

## نموذج وصف المقرر الدراسي

اسم الجامعة: جامعة وارث الانبياء عليه السلام

الكلية/ المعهد: كلية الطب

القسم العلمي: التعليم لطبيب

اسم المقرر: الوصفة الثامنة / المرحلة الثالثة

النظام الدراسي: النظام التكاملي

تاريخ اعداد الوصف: ٢٠٢٥ / ٨ / ٢٧

تاريخ ملء الملف: ٢٠٢٥ / ٨ / ٢٧



التوقيع:

معاون العميد للشؤون الإدارية: أ.م.د. د. لست محمد

٢٠٢٥ / ٨ / ٢٧



التوقيع:

رئيس الفرع او الوحدة: أ.م.د. فاطمة محمد

التاريخ: ٢٠٢٥ / ٨ / ٢٧



مصادقة كلية الطب  
أ.م.د. د. لست محمد  
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تم تدقيق الملف من قبل

مفوضة ضمان الجودة و اعداد الكافعي

اسم مدير مفوضة ضمان الجودة: أ.د. د. لست محمد

التاريخ: ٢٠٢٥ / ٨ / ٢٧

التوقيع: 



**Unit eight (genitourinary) Code : medu302**

**1. Anatomy**

	ANATOMY	HISTOLOGY	EMBRYOLOGY	hr
WK1				
	kidney & abdominal part of ureter	Kidney & ureter		2+2
lab	histology (Kidney & ureter)			2
WK2				
	Urinary bladder &pelvic ureter	Urinary bladder		2+2
lab	Anatomy of urinary system			2
WK3				
	Prostate & urethra	Prostate & urethra		2+2
lab	Histology(Urinary bladder, prostate & urethra)			2
WK4				
			Embryology of UT& congenital anomalies	2
WK5				
	anatomy of the female genital system	Histology of the female genital system		2+2
lab	Histology of the female genital system			2
WK6				
	anatomy of the male genital system	Histology of the male genital system		2+2
			Embryology of GT	2
lab	Histology of the female genital system			2
WK7				
	perineum		Embryological basis of congenital diseases	2+2
lab	Anatomy of genital tract & perineum			2
WK8				
	Morphological anatomy of mammary gland	Histology of mammary gland		4
lab	Histology of mammary gland			2
نظري	14	12	4	28
عملي	4	10		14

**2. Physiology**



week	Objectives/Theory	hours	Objective/ practical	hours
one	<p>Renal hemodynamics; renal blood flow and glomerular :function</p> <p>Describe the functional unit of the kidney – (Nephron)</p> <p>Distinguish between cortical and juxta-medullary – .nephrons</p> <p>Describe the location, structure and function of – .juxtaglomerular apparatus</p> <p>Describe the filtration membrane's structure and – .function</p> <p>Describe features of the endothelial capsular – .membrane that allow it to act as a filter</p> <p>List and name forces that – contribute to net filtration pressure and explain How .NFP is calculated</p> <p>.Define glomerular filtration rate –</p> <p>Describe the intrinsic and extrinsic mechanisms – that regulate glomerular filtration rate and renal blood flow</p> <p>Define the filtration coefficient and how it may – .affect the glomerular filtration rate</p> <p>Describe different signs and symptoms resulting – from disruption of physiological function of .glomerular filtration membrane</p> <p>Renal transport mechanisms</p> <p>Tubular processes overview –</p> <p>Tubular reabsorption processes of water, sodium, – potassium, chloride, glucose, amino acids</p> <p>Tubular secretion -endogenous substances, some – +drugs, H</p> <p>Describe the tubular maximum mechanism. – –</p> <p>Identify factors affecting glomerular reabsorption of .glucose</p>	4		
two	<p>Tubular function:</p> <ol style="list-style-type: none"> <li>1. Describe the permeability and ion transport</li> <li>2. characteristics of each segment of the nephron.</li> <li>3. Describe the action and site of action of aldosterone.</li> <li>4. Describe the site of secretion of K<sup>+</sup>.</li> <li>5. Describe the function of the principal cells.</li> <li>6. Describe the function of the intercalated cells.</li> </ol> <p>Regulation of effective circulating volume</p> <p>–Describe the water permeability</p>	3		



