

Republic of Yemen

Ministry of Higher Education & Scientific Research

21 SEPTEMBER UNIVERSITY for MEDICALS & APPLIED
SCIENCES



Faculty of Medicine

Bachelor Program of Medicine and Surgery

Course Specification of

Genito-Urinary system

Course Code. (A21P313)

2023



T4: This Template is Developed and Approved by CAQA-Yemen, 2023

Prepared by:	Reviewed by:	Head of department	Quality Unit:	Dean of Medicine Faculty	Center of Development and Quality Assurance Dean
Dr. Ahmed Hudna	Dr. Salwa Al-Ghomeri		Dr. Fadhl Shujaa Al-deen	Dr. Salwa Al-Ghomeri	

I. General Information:

1.	Course Title:	Genito-Urinary system				
2.	Course Code:	A21P313				
3.	Credit Hours:	Credit Hours	Theory Contact Hours		Practical Contact Hours	
			Lecture	Tutorial/ Seminar	Lab	Clinical
		8	6	--	4	--
4.	Level/ Semester at which this Course is offered:	3 rd Level / 1 st Semester				
5.	Pre –Requisite (if any):	Physiology, Biochemistry, Anatomy Histology, Pathology and Pharmacology.				
6.	Co –Requisite (if any):	None				
7.	Program (s) in which the Course is Offered:	Bachelor of Medicine and surgery				
8.	Language of Teaching the Course:	English				
9.	Location of Teaching the Course:	Faculty of Medicine				
10.	Prepared by:	Dr. Ahmed Hudna				
11.	Date and Number of Approval by Council:	٢٠٢٣				

II. Course Description:

This block aims to provide students with the basic, practical, attitudes and skills concerning Genito-urinary system. Students will be exposed to fundamental concepts and practical issues in Anatomy, Embryology, Histology, Physiology, pathology, pharmacology, microbiology, and clinical skills in

Prepared by:	Reviewed by:	Head of department	Quality Unit:	Dean of Medicine Faculty	Center of Development and Quality Assurance Dean
Dr. Ahmed Hudna	Dr. Salwa Al-Ghomeri		Dr. Fadhl Shujaa Al-deen	Dr. Salwa Al-Ghomeri	

an integrated approach; they will apply such concepts to understand common disorders in these systems. Also, students will be exposed to important diseases in Medicine and Surgery and Gyno-Obstetrics that are closely linked to these systems.

III. Course Intended Learning Outcomes (CILOs) : Upon successful completion of the course, students will be able to:		Referenced PILOs		
A. Knowledge and Understanding:		I, P or M/A		
a1	Describe the anatomical and histological structures as well as physiological functions of the urogenital system.	I	A1	Describe the general and basic sciences related to human body structure and functions with emphasis on normal and abnormal conditions.
a2	Recognize the infectious and non-infectious etiology, risk factors, pathogenesis, clinical features, complications, diagnosis, management, prevention and control of urogenital disorders.	A	A3	Explain the pathological and pathogenesis changes in various diseases, and their etiological triggers including genetic, developmental, infectious, metabolic, endocrinal, autoimmune, neoplastic, traumatic, degenerative and occupational factors.
B. Intellectual Skills:				
b1	Distinguish between physiological and pathological performance of body cells.	I	B1	Compare between normal and abnormal conditions and predict the appropriate treatment or intervention.
b2	Appraise medical history, clinical features and laboratory/radiologic findings for the differential diagnosis of urogenital	P	B2	Analyze and interpret the finding from history, clinical examination and investigations to propose a diagnosis and develop a shared management plan for common acute, chronic and urgent physical

Prepared by:	Reviewed by:	Head of department	Quality Unit:	Dean of Medicine Faculty	Center of Development and Quality Assurance Dean
Dr. Ahmed Hudna	Dr. Salwa Al-Ghomeri		Dr. Fadhil Shujaa Al-deen	Dr. Salwa Al-Ghomeri	

				and mental health presentations.
C. Professional and Practical Skills:				
c1	Practice medical history taking, physical/clinical examination and laboratory investigations for the diagnosis of urogenital diseases	P	C1	Perform complete clinical examination and precise investigations to reach the final diagnosis.
c2	Perform on a model some routine technical and therapeutic procedures needed in genitourinary problems such as catheterization.	A	C3	Carry out routine medical procedure and demonstrate the ability of using common medical tools required for diagnosis and management with highly qualified competency.
D. Transferable Skills:				
d1	Use the information technology and internet resources efficiently for self-learning and gaining up-to-date information in the areas of interest.	P	D1	Communicate with professionals, patients, their families and the community through verbal, written and other non-verbal means.
d2	Act independently or collaboratively as a member of teamwork and communicate effectively with others.	A	D2	Work individually or in a team and develop lifelong learning using up to date technology that help in understanding the diseases and its control and prevention.
I= Introduced, P=Practiced or M/A= Mastered/Advanced				

(A) Alignment of Course Intended Learning Outcomes (Knowledge and Understanding) to Teaching Strategies and Assessment Methods:

Course Intended Learning Outcomes	Teaching Strategies	Assessment Strategies
a1 Describe the anatomical and histological structures as well as physiological functions of the urogenital system.	<ul style="list-style-type: none"> ▪ Interactive lectures ▪ Discussion ▪ Office hours ▪ Self-learning 	<ul style="list-style-type: none"> ▪ Quizzes ▪ Final written exam ▪ Oral discussion

