



## COURSE SPECIFICATION

### (Medical Statistics)

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.	Medical Oncology Unit
(4) Part of the programme.	2 <sup>nd</sup> 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
(8) Course code.	MONC 610 MS
(9) Total teaching hours.	30 hours/15 Weeks

## **(B) Professional information**

### **1) Course Aim.**

The broad aim of the course are as follows.

1. To cover the advanced statistical methods in field of Medical Oncology.
2. To enable students to turn a problem described in medical or biological terms into something that can be tackled by a statistical analysis.

### **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. Review Biostatistics applied to cancer research.
- A2. List types of clinical trials.

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

- B1. Calculate different statistical tests.
- A3. Choose valid and reliable statistical tools to critically evaluate the effectiveness and efficiency of approaches to disease and patient management within oncology.
- A4. Compare between descriptive and inferential Statistics.
- A5. Formulate a design to a clinical trial or research proposal.

### 3) Course content.

Subjects	Lectures	Clinical	Laboratory	Seminars	Total Teaching Hours
1) Biostatistics applied to cancer research	4h				4h
2) Clinical trials	4h				4h
3) Frequentist approach	2h				2h
4) Bayesian approach	2h				2h
5) Adaptive designs of clinical trials	2h				2h
6) Bioinformatics	2h				2h
7) Descriptive Statistics	4h				4h
8) Inferential Statistics	4h				4h
9) Hypothesis Testing	2h				2h
10) Correlational and Predictive Techniques	4h				4h

### 4) Teaching methods.

#### 4.1 Power point presentation

### 5) Assessment methods.

5.1. Written exam for assessment of A1-2 , B1-5

5.2. MCQ exam for assessment of A1-2 , B1-5

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

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

**MCQ exam 20 marks 20% of total exam.**

**6) References of the course.**

**6.2 Text books :-** Manual of Clinical Oncology seventh edition(Dennis A.Casciato)

- Abeloff's Clinical Oncology, 5th Edition (Johj E. Niederhuber)

- High-Yield Biostatistics, Epidemiology & Public Health, 4<sup>th</sup> edition

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

-Lectures Halls.

-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. 23/08/2016**

**Date of Last approval. 23/08/2016**