

**Ministry of Higher Education and Scientific Research  
Scientific Supervision and Scientific Evaluation Apparatus  
Directorate of Quality Assurance and Academic  
Accreditation Department**



# **Academic Program and Course Description Guide**

**3<sup>rd</sup> stage Systemic Pathology 2025-2026**

## Academic Program Description Form

**University Name:** University of Al-Qadisiyah

**Faculty/Institute:** College of medicine

**Scientific Department:**

**Academic or Professional Program Name:** General Medicine and Surgery

**Final Certificate Name:** Bachelor's degree in General Medicine and Surgery

**Academic System:** Annual year / 2 semester

**Description Preparation Date:** 10/9 /2025

**File Completion Date:** 16/9/2025

**Signature:**

**Head of Department Name:**

Prof Dr. Nael Mohammed

**Signature:**

**Scientific Associate Name:**

Prof. Dr. Shorag Mohamed

The file is checked by: Prof Dr. Anwar jassib

**Department of Quality Assurance and University Performance**

**Director of the Quality Assurance and University Performance**

**Department:**

**Signature:**

**Approval of the Dean**

## 1. Program Vision

Seeking to make the College of Medicine in Al-Qadisyah University a distinguished college among the medical colleges in Iraq in the field of medical education. Additionally, to make it has a clear imprint in promoting the health field in the Iraqi community and works to provide distinctive proposals and views for basic and clinical medical sciences to ensure meeting the health needs of the community at the local and national levels.

## 2. Program Mission

Al Qadisyah medical college aims at producing medical doctors that are able to participate effectively in the health care delivery system whether in Iraq or any other country

The curriculum is designed to provide students with the necessary knowledge, skills and attitudes in order to function as safe doctors and have the baseline for lifelong learning in the medical field in the future

The teaching methods are guided by learning objectives that ensure delivering basic biomedical, behavioral and social and clinical subjects which help creating an efficient junior doctor who is competent, motivated and professional.

It is a well-established strategy that students are heard and welcomed to provide feedback about different aspects of the learning process and they are considered as an essential part in the decision making in the college used for continuous planning for improvement of the whole institution.

## 3. Program Objectives

Graduating distinguished doctors and rehabilitating them scientifically, professionally and ethically so that they can provide health and medical care to individuals, families and society on sound scientific bases and in accordance with the noble moral, social and humanitarian values with great interest in primary health care

- Developing curricula, teaching aids and methods to improve quality based on international quality standards and academic accreditation

- Achieving accreditation through the institutional capacity standards of the college. Achieving academic accreditation standards for student and graduate programs offered by the college

Continuous support for distinguished cadres of faculty members through an academic environment that encourages production and creativity

θ Continuous development of the scientific research system to identify and diagnose major health problems in the community, propose appropriate scientific solutions to them, and keep pace with development in basic and clinical medical sciences.

## 4. Program Accreditation

An application has been made for national accreditation for medical colleges

## 5. Other external influences

Advances in medical science and technology , requiring regular curriculum updates

6. Program Structure				
Program Structure	Number of semester	Credit hours	Percentage	Reviews*
Institution Requirements	2	Total hour in annual year semester I and II 210 h ( 150 h theory and 60 h practical)		Basic
College Requirements	2	Total hour in annual year semester I and II 210 h ( 150 h theory and 60 h practical)		Basic
Department Requirements	2	Total hour in annual year semester I and II 210 h ( 150 h theory and 60 h practical)		Basic
Summer Training	Not found			–
Other				–

\* This can include notes whether the course is basic or optional.

7. Program Description				
Year/Level	Course Code	Course Name	Credit Hours	
			theoretical	practical
3 <sup>rd</sup> stage	SPA 3201	Pathology II	150 h for annual year semester I, II	60 h for annual year semester I, II

8. Expected learning outcomes of the program
<p><b>Learning Outcomes for systemic Pathology Course</b></p> <p>Systemic pathology is a specialized branch of pathology that focuses on understanding diseases within specific organ systems. Its objectives encompass a comprehensive approach to disease analysis, integrating clinical and laboratory findings to enhance patient care .</p>

## **The following learning outcomes**

### **knowledge**

**1- Study and analysis the etiology (causes) and pathogenesis (development) of diseases affecting specific organ systems , pathophysiology, etiology, risk factors , causes , radiological finding , clinical features of diseases and basic science knowledge**

**2- Integrate pathological findings and correlate with clinical manifestations, laboratory investigations, and radiological data to formulate accurate diagnoses and guide treatment decisions**

**3- Develop skills in examining surgical specimens and cytological preparations, interpreting morphological changes, and correlating these with clinical presentations**

**4-Identify key laboratory investigations , pathology tests , and special stains used for disease diagnosis and monitoring.**

**5- Understand the role of pathologists as integral members of medical teams, contributing to diagnosis and treatment planning through collaborative efforts and medical teams**

**6-Application advanced diagnostic methods such as immunohistochemistry, molecular pathology, and electron microscopy to enhance diagnostic accuracy and understanding of disease processes**

**7-Recognize the importance of pathology in evidence-based medicine and the continuity of patient care.**

**8-Determining the types of tumor , grade , stage and prognosis of tumor**

**9-Recommended the diagnostic criteria and hallmark of histopathological features ( grossly and microscopically ) , in diagnosis of disease**

**10- Recommended the appropriate screening test for disease affecting various organ systems .**

**11- Students should Collaborate effectively in small groups during laboratory sessions, developing teamwork skills essential for clinical practice through collaborative learning and discussions**

**12-Communicate pathological view and knowledge clearly and accurately, both in written and oral formats, to peers and instructors**

**13- Awareness of the importance of tissue specimens ( cytology and tissue biopsy )and the ethical considerations involved in the use of human specimens for educational purposes .**

**14- Recommended when to utilize appropriate imaging techniques such as X-rays, CT scans, and MRIs to visualize and interpret pathological features in clinical contexts.**

### **Skills**

**1-Apply morphological features knowledge to clinical scenarios, assisting in diagnosis and treatment planning by understanding the implications of anatomical variations and abnormalities.**

**2-Identify normal and abnormal tissue architecture in histological slides**

**3-Recognize disease-specific patterns in major organ systems (cardiovascular, respiratory, gastrointestinal, renal, nervous, endocrine,**

**4-Use special stains and immunohistochemistry results appropriately**

### **Ethics**

**1- demonstrate appropriate proper handling techniques for the care and preservation of tissue samples to ensure accurate diagnosis and maintain specimen integrity.**

**2-Handle tissue specimens correctly (fixation, labeling, processing)**

**3-Maintain laboratory safety and quality control standards**

## 9. Teaching and Learning Strategies

- ❖ Lectures
- ❖ Practical classes
- ❖ Small group discussion with case study and problem solving
- ❖ formative assessment and summative
- ❖ students base learning

## 10. Evaluation methods

**Written Examination:** Assessment of knowledge and understanding and intellectual skills. These are usually done as summative assessments at the mid & end of each course

**Practical Examination:** A. Assessment of practical skills.

B. Intellectual skills

- a. slides
- b. skills assessment
- c. Photos
- d. Report

### 1. Faculty

#### Faculty Members

Academic Rank	Specialization		Special Requirements/Skills (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer
2 prof	MBChB	Pathology			1	8
2 Ass.prof	MBChB	Pathology				
2 Lecturer	MBChB	Pathology				
lecturer	MBChB	Forensic medicine				
Ass. lecturer	MBChB	Pathology				

## Professional Development

### Mentoring new faculty members

One-on-one mentorship with a near-peer mentor. The department chair will assign new faculty a mentor who is in more of a peer position.

### Professional development of faculty members

**Teaching:** Demonstrate an interest and growth in teaching

- Establish and maintain a teaching portfolio
- Classroom observations, student outcomes
- Become an effective advisor
- Other activities, e.g., undergraduate research, implement safe laboratory procedures, support co- or extra-curricular activities or events.

**Professional Growth:**

- Plan for publication or other significant professional activity, as appropriate for discipline.
- Participate in local or regional conferences or professional organization activities

## 2. Acceptance Criterion

According to the student's central acceptance rate

## 3. The most important sources of information about the program

- 1-Robbins basic of pathology
- 2-Muris pathology
- 3-Text book pathology
- 4-Akcrman basic of pathology
- 5-Pathology outlines.com

#### 4. Program Development Plan

1. Focusing mainly on making pathology lectures more interactive by asking the fundamental questions in pathology “how & why “
2. Reliance on clinical tutors; we recruit recent medical graduates for small groups in teaching lab
3. Focusing more on Sample questions: that should be posted weekly based on the learning objectives for the week for the students to study by themselves.

Program Skills Outline															
				Required program Learning outcomes											
Year/Level	Course Code	Course Name	Basic or optional	Knowledge				Skills				Ethics			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
3 <sup>rd</sup> year	SPA 3201	Systemic Pathology II	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

- Please tick the boxes corresponding to the individual program learning outcomes under evaluation.