	<p>characteristics of the loops of Henle, distal convoluted tubule and cortical and medullary collecting ducts.</p> <p>–Describe the mechanism of Countercurrent multiplication and the generation of medullary interstitial hyper osmolarity.</p> <p>–Describe the function of the vasa recta as a countercurrent exchanger in the development and maintenance of the renal corticomedullary osmolar concentration gradient .Describe the role of ADH.</p>			
three	<p>Mechanism of micturition</p> <p>–Describe the nervous control of Bladder function .</p> <p>–Describe changes in intravesical Pressure during filling and voiding.</p> <p>–Describe the micturition reflex.</p> <p>–Describe the physiological factors that influence micturition.</p> <p>–Outline the main disorders of Bladder function.</p>	1		
Four	<p>; Effect of urinary obstruction on renal function</p> <p>–Describe the function of the prostate</p> <p>–Describe the effect of enlarged prostate on renal function and bladder function</p>	1		



five	<ol style="list-style-type: none"> <li>1. Describe the structural arrangement that subserves the reproductive function of the testis.</li> <li>2. Describe the physiology of spermatogenesis and its hormonal regulation.</li> <li>3. Explain how the Pampiniform plexus of veins acts as a counter current heat exchanger</li> <li>4. Describe the pathway taken by a sperm cell from its formation site to its ejaculation.</li> <li>5. Explain the pattern of secretion and metabolism of testosterone.</li> <li>6. Describe function of testosterone during fetal development.</li> <li>7. Identify the various actions of androgenic hormones.</li> <li>8. Describe role of testosterone in erection, emission and ejaculation</li> </ol>	2		
six	Female! Menstrual! Cycle	2		
total		13		

### 3. Pathology

weeks	Objectives/theory	Number of hours	Objectives/practical	Number of hours
Week 1	<ul style="list-style-type: none"> <li>- Classify the different types of glomerular diseases and outline the different mechanisms of glomerular injury.</li> <li>- Differentiate between the clinical manifestations of Nephritic/Nephrotic syndrome. And outline the</li> </ul>	2	different types of glomerular diseases	2



	<p>Pathophysiologic mechanisms underlying each</p> <ul style="list-style-type: none"> <li>- List the causes of Nephrotic syndrome (Primary glomerular /systemic diseases) and describe the etiology, the renal morphology, pathogenesis and clinical course in each condition</li> </ul>			
Week 2	<ul style="list-style-type: none"> <li>- List clinical manifestations and laboratory investigations of renal failure.</li> <li>- Describe the pathology of drug induced interstitial Nephritis</li> <li>- Outline the pathogenesis, morphologic features and clinical picture of Acute tubular injury (ATI)</li> <li>-List the causes of obstructive uropathy and outline its Consequences on the kidney (Hydronephrosis)</li> </ul>	1		
Week 3	<ul style="list-style-type: none"> <li>- Discuss the pathology of urothelial tumors (of the urinary bladder and ureters)</li> <li>- Outline the different causes of hematuria</li> </ul>	2	Urinary bladder disease	2
Week 4	<ul style="list-style-type: none"> <li>- Outline the etiology of Nodular prostatic hyperplasia</li> <li>- Describe the gross and microscopic morphology of Nodular prostatic hyperplasia and outline its clinical Picture</li> <li>- Discuss the pathogenesis, morphology and clinical features of prostatic adenocarcinoma</li> <li>- Discuss the Dynamic role of PSA as a tumor marker for Prostatic adenocarcinoma</li> </ul>	1		
Week 5	<ol style="list-style-type: none"> <li>1- Causes of infertility in testes</li> <li>2- Cryptorchidism (atrophy)</li> <li>3- Inflammations</li> <li>4- Vascular disturbances</li> <li>5- Testicular neoplasms</li> <li>6- Penis, STDs</li> </ol>	2		



Week 6	1- Causes of infertility in ovaries 2- Ovarian cysts and ovarian tumors 3- HPV infection, pap smear, cervical dysplasia (Bethesda System), cervical cancer 4- Pathology of vulva, vagina, uterus, fallopian tubes, placenta, benign and malignant neoplasms 5- Breast lump and benign versus malignant neoplasms, gynecomastia	3	<i>Diseases of female reproductive system</i>	2
Week 7	1. Breast diseases, congenital anomalies, 2. Fibrocystic diseases 3. benign neoplasms, gynecomastia 4. Pre-operative diagnosis 5. Molecular classification and grading of breast tumors 6. Histological types of breast cancer 7. Delineate the variables that influence the prognosis of breast cancer	3	<i>Diseases of breast</i>	2
Total hours				

#### 4. Pharmacology

##### Renal Systems

Weeks	Objectives	Theory/hr
1	-	-
2	<b>Pharmacology of Diuretics:</b> <b>Classes of diuretics,</b> <b>Mechanism and site of action.</b> <b>Clinical application, Adverse reactions of diuretics and Interaction with other drug classes.</b>	1
3	<b>Chemotherapy of bladder cancer</b> <b>– Selection of the treatment modality according to the nature of the lesion</b> <b>– Effects and side effects of intra-vesical therapies</b> <b>– Actions, indications, side effects and contraindications of agents used in management of bladder cancer</b>	1



