

COURSE DESCRIPTIONS

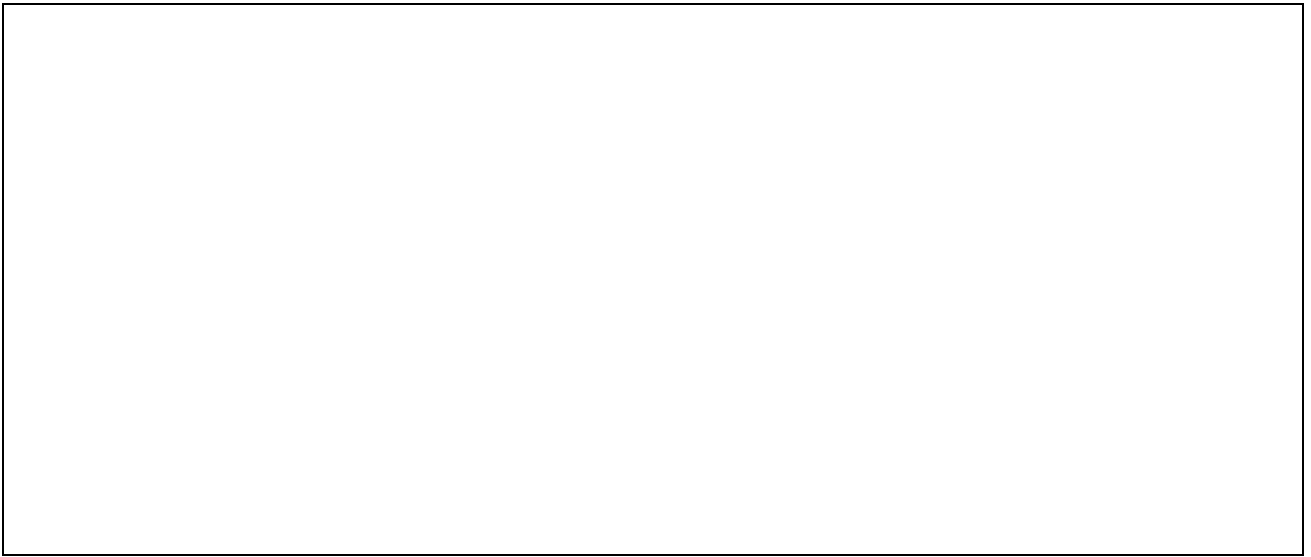
Faculty	Pharmacy				
Department	Pharmacy	NQF level	6		
Course Title	Pathology	Code	901377	Prerequisite	901358
Credit Hours	2	Theory	2	Practical	0
Course Leader	Ali Abu Siyam, PhD	email	aabusiyam@jadara.edu.jo		
Lecturers	Jaafar Abd Alrahman	emails	J.aboabeleh@jadara.edu.jo		
Lecture time	السبت وجاهي من الساعة 9 صباحا ولغاية الساعة 11 صباحا الخميس عن بعد من الساعة 9 صباحا ولغاية الساعة 11 صباحا	Classroom	D 303		
Semester	الصيفي 2024	Production	2020	Updated	2024
Awards				Attendance	Fulltime

Short Description

The course allows students to learn basic concept of the various disease processes in the body as well the basic molecular, cellular and reactions to various injurious agents. Cell injury including adaptations, necrosis & apoptosis. Pathology of Inflammation including causes and manifestations and hemodynamic are also discussed. The course also emphasizes neoplasia including classification, epidemiology, and characteristics of benign and malignant tumors. The major grading and staging systems of neoplasms will be covered in detail. Knowledge of etiology of tumors and its consequences on health are also covered.

Course Objectives

1. List causes of cell injury, Understand the concept of reversible and irreversible.
2. Describe the morphological changes in reversible and irreversible injuries, Define adaptation and list the most common types, Define hyperplasia, hypertrophy, atrophy, metaplasia and list causes with example.
3. Describe lipid, protein and glycogen accumulation in cells. Describe two types of tissue repair. Describe the cell cycle and factors controlling it.
4. Define and give examples of labile, stable and permanent cells. Describe fibrosis. Describe healing by first and second intention.
5. Understand the definitions & terms used in neoplasia. Know the characteristics of benign and malignant tumors. Understand the routes of metastasis. Understand the epidemiology of neoplasia.
6. Understand the hypersensitivity disorders. Understand the autoimmunity disorders, and understand the immunodeficiency diseases.



Learning Outcomes	
A. Knowledge - Theoretical Understanding	
-	a1. Describe the morphological changes in reversible and irreversible injuries, Define adaptation and list the most common types, Define hyperplasia, hypertrophy, atrophy, metaplasia and list causes with example.
B. Knowledge - Practical Application	
	a2. Differentiation the morphological changes in reversible and irreversible injuries, Define adaptation and list the most common types, Define hyperplasia, hypertrophy, atrophy, metaplasia and list causes with example.
C. Skills - Generic Problem Solving and Analytical Skills	
-	b1. able to critically analyze the scientific evidence underlying our current understanding of Pathology.
-	b2. Apply the knowledge from this course to solve problems in scientific research or medical analysis.
D. Competence: Autonomy, Responsibility, and Context	
-	c1. Develop skills, through the knowledge gained from this course, in some of the specific methodologies used in medical tests in pathology.
-	c2. Able to put the knowledge from this course into larger context of how to apply modern techniques in pathology for diagnosis of diseases.
Teaching and Learning Methods	
	• Lectures will be given according to the specified time and location as assigned on the academic schedule. • Lectures will be administrated using power-point presentations and will be provided to the students through Jadara University e-learning website. • Textbook is obligatory and required by the students
Teaching duration: According to the academic calendar provided at Jadara University website	
Assessment Methods	
	• Midterm Exam 30% • Quizzes 20% • Final Exam 50%

Course Contents					
Week	Hours	CLOs	Topics	Teaching & Learning Methods	Assessment Methods
1.	2	a1,b 2	Introduction to the course	Power point presentation & textbook	Midterm Exam
2.	2	a1,b 1	Cell Adaptations, Cell injury	Power point presentation & textbook	Midterm Exam
3.	2	b1,b2	Cell Adaptations, Cell injury	Power point presentation & textbook	Midterm Exam
4.	2	a1, b1,b2 c1 ,c2	Inflammation, Regeneration/Healing	Power point presentation & textbook	Midterm Exam
5.	2	a2 , b1,b2 c1 ,c2	Inflammation, Regeneration/Healing	Power point presentation & textbook	Midterm Exam & Quizzes
6.	2	a2 , b1,b2 c1 ,c2	Neoplasia	Power point presentation & textbook	Midterm Exam & Quizzes
7.	2	a1,b 2	Neoplasia	Power point presentation & textbook	Midterm Exam
8.	2	a1,b 1	Neoplasia	Power point presentation & textbook	Final Exam

9.	2	b1,b2	Hemodynamic Disorders	Power point presentation & textbook	Final Exam & Quizzes
10.	2	a1, b1,b2 c1 ,c2	Hemodynamic Disorders	Power point presentation & textbook	Final Exam & Quizzes
11.	2	a2 , b1,b2 c1 ,c2	Hypersensitivity Reactions	Power point presentation & textbook	Final Exam
12.	2	a1,b 2	Autoimmune diseases	Power point presentation & textbook	Final Exam
13.	2	a1,b 1	Immunodeficiency diseases	Power point presentation & textbook	Final Exam
14.	2	b1,b2	TORCH disease	Power point presentation & textbook	Final Exam
15.	2	a1, b1,b2 c1 ,c2	Genetic Diseases	Power point presentation & textbook	Final Exam

Infrastructure		
Textbook	Title (main Reference)	Basic Pathology
	Authors	Kumar, Cotran and Robbins
	Publisher	Saunders Elsevier
	Year	2023
	Edition	11 th Edition
References	• https://evolve.elsevier.com • Lecture handouts • NCBI Database (https://www.ncbi.nlm.nih.gov/): includes many textbooks that are available online FREE. • Internet: there are many websites that provide valuable data related to immunology including research paper, books, animation, etc. you can find more of these websites by searching in the internet using a suitable searching key. Many websites will be posted on E-learning during the semester.	
Required reading	Textbook is obligatory and required by the students	
Electronic materials	Provided to the students through Jadara University e-learning website.	
Other	In addition to the above, the students will be provided with handouts by the lecturer.	

Assessment Method		Grade	A1	A2	B1	B2	C1	C2
Midterm Exam		30%						
Final Exam		40%						
Coursework								
Course work assessment methods	Assignments	10%						
	Case study							
	Discussion and interaction							
	Group work activities							
	Lab tests and assignments							
	Presentations							
	Quizzes	20%			10	10		
Total		100%						

Plagiarism

Plagiarism is claiming that someone else's work is your own. The department has a strict policy regarding plagiarism and, if plagiarism is indeed discovered, this policy will be applied. Note that punishments apply also to anyone assisting another to commit plagiarism (for example by knowingly allowing someone to copy your code).

Plagiarism is different from group work in which a number of individuals share ideas on how to carry out the coursework. You are strongly encouraged to work in small groups, and you will certainly not be penalized for doing so. This means that you may work together on the program. What is important is that you have a full understanding of all aspects of the completed program. In order to allow proper assessment that this is indeed the case, you must adhere strictly to the course work requirements as outlined above and detailed in the coursework problem description. These requirements are in place to encourage individual understanding, facilitate individual assessment, and deter plagiarism.