Prepared by:	Reviewed by:	Head of department	Quality Unit:	Dean of Medicine Faculty	Center of Development and Quality Assurance Dean
Dr. Ahmed Hudna	Dr. Salwa Al-Ghomeri		Dr. Fadhl Shujaa Al-deen	Dr. Salwa Al-Ghomeri	

a2	Recognize the infectious and non-infectious etiology, risk factors, pathogenesis, clinical features, complications, diagnosis, management, prevention and control of urogenital disorders.	<ul style="list-style-type: none"> ▪ Interactive lectures ▪ Discussion ▪ Case studies ▪ PBL (10%) ▪ Office hours ▪ Self learning 	<ul style="list-style-type: none"> ▪ Quizzes ▪ Final written exam ▪ Oral discussion
(B) Alignment of Course Intended Learning Outcomes (Intellectual Skills) to Teaching Strategies and Assessment Methods:			
	Course Intended Learning Outcomes	Teaching Strategies	Assessment Strategies
b1	Distinguish between physiological and pathological performance of body cells.	<ul style="list-style-type: none"> ▪ Interactive lectures ▪ Seminars ▪ Discussion ▪ Case studies 	<ul style="list-style-type: none"> ▪ Final written exam ▪ Final practical exam ▪ Oral discussion
b2	Appraise medical history, clinical features and laboratory/radiologic findings for the differential diagnosis of urogenital	<ul style="list-style-type: none"> ▪ Interactive lectures ▪ Seminars ▪ Discussion ▪ Case studies 	<ul style="list-style-type: none"> ▪ Final written exam ▪ Final practical exam ▪ Oral discussion
(C) Alignment of Course Intended Learning Outcomes (Professional and Practical Skills) to Teaching Strategies and Assessment Methods:			
	Course Intended Learning Outcomes	Teaching Strategies	Assessment Strategies
c1	Practice medical history taking, physical/clinical examination and laboratory investigations for the diagnosis of urogenital diseases	<ul style="list-style-type: none"> ▪ Lab experiments ▪ Case studies ▪ PBL (10%) 	<ul style="list-style-type: none"> ▪ Final practical exam ▪ OSPE
c2	Perform on a model some	<ul style="list-style-type: none"> ▪ Case studies 	<ul style="list-style-type: none"> ▪ Final practical exam

Prepared by:	Reviewed by:	Head of department	Quality Unit:	Dean of Medicine Faculty	Center of Development and Quality Assurance Dean
Dr. Ahmed Hudna	Dr. Salwa Al-Ghomeri		Dr. Fadhl Shujaa Al-deen	Dr. Salwa Al-Ghomeri	

	routine technical and therapeutic procedures needed in genitourinary problems such as catheterization.	<ul style="list-style-type: none"> PBL (10%) 	<ul style="list-style-type: none"> OSPE
(D) Alignment of Course Intended Learning Outcomes (Transferable Skills) to Teaching Strategies and Assessment Methods:			
	Course Intended Learning Outcomes	Teaching Strategies	Assessment Strategies
d1	Use the information technology and internet resources efficiently for self-learning and gaining up-to-date information in the areas of interest.	<ul style="list-style-type: none"> Seminars Discussion Case studies Self-learning 	<ul style="list-style-type: none"> Oral discussion Homework Teamwork
d2	Act independently or collaboratively as a member of teamwork and communicate effectively with others.	<ul style="list-style-type: none"> Seminars Discussion Case studies Self-learning 	<ul style="list-style-type: none"> Oral discussion Homework Teamwork

IV. Course Contents:

A. Theoretical Aspect:

No.	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours	Learning Outcomes (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. <u>Female Genital System.</u> Ovary and uterine tubes.	6	14	a1,a2, b1,b2, d1,d2

Prepared by:	Reviewed by:	Head of department	Quality Unit:	Dean of Medicine Faculty	Center of Development and Quality Assurance Dean
Dr. Ahmed Hudna	Dr. Salwa Al-Ghomeri		Dr. Fadhl Shujaa Al-deen	Dr. Salwa Al-Ghomeri	

No.	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours	Learning Outcomes (CILOs)
		<p>Uterus. Vagina and vulva. Male Genital System Scrotum. Testis. Spermatic cord, Vas deferens, Epididymis, Ejaculatory duct & seminal vesicles. Penis & Mechanism of ejaculation. Perineum, Urogenital triangle, Urogenital diaphragm and Perineal Pouches. – Surface, Radiological & Clinical anatomy</p>			
2	Physiology	<p>Introduction & general functions. Physiological anatomy of the kidney & renal blood flow. Glomerular filtration & GFR. 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. Monthly ovarian cycle, endometrial cycle & menstruation.</p>	6	14	a1,a2, b1,b2, d1,d2
3	Histology	<p>Kidneys Ureter Urinary bladder Male urethra Female urethra Ovaries Fallopian tubes Uterus</p>	4	8	a1,a2, b1,b2, d1

Prepared by:	Reviewed by:	Head of department	Quality Unit:	Dean of Medicine Faculty	Center of Development and Quality Assurance Dean
Dr. Ahmed Hudna	Dr. Salwa Al-Ghomeri		Dr. Fadhl Shujaa Al-deen	Dr. Salwa Al-Ghomeri	

