



COURSE SPECIFICATION

Faculty of Medicine– Mansoura University

(A) Administrative information

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|---|---|
| (1) Programme offering the course. | Clinical nephrology, dialysis and renal transplantation (MD) NEPH610 |
| (2) Department offering the programme. | Internal medicine Department: Nephrology unit |
| (3) Department responsible for teaching the course. | Internal medicine Department: Nephrology unit |
| (4) Part of the programme. | First part (Semester 1) |
| (5) Date of approval by the Department's council | 5/11/2014 |
| (6) Date of last approval of programme specification by Faculty council | 9/8/2016 |
| (7) Course title. | Evidence-based medicine, critical appraisal of clinical research |
| (8) Course code. | NEPH610EB |
| (9) Total teaching hours. | 15 (1 credit hour) |

(B) Professional information

(1) Course Aims:

The broad aims of the course are as follows:

- Provide knowledge about study design and how to run one and develop updated concepts about medical biostatistics.
- Emphasize on critical appraisal of clinical research and identification of different types of bias and how to avoid.

(2) Intended Learning Outcomes (ILOs):

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

A- Knowledge and Understanding

- A 1 Recall the basics of study design and how to run a randomized clinical trial
- A 2 Show sufficient knowledge of basics of medical biostatistics
- A 3 Correlate between evidence based medicine and best practice in nephrology
- A 4 Identify different types of bias and how to nullify
- A 5 Identify how to critically appraise clinical research

B- Intellectual skills

- B1 **Analyze** and perform appropriate learning activities and prepared to be able to transform these activities through teaching.
- B2 systematically analyze practice using *quality improvement methods* , and implement changes with the goal of practice improvement.
- B3 run scientific research and formulate scientific papers.
- B4 locate , appraise , and assimilate evidence from scientific studies related to their patient's health problems , i.e. adopt an *evidence based approach* .

C- Professional/practical skills

D- Communication & Transferable skills

(3) Course content: Compulsory

Lectures: 1 hour/week(15 weeks)

| Course title | Code | Lectures Hours/ week | Seminars Hours/ week | Total | Total Teaching Hours | Credit Hours |
|---|------------------|----------------------------|----------------------------|----------|----------------------------|-----------------|
| <u>Evidence-based medicine, critical appraisal of clinical Research</u> Study design How to carry a randomized clinical trial Medical biostatistics: how to select a proper statistical test? Medical biostatistics: pitfalls in Medical biostatistics How to test the diagnostic performance of a new diagnostic Modality Bias Making evidence-based decisions Evidence-based practice: toward clinical outcomes Evidence-based medicine: guidelines development Critical appraisal of clinical research Critical appraisal of nephrology guidelines | NEPH610EB | 1 | 0 | 1 | 15 | 1 |

(4) Teaching methods:

4.1:lectures with power point presentations and discussions

4.2: Seminars

4.3: Problem solving case scenarios

(5) Assessment methods:

5.1:written exam

5.2: online MCQ exam(20% of written exam degrees)

| Course | Assessment | Marks |
|---|---------------------------------|-----------|
| Evidence-based medicine and critical appraisal of research | Written exam (1.5 hours) | 40 |
| | MCQs exam | 10 |

Assessment schedule:

First part examination, 6 months from admission to the program:

Assessment 1: Written exam

Assessment 2: Online MCQ exam

Other assessment without marks: logbook

(6) References of the course:

Textbooks

- **Essential Evidence-Based Medicine ,Second Edition, 2010 by Dan Mayer, MD**

Periodicals

- **Journal of Medical Statistics and Informatics**

(7) Facilities and resources mandatory for course completion.

- **Lecture halls**
- **Intranet with a vast learning material**
- **Program specification and handbooks**
- **Candidates logbook**
- **A very rich library and computer laboratories**
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Course coordinator:

- **Prof. Mohammed Sobh (General supervisor)**
- **Prof. Hussein Sheashaa (Academic guide)**

Head of the department:

Prof. Salah El Gamal

Date: 5/11/2014