<b>4</b>	<b>Pharmacotherapy of prostatic disorders</b> – Drugs used to control symptoms of benign prostatic hyperplasia (BPH) – Hormonal therapy of prostatic carcinoma (Androgen deprivation therapy) – Non hormonal therapy of prostatic carcinoma	<b>2</b>
	<b>The role of the kidney in pharmacokinetics:</b> – Understand the mechanism of renal excretion of drugs and their metabolites and the problems in drug handling that can occur if renal function is impaired	
<b>Total hours</b>		<b>4</b>
<b>Credits</b>		<b>0.26</b>

### reproductive system

<b>Weeks</b>	<b>Objectives</b>	<b>Theory/hr</b>
<b>5</b>	<b>Pharmacotherapy of male infertility:</b> 1. describe different classes of drugs used for management of male infertility 2. choose the optimum therapy for male infertility according to the cause 3. discuss the pharmacology of drugs used for male infertility  <b>Pharmacology of female infertility:</b> 1. controlled secretion of gonadotropins and its pharmacologicalmodulations 2. GnRH agonists and antagonists: available agwns , their sources and clinical applications	<b>1</b>
<b>6</b>	<b>Hormonal contraception</b> 1. Common indications and contraindications 2. Benefits versus risks 3. Mechanisms of actions and formulations available 4. Interactions with other drugs <b>Different pharmaceutical forms</b>	<b>1</b>
<b>7</b>	<b>Chemotherapy of breast cancer</b>	<b>2</b>



## 5. Microbiology

8  Renal  And  Reproductive	1  Nephrotic  syndrome	Immunity	Autoimmune basis of nephrotic syndrome 1. Recall the immune basis of nephrotic syndrome. 2. Explain the regulation of the complement cascade. 3. Explain the different mechanism and types of immune mediated nephropathies.	1 hr.
	2	Microbiology	1.Epidemiology,etiology and pathogenesis of community-acquired and hospital acquired UTIs 2. Virulence factors in the causative organisms 3. Clinical predictors of Recurrent UTIs in women	1 hr.
		Immunity	Urethral and bladder defenses .1Recognize innate immune response of lower urinary tract against infection***. .2Recognize adaptive immune response of lower urinary tract against infection***.	1 hr.
		Microbiology Lab.	Microbiological investigation of urinary tract infection 1. Identify the different methods of obtaining urine for microbiological investigation.	6 hr. (2hr/3 groups)



			<p>2. Understand how to collect a midstream urine specimen.</p> <p>3. Understand the different microbiological procedures carried out urine specimens.</p> <p>4. Know how to interpret urine culture report.</p> <p>5. Understand the microbiological culture work up for investigation of chronic urogenital infections in men.</p>	
	3	Parasitology	<p>Schistosomiasis</p> <p>1. Classify common helminthes.</p> <p>2. Identify the different Schistosoma As trematodes (tissue flukes) of clinical importance and describe the types of infections they cause.</p> <p>3. Describe the epidemiology and transmission of Schistosoma spp.</p> <p>4. Describe the pathogenesis and clinical manifestations of Schistosoma infection.</p> <p>5. Describe the diagnosis management and prevention of Schistosoma infection.</p>	1 hr.
			Immune response of parasites	



		Immunology	1. Role of T and B in cells in helminthes infection. 2. Effector cells in protozoal infections. 3. Cytokines and secreted cytotoxic molecules in helminth infection. 4. Immune pathological con-sequences of parasitic infections: hepatosplenomegaly and auto –immunity.	1 hr.
8 Renal  And  Reproductive	5	Immunology	Immune privilege organs 1. List immune privilege organs. 2. Describe the mechanisms in active and passive immune privilege. 3. Recall that sperms are antigenic. 4. Enumerate mechanisms by which sperm antigens gain access to immune system. 5. Describe the role of immune system in induction of infertility. 6. Recall the use of immunological methods in identification of infertility.	1 hr.
	5	Microbiology	An introduction to sexually transmitted infections 1.A broad understanding of the spectrum sexually transmitted microbiota and infections(STI)	1hr.



			<p>2. Have a good knowledge of two STI which contribute significantly to tubal factor infertility (Gonococcal and genital Chlamydia infections)</p> <p>3. Understand the female urogenital Microbiota and how imbalance can results in bacterial vaginosis.</p> <p>4. Acquisition and transmission of SDI.</p>	
	6	Microbiology	<p>Human Papilloma virus</p> <p>1. Types of HPV, and the association of high-risk types and Ca cervix.</p> <p>2. Understanding the mode of transmission and risk factors for HPV.</p> <p>3. HPV and cervical cancer.</p> <p>4. Diagnosis</p> <p>5. prevention - Vaccine</p>	1 hr.
	7	Genetics	<p>Genes involved in breast cancer and mutation screening</p>	1 hr