## Course Description Form

1. Course Name:
Systemic pathology II
2. Course Code:
SPA 3201
3. Course :
Annual year / 2 semester for 3 <sup>rd</sup> stage
4. Description Preparation Date:
10/9/2025
5. Available Attendance Forms:
Attendance sheet
6. Number of Credit Hours (Total) / Number of Units (Total)
<b>210 h for annual year semester I,II ( 150h theory and 60 h practical ) / 10 unit total</b>
7. Course administrator's name (mention all, if more than one name)
Name: prof. Dr. Shoroq Mohamed Email: <a href="mailto:shoroq.abas@qu.edu.iq">shoroq.abas@qu.edu.iq</a>

## Course Objectives

- To develop a comprehension and knowledge of the etiology, pathogenesis, structural and functional manifestations of disease
  - To develop beginning skills in recognition of disease at the gross, microscopic and ultrastructural level.
  - To understand the dynamics of disease and to be aware of the natural course of specific disease states and the result of intervention by a physician.
- To develop basic skills of case presentation

## 8. Teaching and Learning Strategies

### Strategy

- 1- large group teaching / in large halls / by data shows & computer assistance
- 2- Small group teaching for laboratory and clinical skills .
- 3- Problem base learning and solving the problem condition (PBL) / in lab .
- 4- small group teaching / Student base learning and discussion the problem condition / in lab
- 5- Seminars in lab

## First semester schedule: Theory lectures

<b>Week</b>	<b>Lecture subject</b>	<b>Objectives</b>	<b>Description and parameters</b>
<b>Week-1</b>	CVS: Congenital heart disease	The student will be familiar with: major congenital abnormalities affecting the heart, their clinical presentation, gross features and related complications and differential diagnosis	Quiz , oral , discussion formative assessment
	CVS: Ischemic heart disease, Angina	The student will be familiar with causes, clinical presentation and pathophysiological consequences of IHD and differential diagnosis	Quiz , oral , discussion formative assessment
	CVS: Myocardial Infarction	The student will be familiar with common types of intracranial hemorrhage and their clinicopathological features , gross and microscopic features and differential diagnosis	Quiz , oral , discussion formative assessment
	CVS: valvular heart disease	The student will be familiar with causes of CVA and their clinicopathological features gross and microscopic features ,diagnostic methods and differential diagnosis	Quiz , oral , discussion formative assessment
	CVS: Rheumatic Valvular Disease	The student will be familiar with causes, clinical presentation and pathophysiological, pathogenesis, risk factors, of valvular heart disease and differential diagnosis	Quiz , oral , discussion formative assessment
<b>Week-2</b>	CVS : Infective Endocarditis	The student will be familiar with causes, clinical presentation and pathophysiological of infective endocarditis finding and differential diagnosis	Quiz , oral , discussion formative assessment
	CVS: cardiomyopathies	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and different types of cardiomyopathies	Quiz , oral , discussion formative assessment
	CVS: Myocarditis	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	CVS: hypertensive vascular disease	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	CVS: vascular disorders	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and differential diagnosis	Quiz , oral , discussion formative assessment

<b>Week-3</b>	CVS: Vasculitis	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and differential diagnosis	Quiz , oral , discussion formative assessment
	CVS tumor	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Endocrine: pituitary gland ,Hypopituitarism	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis of hypopituitarism	Quiz , oral , discussion formative assessment
	Endocrine: pituitary gland Hyperpituitarism	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis of hyperpituitarism	Quiz , oral , discussion formative assessment
	Pituitary tumor	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis of benign & malignant pituitary tumors	Quiz , oral , discussion formative assessment
<b>Week-4</b>	Endocrine: Solitary thyroid nodules, Hypothyroidism	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Endocrine: Hyperthyroidism, Hypothyroidism	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Endocrine:malignant thyroid	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Endocrine: Hyperparathyroidism	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Endocrine: Hypoparathyroidism	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
<b>Week-5</b>	Endocrine: adrenal gland tumor	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Endocrine : Multiple Endocrine Neoplasia Syndromes (MEN)	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and	Quiz , oral , discussion formative

		pathophysiology and differential diagnosis	assessment
	Endocrine hypothalamus I	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Endocrine: endocrine pancreas and pineal gland	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Endocrine: Diabetes mellitus I	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
<b>Week-6</b>	Endocrine: Diabetes mellitus II	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	<b>Mid 1<sup>st</sup> semester exam</b>		Quiz , oral , discussion formative assessment
	Respiratory system: approach to respiratory examination	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	RS: Congenital abnormalities and atelectasis	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	RS: acute lung injury	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
<b>Week-7</b>	Respiratory system: obstructive lung disease I	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and DDX	Quiz , oral , discussion formative assessment
	RS: obstructive lung disease II	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Respiratory system: Diffuse interstitial lung disorders I	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	RS: Diffuse interstitial lung disorders	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and	Quiz , oral , discussion formative