No.	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours	Learning Outcomes (CILOs)
		Vagina Placenta External genitalia Testes Vas deferens and ejaculatory ducts. Seminal vesicles Prostate External genitalia			
4	Pathology	<p>Congenital anomalies & Cystic diseases of the kidney.</p> <p>-Glomerular Diseases:</p> <ul style="list-style-type: none"> • Classification & clinical manifestati-ons. • Pathogenesis. • Morphological changes. • Glomerulonephritis presenting as nephritic syndrome. • Nephrotic syndrome. • Chronic glomeruonephritis <p>Systemic glomerulonephritis & Diabetic Nephropathy.</p> <p>- Tubular & Interstitial Diseases:</p> <ul style="list-style-type: none"> • Acute tubular necrosis. • Tubulointerstitial nephritis. • Urinary tract infections. • Drug-induced nephritis. • Uric acid nephropathy. <p>Tumours of the Upper & Lower urinary systems:</p> <p>Renal cell carcinoma.</p> <ul style="list-style-type: none"> • Wilm's tumour. • Transitional cell carcinoma. <p>Penile & testicular diseases:-</p> <ul style="list-style-type: none"> • Inflammatory lesions. • Cryptorchidism. • Testicular neoplasia. <p>Disorders of the prostate:</p> <ul style="list-style-type: none"> • Prostatitis. • Nodular hyperplasia. • Prostatic carcinoma. 	6	14	a1,a2, b1,b2, d1,d2

Prepared by:	Reviewed by:	Head of department	Quality Unit:	Dean of Medicine Faculty	Center of Development and Quality Assurance Dean
Dr. Ahmed Hudna	Dr. Salwa Al-Ghomeri		Dr. Fadhl Shujaa Al-deen	Dr. Salwa Al-Ghomeri	

No.	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours	Learning Outcomes (CILOs)
		<p>-Diseases of Lower Female genital tract:</p> <ul style="list-style-type: none"> Infections of female genital tract. Vulva1 & vaginal lesions. Cervical intraepithelial neoplasia & carcinoma. <p>-Uterus.</p> <p>Ovarian & tubal disease:-</p> <ul style="list-style-type: none"> Inflammatory conditions. Functional & non-neoplastic cysts. Ovarian tumour <p>-Gestational disorders:</p> <ul style="list-style-type: none"> Ectopic gestation. Gestational trophoblastic diseases. 			
5	Microbiology:	<p>Definition, cause, pathogenesis and laboratory diagnosis of:-</p> <p>-Microorganisms causing Urinary tract infections: E.Coli, Klebsiella, Proteus,Pseudomonas,Streptococcus faecalis(Enterococcus),Staphylococci, Mycobacterium tuberculosis.</p> <p>-Schistosoma Hematobium.</p> <p>-Definition, cause, pathogenesis and laboratory diagnosis of:-</p> <ul style="list-style-type: none"> Microorganisms causing Syphilis &chancroid: (Treponema Pallidum and Haemophilus decruui). Microorganisms causing Gonorrhoea (Neisseria gonorrhoea) & non-gonococcal urthritis. Microorganism causing Lymphogranuloma venerum (Chamydia trachomatis). 	4	8	a1,a2, b1,b2, d1,d2

Prepared by:	Reviewed by:	Head of department	Quality Unit:	Dean of Medicine Faculty	Center of Development and Quality Assurance Dean
Dr. Ahmed Hudna	Dr. Salwa Al-Ghomeri		Dr. Fadhl Shujaa Al-deen	Dr. Salwa Al-Ghomeri	

No.	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours	Learning Outcomes (CILOs)
		<ul style="list-style-type: none"> Herpes Simplex Virus & Papilloma virus. Microorganisms causing vaginitis, Bacterial vaginitis (Gardnerella vaginalis), Fungal vaginitis (Candida albican) and Protozoal vaginitis (Trichomonas vaginalis). <p>– HIV.</p>			
6	Pharmacology	<p>Diuretics.</p> <p>-Treatment of UTI</p> <p>-Androgens and Anabolic Steroids.</p> <p>-Estrogen, Progesteron and Contraceptives.</p> <p>-Treatment of Genital Infections: Gonorrhea, Syphilis, AIDS, Herpes, Chancroid, Prostatitis & Granuloma Inguinale.</p>	3	6	a1,a2, b1,b2,d1, d2
7	Biochemistry	<p>Renal stone and crystal formation</p> <p>- Renal function tests</p>	2	4	a1,a2, b1,b2,d1, d2
8	Medicine	<p>...Clinical picture, diagnosis, treatment & prognosis of:</p> <ul style="list-style-type: none"> Renal failure (Acute & Chronic). Proteinurea & Nephrotic syndrome in adults. Pyelonephritis. <p>– Sexual transmitted Diseases in males:Syphilis&Gonorrhea</p>	4	8	a1,a2, b1,b2,d1, d2
9	Surgery	<p>... Clinical picture, diagnosis, treatment & prognosis of:</p> <ul style="list-style-type: none"> Urolithiasis Renal abscess & chronic pyelonephritis Renal cell carcinoma &Urinary 	5	10	a1,a2, b1,b2,d1, d2

