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Republic of Yemen

Ministry of Higher Education & Scientific Research

21 SEPTEMBER UNIVERSITY of MEDICALS & APPLIEED

SCIENCES

Faculty of Laboratory medicine..

Department of Pathology

Course Specification of Pathology
Course No. (01.01. 305)
2022/2023

Prepared by:	Reviewed by:	Head of the Department:	Vice Dean for Quality affairs	Dean of College:
Dr. Aref Saleh Abdulmughni	Dr Gamil Taher Abdul Mughni		Dr\Gamil Taher Abdul Mughni	Associate Prof. Dr. Ebtesam Al-Zabedi

I. Course Identification and General Information:						
1	**Course Title:**	pathology				
2	**Course Code & Number:**	**01.01.305**				
3	**Credit Hours:**	**Theory Hours**				
		Lecture	**Exercise**	Practical	**Credit Hours**	
		2	0	2	2	
4	**Study Level/ Semester at which this Course is offered:**	2-year Level / 1st Semester				
5	**Pre –Requisite (if any):**	Histology				
6	**Co –Requisite (if any):**	None				
7	**Program (s) in which the Course is Offered:**	Bachelor in laboratory medicine				
8	**Language of Teaching the Course:**	English				
9	**Study System:**	semester				
10	**Mode of Delivery:**	Regular				
11	**Location of Teaching the Course:**	University Campus				
12	**Prepared by:**	Dr. Aref Saleh Mohammed Abdulmughni				
13	**Date of Approval:**	2023				

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II. Course Description:

The course covers stud the A etiology , Mechanism of cell injury; Disturbances of circulation, growth and metabolism; Degenerations, necrosis and gangrene; Inflammation, healing and repair; Hypersensitivity reactions; Neoplasia.

III. Alignment Course Intended Learning Outcomes with program outcomes

III. Course Intended Learning Outcomes (CILOs)		Referenced PILOs
A. Knowledge and Understanding: ***Upon successful completion of the course, students will be able to:***		
a1	**List** different disease processes encountered their causes (etiology), and how the disease develops in response to the etiological agents (pathogenesis).	**A1**
a2	**Discuss** characteristic gross and microscopic pictures of different pathologic lesions within specific organ system and the associated functional disturbances.	**A1**
a3	**Describe** the morphologic changes of the diseases in the form of gross and microscopic pictures.	**A2**
B. Intellectual Skills: ***Upon successful completion of the course, students will be able to:***		
b1	**Explain** inflammatory and neoplastic process in terms of the micro anatomical and cellular changes involved.	**B1**
b2	**Interpret** pathological changes of systemic diseases by using appropriate diagnostic methods.	**B2**
b3	**Analyze** various gross and microscopic pathologic data resulting from the disease process.	**B1**
C. Professional and Practical Skills: ***Upon successful completion of the course, students will be able to:***		
D. Transferable Skills: ***Upon successful completion of the course, students will be able to:***		
d1	**Relate** different disease processes encountered their causes (etiology), and how the disease develops in response to the etiological agents (pathogenesis).	D1

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IV. Alignment Course Intended Learning Outcomes with Teaching Strategies and Assessment methods :

(A) Alignment Course Intended Learning Outcomes of Knowledge and Understanding to Teaching Strategies and Assessment Strategies:

	Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
a1	**List** different disease processes encountered their causes (etiology), and how the disease develops in response to the etiological agents (pathogenesis).	Lecture	Exam
a2	**Discuss** characteristic gross and microscopic pictures of different pathologic lesions within specific organ system and the associated functional disturbances.	Lecture	Exam
a3	**Describe** the morphologic changes of the diseases in the form of gross and microscopic pictures.	Lecture	Exam

(B) Alignment Course Intended Learning Outcomes of Intellectual Skills to Teaching Strategies and Assessment Strategies:

	Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
b1	**Explain** inflammatory and neoplastic process in terms of the micro anatomical and cellular changes involved.	Lecture	Exam
b2	**Interpret** pathological changes of systemic diseases by using appropriate diagnostic methods.	Lecture	Exam
B3	**Analyze** various gross and microscopic pathologic data resulting from the disease process.	Lecture	Exam