	II	pathophysiology and differential diagnosis	assessment
	Respiratory system: vascular disorders I	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
<b>Week-8</b>	RS: vascular disorders II	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	RS: pulmonary edema I	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and	Quiz , oral , discussion formative assessment
	RS: pulmonary edema II	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	RS: Pulmonary infections(pneumonia)I	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	RS: Pulmonary infections: pneumonia and covid 19 infection	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
<b>Week-9</b>	TB I	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and DDX	Quiz , oral , discussion formative assessment
	T.B I	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	RS: benign Tumors	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	RS: malignant Tumors	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment

	RS: Pleura	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
<b>Week-10</b>	RS: Pleural effusion	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	RS: pneumothorax	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	RS: Pleural tumor	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Hematology: NR Hemopoiesis	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	IDA	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
<b>Week-11</b>	Megaloplastic anemia	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Aplastic anemia and sedroplastic anemia	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Acquired hemolytic anemia	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	WBC disorders, acute leukemia	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Chronic leukemia	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment

<b>Week-12</b>	Blood group and Blood transfusion	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Coagulopathy , Spleen, Thymus	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	lymphoproliferative disorders I	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	lymphoproliferative disorders II	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	lymphoproliferative disorders III	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
<b>Week-13</b>	Liver disease I	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Liver disease II	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Liver III	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Liver tumor	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	gall bladder disease	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
<b>Week-14</b>	gall bladder tumors	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	CBD disorders	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Jaundice	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and	Quiz , oral , discussion formative assessment

		pathophysiology and differential diagnosis	
	Pancrease disease	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Pancrease tumors	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
<b>Week-15</b>	<b>Review</b>		
<b>Half year Exam</b>			

## **The learning outcome of practical session for syatemic pathology**

**By the end of practical training in systemic pathology, students will be able to:**

- 1. Identify gross pathological specimens of major organ systems and describe key morphological features.**
- 2. Recognize microscopic changes in histopathology slides of systemic diseases.**
- 3. Differentiate normal and abnormal tissue structures in various organs.**
- 4. Correlate pathological findings with clinical features and disease mechanisms.**
- 5. Diagnose common systemic diseases based on gross and microscopic examination.**
- 6. Interpret special stains and basic immunohistochemical findings used in systemic pathology.**
- 7. Handle, label, and process pathological specimens following standard laboratory procedures.**
- 8. Demonstrate proper use of microscopes and laboratory equipment.**
- 9. Follow laboratory safety, biosafety, and ethical guidelines during practical sessions.**
- 10. Present pathology findings clearly using appropriate medical terminology.**

**11- problem based learning ( PBL ) , student base learning (SBL ) , and EBM for systemic disease .**

**12- Seminar presentation by the students /weekly**

**Course schedule: Small groups session / PBL and SBL**

<b>Week</b>	<b>PBL /first hour</b>	<b>SBL/Second hour</b>	<b>Description and parameters</b>
Week-1 Group A,B,C,D,E, F	Ischemic heart disease: clinical , gross and microscopical features	Approach examination patient with Ischemic heart disease	Quiz , oral , discussion formative assessment
Week-2 Group A,B,C,D,E,F	Vascular disorders ,gross and microscopical features	Approach examination patient with Vascular disorders	Quiz , oral , discussion formative assessment
Week-3 Group A,B,C,D,E,F	Vascular tumor :radiological, gross and microscopical features	Approach examination patient with Vascular tumor	Quiz , oral , discussion formative assessment
Week-4 Group A,B,C,DE,F	Pituitary disorders and tumor: radiological, gross and microscopic features	Approach examination patient with pituitary disorders and tumor	Quiz , oral , discussion formative assessment
Week-5 Group A,B,C,D,E,F	Thyroid and parathyroid disorders and tumors: radiological, gross and microscopical features	Approach examination patient with thyroid and parathyroid disorders and tumor	Quiz , oral , discussion formative assessment
Week-6	<b>Mid first exam</b>	<b>Mid first exam</b>	

