COURSE SPECIFICATION

Faculty of Medicine- Mansoura University

(A) Administrative information

(1) **Programme offering the course:**	Dialysis Fellowship(fD)
(2) **Part of the programme:**	Semester 3
(3) **Date of last approval of programme specification by Faculty council**	9/8/2016
(4) **Course title:**	**Blood-based therapies and dialysis adequacy**
(5) **Course Code**	**fD4**
(6) **Total teaching hours:**	9 credit hours

(B) Professional information

(1) Course Aims:

The broad aims of the course are as follows:

- Adress doctors about venous access, creation of AVF and their complications.
- Provide study modules designed to give candidates a sound understanding of hemodialysis prescription, complications and anticoagulation
- .Provide information about types of CRRT, home and intensive dialysis
- Gives information about hemodiafilteration, apharesis, hemoperfusion and relevance of sorbent technology today.

(2) Intended Learning Outcomes (ILOs):

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

A- Knowledge and Understanding

A13. Explain different routes of blood access, their basics, monitoring and complications

A14. Recognize acute and chronic hemodialysis prescription and anticoagulation

A15. Show good knowledge about complications of hemodialysis

A16. Explain basics, indications and modalities of CRRT

A17. Recognize basics and indications of therapeutic apharesis and hemoperfusion

B- Intellectual skills:

B3 Construct appropriate management strategies (both diagnostic and therapeutic) for patients with common diseases, both acute and chronic, including medical, psychiatric, and surgical conditions.

B4 Design an initial course of management for stabilization of patients with serious illnesses.

B5 Classify factors that place individuals at risk for disease or injury, to determine strategies for appropriate response.

B6 Retrieve, analyze, and synthesize relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM).

B7 Recognize and cope with uncertainty by:

a. Accepting that uncertainty is unavoidable in the practice of medicine.

b. Using appropriate cognitive strategies to deal with uncertainty when it arises.

C- Professional/practical skills

c4- Diagnose of common and life threatening illnesses affecting the body and each of its major organ systems, presenting throughout the age spectrum.

c5- Write competently and evaluate professional reports and referral letters related to his specialty

c6- Manage and perform a CRRT session specially in critically ill patients

D- Communication & Transferable skills

D2. Work effectively within the health care team.

D3. Solve problems related to patients, work management, and among colleagues.

D4. Cope with a changing work environment.

(3) Course content:

Course title	Code	Hours/ lectures	Credit hours
	fD4		9
-Types of vascular access		6	
-Guidelines to increase fistula use & vessel preservation		4	
-AVF perioperative evaluation		6	
-Possible locations of AVF		3	
-Initial canulation of new AVF		3	
-AV grafts		3	
- Physical examination of AVF, AVG		3	
- Rules for cannulation of AVF, AVG.		3	
-Venous catheter types, sites of insertion and technique		2	
-Cuffed catheters insertion		2	
-Complications of venous catheters		4	
-Care for catheters		3	
-AV access complications		6	
-Acute & chronic HD prescription		12	
-Complications of HD		12	
-Dialyzer reuse		8	
-Anticoagulation		6	
-CRRT		12	
-Home & intensive HD		10	
-HDF		8	
-Therapeutic apharesis		10	
-Dialysis & hemoperfusion in treating poisoning		9	

***Clinical training 6hrs./w for 15 weeks (3 credit hours)**

(4) Teaching methods:

4.1:Online lectures and discussions.

4.2: Problem solving case scenarios.

4.3: Online training courses for procedural skills.

4.4: Clinical training in dialysis units

Assessment methods:

-Online MCQs and EMQs exam after end of 3rd semester.

-Log book for assessment of activities throughout the whole program.

(5) References of the course:

Textbooks

- Brenner's textbook of nephrology.
- Handbook of hemodialysis 5th edition
- Oxford handbook of dialysis
- Chronic Kidney Disease, Dialysis, and Transplantation, Companion to Brenner and Rector's the Kidney (by Brian J.G. Pereira; Mohamed Sayegh & Peter R. Blake.
- Comprehensive clinical Nephrology textbook.
- Essential Atlas of Nephrology & Hypertension. Schrier, Robert W.; Cohen, A.H. (Eds.)
- Oxford textbook of medicine
- Oxford textbook of clinical Nephrology
- Shaul El-Massry textbook of nephrology.
- The Washington Manual® Nephrology Subspecialty Consult. Irfan A Agha, and Gopa Bhattacharyya Green

Periodicals

- Advances in Chronic Kidney Disease.
- American Journal of Hypertension.
- American Journal of Kidney Diseases.
- Clinical nephrology.
- Current Opinion in Nephrology & Hypertension.
- Journal of the American Society of Nephrology.
- Kidney International.
- Nephrology, dialysis and transplantation.
- Nephron Clinical Practice.
- Nephron Experimental Nephrology
- Scandinavian Journal of Urology and Nephrology.

- Seminars in Dialysis.
- Seminars in Nephrology
- The Internet Journal of Nephrology.

Web Sites:

- American Society of Nephrology
- ESNT virtual academy
- American Society of Transplantation
- EDTA-ERA Educational
- Kidney Directions
- National Kidney Foundation
- Nephrology gateway
- Renal Physicians Association
- The Nephron Information Center
- The Renal Network, Inc.
- Up-To-Date

(6) Facilities and resources mandatory for course completion:

■Programme Specification and Handbooks
■ Extensive library and other learning resources
■ Computer laboratories with a wide range of software
■ Intranet with a wide range of learning support material

Course director:

Prof.: Hussein shaeshaa

Course co-ordinators:

Dr. Ahmed Mohammed Abd El Wahab

Dr. Mostafa Abdel Salam

Date: