

الصف الثالث : علم الأمراض العام ( General pathology )

ا. الفصل الدراسي الأول

No	No. of weeks	Theoretical Hours		Practical Hours	
		Theory Lecture Topics	Hours per weeks	Practical Session Topics	Hours per weeks
1	1 <sup>st</sup> .week  1 <sup>st</sup> hour  2 <sup>nd</sup> hour	Introduction ,Definition of pathology, etiology & pathogenesis  <b>Describe the role of a pathologist in diagnosis and management of disease</b>	2 hours	Microscope  Preparation of pathology slides/discussion	2 hours
2	2 <sup>nd</sup> .week  1 <sup>st</sup> hour  2 <sup>nd</sup> hour	Overview of Cellular Responses to Stress and Noxious Stimuli Causes of Cell Injury  Sequence of Events in Cell Injury and Cell Death Reversible Cell Injury Cell Death Necrosis Apoptosis	2 hours	Types of degeneration  Types of necrosis  Slides/discussion	2 hours
3	3 <sup>rd</sup> .week  1 <sup>st</sup> hour	Autophagy Mechanisms of Cell Injury and Cell Death Hypoxia and Ischemia	2 hours	Disturbances of cell growth  slides/discussion	2 hours

	2 <sup>nd</sup> hour	Ischemia-Reperfusion Injury  Oxidative Stress Cell Injury Caused by Toxins Endoplasmic Reticulum Stress DNA Damage Inflammation			
4	4 <sup>th</sup> .week  1 <sup>st</sup> hour  2 <sup>nd</sup> hour	Cellular Adaptations to Stress Hypertrophy Hyperplasia Atrophy, Metaplasia  <b>mechanisms of cellular aging , and cellular accumulation</b>	2 hours	Acute inflammation-slides	2 hours
5	5 <sup>th</sup> .week  1 <sup>st</sup> hour  2 <sup>nd</sup> hour	Causes of Inflammation Recognition of Microbes and Damaged Cells  Acute Inflammation Reactions of Blood Vessels in Acute Inflammation  Leukocyte Recruitment to Sites of Inflammation  Phagocytosis and Clearance of the Offending Agent Leukocyte-Mediated Tissue Injury Other Functional Responses of Activated Leukocytes	2 hours	Acute inflammation-slides/discussion	2 hours
6	6 <sup>th</sup> .week  1 <sup>st</sup> hour	Mediators of Inflammation 70 Vasoactive Amines: Histamine and Serotonin 71 Arachidonic	2 hours	Acute inflammation-slides/discussion	2 hours

		<p>Acid Metabolites Cytokines and Chemokines Complement System Other Mediators of Inflammation</p> <p>Morphologic Patterns of Acute Inflammation Serous Inflammation Fibrinous Inflammation Purulent (Suppurative) Inflammation, Abscess Ulcers</p>			
	2 <sup>nd</sup> hour				
7	7 <sup>th</sup> .week 1 <sup>st</sup> hour	<p>Chronic inflammation</p> <p>Causes of Chronic Inflammation Morphologic</p>	2 hours	chronic inflammation - slides/discussion	2 hours
	2 <sup>nd</sup> hour	<p>Features Cells and Mediators of Chronic Inflammation</p> <p>Systemic Effects of Inflammation</p>			
8	8 <sup>th</sup> .week 1 <sup>st</sup> hour	<p>Tissue Repair Overview of Tissue Repair Cell and Tissue Regeneration Repair by Scarring</p>	2 hours	Tissue repair - slides/discussion	2 hours
	2 <sup>nd</sup> hour	<p>Factors That Impair Tissue Repair Clinical Examples of Abnormal Wound Healing and Scarring</p> <p>Mid Exam</p>			
9	9 <sup>th</sup> .week		2 hours	Pulmonary edema - slides/discussion	2hours

	1 <sup>st</sup> hour	Hyperemia and Congestion Edema Increased Hydrostatic Pressure Reduced Plasma			
	2 <sup>nd</sup> hour	Osmotic Pressure Lymphatic Obstruction Sodium and Water Retention Hemorrhage			
10	10 <sup>th</sup> .week		2 hours	Thrombosis	2
	1 <sup>st</sup> hour	Normal Hemostasis Thrombosis Disseminated Intravascular Coagulation (DIC) Embolism		embolism	hours
	2 <sup>nd</sup> hour	PulmonaryThromboembolism Systemic Thromboembolism		slides/discussion	
11	11 <sup>th</sup> .week		2 hours	Edema, congestion	2
	1 <sup>st</sup> hour	Fat Embolism  Air Embolism Infarction		slides/discussion	hours
	2 <sup>nd</sup> hour	Factors That Influence Infarct Development			
12	12 <sup>th</sup> .week		2 hours	Embolism, Hemorrhage & shock	2
	1 <sup>st</sup> hour	Shock Pathogenesis of Septic Shock		- slides/discussion	hours
	2 <sup>nd</sup> hour	Stages of Shock  Classification of shock			