Week-7 Group A,B,C,D,E,F	Pneumonia and T.B: radiological, gross and microscopical features	Approach examination patient with pulmonary infection	Quiz , oral , discussion formative assessment
Week-8 Group A,B,C,D,E,F	Obstructive lung diseases: radiological, gross and microscopical features	Approach examination patient with Obstructive lung diseases	Quiz , oral , discussion formative assessment
Week-9 Group A,B,C,D,E,F	Respiratory tumors: gross and microscopical features <b>EBM</b>	Approach examination patient with lung tumor	Quiz , oral , discussion formative assessment
Week-10 Group A,B,C,D,E,F	Iron deficiency Anemia and Anima of chronic disorders	Approach examination patient with anemia	Quiz , oral , discussion formative assessment
Week-11 Group A,B,C,D,E,F	Hemolytic anemia	Approach examination patient with hemolytic anemia	Quiz , oral , discussion formative assessment
Week-12 Group A,B,C,D,E,F	leukemia : types and microscopical features	Approach examination patient with leukemia	Quiz , oral , discussion formative assessment
Week-13 Group A,B,C,D,E,F	Liver cirrhosis and tumors	Approach to different causes of cirrhosis +	Quiz , oral , discussion formative assessment
Week-14 Group A,B,C,D,E,F	Gall bladder disease and pancreatic tumors	Approach to different causes of GB, and pancreatic tumor	Quiz , oral , discussion formative assessment
<b>Week-15</b>	<b>Review</b>		

## Second semester schedule: Theory lectures

Week	Lecture subject	objectives	Description and parameters
1-2	Renal / Clinical manifestation of renal diseases	The student will learn about the various spectrum of clinical manifestations associated with renal diseases.	Quiz , oral , discussion formative assessment
	Renal/ Glomerular diseases I	The student will be familiar with various mechanisms of glomerular injury. They'll learn about nephrotic syndrome: causes ,types ,clinical presentation, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Renal/ Glomerular diseases II	The student will be familiar with nephritic syndrome & RPGN: causes ,types ,clinical presentation, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Renal/ Diseases affecting tubules & interstitium	The student will be familiar with causes ,types ,clinical presentation, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Renal system	The student will learn about (1) diseases affecting renal blood vessels ( clinical presentation & complication) , (2) systemic diseases with renal involvement.	Quiz , oral , discussion formative assessment
3-4	Renal / Chronic kidney disease	The student will be familiar with causes ,clinical presentation, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Renal / Cystic diseases of kidney	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment

	Renal/ Urinary outflow obstruction	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Renal / Tumors of kidney	The student will be familiar with types of kidney tumor ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Diseases of ureter & urinary bladder	The student will be familiar with the different diseases that affects ureter & urinary bladder .	Quiz , oral , discussion formative assessment
5-6	Diseases of female external genitalia	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Diseases of cervix I	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Diseases of cervix II	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	<b>Mid 2<sup>nd</sup> semester exam</b>		
	Diseases of uterus I	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
7-8	Diseases of uterus II	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Diseases of uterus III	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Diseases of ovary I	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment

	Diseases of ovary II	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Diseases of ovary III	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
<b>9-10</b>	Diseases of fallopian tube	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Pregnancy & trophoblastic disorders	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Diseases of male external genitalia	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Diseases of testis	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Diseases of prostate	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
<b>11-12</b>	Inflammatory diseases of breast	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Fibrocystic changes of breast	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Benign breast tumors	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Malignant breast tumors I	The student will be familiar with causes ,types ,clinical	Quiz , oral , discussion formative

		presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	assessment
	Malignant breast tumors II	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
13	Staging of breast tumors	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	Breast tumor markers	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	prognostic factors of breast cancer	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
14	CNS: Congenital abnormalities	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	CNS: Raised intracranial pressure	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	CNS: Trauma	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	CNS: CVA	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	CNS:LOS	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment

<b>Week-15</b>	CNS: CNS infections	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	CNS: Degenerative disorders	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	CNS: Demyelinating disorders	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	CNS: Diseases of peripheral nerves	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
	CNS: Benign Tumors	The student will be familiar with causes ,types ,clinical presentation, radiological findings, pathological finding and pathophysiology and differential diagnosis	Quiz , oral , discussion formative assessment
<b>Final year Exam</b>			

