هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

Course Specifications

Course Title:	Pathology 1
Course Code:	**361 path-6**
Program:	**Bachelor of Medicine, Bachelor of Surgery**
Department:	**N/A**
College:	**Medicine**
Institution:	**Najran University**

A. Course Identification

1. Credit hours: 6 (4+2)
2. Course type **a.** University ☐ College ☐ Department ☐ Others ☑ **PROGRAM** **b.** Required ☑ Elective ☐
3. Level/year at which this course is offered: level 9 ,3rd year
4. Pre-requisites for this course (if any)**:** **Histology-2**
5. Co-requisites for this course (if any)**:** None

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	64	51.6%
2	**Blended**		
3	**E-learning**		
4	**Distance learning**		
5	**Other**	60	48.4%

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	56
2	**Laboratory/Studio**	60
3	**TBL**	8
4	**Others** (specify)	
	Total	124

B. Course Objectives

1. Course Description

Pathology is the scientific study of disease: its definition, etiology, epidemiology, pathogenesis, pathological changes, clinical features, investigations and prognosis. This subject is taught to medical students in 2 parts: general pathology and systemic pathology, with special emphasis on pathological changes and pathogenesis that are correlated with the clinical features.

This course (361 path-6) covers general pathology. It is concerned with the study of disease processes like inflammation, immunopathology, tumors, thrombosis, shock, embolism, edema, …etc.

The description of the pathological changes is started by discussing it at the lower level of life, the cell and even the subcellular level like DNA. This is covered by studying cell injury, cell death and adaptation of the cell to injury.

In this course the student is also given a general concept about medical laboratories: sections, types of specimens, different tests carried out to help the treating doctor make diagnosis.

Strategies used to deliver this information to students are: formal lectures, practical and research tasks about certain assigned topics.

Students are assessed for the knowledge acquirement by: continuous course assessment (mid-term test, quizzes, assignment), final written exam and final practical exam.

2. Course Main Objective

By the end of the course, students should be able to demonstrate knowledge of:-

1) Scientific aspects of disease including: causes, predisposing factors, pathogenesis, macroscopic and microscopic features, complications, clinical features, investigations.
2) The basic pathological processes that underlie diseases (including cell injury and necrosis, inflammation and healing, ischemia, infarction and neoplasia)
3) General pathologic features of diseases.
4) Basic principles and concepts of medical laboratory.
5) The terminologies used in pathology and in the medical fields in general

C. Course Content

No	List of Topics	Contact Hours
1.	Introduction To General Pathology, Course Specification, Branches	1
2.	Common Pathological Lab Investigations, Biopsy, Cytology, Histopathological Tissue Processing, Reporting	1
3.	Practical: Surgical Specimens	2
4.	Practical: Tissue Processing	2
5.	Practical: Cytology, Special Stains, Immunohistochemical Staging, Genetic Microarray	2
6.	Cell Injury Causes, Cellular Changes	1
7.	Mechanism of Cell Injuries: HYPOXIA	1
8.	Irradiation & Chemical Injuries	1
9.	Free Radicals and Reperfusion Injury	1
10.	Pathology of Aging Process	1
11.	Practical1: Cell Injury	2
12.	Cell Death, Necrosis	1
13.	Apoptosis	1
14.	Practical: Necrosis and Apoptosis	2

