Course Syllabus of Urogenital System

Faculty : Medicine and health sciences
Department: Basic Sciences
Program : Bachelor of Medicine and Surgery

I. General information about the course instructor :

Name	Group of teachers	Office Hours(3 Hours Weekly)					
Location & phone number	-	Sat	Sun	Mon	Tue	Wed	Thu
Email	-						

II. General information about the course:

1.	Course Title :	Urogenital System					
2.	Course Code and Number	BMD 27					
3.	Credit Hours :	Credit Hours					Total
		Theoretical	Seminar/Tutorial	Practical	Clinical	Training	
		8	-	2	-	-	10
4.	Study Level and Semester:	4th year/ 2nd semester					
5.	Pre-requisites:	Introductory blocks of the first and second year					
6.	Co-requisites:	None					
7.	Program in which the course is offered:	Bachelor of Medicine and Surgery					
8.	Teaching Language:	English					
9.	Instruction location:	University of Science and Technology, Sana'a					

III. Course Description

This course is a multidisciplinary integrated course giving a comprehensive coverage of the normal anatomy, physiology, histology, pathology, pharmacology and microbial infections of the male and female genito-urinary system. Pathogenesis, therapy and basic laboratory investigations of common diseases of the genitourinary system are explored. In this course students will be exposed to important diseases in Medicine, Pediatric, Surgery and Gyno-Obstetrics that are closely linked to these systems. Teaching and learning methods include

lectures, small group discussion (Problem-Based Learning "PBL"), and practical sessions.

IV. Course Aims:

- The course aims are to :-

1 . Provide the students with basic medical Knowledge about the components of genitourinary system of male and female regarding anatomy, physiology, pathology, histology, microbiology, biochemistry, pharmacology and nutritional issues.

2 .Understands the functions of each part of genitourinary system in both (male &female).

3. Recognize the common disorders that affect the genitourinary system with their etiologies, diagnoses and treatment.

4. Perform clinical skills of taking the history and the clinical examination of the genito-urinary system and of the pregnant woman as well as some gynecological procedures such as urinary catheterization**..**

V. Course Intended Learning Outcomes (CILOs) :

1-Describe the anatomical, physiological, histological, embryological and microbial features of the renal and genital systems in the normal and common pathological conditions..
2-Identify the etiology, diagnosis complications, principles of prevention and treatment of the common and life-threatening genitourinary disorders.
3- Correlate the pathophysiological & biochemical results with the clinical findings of common genitourinary disorders, **and its care.**
4-Integrate the clinical history and findings, with the results of the investigations to reach a provisional diagnosis and Construct a correct plan for the management.
5- Perform and document an accurate medical history and clinical examination of a patient with a genitourinary condition and request appropriate investigations to determine differential diagnosis.
6- Apply some routine technical and therapeutic procedures, on a model, and start initial therapy for patients with immediate life threatening conditions.
7- Work effectively in a team through preparing collective assignments and in the skill lab activities.
8- Use his various technology skills in accessing different learning resources and in presenting his assignments.

VI. Course Contents					
First: Theoretical Aspects					
No.	**Course Topics/Units**	**Sub-topics**	**No. of Lectures**	**Contact Hours**	**CILOs**
1	Anatomy	-Kidney,Ureters ,Urinary bladder,Prostate and urethra -Pelvis (Boundaries, Types, Diameters, Inlet & Outlet). -Muscles of the pelvis and pelvic diaphragm -Blood vessels of pelvis & Internal iliac vessels -Nerves, lumbosacral plexus & autonomic supply. -Pelvic periton and Broad ligament. **Female Genital System**. Ovary, Uterine tubes, Uterus, Vagina and vulva. **Male Genital System** Scrotum, Testis, Spermatic cord, Vas deferens,Epididmis, Ejaculatory duct & seminal vesicles. Penis & Mechanism of ejaculation. Perineum, Urogenital triangle, Urogenital diaphragm and Perineal Pouches. Surface, Radiological & Clinical anatomy	10	20	a1,a2, b1,b2,d1,d2
2	Physiology	-Introduction & general functions. Physiologic anatomy of the kidney & renal blood flow. -Glomerular filtration &tubular processing of the glomerular filtrate. -Acidification of urine and regulation of acid-base balance. -Concentration of urine (countercurrent mechanism). -Micturition. -Physiologic anatomy of the male sexual organs, spermatogenesis. Male sex hormone. -Physiologic anatomy of the female sexual organs, oogenesis. -ovarian cycle, endometrial cycle & menstruation. -Puberty, menarche, and menopause, -pregnancy, purperium & lactation -Fluid and electrolytes	9	18	a1,a2, b1,b2,d1,d2
3	Histology	-Kidneys, Ureter, Urinary bladder -Male & Female urethra -Female genital histology: Ovaries, Fallopian tubes, Uterus, Vagina, vulva.	2	4	a1,a2, b1,b2, d1,d2

