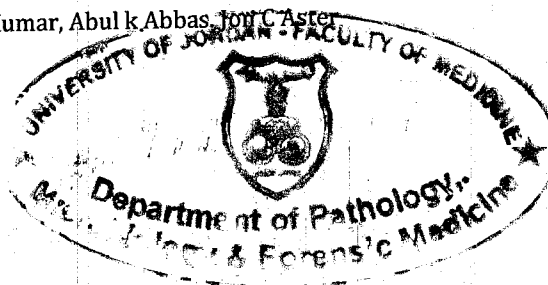
24. Required equipment:

none

25. References:

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

Robbins Basic Pathology: 10th edition. Vinay Kumar, Abul k Abbas, Jon C Aster



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26. Additional information:

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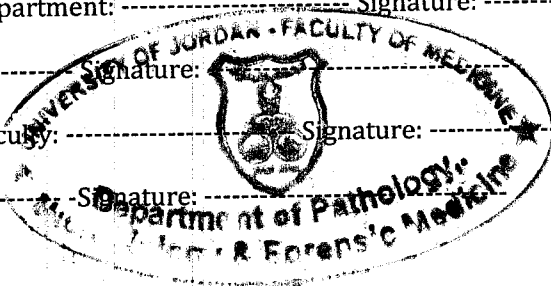
Name of Course Coordinator: -Dr Manar Hajeer-----Signature: -----Date: September 2023

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

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

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

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



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