Prepared by:	Reviewed by:	Head of department	Quality Unit:	Dean of Medicine Faculty	Center of Development and Quality Assurance Dean
Dr. Ahmed Hudna	Dr. Salwa Al-Ghomeri		Dr. Fadhl Shujaa Al-deen	Dr. Salwa Al-Ghomeri	

No.	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours	Learning Outcomes (CILOs)
		bladder carcinoma • Benign Prostatic Hyperplasia (B.P.H) • Carcinoma of Prostate • Common Painful scrotal conditions (Torsion of Testis, epididemo-orchitis). • Common Painful scrotal conditions (Torsion of Testis, epididemo-orchitis). –			
10	Obstetrics	Normal pregnancy -Bleeding in early pregnancy: <ul style="list-style-type: none"> Miscarriage Ectopic gestation. Gestational trophoblastic disease. -Renal disease in pregnancy. -Infections of female genital tract. -Menstrual disturbances. - Dysfunction uterine bleeding - Genital prolapsed – Incontinence of urine	6	14	a1,a2, b1,b2,d1, d2
11	Pediatrics	Clinical picture, diagnosis, treatment & prognosis of: <ul style="list-style-type: none"> Hematuria & Nephritic Syndrome. Nephrotic Syndrome in children. – UTI in children.	3	6	a1,a2, b1,b2,d1, d2
12	Final Theoretical Exam		7 th	2	a1,a2, b1,b2, d1,d2
Number of Weeks /and Units Per Semester				108	

Prepared by:	Reviewed by:	Head of department	Quality Unit:	Dean of Medicine Faculty	Center of Development and Quality Assurance Dean
Dr. Ahmed Hudna	Dr. Salwa Al-Ghomeri		Dr. Fadhl Shujaa Al-deen	Dr. Salwa Al-Ghomeri	

B. Case Studies and Practical Aspect:

No.	Tasks/ Experiments	Week Due	Contact Hours	Learning Outcomes (CILOs)
1	Anatomy Kidney Ureters Urinary bladder Prostate and urethra Nerves, lumbosacral plexus & autonomic supply Female Genital System Male Genital System	First 5 weeks	10	b1,b2, c1,c2
2	Pathology Glomerular Diseases Congenital anomalies & Cystic diseases of the kidney. Tubular & Interstitial Diseases Tumours of the Upper & Lower urinary systems Penile & testicular diseases Disorders of the prostate Diseases of Lower Female genital tract Ovarian & tubal disease	6	20	b1,b2, c1,c2
3	Microbiology Microorganisms causing Urinary tract infections: E.Coli, Klebsiella, Proteus, Pseudomonas, Streptococcus faecalis (Enterococcus), Staphylococci, Mycobacterium tuberculosis. Schistosoma Hematobium Microorganisms causing Syphilis & chancroid: (Treponema Pallidum and Haemophils decrui) Microorganisms causing Gonorrhea (Neisseria gonorrhoea) & non-gonococcal urthritis Microorganisms causing vaginitis: Bacterial vaginitis (Gardnerella vaginalis)	First 5 weeks	10	b1,b2, c1,c2

Prepared by:	Reviewed by:	Head of department	Quality Unit:	Dean of Medicine Faculty	Center of Development and Quality Assurance Dean
Dr. Ahmed Hudna	Dr. Salwa Al-Ghomeri		Dr. Fadhl Shujaa Al-deen	Dr. Salwa Al-Ghomeri	

No.	Tasks/ Experiments	Week Due	Contact Hours	Learning Outcomes (CILOs)
	Fungal vaginitis (Candida albican). Protozoal vaginitis (Trichomonas vaginalis)			
4	Basic clinical skills History taking and examination of a patient with urogenital problem	Last 5 weeks	10	b1,b2, c1,c2
5	Final practical test	7 th	2	b1,b2, c1,c2
Number of Weeks /and Units Per Semester		7	52	

V. Teaching Strategies of the Course:

- Interactive lectures
- Discussion
- Case studies
- Seminars
- PBL
- Office hours
- Self-learning
- Lab experiments

VI. Assessment Methods of the Course:

- Quizzes
- Final written exam
- Final clinical exam
- Final practical exam
- OSPE
- Oral discussion
- Homework

Prepared by:	Reviewed by:	Head of department	Quality Unit:	Dean of Medicine Faculty	Center of Development and Quality Assurance Dean
Dr. Ahmed Hudna	Dr. Salwa Al-Ghomeri		Dr. Fadhl Shujaa Al-deen	Dr. Salwa Al-Ghomeri	

VIII. Schedule of Assessment Tasks for Students During the Semester:

No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment	Aligned Course Learning Outcomes
1	Quizzes	3 rd	5	5%	a1,a2
2	Oral desiccation & Homework	5 th	15	15%	d1,d2
3	Final Practical Exam & OSPE	6 th	30	30%	c1,c2, b1,b2
4	Final Theoretical Exam	7 th	50	50%	a1,a2, b1,b2, d1, d2
Total			100	100%	

IX. Learning Resources:

1- Required Textbook(s):

- 1- S Standing, 2016, Gray's Anatomy: The Anatomical Basis of Clinical Practice, 41st Edition, Elsevier.
- 2- K E Barrett, S M Barman, S Boitano, H L Brooks, 2015, Ganong's Review of Medical Physiology, 25th Edition, New York, McGraw-Hill Medical Education.
- 3- L Junqueira, J Carneiro, 2005, Basic Histology. Text and Atlas, 11th Edition, New York, McGraw-Hill Medical.
- 4- R Goering, H Dockrell, M Zuckerman, P Chiodini, 2019, Mims' Medical Microbiology and Immunology, 6th Edition, Edinburgh, Elsevier.
- 5- V Kumar, A Abas, J Aster, 2017, Robbins Basic Pathology, 10th Edition, Elsevier.
- 6- M A Clark, R Finkel, J A Rey, K Whalen, 2011, Lippincott's Illustrated Reviews: Pharmacology, 5th Edition, Philadelphia, Lippincott Williams & Wilkins.

