Course Description Template

University Name: Warith Al-Anbiya

Faculty/Institute: Collage of medicine

Scientific Department: medical education

Academic or Professional Program Name: unit 7 / 3rd stage.

Final Certificate Name: .....

Academic System: Integration system

Description Preparation Date: 27/8/2025

File Completion Date: 27/8/2025

Signature:

Head of Branch: Dr. Fatima M. Swadi

Date: 27/8/2025

Signature:

Vice Dean for Scientific Affairs: Dr. Laith M. Abbas

Date: 27/8/2025

The file is checked by:

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department: professor Dr. Ali Al Mousawi

Date: 27.8.2025

Signature:

Dean's approval

الأستاذ الدكتور
علي عبد الستار العزي
عميد كلية الطب

Ministry of Higher Education and Scientific Research

UNIVERSITY OF WARITH ALANBAYAA

COLLEGE OF MEDICINE

Academic Program and Course Description Guide

2025

In this stage, four units are taught:

- Unit 7 : Gastrointestinal System – 7 weeks
- Unit 8 : Genitourinary System – 7 weeks
- Unit 9 : Nervous System – 7 weeks
- Unit 10 : Endocrine System – 4 weeks

The subjects will be listed according to the units and for each discipline separately, although they are taught in an integrated manner.

There are six hours of discussion weekly throughout the weeks of each unit during the academic year. In total, this equals $27 \times 6 = 162$ hours of discussion for all topics, which corresponds to the theoretical teaching hours of each subject.

In addition, there are 54 hours of skills training during this year covering all units.

Unit seven (GIT) **Code : medu301**

1. Anatomy

	ANATOMY	HISTOLOGY	EMBRYOLOGY	hr
WK1				
	sophagus (abdominal part) & Stomach	esophagus& stomach		2+2
	ant. abd wall			2
	urface anatomy of abdomen			1
	Peritoneum& abdominal cavity			2
	surgical anatomy of inguinal canal			2
lab	Anatomy (surface anatomy of abdomen, ant. abd. wall, abd. cavity & peritoneum			2
WK2				
	anatomy of small intestine	Histology of small intestine		2+2
lab	Histology(esophagus, stomach& small intestine)			2
WK3				
	anatomy of large intestine - part 1	Histology of large intestine		2+2
	anatomy of large intestine - part 2			2
	blood supply of gut			2
	pelvic floor			1
lab	1hr anatomy(large intestine& anal canal) +1hr histology of LI_ anal canal			2
WK4				
	anatomy of liver & portal vein	Histology of the liver		2+2
lab	Anatomy (liver & extrabiliary apparatus)			2
WK5				
	extrahepatic biliary apparatus	Histology of gallbladder		2+2
lab	Histology (liver & gallbladder)			2

WK6				
	anatomy of the pancreas & spleen	Histology of the exocrine part of pancreas		**2+2**
			Embryology of GIT	**2**
WK7				
			Embryological basis of congenital diseases	**2**
نظري	**24**	**12**	**4**	**40**
عملي	**5**	**5**		**10**

2. Physiology

week	Objectives/Theory	hours	Objective/ practical	hours
one	GIT system overview: To develop an understanding :of -The digestive system and its four key functions. -The main structures of the digestive tract and their functions. -The accessory organs of the digestive tract and their functions. -The structure of the wall of the alimentary canal. -The innervation and patterns of motility of GIT. -Enteric plexus of nerves: autonomic nervous system and the neurotransmitters of Enteric Neurons Physiology of swallowing: -Outline the mastication reflex. -Identify the functions of both upper and lower esophageal sphincters. -Discuss the phases of swallowing, how it is mediated and the role of upper and lower esophageal sphincters -Outline factors affecting tone of the lower esophageal sphincter. -Identify the receptive relaxation of the stomach. -Discuss the basis of the esophageal manometry test. Physiology of Gastric secretion, tests, analysis -Identify the stomach secretions and state their functions. -Explain how the stomach produces hydrochloric acid and pepsin. -Explain mechanism of HCL secretion and how this produces an alkaline tide. -Describe the three phases of gastric function. -How does food in the duodenum inhibit motility and secretion in the stomach?	3		2

