



## COURSE SPECIFICATION

### Renal dialysis

#### Faculty of Medicine- Mansoura University

#### (A) Administrative information

<b>(1) Programme offering the course:</b>	Postgraduate MD degree of Internal Medicine
<b>(2) Final award / degree</b>	MD degree
<b>(3) Department offering the programme:</b>	Nephrology Unit, Internal Medicine Department
<b>(4) Department responsible for teaching the course:</b>	Nephrology Unit, Internal Medicine Department
<b>(5) Part of the programme:</b>	Second part
<b>(6) Course title:</b>	Renal dialysis
<b>(7) Course code:</b>	MED 510RD
<b>(8) Credit hours</b>	2hours
<b>(9) Total teaching hours:</b>	30 lecture

## **(B) Professional information**

### **(1) Course Aims:**

The broad aims of the course are as follows:

- Give an in-depth medical and technical knowledge on dialysis
- Enable the candidates to apply principles of care of patients on dialysis.

### **(2) Intended Learning Outcomes (ILOs):**

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

#### **A- Knowledge and Understanding**

<b>A1</b>	Describe treatment options for End Stage Renal Disease.
<b>A2</b>	Discuss principles of hemodialysis in acute and chronic renal failure.
<b>A3</b>	Identify different types of vascular accesses and access complications along with management and care.
<b>A4</b>	Identify complications and emergencies associated with dialysis treatment.
<b>A5</b>	Discuss various medications used in hemodialysis
<b>A6</b>	Discuss nutritional needs in dialysis patients
<b>A7</b>	Explain the purpose of water treatment and identify the components of the water treatment systems as it relates to the hemodialysis facility
<b>A8</b>	Recognize methods of assessment of adequacy of dialysis

## B- Intellectual skills

<b>B1</b>	Assess problems and complications of vascular access and demonstrate appropriate interventions.
<b>B2</b>	interpret different blood tests in hemodialysis patients
<b>B3</b>	Differentiate between different extracorporeal modalities.
<b>B4</b>	Monitor equipment function, interpreting and utilizing information provided.

### (3) Course content.

<b>Subjects</b>	<b>Lectures</b>
End stage kidney disease (ESKD)	2
Management of ESKD and assessment of patients for dialysis	2
Temporary and permanent vascular access	1
Renal replacement therapy	2
Principles of haemodialysis	1
Dialysis machine and dialyser	1
Dialysate and water purification	1
Target weight , dialysis prescription and adequacy	1
Initiation, monitoring and troubleshooting dialysis complications	3
Related extracorporeal modalities (Hi flux,Haemoperfusion,Haemodialfiltration...)	1
Dialysis adequacy	1
Complication of ESKD: anemia	2

Complication of ESKD: bone mineral disorders	2
Complication of ESKD: infection	1
Complication of ESKD: cardiovascular diseases	1
Nutrition in dialysis	1
Dialysis in acute kidney injury	1
Dialysis in special situation(diabetics, elderly, pregnancy, surgery)	3
Drug prescription in patients on dialysis	1
Transplantation for dialysis patients	1
Peritoneal dialysis	1
<b>Total teaching hours</b>	<b>30</b>

#### (4) Teaching methods:

4.1: Lectures

4.2: Small group discussion with case study and problem solving

#### (5) Assessment methods:

5.1:Written exam (20 marks), MCQ (5marks).

5.2:Oral examination (25 marks).

5.3:**Total mark:** 50

#### (6) References of the course:

**6.1: Comprehensive clinical nephrology**

**6.2: Oxford handbook of dialysis**

#### (7) Facilities and resources mandatory for course completion:

Lecture halls and data show.

Course coordinator: Prof.Dr. Nagy Abdelhady

Head of the department: Prof.Dr. Salah El gamal