University of Baghdad
College of Pharmacy
Department of Clinical Laboratory Sciences
Title of the course: ***Pathophysiology*** Course number: **315**
Level: 3rd Class, 1st Semester
Credit hours/week : **Theory 3** **Laboratory 1**
Reference text: ***Essentials in Pathophysiology by: Carol Mattson Porth 2nd Ed.***

No	Lecture title	Hours	Lecture
1	**Introduction.**	1	1
2	**Cell injury and tissue response**; **Degeneration; Necrosis; Atrophy; Hypertrophy; Metaplasia and Calcification**; **Inflammation and Repair**.	6	2,3,4,5,6,7
3	**Disorders of electrolytes and water and acid–base balances: Hyper and Hyponatremia; Hyper and Hypokalemia;** Syndrome of inappropriate secretion of ADH; Diabetes insipidus; Metabolic acidosis and alkalosis; Respiratory acidosis and alkalosis.	4	8,9,10,
4	Disorders of cardiovascular system: **Hyperemia; Congestion and edema; Thrombosis; embolism and infarction; Shock; Coronary heart disease and MI; Rheumatic heart disease; Heart failure; Acute pulmonary edema; Essential hypertension; Secondary hypertension; Malignant hypertension; Hypotension; Aneurysm versus varicose veins;**	5	11,12,13, 14,15
5	**Disorders of respiratory system: Pneumonias; Tuberculosis; Respiratory distress syndrome; Bronchial asthma; Emphysema and bronchiectasis; Cystic fibrosis; Pulmonary embolism; Pulmonary hypertension.**	3	16,17, 18
6	**Disorders of the renal system: Nephrotic syndrome; Glomerulonephritis; Diabetic glomerulosclerosis; Hypertensive glomerular disease; Pyelonephritis; Drug related nephropathies; Acute renal failure; Chronic renal failure.**	4	19,20, 21
7	Disorders of GI and hepatobiliary systems: **Peptic ulcer and Zollinger – Ellison syndrome;** Irritable bowel syndrome; Crohn's disease; Diarrhea; Celiac disease; **Viral hepatitis; Primary biliary cirrhosis**; **Liver failure; Cholelithiasis.**	4	22,23, 24,25
8	**Disorders of thyroid function: Hypothyroidism.Hyperthyroidism. Graves's disease.Thyrotoxicosis.**	2	26
9	Disorders of adrenal function: **Cushing syndrome. Adrenal cortical insufficiency (primary and secondary).** Congenital adrenal hyperplasia. Pheochromocytoma.	2	27,28
10	**Diabetes mellitus and metabolic syndrome; Dyslipoproteinemia.**	5	29,30, 31

Objectives: Describe the basic concepts of pathophysiology at the cellular level related to injury, the self-defense mechanism, mutation, and cellular proliferation. Outline basic pathological factors that influence the disease process. Describe the impact and abnormal functions upon the organ (s) associated with the disease process of targeted body systems. Describe **clinical manifestations associated with the diseased organ(s).**