2- Essential References:

- 1- R S Snell, 2000, Clinical Anatomy for Medical Students, 6th Edition, Washington, Little, Brown and Company.
- 2- J E Hall, 2013, Guyton and Hall Textbook of Medical Physiology, 13th Edition,

Prepared by:	Reviewed by:	Head of department	Quality Unit:	Dean of Medicine Faculty	Center of Development and Quality Assurance Dean
Dr. Ahmed Hudna	Dr. Salwa Al-Ghomeri		Dr. Fadhl Shujaa Al-deen	Dr. Salwa Al-Ghomeri	

Philadelphia, Saunders.

- 3- V Kumar, A Abas, J Aster, 2020, Robbins & Cotran Pathologic Basis of Disease, 9th Edition, Philadelphia, Saunders.
- 4- C Ray, K J Ryan, 2003, Sherris Medical Microbiology: An Introduction to Infectious Diseases, 4th Edition, New York, McGraw-Hill Medical Education.
- 5- B Katzung, 2017, Basic and Clinical Pharmacology, 14th Edition, New York, McGraw-Hill Medical Education.

3- Electronic Materials and Web Sites etc.:

Websites:

- 1- The Visible Body Learn Site
<https://www.visiblebody.com/learn/nervous>
- 2- Medical news today
<https://www.medicalnewstoday.com/articles/307076>

X. Course Policies: (Based on the Uniform Students' By law (2007))

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007)

Prepared by:	Reviewed by:	Head of department	Quality Unit:	Dean of Medicine Faculty	Center of Development and Quality Assurance Dean
Dr. Ahmed Hudna	Dr. Salwa Al-Ghomeri		Dr. Fadhl Shujaa Al-deen	Dr. Salwa Al-Ghomeri	

	shall apply.
6	Forgery and Impersonation: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: The University official regulations in force will be strictly observed and students shall comply with all rules and regulations of the examination set by the Department, Faculty and University Administration.

Prepared by:	Reviewed by:	Head of department	Quality Unit:	Dean of Medicine Faculty	Center of Development and Quality Assurance Dean
Dr. Ahmed Hudna	Dr. Salwa Al-Ghomeri		Dr. Fadhl Shujaa Al-deen	Dr. Salwa Al-Ghomeri	

Faculty of Medicine

Bachelor Program of Medicine and Surgery

Course Plan (Syllabus) of

Genito-Urinary system

Course Code. (A21P313)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:		Office Hours					
Location & Telephone No.:	----						
E-mail:	--@--.--	SAT	SUN	MON	TUE	WED	THU

2023

Prepared by:	Reviewed by:	Head of department	Quality Unit:	Dean of Medicine Faculty	Center of Development and Quality Assurance Dean
Dr. Ahmed Hudna	Dr. Salwa Al-Ghomeri		Dr. Fadhl Shujaa Al-deen	Dr. Salwa Al-Ghomeri	

II. General Information:

Course Title:	Genito-Urinary system				
Course Code:	A21P313				
Credit Hours:	Credit Hours	Theory Contact Hours		Practical Contact Hours	
		Lecture	Tutorial/Seminar	Lab	
	8	6	--	4	-
Level/ Semester at which this Course is offered:	3rd Level / 1st Semester				
Pre –Requisite (if any):	Physiology, Biochemistry, Anatomy Histology, Pathology and Pharmacology.				
Co –Requisite (if any):	None				
Program (s) in which the Course is Offered:	Bachelor of Medicine and surgery				
Language of Teaching the Course:	English				
Location of Teaching the Course:	Faculty of Medicine				
Prepared by:	Dr. Ahmed Hudna				
11	Date and Number of Approval by Council:	٢٠٢٣			

III. Course Description:

This block aims to provide students with the basic, practical, attitudes and skills concerning Genito-urinary system. Students will be exposed to fundamental concepts and practical issues in

Prepared by:	Reviewed by:	Head of department	Quality Unit:	Dean of Medicine Faculty	Center of Development and Quality Assurance Dean
Dr. Ahmed Hudna	Dr. Salwa Al-Ghomeri		Dr. Fadhl Shujaa Al-deen	Dr. Salwa Al-Ghomeri	

Anatomy, Embryology, Histology, Physiology, pathology, pharmacology, microbiology, and clinical skills in an integrated approach; they will apply such concepts to understand common disorders in these systems. Also, students will be exposed to important diseases in Medicine and Surgery and Gyno-Obstetrics that are closely linked to these systems.