## Course schedule: Small groups session / Practical sessions and SBL , EBM

Week	Subject-practical session	PBL - SBL	Description and parameters
Week-1 Group A,B,C,D,E,F	Degenerative and demyelinating disorders: radiological, gross and microscopic features	Approach examination patient with Degenerative and demyelinating disorders	Quiz , oral , discussion formative assessment
Week-2 Group A,B,C,D,E,F	CNS infection: radiological, gross and microscopic features	Approach examination patient with meningitis	Quiz , oral , discussion formative assessment
Week-3 Group A,B,C,D,E,F	CNS tumor: radiological, gross and microscopic features	Approach examination patient with brain tumor	Quiz , oral , discussion formative assessment
Week-4 Group A,B,C,DE,F	Renal : GN; differential diagnosis, microscopical feature	DDx of glomerulopathies	Quiz , oral , discussion formative assessment
Week-5 Group A,B,C,D,E,F	Renal : tubular & interstitial disease	Approach examination of different causes of tubule-interstitial pathology	Quiz , oral , discussion formative assessment
Week-6 Group Group A,B,C,D,E ,F	Renal : renal tumors  EBM	DDx of renal mass; microscopical features, staging, prognosis	Quiz , oral , discussion formative assessment
Week-7 Group A,B,C,D,E,F	FGT: vulvar & cervical lesions	Approach examination to patients with cervical lesions, interpretation of pap smear	Quiz , oral , discussion formative assessment
Week-8	Uterine pathology	Approach examination :patient with endometrial hyperplasia, endometrial	Quiz , oral , discussion formative assessment

		carcinoma	
Week-9 Group A,B,C,D,E,F	Ovarian pathology	Approach examination & DDx of ovarian tumor	Quiz , oral , discussion formative assessment
Week-10 Group A,B,C,D,E,F	MGT : testicular tumors & prostatic pathology	Approach examination patient with testicular mass, BPH & prostatic cancer	Quiz , oral , discussion formative assessment
Week-11 Group A,B,C,D,E,F	Breast : benign breast diseases	Approach examination patient with breast mass: DDx of benign breast disease	Quiz , oral , discussion formative assessment
Week-12 Group A,B,C,D,E,F	Breast : malignant tumor of breast	Approach examination patient with breast mass	Quiz , oral , discussion formative assessment
Week-13 Group A,B,C,D,E,F	Skin diseases	Approach examination to patient with skin lesion	Quiz , oral , discussion formative assessment
Week-14 Group A,B,C,D,E,F	Joint & Muscle diseases	Approach examination patient with RA , most commonly encountered muscular pathologies	Quiz , oral , discussion formative assessment
Week-15 Group A,B,C,D,E,F	Bone disease : tumor & tumor like lesions of bone	DDx of bone lesion, how to approach diagnosis clinically & via histopathological examination	Quiz , oral , discussion formative assessment
<b>Final year Exam</b>			

## **Seminars for course I, II :**

Seminar prepared by group of students (change every week) and after presentation ; discussion started with questions and answers.

1-CVS / seminars

2-endocrine / seminars

3-Hematology seminars

4-respiratory seminars

5- liver , GB, and pancrease seminars

6- respiratory seminars / covid 19

7-GIT seminars

8-female and male seminars

9-renal system seminars

10- Breast seminar

## 1. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, written exams, PBL exam , SBL , OST exam , and reports .... etc

## 2. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Robbins basic of pathology
Main references (sources)	1-Robbins basic of pathology 2-Muris pathology 3-Text book pathology
Recommended books and references (scientific journals, reports...)	<a href="#">Ackerman basic of pathology</a>
Electronic References, Websites	<a href="#">Pathology out lines .com</a>

### Examinations description:

Examination	Description
1-Continuous progress test (CPT)	oral examination / spot diagnosis , quizzes , PBL ,Short answered questions, and skills assessment , log book activity , Case report ,homework activity
2- Mid theory exam for each semester	Short answered questions, M.C.Qs. and case presentation with short answer and matching according bloom and blue print
3- Half year theory exam	M.C.Qs. as case sinario or direct question , according bloom and blue print
4-Final year theory exam	M.C.Qs. as case sinario or direct question , according bloom and blue print
5- Final Practical exam for semester I,II	Spot slide diagnosis , prescription writing, M.C.Q , according bloom and blue print

**The minimum passing grades (Faculty bylaws) is 50 marks.**

**Re-sit Examinations :- Students who fail in annual year assessment will be required to re-sit (second sitting) the Final examination ( theory and practical exam) .**