	-Describe the physiological mechanisms that acidic environment. Identify the harmful effects of smoking on gastric - .mucosa Describe the cell types in gastric mucosa and - .discuss their function			
two	**Physiology of digestion and absorption in small intestines** - Demonstrate the pathophysiology of celiac disease. - Outline the Physiological structure of the intestinal villi. - Recognize the structure and function of crypts of Lieberkuhn. - Recognize the physiological function of enterocytes. - Understand the physiological function of gastric inhibitory peptide hormone. - Recognize the physiological function of secretin. - Understand the physiological function and its role in digestion of cholecystokinin hormone. - Recognize the physiological function of vasoactive intestinal peptide. - Demonstrate the segmental movement in different parts of the small intestine. - Demonstrate the peristaltic movement of small intestine. - Demonstrate the role of the proximal segment of the small intestine in regulation of pancreatic enzymes	3		2
three	Colon physiology Identify how the mucosa of the large intestine - .differs from that of small intestine Discuss the types of contractions that occur in the - .colon Identify the function of large intestine smooth - .muscles .Explain the neurological control of defecation - Explain the gastro colic and gastroileal reflexes -	1		
Four	Obesity and appetite control Differentiate between hunger sensation, appetite - .and satiety Central control of appetite: hypothalamic hunger - .and satiety centers .Adipostat factor: leptin - Gut hormones: cholecystokinin; pancreatic - .ghrelin;polypeptide and peptide YY	1		
five	Pathophysiology and Biochemistry of jaundice Identify the detoxifying action of the liver - Define - bile	1		

	Discuss bilirubin Metabolism -			
six	Physiology of exocrine pancreas Discuss the pancreatic juice (Phases of secretion, - mechanism of secretion, major enzymes) Describe the regulation of pancreatic secretion - (neural and hormonal)	1		
total		8		

3. Pathology

Pathology curriculum for unit 6 for third stage students (GIT UNIT):-

Weeks	Objectives/theory	hours	Objectives/practical	hours
wk 1	<u>Pathology of esophagus</u> -developmental maformatiom - hiatus hernia -achalasisia and it's causes - pathology of GERD. -Barrett's esophagus, -oesophageal varices. - epidemiology, morphology and C/P of esophageal tumors. <u>Pathology of the stomach</u> -congenital pyloric stenosis - Define acute gastritis and list its causes - Differentiate between type A and type B chronic gastritis - Describe the pathology of hypertrophic gastropathies - Outline the epidemiology, pathogenesis, morphology, C/P and complications of peptic ulcer disease - List types of gastric polyps	2	Microscopical findings of Barrett's esophagus Gross and microscpical features of squamous cell carcinoma of esophagus Gross and microscpical features of gastric ulcer Gross and microscpical features of gastric carcinoma	2

	- List the most common types of gastric tumors and describe the pathology of each			

Weeks	Objectives/theory	Hours	Objectives/practical	hours
wk2	Describe the pathology of Meckel's diverticulum. - List the most common causes of intestinal obstruction. - List causes & describe morphology of ischeamic bowel disease. - Define malabsorption & list its causes. - Outline the pathogenesis, morphology cealiac disease - Define & classify diarrhea and list its causes. - List the most common pathogens causing diarrhea - List the different types of small intestinal tumors and describe the pathology of each.	1		
wk 3	Outline the pathology of Hirschprung disease - Differentiate between Crohn's disease and ulcerative colitis - List the different types of intestinal polyps - Discuss the pathology of Diverticular disease - List the different familial cancer syndromes of the colon and explain the underlying molecular events	1	Microscopical findings of Celiac disease Gross and microscpical features of different intestinal polyp Gross and microscpical features of	2

	- Enumerate the common malignant tumors of the colon and describe the morphology &staging of CRC - Describe the morphology, C/P and complications of acute appendicitis - Define and classify Heamorrhoids, list tumors of anal canal		Inflammatory bowel disease Gross and microscpical features of colonic adenocarcinoma	

Weeks	Objectives/theory	hours	Objectives/ practical	hours
wk4	Define liver cirrhosis. List its causes. Outline its pathogenesis, morphology and consequences. - Outline the causes, mechanism and complications of portal hypertension - Outline the pathology of Alcoholic liver diseases and describe liver morphology in each. - Discuss the pathology of NAFLD/NASH - Outline the pathogenesis, morphology and clinical features of: Heamochromatosis , Wilson s disease, α-1 antitrypsin deficiency, Reye s syndrome - Classify tumors of the liver and outline the predisposing factors, diagnostic morphology and possible treatment modalities.	2		