IV. Course Intended Learning Outcomes (CILOs) :

Upon successful completion of the Course, student will be able to:

	A. Knowledge and Understanding:
a1	Describe the anatomical and histological structures as well as physiological functions of the urogenital system.
a2	Recognize the infectious and non-infectious etiology, risk factors, pathogenesis, clinical features, complications, diagnosis, management, prevention and control of urogenital disorders.
	B. Intellectual Skills:
b1	Distinguish between physiological and pathological performance of body cells.
b2	Appraise medical history, clinical features and laboratory/radiologic findings for the differential diagnosis of urogenital
	C. Professional and Practical Skills:
c1	Practice medical history taking, physical/clinical examination and laboratory investigations for the diagnosis of urogenital diseases
c2	Perform on a model some routine technical and therapeutic procedures needed in genitourinary problems such as catheterization.
	D. Transferable Skills:
d1	Use the information technology and internet resources efficiently for self-learning and gaining up-to-date information in the areas of interest.
d2	Act independently or collaboratively as a member of teamwork and communicate effectively with others.
I= Int rod	

Prepared by:	Reviewed by:	Head of department	Quality Unit:	Dean of Medicine Faculty	Center of Development and Quality Assurance Dean
Dr. Ahmed Hudna	Dr. Salwa Al-Ghomeri		Dr. Fadhl Shujaa Al-deen	Dr. Salwa Al-Ghomeri	

used,
P=
Practical
or
M/
A=
Mastered
/Advanced

IV. Course Contents:

A. Theoretical Aspect:

No.	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours
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. <u>Female Genital System.</u> Ovary and uterine tubes. Uterus. Vagina and vulva. <u>Male Genital System</u> Scrotum.	7	14

Prepared by:	Reviewed by:	Head of department	Quality Unit:	Dean of Medicine Faculty	Center of Development and Quality Assurance Dean
Dr. Ahmed Hudna	Dr. Salwa Al-Ghomeri		Dr. Fadhl Shujaa Al-deen	Dr. Salwa Al-Ghomeri	

No.	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours
		<p>Testis. Spermatic cord, Vas deferens, Epididymis, Ejaculatory duct & seminal vesicles. Penis & Mechanism of ejaculation. Perineum, Urogenital triangle, Urogenital diaphragm and Perineal Pouches.</p> <p>– Surface, Radiological & Clinical anatomy</p>		
2	Physiology	<p>Introduction & general functions. Physiological anatomy of the kidney & renal blood flow. Glomerular filtration & GFR. 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. Monthly ovarian cycle, endometrial cycle & menstruation.</p>	7	14
3	Histology	<p>Kidneys Ureter Urinary bladder Male urethra Female urethra Ovaries Fallopian tubes Uterus Vagina Placenta External genitalia Testes Vas deferens and ejaculatory ducts.</p>	4	8

Prepared by:	Reviewed by:	Head of department	Quality Unit:	Dean of Medicine Faculty	Center of Development and Quality Assurance Dean
Dr. Ahmed Hudna	Dr. Salwa Al-Ghomeri		Dr. Fadhl Shujaa Al-deen	Dr. Salwa Al-Ghomeri	

No.	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours
		Seminal vesicles Prostate External genitalia		
4	Pathology	<p>Congenital anomalies & Cystic diseases of the kidney.</p> <p>-Glomerular Diseases:</p> <ul style="list-style-type: none"> • Classification & clinical manifestati-ons. • Pathogenesis. • Morphological changes. • Glomerulonephritis presenting as nephritic syndrome. • Nephrotic syndrome. • Chronic glomeruonephritis <p>Systemic glomerulonephritis & Diabetic Nephropathy.</p> <p>- Tubular & Interstitial Diseases:</p> <ul style="list-style-type: none"> • Acute tubular necrosis. • Tubulointerstitial nephritis. • Urinary tract infections. • Drug-induced nephritis. • Uric acid nephropathy. <p>Tumours of the Upper & Lower urinary systems:</p> <p>Renal cell carcinoma.</p> <ul style="list-style-type: none"> • Wilm's tumour. • Transitional cell carcinoma. <p>Penile & testicular diseases:-</p> <ul style="list-style-type: none"> • Inflammatory lesions. • Cryptorchidism. • Testicular neoplasia. <p>Disorders of the prostate:</p> <ul style="list-style-type: none"> • Prostatitis. • Nodular hyperplasia. • Prostatic carcinoma. <p>-Diseases of Lower Female genital tract:</p> <ul style="list-style-type: none"> • Infections of female genital tract. • Vulval & vaginal lesions. • Cervical intraepithelial 	7	14

Prepared by:	Reviewed by:	Head of department	Quality Unit:	Dean of Medicine Faculty	Center of Development and Quality Assurance Dean
Dr. Ahmed Hudna	Dr. Salwa Al-Ghomeri		Dr. Fadhl Shujaa Al-deen	Dr. Salwa Al-Ghomeri	