		-Oogenesis, Menstrual cycle &Placenta -Male genital histology:Testes Vas deferens and ejaculatory ducts. Seminal vesicles &Prostate			
4	Pathology	-Congenital anomalies & Cystic diseases of the kidney. **-Glomerular Diseases:** • Classification & clinical manifestations. • Pathogenesis. • Morphological changes. • Glomerulonephritis. • Nephrotic syndrome. • Chronic glomeruonephritis Systemic glomerulonephritis & Diabetic Nephropathy. **- Tubular & Interstitial Diseases:** • Acute tubular necrosis. • Tubulointerstitial nephritis. • Urinary tract infections. • Drug-induced nephritis. • Uric acid nephropathy. **- Tumours of the Upper & Lower urinary systems:** • Renal cell carcinoma. • Wilm's tumour. • Transitional cell carcinoma. **Penile & testicular diseases:-** • Inflammatory lesions. • Cryptorchidism. • Testicular neoplasia. **Disorders of the prostate:** • Prostatitis. • Nodular hyperplasia. • Prostatic carcinoma. **-Diseases of Lower Female genital tract:** • Infections of female genital tract. • Vulva1 & vaginal lesions. • Cervical intraepithelial neoplasia & carcinoma. **-Uterus ,ovarian & tubal disease:-** • Inflammatory conditions. • Functional & non-neoplastic cysts. • Ovarian tumour **-Gestational disorders**: • Ectopic gestation. • Gestational trophoblastic diseases.	9	18	a1,a2, b1,b2,d1,d2
5	Microbiology	**Definition, cause, pathogenesis and laboratory diagnosis of:-**	5	10	

		-Microorganisms causing Urinary tract infections**:** E.Coli, Klebsiella, Proteus , Pseudomonas , Streptococcus faecalis (Enterococcus) Staphylococci , Mycobacterium tuberculosis. -Schistosoma Hematobium. **-Definition, cause, pathogenesis and laboratory diagnosis of:-** • Microorganisms causing Syphilis & chancroid**:** (Treponema Pallidum and Haemophils decrui). • Microorganisms causing Gonorrhea (Neisseria gonorrhoea) & non-gonococcal urthritis. • Microorganism causing Lymphogranuloma venerum (Chlamydia trachomatis). • Herpes Simplex Virus & Human Papilloma virus. • Microorganisms causing vaginitis, Bacterial vaginitis (Gardnerella vaginalis), Fungal vaginitis (Candida albican) and Protozoal vaginitis (Trichomonas vaginalis). • HIV.			a1,a2, b1,b2, d1,d2
6	**Pharmacology**	-Diuretics. -Treatment of UTI -Androgens and Anabolic Steroids. -Estrogen, Progesteron and Contraceptives. -Treatment of Genital Infections: Gonorrhea, Syphilis ,HIV, Herpes, Chancroid, Prostatitis & Granuloma Inguinale.	4	8	a1,a2, b1,b2,d1,d2
7	**Biochemistry**	-Renal stone and crystal formation - Renal function tests -urine analysis , seminal analysis	2	4	a1,a2, b1,b2,d1,d2
8	Community medicine	Epidemiology of sexually transmitted diseases	1	2	a1,a2, b1,b2,d1,d2
9	Medicine	**Clinical picture, diagnosis, treatment & prognosis of:** • Renal failure (Acute & Chronic). • Proteinurea & Nephrotic syndrome in adults. • Pyelonephritis. • Polycystic kidney disease • Sexual transmitted Diseases in males : Syphilis &Gonorrhea.	4	8	a1,a2, b1,b2, d1,d2
10	Pediatrics	Clinical picture, diagnosis, treatment & prognosis of: • Hematurea &-**nephritis** • Nephrotic Syndrome in children. • UTI in children**.**	3	6	a1,a2, b1,b2,d1,d2

الموصف: **المراجع:**

11	**Surgery**	Clinical picture, diagnosis, treatment & prognosis of: • Urolithiasis • UTI (Renal abscess & chronic pyelonephritis) • Prostatic disease: o Benign Prostatic Hyperplasia (B.P.H) o Carcinoma of Prostate • Common Painful scrotal conditions (Torsion of Testis, epidedemo-orchitis)**.**	4	8	a1,a2, b1,b2,d1,d2
12	**Obstetrics**	-Normal pregnancy -Bleeding in early pregnancy: Miscarriage Ectopic gestation**.** Gestational trophoplastic disease**.** -Renal disease in pregnancy. -Infections of female genital tract. -Menstrual disturbances &Dysfunction uterine bleeding - Genital prolapse - Incontinence of urine	7	14	a1,a2,b1,b2,d1,d2
	Total		60	120=8C.H)	

Second: Practical/Tutorial/Clinical Aspects			
No.	**Practical/Tutorial/Clinical topics**	**No. of Labs**	**Contact Hours**
1	Anatomy	**12**	24
2	Histology	**3**	6
3	Pathology	**9**	20
4	Microbiology	**5**	10
Total		**30**	**60=2.0 Credit**

المراجع: **الموصف:**