Weeks	Objectives/theory	hours	Objectives/ practical	hours
wk5	Define and classify jaundice, list its causes - Outline the pathway of bilirubin metabolism - List the different liver function tests and outline their interpretation - Discuss the Pathogenesis, morphology, C/P and complications of PBC/PSC - List the different hepatotropic viruses and discuss the mode of transmission, C/P,complications and serologic diagnosis of each - List manifestations of liver failure	1		
Week 6	Outline the etiology, pathogenesis, C/P and complications of gall bladder stones. - Outline the pathogenesis, morphology and clinical picture of Acute/chronic cholecystitis - Describe the morphology and clinical picture of Cholangiocarcinoma - List the different developmental malformations involving the pancreas - Define, list causes and describe the morphology and clinical picture of Acute/chronic pancreatitis. - Describe the pathology of pancreatic pseudocyst Classify pancreatic tumor	2	Microsc opical findings of Liver cirrhosis Gross and microscp ical features of chronic cholecys titis Gross and microscp	2

			ical changes in pancreatic tumors	
Total hours		**9**	**6**	

4. Pharmacology

Weeks	Objectives	Theory/hr
1	**Principles of treatment of peptic ulcer disease** **- Proton pump inhibitors (PPI), H2 blockers, Antacids, Cytoprotective agents** **- Anti-H. pylori drugs,** **- Prokinetic Drugs**	**2**
2	**Antiemetics, IV-fluids/ORS**	**2**
	Anti-infectious drugs, antiamebic drugs, Antihelminthic drugs	
3	**Pharmacotherapy of :** **1. IBD: Aminosalicylates, Cortico-steroids, Immunosupressants, TNF antagonists** **2. IBS: Anti-spasmodics (Anticholinergics)**	**2**
	• **Role of chemotherapy in management of CRC: Antimetabolites, Platinum compounds, Topoisomerase inhibitors.** • **- Laxatives/purgatives: Bulk-forming laxatives, Osmotic laxatives, Irritant laxatives, Stool softeners**	

Weeks	Objectives	Theory/hr
4	**Pharmacotherapy of obesity** **- Review the different guidelines for management of obesity** **- Discuss the role of pharmacotherapy in achieving and maintaining weight loss** **- Discuss the different types of drugs that are most beneficial** **- Learn how to maximize benefit and minimize side effects of antiobesity drugs**	**1**
5	**General guidelines for management of viral hepatitis** **-Interferon & antiviral therapy in chronic hepatitis** **-** **- Duration of therapy with anti-viral agents** **- Different types of interferons**	**1**
6	**-**	

5. Microbiology

6 **GIT**	1 GERD, Heart burn	Microbiology	Helicobacter pylori: Discuss the pathogenicity, transmission ,manifestations, antibiotic therapy	1 hr.
	2 Celiac disease	Immunity	MALT and mucosal immunity -List the different of mucosa associated lymphoid tissue -Explain their functional significance -Differentiate between lymphoid and non-lymphoid trafficking of immune cells. -Identify the role of M cells in gut mucosa.	1hr.

			-Explain why commensalism can become pathogenic in immune compromised states Immunological basis of celiac disease -Explain the difference between hyposensitivity and autoimmunity. -Recall the concept of molecular mimicry. -Identify the role of gliding and HLA in celiac disease. -Demonstrate that is both a T cell and B cells mediated disorder. -Explain that Ab can be used to identify autoimmune disorder.	
		Micro.	A. Bacterial and Viral agents of diarrhea -Important bacterial pathogens of the GI tract. -Consequences of GIT infections -Secretary diarrhea. -Acute diarrhea, management. -Invasive diarrhea -Antibiotic-associated diarrhea -Specimens selection of microbiology laboratory diagnosis	1 hr.
			GI parasites infections	

		Parasitology	1. List common intestinal protozoa. 2. List common intestinal helminthes and the silent morphological features, routs and modes of transmission. 3. Laboratory diagnosis. 4. management of common parasitic infections including prevention strategies.	1 hr.
		Microbiological/ Immunological Lab.	Viral, bacterial and parasitic causes of diarrhea	6 hr. (2hr/3 groups)
	3 Colorectal Ca	Genetics	Genetic predisposition to colorectal ca 1.Discuss the hereditary susceptibility to colorectal carcinoma 2. Discuss the hereditary versus sporadic colorectal carcinoma. 3. List different genes that may be involved in such cancer.	1 hr.
	5 Hepatitis B	Immunity	Immune response to viral infections 1-Recall the innate immune response to viral infections 2.Describe the role of adaptive immune 3. Enlist the different strategies used by virus to evade the immune system.	1 hr.

			4. Describe the tissue damage caused to immune complexes.	
		Microbiology	Viral hepatitis 1-Describe the microbiological properties of Hepatitis A, B, C, D and E viruses. 2. Describe the clinical presentation, management and natural history of acute hepatitis A, B and C. 3. Discuss the interpretation and significance of laboratory tests for investigation of liver diseases. 4. Discuss the interpretation of serological investigations in the diagnosis of acute and chronic viral hepatitis. 5. Discuss the methods for control and prevention of viral hepatitis.	1 hr.