No.	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours
		<p>neoplasia & carcinoma.</p> <p>-Uterus.</p> <p>Ovarian & tubal disease:-</p> <ul style="list-style-type: none"> Inflammatory conditions. Functional & non-neoplastic cysts. Ovarian tumour <p>-Gestational disorders:</p> <ul style="list-style-type: none"> Ectopic gestation. Gestational trophoblastic diseases. 		
5	Microbiology:	<p>Definition, cause, pathogenesis and laboratory diagnosis of:-</p> <p>-Microorganisms causing Urinary tract infections: E.Coli, Klebsiella, Proteus, Pseudomonas, Streptococcus faecalis (Enterococcus), Staphylococci, Mycobacterium tuberculosis.</p> <p>-Schistosoma Hematobium.</p> <p>-Definition, cause, pathogenesis and laboratory diagnosis of:-</p> <ul style="list-style-type: none"> Microorganisms causing Syphilis & chancroid: (Treponema Pallidum and Haemophilus decruui). Microorganisms causing Gonorrhoea (Neisseria gonorrhoea) & non-gonococcal urthritis. Microorganism causing Lymphogranuloma venereum (Chlamydia trachomatis). Herpes Simplex Virus & Papilloma virus. Microorganisms causing vaginitis, Bacterial vaginitis (Gardnerella vaginalis), Fungal vaginitis (Candida albican) 	6	12

Prepared by:	Reviewed by:	Head of department	Quality Unit:	Dean of Medicine Faculty	Center of Development and Quality Assurance Dean
Dr. Ahmed Hudna	Dr. Salwa Al-Ghomeri		Dr. Fadhl Shujaa Al-deen	Dr. Salwa Al-Ghomeri	

No.	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours
		and Protozoal vaginitis (Trichomonas vaginalis. – HIV.		
6	Pharmacology	Diuretics. -Treatment of UTI -Androgens and Anabolic Steroids. -Estrogen, Progesteron and Contraceptives. -Treatment of Genital Infections: Gonorrhea, Syphilis, AIDS, Herpes, Chancroid, Prostatitis & Granuloma Inguinale.	5	10
7	Biochemistry	Renal stone and crystal formation - Renal function tests	2	4
8	Medicine	... Clinical picture, diagnosis, treatment & prognosis of: <ul style="list-style-type: none"> • Renal failure (Acute & Chronic). • Proteinurea & Nephrotic syndrome in adults. • Pyelonephritis. – Sexual transmitted Diseases in males:Syphilis&Gonorrhea	4	8
9	Surgery	... Clinical picture, diagnosis, treatment & prognosis of: <ul style="list-style-type: none"> • Urolithiasis • Renal abscess & chronic pyelonephritis • Renal cell carcinoma &Urinary bladder carcinoma • Benign Prostatic Hyperplasia (B.P.H) • Carcinoma of Prostate • Common Painful scrotal conditions (Torsion of Testis, epididymo-orchitis). 	5	10

Prepared by:	Reviewed by:	Head of department	Quality Unit:	Dean of Medicine Faculty	Center of Development and Quality Assurance Dean
Dr. Ahmed Hudna	Dr. Salwa Al-Ghomeri		Dr. Fadhl Shujaa Al-deen	Dr. Salwa Al-Ghomeri	

No.	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours
		<ul style="list-style-type: none"> Common Painful scrotal conditions (Torsion of Testis, epididymo-orchitis). 		
10	Obstetrics	<p>Normal pregnancy</p> <p>-Bleeding in early pregnancy:</p> <ul style="list-style-type: none"> Miscarriage Ectopic gestation. Gestational trophoblastic disease. <p>-Renal disease in pregnancy. -Infections of female genital tract. -Menstrual disturbances. - Dysfunction uterine bleeding - Genital prolapsed</p> <p>- Incontinence of urine</p>	7	14
11	Pediatrics	<p>Clinical picture, diagnosis, treatment & prognosis of:</p> <ul style="list-style-type: none"> Hematuria & Nephritic Syndrome. Nephrotic Syndrome in children. <p>- UTI in children.</p>	3	6
12	Final Theoretical Exam		8	2
Number of Weeks /and Units Per Semester				116

B. Case Studies and Practical Aspect:

No.	Tasks/ Experiments	Week Due	Contact Hours
1	<p>Anatomy</p> <p>Kidney</p> <p>Ureters</p>	First 5 weeks	10

Prepared by:	Reviewed by:	Head of department	Quality Unit:	Dean of Medicine Faculty	Center of Development and Quality Assurance Dean
Dr. Ahmed Hudna	Dr. Salwa Al-Ghomeri		Dr. Fadhl Shujaa Al-deen	Dr. Salwa Al-Ghomeri	

No.	Tasks/ Experiments	Week Due	Contact Hours
	Urinary bladder Prostate and urethra Nerves, lumbosacral plexus & autonomic supply Female Genital System Male Genital System		
2	Pathology Glomerular Diseases Congenital anomalies & Cystic diseases of the kidney. Tubular & Interstitial Diseases Tumours of the Upper & Lower urinary systems Penile & testicular diseases Disorders of the prostate Diseases of Lower Female genital tract Ovarian & tubal disease	6	20
3	Microbiology Microorganisms causing Urinary tract infections: E.Coli, Klebsiella, Proteus, Pseudomonas, Streptococcus faecalis (Enterococcus), Staphylococci, Mycobacterium tuberculosis. Schistosoma Hematobium Microorganisms causing Syphilis & chancroid: (Treponema Pallidum and Haemophils decrui) Microorganisms causing Gonorrhoea (Neisseria gonorrhoea) & non-gonococcal urthritis Microorganisms causing vaginitis: Bacterial vaginitis (Gardnerella vaginalis) Fungal vaginitis (Candida albican). Protozoal vaginitis (Trichomonas vaginalis)	First 5 weeks	10
4	Basic clinical skills History taking and examination of a patient with urogenital problem	Last 5 weeks	10

