



## COURSE SPECIFICATION

**(Medical Statistics & Epidemiology in Oncology)**

**Faculty of Medicine– Mansoura University**

### **(A) Administrative information**

(1) Programme offering the course.	Postgraduate doctorate degree of Medical Oncology
(2) Department offering the programme.	Internal Medicine department
(3) Department responsible for teaching the course.	Department of public health
(4) Part of the programme.	Second part
(5) Date of approval by the Department's council	2/08/2016
(6) Date of last approval of programme specification by Faculty council	9/8/2016
(7) Course title.	Medical Statistics & Epidemiology in Oncology
(8) Course code.	MONC 618 BMS, BEP
(9) Total teaching hours.	7.5 hours/15 weeks

## **(B) Professional information**

### **(1) Course Aims.**

The broad aims of the course are as follows.

1. To enable students to turn a problem described in medical or biological terms into something that can be tackled by a statistical analysis.
2. To develop the student's computer skills so that they handle and analyze large medical databases.

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

Intended learning outcomes (ILOs); Are four main categories: knowledge & understanding to be gained, intellectual qualities, professional/practical and transferable skills.

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

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

- A1. Discuss clinical epidemiology and medical statistics, resulting in.
  - a. Improving the ability to conduct clinical studies.
  - b. Learning the basis of experimental protocols design,
  - c. Improving data collection, and analysis.
  - d. Capability of Planning & conduction of clinical trials

#### **B- Intellectual skills**

- B1. Compare between a range of health contexts, such as individual and institutional and national and international contexts
- B2. Analyze health and health issues, and health information and data that may be drawn from a wide range of disciplines
- B3. Articulate central theoretical arguments within a variety of health studies contexts;
- B4. Construct research and research methodologies to locate, review and evaluate research findings relevant to health and health issues, across a range of disciplines

### (3) Course content.

Subjects	Lectures	Clinical	Laboratory	Seminars	Total Teaching Hours
• Basic principles of statistics	1h				1h
• Observational studies	1h				1h
• Experimental studies	1h				1h
• Sample size collection	0.5h				0.5h
• Study design in medical research	0.5h				0.5h
• How to carry out a randomized clinical trial	0.5h				0.5h
• Evidence based medicine	0.5h				0.5h
• How to use appropriate statistical test for your data	1h				1h
• How to test a diagnostic performance of a new diagnostic modality	0.5h				0.5h
• Practice on SPSS	1h				1h

### (4) Teaching methods.

Problem based small groups, data interpretation exercises and objective structured clinical examinations

### (5) Assessment methods.

5.1 Written exam for assessment of A1, B1–4,

5.3: MCQ for assessment of A1, B1–4,

#### Assessment schedule.

Assessment 1: Final exam week/month: 15<sup>th</sup> week

#### Percentage of each Assessment to the total mark.

Written exam: 80 marks 80% of total course exam.

MCQ exam 20 marks 20% of total course exam.

**(6) References of the course.**

6.1: Cancer Clinical Trials, Methods and Practice, Mark E Buyse,  
Oxford Medical publications.

6.2: Cancer Principles & practice of Oncology, Vincent DeVita

**(7) Facilities and resources mandatory for course completion.**

1. Lecture halls.

2. Data show.

**Course coordinator:**

**Prof. Sameh Shamaa**

**Prof. Tawfik Elkhodary**

**Dr. Ziad Emarah**

**Head of the department: Prof. Salah El-Gamal**

**Date of First Approval: 22/12/2010**

**Date of Last Approval: 23/08/2016**