13	13 <sup>th</sup> .week  1 <sup>st</sup> hour        2 <sup>nd</sup> hour	Classification of neoplastic lesions  Characteristic of malignant and benign tumor   Nomenclature of the  Hallmarks of cancer	2 hours	Benign tumors slides/discussion	2 hours
14	14 <sup>th</sup> .week  1 <sup>st</sup> hour        2 <sup>nd</sup> hour	Etiology of cancer (carcinogenic agents)   Initiation and promotion	2 hours	Malignant tumors slides/discussion	2 hours
15	15 <sup>th</sup> .week  1 <sup>st</sup> hour        2 <sup>nd</sup> hour	Clinical aspects of neoplasia    Mechanism of local invasion and metastasis	2 hours	Molecular technique in tumor diagnosis	2 hours

ب.الفصل الدراسي الثاني

No	No. of weeks	Theoretical Hours		Practical Hours	
		Theory Lecture Topics	Hours per weeks	Practical Session Topics	Hours per weeks
1	1 <sup>st</sup> .week  1 <sup>st</sup> hour    2 <sup>nd</sup> hour	Genetic diseases  Nature of Genetic Abnormalities Contributing to Human Disease   Mutations in Protein-Coding Genes Alterations in Protein-Coding Genes other Than Mutations	2 hours	Laboratory diagnosis of genetic diseases.	2 hours
2	2 <sup>nd</sup> .week  1 <sup>st</sup> hour    2 <sup>nd</sup> hour	Genetic diseases  Mendelian Disorders: Diseases Caused by Single-Gene Defects   Complex multigenic disorders Cytogenetic disorders, Numeric abnormalities	2 hours	Molecular technique in genetic diagnosis	2 hours
3	3 <sup>rd</sup> .week  1 <sup>st</sup> hour	Genetic diseases  Diseases Caused by Mutations in Mitochondrial Genes	2 hours	Direct Detection of DNA mutations by Polymerase Chain Reaction (PCR)	2 hours

	2 <sup>nd</sup> hour	Diseases Caused by Alterations of Imprinted Regions: Prader-Willi and Angelman Syndromes			
4	4 <sup>th</sup> .week 1 <sup>st</sup> hour  2 <sup>nd</sup> hour	Diseases Pediatric Congenital Anomalies Etiology of Perinatal Infections Prematurity  Fetal Growth Restriction Respiratory Distress Syndrome of the Newborn		CISH technique in the genetic diseases diagnosis	2 hours
5	5 <sup>th</sup> .week 1 <sup>st</sup> hour  2 <sup>nd</sup> hour	Tumor of infancy and childhood  Tumor like lesions of infancy and childhood	2 hours	Wilms tumor-slide Retinoblastoma-slide	2 hours
6	6 <sup>th</sup> .week 1 <sup>st</sup> hour  2 <sup>nd</sup> hour	Congenital immunodeficiency  Acquired immunodeficiency syndrome	2 hours	Hypersensistivity reaction slides	2 hours
7	7 <sup>th</sup> .week 1 <sup>st</sup> hour	Autoimmune diseases	2 hours	Slides – asthma, eczema (skin)	2 hours

	2 <sup>nd</sup> hour	Rejection of transplants			
8	8 <sup>th</sup> .week 1 <sup>st</sup> hour  2 <sup>nd</sup> hour	Types of hypersensitivity reaction  Mid exam	2 hours	Slides – graft rejection	2 hours
9	9 <sup>th</sup> .week 1 <sup>st</sup> hour  2 <sup>nd</sup> hour	Environmental Disorders Health Effects of Climate Change  Toxicity of Chemical and Physical Agents Environmental Pollution	2 hours	Chemical and physical tissue injury  Practical session with power point slide collection	2 hours
10	10 <sup>th</sup> .week 1 <sup>st</sup> hour  2 <sup>nd</sup> hour	Nutritional Diseases, Malnutrition Severe Acute Malnutrition, Anorexia Nervosa and Bulimia  Vitamin Deficiencies, Obesity, Diet and Systemic Diseases, Diet and Cancer	2 hours	Nutritional deficiency and obesity  Practical session with power point slide collection	2 hours
11	11 <sup>th</sup> .week 1 <sup>st</sup> hour	Metals as Environmental Pollutants Industrial and Agricultural Exposures  Effects of Tobacco Effects	2 hours	Practical session with power point slide collection	2 hours



	2 <sup>nd</sup> hour	of Alcohol			
12	12 <sup>th</sup> .week 1 <sup>st</sup> hour  2 <sup>nd</sup> hour	Injury by Therapeutic Drugs and Adverse Drug Reactions,  Injury by Nontherapeutic Agents (Drug Abuse) Injury by Physical Agents	2 hours	Practical session with power point slide collection	2 hours
13	13 <sup>th</sup> .week 1 <sup>st</sup> hour  2 <sup>nd</sup> hour	blood group systems (ABO and RH)  steps of compatibility testing, blood components. transfusion reactions	2 hours	Practical session with power point slide collection	2 hours
14	14 <sup>th</sup> .week 1 <sup>st</sup> hour  2 <sup>nd</sup> hour	Describe Structure and Function of Blood Vessels Vascular Organization Endothelial Cells Vascular Smooth Muscle Cells  Describe Congenital Anomalies Blood Pressure Regulation Hypertensive Vascular Disease, vasculitis	2 hours	Practical session with power point slide collection	2 hours
15	15 <sup>th</sup> .week	structure and function of heart muscle, and enumerate and describe the ischemic heart	2 hours	Atheroma, atherosclerosis	2 hours

	1 <sup>st</sup> hour	diseases(coronary heart diseases)		Hypertensive vascular disease,	
	2 <sup>nd</sup> hour	congenital and rheumatic heart diseases		Hyaline arteriosclerosis. Hyperplastic arteriosclerosis	

ثانيا :- الصف الرابع: علم الأمراض الجهازى (Systemic Pathology)

الفصل الدراسى الاول

No	No. of weeks	Theoretical Hours		Practical Hours	
		Theory Lecture Topics	Hours per weeks	Practical Session Topics	Hours per weeks
1	1 <sup>st</sup> week		2	Slides-types of anemia	2
	1 <sup>st</sup> hour	Anemia: Iron deficiency anaemia , Megaloblastic anaemia, pernicious anaemia		Iron deficiency anemia,megaloblastic anemia	
	2 <sup>nd</sup> hour	Aplastic anaemia, anaemia of chronic disease		Pernicious aneamia	
2	2 <sup>nd</sup> week		2	Slides-types of anemia	2
	1 <sup>st</sup> hour	Heamolytic anaemia, bleeding disorder :disseminated intravascular coagulation,		Thalasseamia, sickle cell anemia	
		idiopathic thrombocytopenic perpura			

	<b>2<sup>nd</sup> hour</b>				
<b>3</b>	<b>3<sup>rd</sup>.week</b>		2	Slides of leukocytosis:lymphocytosis, neutrophilia, Lymphopenia, neutropenia	2
	<b>1<sup>st</sup> hour</b>	Inflammatory proliferation of white blood cell disorders			
	<b>2<sup>nd</sup> hour</b>	Leuckopenia: neutropenia, lymphopenia		:	
<b>4</b>	<b>4<sup>th</sup>.week</b>		2	Slides- leukemia	2
	<b>1<sup>st</sup> hour</b>	Neoplastic proliferations of white blood cell  -Acute lymphoblastic and myeloblastic leukemias		Acute lymphoblastic and myeloblastic leukemias  -Chronic lymphocytic and myelocytic leukemia	
	<b>2<sup>nd</sup> hour</b>	-Chronic lymphocytic and myelocytic leukemia			
<b>5</b>	<b>5<sup>th</sup>.week</b>		2	Slides-upper respiratory system,  Allergic nasal polyp, nasopharyngeal carcinoma laryngeal tumors, ...etc	2
	<b>1<sup>st</sup> hour</b>	Upper respiratory diseases;  -Nasal polyp, nasopharyngeal carcinoma  -acute chronic laryngitis ,laryngeal tumors			

	<b>2<sup>nd</sup> hour</b>				
<b>6</b>	<b>6<sup>th</sup>.week</b>		2	Slides of -Asthma, emphysema	2
	<b>1<sup>st</sup> hour</b>	Pathology of Chronic Obstructive airway disease  -Asthma, emphysema		-chronic bronchitis, bronchiectasis	
	<b>2<sup>nd</sup> hour</b>	-chronic bronchitis, bronchiectasis			
<b>7</b>	<b>7<sup>th</sup>.week</b>		2	Slides of	2
	<b>1<sup>st</sup> hour</b>	Pathology of pulmonary infection  - lobar and bronchopneumonia, interstitial pneumonia		- lobar and bronchopneumonia, interstitial pneumonia	
	<b>2<sup>nd</sup> hour</b>	- primary and secondary tuberculosis		- primary and secondary tuberculosis	
<b>8</b>	<b>8<sup>th</sup>.week</b>		2	Slides of	2
	<b>1<sup>st</sup> hour</b>	Pathology of pulmonary tumors		-squamous cell carcinoma, adenocarcinoma	
	<b>2<sup>nd</sup> hour</b>	Mid exam		-small cell carcinoma	
<b>9</b>	<b>9<sup>th</sup>.week</b>		2	Slides of	2
	<b>1<sup>st</sup> hour</b>	Pathology of plural diseases  -Anthracois , benign and		Anthracois , benign and malignant mesothelioma	

		<p>malignant mesothelioma</p> <p><b>2<sup>nd</sup> hour</b> - Types of plural effusion , pleurisy</p>		Types of plural effusion ,	
<b>10</b>	<b>10<sup>th</sup>.week</b>	<p><b>1<sup>st</sup> hour</b> Pathology of the mouth &amp; esophagus</p> <p>-aphtous ulcers, tumors ( sequamous cell carcinoma)</p> <p><b>2<sup>nd</sup> hour</b> -eosophagitis, barrets eosophagus , eosophageal carcinoma</p>	2	<p>Slides of mouth</p> <p>eosophageal pathology</p> <p>aphtous ulcers, mouth tumors ( sequamous cell carcinoma)</p> <p>-eosophagitis, barrets eosophagus , eosophageal carcinoma</p>	2
<b>11</b>	<b>11<sup>th</sup>.week</b>	<p><b>1<sup>st</sup> hour</b> Pathology of the stomach</p> <p>- gastritis , acute and chronic gastric ulcers</p> <p><b>2<sup>nd</sup> hour</b> -gasric tumors ( intestinal type and signet ring), gastric lymphoma</p>	2	<p>Slides of stomach</p> <p>- gastritis , acute and chronic gastric ulcers</p> <p>-gasric tumors ( intestinal type and signet ring), gastric lymphoma</p>	2
<b>12</b>	<b>12<sup>th</sup>.week</b>	<p><b>1<sup>st</sup> hour</b> Pathology of small intestine</p> <p>-dudenal ulcers, small intestinal tumors</p> <p>- celiac diseases</p>	2	<p>Slides of small intestine pathology</p> <p>dudenal ulcers, small intestinal tumors</p> <p>celiac diseases</p>	2

	<b>2<sup>nd</sup> hour</b>				
<b>13</b>	<b>13<sup>th</sup>.week</b>		2	Slides of large intestine pathology crohns disease, ulcerative colitis  - polyps, colorectal carcinoma	2
	<b>1<sup>st</sup> hour</b>	Pathology of of large intestine  Diseases  -crohns disease, ulcerative colitis    - polyps, colorectal carcinoma			
	<b>2<sup>nd</sup> hour</b>				
<b>14</b>	<b>14<sup>th</sup>.week</b>		2	Slides of benign liver diseases  acute and viral hepatitis  Types of cirrhosis, hepatic adenoma	2
	<b>1<sup>st</sup> hour</b>	Pathology of benign liver disease  -acute and viral hepatitis			
	<b>2<sup>nd</sup> hour</b>	Types of cirrhosis,  -Alcoholic . primary bliary			
<b>15</b>	<b>15<sup>th</sup>.week</b>		2	Slides of malignant liver diseases and pancreatic diseases  - hepatocellular carcinoma, metastatic carcinoma  -acuta and chronic pancreatitis, pancreatic tumors	2
	<b>1<sup>st</sup> hour</b>	hepatic adenoma  Pathology of malignant liver diseases and pancreatic diseases  - hepatocellular carcinoma, metastatic carcinoma			