Prepared by:	Reviewed by:	Head of department	Quality Unit:	Dean of Medicine Faculty	Center of Development and Quality Assurance Dean
Dr. Ahmed Hudna	Dr. Salwa Al-Ghomeri		Dr. Fadhl Shujaa Al-deen	Dr. Salwa Al-Ghomeri	

No.	Tasks/ Experiments	Week Due	Contact Hours
5	Final practical test	7	2
Number of Weeks /and Units Per Semester		7	52

V. Teaching Strategies of the Course:

- Interactive lectures
- Discussion
- Case studies
- Seminars
- PBL
- Office hours
- Self-learning
- Lab experiments
- Training

VI. Assessment Methods of the Course:

- Quizzes
- Final written exam
- Final clinical exam
- Final practical exam
- OSPE
- Oral discussion
- Homework

VIII. Schedule of Assessment Tasks for Students During the Semester:

Prepared by:	Reviewed by:	Head of department	Quality Unit:	Dean of Medicine Faculty	Center of Development and Quality Assurance Dean
Dr. Ahmed Hudna	Dr. Salwa Al-Ghomeri		Dr. Fadhl Shujaa Al-deen	Dr. Salwa Al-Ghomeri	

No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment	
1	Quizzes	3 rd	5	5%	
2	Oral desiccation & Homework	5 th	15	15%	
3	Final Practical Exam & OSPE	6 th	30	30%	
4	Final Theoretical Exam	7 th	50	50%	
Total			100	100%	

IX. Learning Resources:

- *Written in the following order: Author, Year of publication, Title, Edition, Place of publication, Publisher.*

1- Required Textbook(s) (maximum two):

- 6- S Standring, 2016, Gray's Anatomy: The Anatomical Basis of Clinical Practice, 41st Edition, Elsevier.
- 7- K E Barrett, S M Barman, S Boitano, H L Brooks, 2015, Ganong's Review of Medical Physiology, 25th Edition, New York, McGraw-Hill Medical Education.
- 8- L Junqueira, J Carneiro, 2005, Basic Histology. Text and Atlas, 11th Edition, New York, McGraw-Hill Medical.
- 9- R Goering, H Dockrell, M Zuckerman, P Chiodini, 2019, Mims' Medical Microbiology and Immunology, 6th Edition, Edinburgh, Elsevier.
- 10- V Kumar, A Abas, J Aster, 2017, Robbins Basic Pathology, 10th Edition, Elsevier.
- 11- M A Clark, R Finkel, J A Rey, K Whalen, 2011, Lippincott's Illustrated Reviews: Pharmacology, 5th Edition, Philadelphia, Lippincott Williams & Wilkins.

2- Essential References:

- 12- R S Snell, 2000, Clinical Anatomy for Medical Students, 6th Edition, Washington, Little, Brown and Company.
- 13- J E Hall, 2013, Guyton and Hall Textbook of Medical Physiology, 13th Edition, Philadelphia, Saunders.
- 14- V Kumar, A Abas, J Aster, 2020, Robbins & Cotran Pathologic Basis of Disease, 9th Edition, Philadelphia, Saunders.
- 15- C Ray, K J Ryan, 2003, Sherris Medical Microbiology: An Introduction to Infectious

Prepared by:	Reviewed by:	Head of department	Quality Unit:	Dean of Medicine Faculty	Center of Development and Quality Assurance Dean
Dr. Ahmed Hudna	Dr. Salwa Al-Ghomeri		Dr. Fadhl Shujaa Al-deen	Dr. Salwa Al-Ghomeri	

Diseases, 4th Edition, New York, McGraw-Hill Medical Education.

16- B Katzung, 2017, Basic and Clinical Pharmacology, 14th Edition, New York, McGraw-Hill Medical Education.

3- Electronic Materials and Web Sites etc.:

Websites:

3- The Visible Body Learn Site

<https://www.visiblebody.com/learn/nervous>

4- Medical news today

<https://www.medicalnewstoday.com/articles/307076>

خطأ! لم يتم العثور على مصدر المرجع. خطأ! لم يتم العثور على مصدر المرجع.

XI. Course Policies: (Based on the Uniform Students' Bylaw (2007))

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Forgery and Impersonation: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the

Prepared by:	Reviewed by:	Head of department	Quality Unit:	Dean of Medicine Faculty	Center of Development and Quality Assurance Dean
Dr. Ahmed Hudna	Dr. Salwa Al-Ghomeri		Dr. Fadhl Shujaa Al-deen	Dr. Salwa Al-Ghomeri	

	Uniform Students' Bylaw (2007) shall apply.
7	Other policies: The University official regulations in force will be strictly observed and students shall comply with all rules and regulations of the examination set by the Department, Faculty and University Administration.

Prepared by:	Reviewed by:	Head of department	Quality Unit:	Dean of Medicine Faculty	Center of Development and Quality Assurance Dean
Dr. Ahmed Hudna	Dr. Salwa Al-Ghomeri		Dr. Fadhl Shujaa Al-deen	Dr. Salwa Al-Ghomeri	