15.	Cellular Accumulations	1
16.	Amyloidosis	1
17.	Practical: Intracellular Accumulations Slide Show	2
18.	Practical: Intracellular +Amyloidosis	2
19.	Cellular Adaptations And Growth Disorders	1
20.	Hypertrophy, Hyperplasia	1
21.	Metaplasia & Dysplasia	1
22.	Practical: Cellular Adaptations And Growth Disorder	2
23.	Genetic Abnormalities	1
24.	Practical: Tissue Matrix &Disorders	2
25.	Wound Healing (Types, Mechanism Of, Complications)	1
26.	Wound Healing: Practical	2
27.	Bone Healing	1
28.	Practical: Fractures &Healing	2
29.	Fibrosis & Fibromatosis	1
30.	Practical: Fibrosis And Fibromatosis	2
31.	Inflammation ACUTE	1
32.	Inflammation CHRONIC	1
33.	Inflammation ACUTE: PRACTICAL: Microscopy	2
34.	**Granulomas: TBL1**	2
35.	Practical: Chronic Inflammations: Microscopy	2
36.	Practical Slide Show Acute And Chronic Inflammation	2
37.	Fluid Disturbance	1
38.	Electrolyte Disturbances	1
39.	Practical: Fluid Disturbances	2
40.	Hemodynamic Disturbances: Congestion, Hyperemia	1
41.	Hemodynamic Disturbances: Thrombogenesis, Embolism,	1
42.	Hypercoagulable States &DIC	1
43.	Hemodynamic Disturbances: Ischemia, Infarction	1
44.	**Hemodynamic Disturbances: Shock TBL**	2
45.	Practical 1: Hemodynamic Disturbances: Thrombosis, Emboli, Congestion	2
46.	Practical2: Hemorrhages, DIC, Hypercoagulable State	2
47.	Mendelian Diseases Single Gene Classical Inheritance & Multifactorial	1
48.	Lysosomal Storage Diseases	1
49.	Cytogenetic Disorders	1
50.	Non Classical Inheritance (Trinucleotide Repeats, Genomic Imprinting)	1
51.	Diagnosis Of Genetic Diseases	1
52.	Practical: Slideshow genetic Disorders	2
53.	Immunopathology: Rheumatoid Arthritis	1
54.	Systemic Lupus Erythematosus	1
55.	Scleroderma &Inflammatory Myopathies, Combined Connective Tissue Disorders	1
56.	Practical: Immunopathology	2
57.	Pathology Of Some Infectious & Granulomatous Diseases:(Mycobacterial Infections, Sarcoidosis, Leprosy	1
58.	Syphilis, Brucellosis, Bilharziasis Toxoplasmosis, Typhoid	1
59.	TB, And Other Atypical Mycobacterial Infections, Sarcoidosis	1
60.	Bilharziasis Syphilis, Leprosy	1
61.	Brucellosis, Typhoid, Toxoplasmosis	1

62.	PRACTICAL: Slideshow	2
63.	Neoplasia: Definition, Features, Nomenclature And Types	1
64.	Epidemiology, Risk Factors, Premalignant Conditions	1
65.	Carcinogenesis	1
66.	Common Carcinogens	1
67.	Diagnosis, Clinical Features, Tumor Markers & Staging	1
68.	Para Neoplasm	1
69.	Practical 1: Benign Neoplasm: Gross Slide Show	2
70.	Practical 2 Microscopy	2
71.	Practical 3 Malignant Neoplasm: Gross	2
72.	Practical 4 Malignant: Microscopy	2
73.	Body Cysts &Cystic Changes Lecture	1
74.	Cystic Changes Practical	2
75.	Practical Audiovisual Session	2
76.	Environmental Pathology: Air Pollutions And Smoking	1
77.	Drugs& Chemicals	1
78.	Physical Injuries: Burns, Heat Stroke, Cold, Irradiation, Electric Shock	1
79.	Traumas& Gunshots	1
80.	**Nutrition Deficiencies And Diseases: TBL**	2
81.	Obesity	1
82.	Practical: Slide Show: Physical, Chemical &Irradiation Injury	2
83.	Practical: Slide Show: Nutritional Disorders, Microscopy :Frost Bite	2
84.	Pathology Of Child Hood Diseases	1
85.	Prematurity, Small For Dates& Intrauterine Growth Retardation	1
86.	Infant Respiratory Distress Syndrome L &Sudden Infant Death Syndrome	1
87.	Congenital Anomalies, Teratogenesis	1
88.	Inborn Error Of Metabolism	1
89.	Childhood Tumors: **TBL**	2
90.	Practical Childhood Disease	2
Total		١٢٤

D. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Midterm written exam & mid practical	6th week	25%
4	TBL	2rd,5th ,7th 9t h,	10%
5	Practical logbook	All practical sessions	5%
6	Final written exam	12th -13th(Exam week)	40%
7	OSPE	12th -13th (Exam weeks)	20%

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	Robbins &Cortan Basic pathology 9th edition wilily

Essential References Materials	Robbins pathological basic of diseases7th edition Tropical diseases
Electronic Materials	Ackerman and Rosai surgical pathology
Other Learning Materials	Lippincott lecture note of pathology

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Class room for 30 students, practical lab with 30 microscopes &30 lab seats,
Technology Resources (AV, data show, Smart Board, software, etc.)	Computer system in the class room and lab ,data show, net connection in both
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	30 microscopes and 30 pathology slide boxes

F. Specification Approval Data

Council / Committee	PATHOLOGY DEPARTEMNT
Reference No.	1/3/44
Date	07/03/1444

course coordinator
Dr sumiah

PATHOLOGY DEPARTEMNT HEAD

Dr. Soliman Alsaiari