		-acute and chronic pancreatitis, pancreatic tumors			
	<b>2<sup>nd</sup> hour</b>				

الفصل الدراسي الثاني

No	No. of weeks	Theoretical Hours		Practical Hours	
		Theory Lecture Topics	Hours per weeks	Practical Session Topics	Hours per weeks
<b>1</b>	<b>1<sup>st</sup>.week</b>	Pathology of glomerular disease of kidney  -Minimal change glomerulonephritis, membranous glomerulonephritis  - focal glomerulosclerosis, post infectious glomerulonephritis	2	Slides – glomerular renal diseases  -Minimal change glomerulonephritis, membranous glomerulonephritis  - focal glomerulosclerosis, post infectious glomerulonephritis	2
	<b>1<sup>st</sup> hour</b>				
	<b>2<sup>nd</sup> hour</b>				
<b>2</b>	<b>2<sup>nd</sup>.week</b>	Pathology of renal tubules, intersitium  - Polycystic kidney diseases  -Types of pyelonephritis	2	Slides - renal tubules, intersitium,  - Polycystic kidney diseases  -Types of pyelonephritis	2
	<b>1<sup>st</sup> hour</b>				

	<b>2<sup>nd</sup> hour</b>				
<b>3</b>	<b>3<sup>rd</sup>.week</b>	<p>Pathology of renal tumors and bladder disease</p> <p>-Renal cell carcinoma,</p> <p>- cystitis and bladder tumors</p>	2	<p>Slides of renal tumors and bladder pathology</p> <p>-Renal cell carcinoma,</p> <p>- cystitis and bladder tumors</p>	2
	<b>1<sup>st</sup> hour</b>				
	<b>2<sup>nd</sup> hour</b>				
<b>4</b>	<b>4<sup>th</sup>.week</b>	<p>Pathology of male genital tract</p> <p>-testicular atrophy, testicular tumors(seminoma, yolk sac tumor)</p> <p>- prostatic hyperplasia, prostatic adenocarcinoma</p>	2	<p>Slides- male genital tract</p> <p>-testicular atrophy, testicular tumors(seminoma, yolk sac tumor)</p> <p>- prostatic hyperplasia, prostatic adenocarcinoma</p>	2
	<b>1<sup>st</sup> hour</b>				
	<b>2<sup>nd</sup> hour</b>				
<b>5</b>	<b>5<sup>th</sup>.week</b>	<p>Pathology of female genital tract</p> <p>Cervical and uterine diseases.</p> <p>- cervicitis, intraepithelial neoplasia, cervical carcinoma</p>	2	<p>Slides-female</p> <p>Genital tract, cervical pathology</p> <p>cervicitis, intraepithelial neoplasia, cervical carcinoma</p>	2
	<b>1<sup>st</sup> hour</b>				



	<b>2<sup>nd</sup> hour</b>	-endometriosis, endometrial hyperplasia, and endometrial tumors			
<b>6</b>	<b>6<sup>th</sup>.week</b>  <b>1<sup>st</sup> hour</b>  <b>2<sup>nd</sup> hour</b>	Placental and ovarian diseases  - polycytic ovary, ovarian tumors  - choriocarcinoma,	2	Slides of endometrial diseases  endometriosis, endometrial hyperplasia, and endometrial tumors	2
<b>7</b>	<b>7<sup>th</sup>.week</b>  <b>1<sup>st</sup> hour</b>  <b>2<sup>nd</sup> hour</b>	Pathology of breast  Benign tumor  - mastitis, duct ectasia, fibroadenoma    -fibrocystic changes, adenosis, intraductal papilloma	2	Slides of ovarian tumors  Serous cyst , mucinous cyst, papillary serous cystadenocarcinoma, teratoma	2
<b>8</b>	<b>8<sup>th</sup>.week</b>  <b>1<sup>st</sup> hour</b>	Pathology of breast Malignant tumor  Ductal carcinoma insitu - ( comedo, papillary ), lobular carcinoma insitu  Invasive ductal and lobular carcinoma carcinoma	2	Slides of placental diseases  - choriocarcinoma, hydatiform mole	2

	<b>2<sup>nd</sup> hour</b>	Mid exam			
<b>9</b>	<b>9<sup>th</sup>.week</b>	Pathology of thyroid glands	2	Slides-Breast	2
	<b>1<sup>st</sup> hour</b>	Hyperthyroidism, Hypothyroidism, Multinodulargoitre,		- mastitis, duct ectasia, fibroadenoma	
	<b>2<sup>nd</sup> hour</b>	Ridles thyroiditis, Graves disease, Hashimotos thyroiditis		-fibrocystic changes, adenosis, intraductal papilloma	
<b>10</b>	<b>10<sup>th</sup>.week</b>	Thyroid Tumor	2	Slides- of breast	2
	<b>1<sup>st</sup> hour</b>	Follicular adenoma Follicular carcinoma		Ductal carcinoma - insitu ( comedo, papillary ), lobular carcinoma insitu	
	<b>2<sup>nd</sup> hour</b>	Papillary carcinpma Medullary carcinoma Anaplastic carcinoma		Invasive ductal and lobular carcinoma carcinoma	
<b>11</b>	<b>11<sup>th</sup>.week</b>	Pathology of pituitary glands	2	Slides-of thyroid diseases	2
	<b>1<sup>st</sup> hour</b>	-hyperfunction -hypofunction		Multinodulargoitre, Ridles thyroiditis, Graves disease, Hashimotos thyroiditis	
	<b>2<sup>nd</sup> hour</b>	-pituitary adenoma			
<b>12</b>	<b>12<sup>th</sup>.week</b>	Pathology of adrenal gland	2	Slides of thyroid gland	2
				Follicular adenoma	

	<b>1<sup>st</sup> hour</b>	Cushing syndrome Addison's diseases		Follicular carcinoma Papillary carcinoma Medullary carcinoma	
	<b>2<sup>nd</sup> hour</b>	Adrenal tumors		Anaplastic carcinoma	
<b>13</b>	<b>13<sup>th</sup>.week</b>	Pathology of parathyroid gland	2	Slides- of parathyroid and pituitary disorders	2
	<b>1<sup>st</sup> hour</b>	Hyperparathyroidism Hypoparathyroidism		Parathyroid adenoma Parathyroid carcinoma Adrenal tumors	
	<b>2<sup>nd</sup> hour</b>	Parathyroid adenoma Parathyroid carcinoma			
<b>14</b>	<b>14<sup>th</sup>.week</b>	Diseases of the joints Disease of and skin Osteoporosis, Bone tumors	2	Slides- bone, skin Osteoporosis, Bone tumors Squamous cell carcinoma, basal cell carcinoma Melanoma	2
	<b>1<sup>st</sup> hour</b>				
	<b>2<sup>nd</sup> hour</b>	Squamous cell carcinoma, basal cell carcinoma Melanoma			
<b>15</b>	<b>15<sup>th</sup>.week</b>	Pathology of lymph node	2	Slides of lymphomas Hodgkins lymphoma	2
	<b>1<sup>st</sup> hour</b>	Reactive lymph node changes		-lymphocytic predominance	

	<b>2<sup>nd</sup> hour</b>	Hodgkins lymphoma.Non Hodgkin lymphoma		-nodular seclerosis -lymphocytic depleted Non Hodgkin lymphoma	
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الطب العدلي المرحلة الرابعة

الفصل الدراسي الاول

No	No. of weeks	Theoretical Hours		Practical Hours	
		Theory Lecture Topics	Hours per weeks	Practical Session Topics	Hours per weeks
1	1 <sup>st</sup> .week  1 <sup>st</sup> hour  2 <sup>nd</sup> hour	Introduction to forensic pathology  definition, medico-legal systems, medico-legal consultations,  how to examine a medico-legal case, how to take samples for laboratory investigation.	2	how of examine a medico-legal case, and take samples for laboratory investigation.	2
2	2 <sup>nd</sup> .week  1 <sup>st</sup> hour	forensic autopsy, examination of the scene of death, external examination, examination of the cloths, internal examination,  how to perform medico-legal autopsy. Postmortem artifacts,	2	examination of the scene of death, examination of the cloths, internal examination, how to perform medico-legal autopsy	2