C Alignment Course Intended Learning Outcomes of Professional and Practical Skills to Teaching Strategies and Assessment Strategies:

	Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
c1			

(D) Alignment Course Intended Learning Outcomes of Transferable Skills to Teaching Strategies and Assessment Strategies:

	Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
d1	**Relate** different disease processes encountered their causes (etiology), and how the disease develops in response to the etiological agents (pathogenesis).	SEMINAR	seminars

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III. Course Content:

A – Theoretical Aspect:

Order	Units/Topics List	Subtopics List	Number of Weeks	contact hours	Learning Outcomes (CILOs)
1	Introduction of pathology: -Pathology -Pathogenesis -Etiology - Clinical significance of diseases: Signs & Symptoms -Morphologic changes - Fate of diseases (Complication &Prognosis)	Definitions Structure	1	2	a1, a2
2	Inflammation: -Acute inflammation -Chronic inflammation (granulomas)	- Definitions - Shape - Arrangements - Diagnosis Differential diagnosis	1	2	a1, a3
3	Healing and Repair: -Types of healing -Mechanism of healing by fibrosis and Granulation tissue -Types of wound Healing -Complication of wound healing	pathogenicity - Diagnosis. Interpretation	1	2	a2, a3
4	Cell injury (reversible and irreversible): -Adaptation -Degeneration - Necrosis and Apoptosis	- Definitions - Shape - Arrangements	1	2	a1, b2
5	- Circulatory Disturbance: -Hyperemia, Congestion and ischemia -Thrombosis & Embolism - Hemorrhage & Edema		1	2	b1, b3
6	Neoplasia (benign and malignant tumors): -Benign tumors - Malignant tumors		1	2	a1, d1
7	Med term		1	2	

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8	Diseases of female reproductive system		1	2	a1, a3, b3
9	Diseases of the breast		1	2	b1
10	Diseases of urinary tract		1	2	b1, b3, d1
11	Diseases of gastrointestinal tract		1	2	b1, b3, d1
12	Diseases of respiratory tract		1	2	b1, b3, d1
13	Final exam		1	2	
	Number of Weeks /and Units Per Semester		**13**	**26**	

V. Teaching Strategies of the Course:

1-	Lectures
2-	Self-leaning

VI. Assessment Methods of the Course:

No	Assignment
1	Written Exams (Short Essays) and Quizzes
2	Multiple Choice Questions (MCQ)

VII. Assignments:

No.	Assessment Method	Week Due	Mark	Proportion of	Aligned Course Learning

				Final Assessment	Outcomes
1	**Midterm Exam**	8	30	30%	a1,a2,a3,b1,b2,b3,d1
2	**Final Exam**	16	70	70%	a1,a2,a3,b1,b2,b3,d1
	Total	100		100%	

VII. Learning Resources:

1- Required Textbook(s) (maximum two).	
1-	**Course notes**: Handouts of lectures (either soft or hard copies)
2-	Text book -General Anatomy -Practical General Log Book
2- Essential References.	
1-	Kumar, Cortan and Robbins basic pathology (2010).
2-	Roitt's Essential Immunology
3- Electronic Materials and Web Sites *etc*.	
1-	Websites, Search engines (PubMed, Google Scholar) 1- E-Learning: Video tapes (audio-visual) 2- www.WHO.com
2-	Journals, Scientific Magazines and Articles. § Pathology Journal – Elsevier § The American Journal of Pathology § Pathology Journal Online Journal in Pathology – MDLinx § Diagnostic Pathology Journal

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X. Course Policies: (Based on the Uniform Students' By law

1	**Class Attendance:** Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	**Tardiness:** A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	**Exam Attendance/Punctuality:** No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	**Assignments & Projects:** Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	**Cheating:** Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	**Forgery and Impersonation:** Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply**.**
7	**Other policies:** The University official regulations in force will be strictly observed and students shall comply with all rules and regulations of the examination set by the Department, Faculty and University Administration.