



COURSE SPECIFICATION

Faculty of Medicine– Mansoura University

(A) Administrative information

(1) Programme offering the course.	Renal nutrition Fellowship(fRN)
(2) Part of the programme.	Semester 1
(3) Date of last approval of programme specification by Faculty council	9/8/2016
(4) Course title.	<ol style="list-style-type: none">1. Renal physiology.2. Physiology of metabolism& Principals of nutrition basics3. Renal-endocrine axis4. Kidney function in health and disease
(5) Course code.	fRN1
(6) Total teaching hours.	6 credit hours

(B) Professional information

(1) Course Aims:

The broad aims of the course are as follows:

- Provide in-depth knowledge of basic renal structure, microcirculation and physiological functions.
- Emphasize on renal regulation of electrolytes.
- Spots the physiology of metabolism of human body, energy requirements and expenditure.
- Give information about different aspects of reno-endocrinal interaction
- Provide knowledge about basics of nutrition

(2) Intended Learning Outcomes (ILOs):

On successful completion of the course, the candidate will be able to:

A- Knowledge and Understanding

a1 Explain the basics of different physiological renal functions

a2 Recognize the main physiologic mechanisms involved in Na, K, Ca, Ph and other electrolytes handling by the kidney

a3 Demonstrate understanding of basics of body heat balance, caloric requirements in different body states and how to assess.

a4 Recognize different pathways of reno-endocrinal axis and their effect on nutritional status in renal disease

a5 Recognize basic principals of nutrition .

B- Intellectual skills

B1 Utilize available resources to achieve adequate nutritional support for renal patients.

C- Professional/practical skills

D- Communication & Transferable skills

(3) Course content: Compulsory

Course title	Code	Hours/ Lectures	Total Teaching Hours	Credit Hours
<u>1-Renal Physiology</u>	FRN1		90	6
Structure and function of the kidneys		4		
Renal microcirculation		4		
Physiology of body fluids		6		
Glomerular filtration and renal blood flow		6		
Renal transport mechanisms: NaCl and water reabsorption along the nephron		9		
Regulation of potassium balance		6		
Regulation of calcium and phosphate homeostasis		6		
<u>2- Kidney function in health and disease</u>		4		
<u>3- Reno-endocrinal axis</u>		5		
<u>4- Physiology of metabolism and nutrition basics</u>				
Dietary recommendation		6		
Planning a healthy diet (principals & guides)		6		
Metabolism of protein, carbohydrates and lipids		8		
Energy requirements and expenditure in health & disease	8			
Food guide pyramid	6			
Food composition tables and food exchange list	6			

(4) Teaching methods: Online

- 4.1: Online lectures with discussions, quizzes
- 4.2: Online problem –solving case scenarios

(5) Assessment methods:

Online MCQs and EMQs exam after end of 1st semester

(6) References of the course.

Textbooks

- Renal Physiology – Mosby Physiology Monograph Series
- Comprehensive clinical nephrology textbook
- Nutrition in Kidney disease, 2nd edition
- Basics of human nutrition

Periodicals

- Nephron physiology
- American journal of physiology–Renal physiology

Websites

- American society of cell biology
- The Nephron Information Center
- ESNT- virtual academy

(7) Facilities and resources mandatory for course completion.

Intranet with a vast learning material

Program specification and handbooks

A very rich library and computer laboratories

Course director:

Prof.: Hussein shaeshaa

Course co-ordinator:

Dr. Ahmed Mohammed Abd El Wahab

Date: