



Course Specifications

Course Title:	Renal Block
Course Code:	REN123
Program:	Bachelor of Medicine, Bachelor of Surgery (MBBS)
Department:	NA
College:	College of Medicine
Institution:	Alfaisal University

Table of Contents

A. Course Identification	3
6. Mode of Instruction (mark all that apply)	3
B. Course Objectives and Learning Outcomes	3
1. Course Description	3
2. Course Main Objective.....	3
3. Course Learning Outcomes	4
C. Course Content	4
D. Teaching and Assessment	5
1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods	5
2. Assessment Tasks for Students	5
E. Student Academic Counseling and Support	5
F. Learning Resources and Facilities	6
1. Learning Resources	6
2. Facilities Required.....	6
G. Course Quality Evaluation	6
H. Specification Approval Data	7

A. Course Identification

1. Credit hours:	3 (2+2+0)
2. Course type	
a.	University <input type="checkbox"/> College <input checked="" type="checkbox"/> Department <input type="checkbox"/> Others <input type="checkbox"/>
b.	Required <input checked="" type="checkbox"/> Elective <input type="checkbox"/>
3. Level/year at which this course is offered:	Sem 2, Year 1
4. Pre-requisites for this course (if any):	None
5. Co-requisites for this course (if any):	None

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	31	72%
2	TBL, Labs, LGD	12	28%

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	Lecture	31
2	Laboratory/Studio	
3	Tutorial	12
	Total	43

B. Course Objectives and Learning Outcomes

1. Course Description

This is a multidisciplinary block integrating topics in basic and applied clinical anatomy, histology, embryology, physiology and biochemistry. This course will cover the principles of basic renal processes, fluid balance and acid-base physiology from the systemic to the cellular and molecular levels. It will focus on functional mechanisms and homeostatic regulatory processes that maintain the volume and composition of body fluids. The kidney's homeostatic mechanisms will be discussed in relation to human pathophysiological conditions.

2. Course Main Objective

This course focusses on functional mechanisms and homeostatic regulatory processes that maintain the volume and composition of body fluids. The role of the kidney as the main filtering system of the extracellular fluid, reabsorption of glucose, water, and electrolytes will be covered in detail.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	Knowledge and Understanding	
1.1	Describe the developmental, microscopic and gross anatomical features of the genitourinary tract.	PLO1,3,5
1.2	Discuss the role of the kidney in maintaining electrolyte balance and blood pressure.	PLO1,3,5
1.3	Discuss the role of the kidney in urine production (ultrafiltration, reabsorption, and secretion).	PLO1,3,5
1.4	Discuss the role of the kidney regulating blood pH.	PLO1,3,5
2	Skills :	
2.1	Perform hypothetical deductive reasoning using TBL cases to relate renal structure and function with common diseases	PLO1,3,5
3	Values:	
3.1	Adhere to the attendance policy.	
3.2	Maintain professional conduct with colleagues, faculty and staff.	

C. Course Content

No	List of Topics	Contact Hours
1	Anatomy – including TBLs, Lab 1. Microscopic anatomy of the urinary tract a. Kidney b. Ureter c. Bladder d. Urethra 2. Developmental anatomy of the urinary tract and associated anomalies 3. Gross anatomy of the: a. Posterior abdominal wall (muscles, abdominal aorta, IVC, lumbar and sacral plexus) b. Kidney c. Ureter d. Urinary bladder e. Prostate f. Urethra	20
2	Physiology – including TBLs, Lab 1. Body fluids and edema 2. Renal blood flow 3. Glomerular filtration 4. Tubular Processing 5. Tubular reabsorption 6. Regulation of reabsorption, 7. Regulation of osmolality 8. Antidiuretic hormone 9. Integration of renal mechanisms 10. Diuretics and kidney diseases 11. Acid base balance	23
Total		43

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	Knowledge and Understanding		
1.1	Describe the developmental, microscopic and gross anatomical features of the genitor-urinary tract	Lectures, Labs, TBLs, Large group discussions	Formative and summative assessments
1.2	Discuss the role of the kidney in maintaining electrolyte balance, and blood pressure	Lectures, Labs, TBLs, Large group discussions	Formative and summative assessments
1.3	Discuss the role of the kidney in urine production (ultrafiltration, reabsorption, and secretion)	Lectures, Labs, TBLs, Large group discussions	Formative and summative assessments
1.4	Discuss the role of the kidney regulating blood pH	Lectures, Labs, TBLs, Large group discussions	Formative and summative assessments
2.0	Skills		
2.1	Perform hypothetical deductive reasoning using TBL cases to relate renal structure and function with common diseases	TBLs	Formative assessment
3.0	Values		
3.1	Adhere to the attendance policy.		Continuous assessment
3.2	Maintain professional conduct with colleagues, faculty and staff.		Continuous assessment

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	TBL	2,3	5
2	Final Exam	5	95

*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

The CoM program established its own mentorship program that employs all full-time faculty as mentors. Through this program, every medical student in the program is assigned a mentor at the beginning of their first semester of studies. The program has a broad scope covering academic advising and counseling. The mentors handle all aspects related to academic advising, including academic planning, academic performance review, and advice on course drop or withdrawal, study skills, and time management.

F. Learning Resources and Facilities

1. Learning Resources

Required Textbooks	<ol style="list-style-type: none"> 1. Clinical Anatomy by Keith L Moore 2. Gray's anatomy for students. 3. Histology: Ross, Pawlina and Kaye, Lippincott Williams and Wilkins, 2003. 4. Textbook of Medical Physiology, Guyton & Hall, Thirteenth Edition, Published by Saunders Elsevier, 2016. 5. Biochemistry By Pamella et al (Lippincott) 6. Langman's Medical Embryology-Sadler, Lippincott Williams and Wilkins, 2006
Essential References Materials	<ol style="list-style-type: none"> 1. Cunningham's manual of practical anatomy 2. Color atlas by Grant's
Electronic Materials	<ol style="list-style-type: none"> 1. Integrated medical curriculum: http://imc.meded.com 2. http://anatomy.med.umich.edu/ 3. PowerPoint presentations uploaded on Alfaisal eLearning portal
Other Learning Materials	

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Classrooms, Dissection Facilities, Examination Facilities
Technology Resources (AV, data show, Smart Board, software, etc.)	AV (Audio-Visual), Smartboard, Moodle (E-learning Management), Anatomage
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	Microscopes

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Course and Faculty Evaluation Survey	Students	Survey

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)

Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)

Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	
Reference No.	
Date	