	2 <sup>nd</sup> hour	Autopsy report, forensic photography, and exhumation,			
3	3 <sup>rd</sup> .week 1 <sup>st</sup> hour 2 <sup>nd</sup> hour	Patho-physiology of death; types of death, diagnosis of death,	2	postmortem changes types of death, diagnosis of death,	2
4	4 <sup>th</sup> .week 1 <sup>st</sup> hour 2 <sup>nd</sup> hour	Postmortem decomposition putrefaction, mummification, adipoceros,  determination of time since death, internal body temperature,	2	determination of time since death, Postmortem decomposition putrefaction, mummification, adipoceros	2
5	5 <sup>th</sup> .week 1 <sup>st</sup> hour 2 <sup>nd</sup> hour	The pathology of sudden death definition of sudden death, causes of sudden death, cardiac causes, pulmonary causes,  CNS causes, GIT causes, the relationship between trauma and disease that leads to sudden death.	2	Sudden death examination  causes of sudden death, cardiac causes, pulmonary causes, CNS causes, GIT causes, the relationship between trauma and disease that leads to sudden death.	2
6	6 <sup>th</sup> .week 1 <sup>st</sup> hour	Identification of human remains	2	identification of living persons by finger prints photographs, and	2

	2 <sup>nd</sup> hour	identification of living persons by finger prints, DNA prints, photographs		identifying signs such as tattooing,	
7	7 <sup>th</sup> .week  1 <sup>st</sup> hour    2 <sup>nd</sup> hour	Identification of human remains 2  identifying signs such as tattooing, and genetic and congenital or acquired malformations.  identification of dead unknown persons	2	identification of living persons by DNA print , identifying signs such as tattooing, and genetic and congenital or acquired malformations.	2
8	8 <sup>th</sup> .week  1 <sup>st</sup> hour   2 <sup>nd</sup> hour	identification of human remains such as bones, or fragments of skin or muscles, seminal fluid  Mid exam	2	identification of human remains such as bones, or fragments of skin or muscles, seminal fluid, blood spots.	2
9	9 <sup>th</sup> .week  1 <sup>st</sup> hour   2 <sup>nd</sup> hour	identification of human remains such Identification of hairs and fibers,  identification of sex and race from bones.	2	Identification of hairs and fibers, identification of sex and race from bones.	2

10	10 <sup>th</sup> .week	age estimation, by general appearance, by deciduas and permanent dentition.	2	age estimation, by general appearance& deciduas and permanent dentition.	2
11	11 <sup>th</sup> .week 1 <sup>st</sup> hour  2 <sup>nd</sup> hour	Age estimation from bones, ossification centers and fusion lines,  purposes of age estimation.	2	Age estimation from bones, ossification centers and fusion lines,	2
12	12 <sup>th</sup> .week 1 <sup>st</sup> hour  2 <sup>nd</sup> hour	Pathology of wound: definition of a wound, mechanisms of wounding.  Classification of wounds,  abrasions, contusions, lacerations, blunt penetrating injuries, incised wounds	2	Examination of wounds  Classification of wounds, abrasions, contusions, lacerations, blunt penetrating injuries, incised wounds	2
13	13 <sup>th</sup> .week 1 <sup>st</sup> hour	wounds from medico-legal point of view;dating of wound by histological examination, nature of wounds, incidental, suicidal, induced by the person or other persons.  Fate of the wound, complete healing, healing with deformity or loss of function, death from wounds.	2	Medico legal points of wound injury dating of wound by histological examination, nature of wounds, incidental, suicidal, induced by the person or other persons. Fate of the wound, complete healing, healing with deformity or loss of function, death from wounds.	2

	2 <sup>nd</sup> hour				
14	14 <sup>th</sup> .week	Head and spinal injuries, injuries of the scalp, epidural hemorrhages, sub-arachnoid hemorrhage, brain injuries,	2	Head and spinal injury examination and assessment	2
	1 <sup>st</sup> hour			Examination of pelvic injury	
	2 <sup>nd</sup> hour	injuries of thoracic cage, ribs fractures, laceration of the heart, injuries of the abdomen, rupture liver and spleen, injuries of the intestine. Pelvic injuries.			
15	15 <sup>th</sup> .week	Transportation injuries: dynamics of vehicular injuries, pattern of injury of vehicle occupants,	2	Assessment of transportation injuries	2
	1 <sup>st</sup> hour				
	2 <sup>nd</sup> hour	injuries to the driver in vehicle collision, injuries to children,			



No	No. of weeks	Theoretical Hours		Practical Hours	
		Theory Lecture Topics	Hours per weeks	Practical Session Topics	Hours per weeks
1	1 <sup>st</sup> .week 1 <sup>st</sup> hour 2 <sup>nd</sup> hour	injuries to pedestrian,  injuries to pedal cyclists causes of death in traffic accidents	2	Examination of pedestrian injuries	2
2	2 <sup>nd</sup> .week 1 <sup>st</sup> hour 2 <sup>nd</sup> hour	suicide and homicide by motor vehicle,  railway injuries.	2	Examination suicide and homicide by motor vehicle,	2
3	3 <sup>rd</sup> .week 1 <sup>st</sup> hour 2 <sup>nd</sup> hour	gunshot and explosion injuries: the mechanics of missile injury,  types of weapons, entrance wound inflicted by smooth-bore shotgun	2	Assessment of the type of gunshot injury, missile injury and assessment the type of the wound	2
4	4 <sup>th</sup> .week 1 <sup>st</sup> hour 2 <sup>nd</sup> hour	Exit wound, firearm damage to internal organs,  estimating the range of discharge	2	Examination of exit and entrance of missile and smooth bore gunshot	2
5	5 <sup>th</sup> .week 1 <sup>st</sup> hour	determination of pattern of death from fire arms,  determination of the direction	2	determination of pattern of death from fire arms	2

	2 <sup>nd</sup> hour	of discharge, causes of death from firearms			
6	6 <sup>th</sup> .week		2		
	1 <sup>st</sup> hour	burns and scalds, heat injuries, classification of severity of burns, moist thermal damage,		gross appearance at autopsy of ante-mortem versus post-mortem burns,	2
	2 <sup>nd</sup> hour	burns from dry heat, gross appearance at autopsy, ante-mortem versus post-mortem burns, inhalation of soot, causes of death from burns.		classification of severity of burns, moist thermal damage	
7	7 <sup>th</sup> .week		2		
	1 <sup>st</sup> hour	electrical fatalities, effect on muscles, mode of death, cutaneous electrical marks, metallic traces in electric marks,		Post-mortem examination of electrical, injuries mode of death, cutaneous electrical marks, metallic traces in electric marks, histological appearances,	2
	2 <sup>nd</sup> hour	histological appearances, suicide by electricity, homicide by electricity, death from lightning			
8	8 <sup>th</sup> .week		2		
	1 <sup>st</sup> hour	suffocation by fatal pressure on the neck, manual strangulation, strangulation by ligature, hanging,		Examination of the victims of strangulation	2
	2 <sup>nd</sup> hour	Mid exam			

9	9 <sup>th</sup> .week	Immersion deaths: signs of immersion signs of immersion, death from natural causes before entering the water, whilst in water, death from immersion other than drowning. Autopsy signs of drowning,	2	Examination of immersion injury signs of immersion, death from natural causes before entering the water,	2
10	10 <sup>th</sup> .week  1 <sup>st</sup> hour         2 <sup>nd</sup> hour	Sexual affairs the hymen, anatomy of the hymen, defloration of the hymen, consequences of hymen defloration, pregnancy,       abortion, illegal abortion, sexually transmitted disease, sexual perversion, sodomy, lesbianism, killing of newly born infants.	2	Examination of rape victims illegal abortion, sexually transmitted disease,	2
11	11 <sup>th</sup> .week  1 <sup>st</sup> hour       2 <sup>nd</sup> hour	Poisons and alcohol types of poisons, causes of death from poisons,     the concept of the lethal dose, poisoning by insecticides,	2	how to take samples for laboratory investigation.	2
12	12 <sup>th</sup> .week  1 <sup>st</sup> hour	drug poisoning, how to take samples for investigation of poisons. Alcohol, absorption and elimination of alcohol,	2	How to examine the signs of drug poisoning	2

	2 <sup>nd</sup> hour	effects of alcohol on the body, death from alcohol overdose. Kerosene poisoning			
13	13 <sup>th</sup> .week  1 <sup>st</sup> hour  2 <sup>nd</sup> hour	Medical ethics doctor-patient relationship,doctor-doctors relationship,  doctors in front of law, medical responsibility, responsibility in prescription, responsibility in surgical operation, medical secret.	2	How to write death certificate	2
14	14 <sup>th</sup> .week  1 <sup>st</sup> hour  2 <sup>nd</sup> hour	forensic writings; death certificate birth certificate,  primary medico-legal report, reports on hospital discharge	2	How to write birth certificate	2
15	15 <sup>th</sup> .week  1 <sup>st</sup> hour  2 <sup>nd</sup> hour	reports on hospital discharge, final medico-legal reports,  civil responsibility, and penal responsibility.	2	How to write final hospital discharge and medico legal report	2