COURSE SPECIFICATION
Faculty of Medicine- Mansoura University

(A) Administrative information

(1) Program offering the course:	**Master Degree of Public Health & Preventive Medicine**
(2) Department offering the program:	**Public Health & Community Medicine Department**
(3) Department responsible for teaching the course:	**Public Health & Community Medicine Department**
(4) Part of the program:	**First Part**
(5) Date of approval by the Department`s council	**27/3/2016**
(6) Date of last approval of program specification by Faculty council	
(7) Course title:	**Epidemiologic Methods & Biostatistics**
(8) Course code:	**PHPM 518 EpiSt1**
(9) Credit hours	**1 hour per week**
(10) Total teaching hours:	**7.5 Lectures, 15 practical**

(B) Professional information

(1) Course Aims:

To support acquisition of basic knowledge & practical skills in epidemiological methods & biostatistics:

1. The value & uses of epidemiologic methods.
2. Epidemiologic knowledge for control & prevention of disease.
3. Using statistical principles to improve their professional work
4. Making optimum use of resources to reach valid research conclusions

(2) Intended Learning Outcomes (ILOs):

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

A- Knowledge & Understanding

A1: Discuss characteristics, advantages & disadvantages of descriptive, analytic & experimental studies.
A2: Discuss indications, criteria & steps of screening programs.
A3: Describe & understand basic statistical tests.
A4: Recognize different morbidity and mortality indices

2- Intellectual activities (I)

The Postgraduate Degree provides opportunities for candidates to achieve & demonstrate the following intellectual qualities:

B- Intellectual skills

B1: Apply the suitable epidemiologic strategy for the research problem.
B2: Calculate indices of a specific health problem.
B3: Test the association between certain outcome & an exposure
B4: Interpret epidemiological findings into recommendations for a specific intervention.

C- Professional/practical skills

C1: Select study design appropriate to its objectives.
C2: Apply appropriate statistical tests when needed.
C3: Interpret the results of statistical analysis.

D- Communication & Transferable skills

D1: Develop communication skills and express themselves freely and adequately.
D2: Develop team skills during student's presentations.
D3: Use computers to calculate various indices and indicators
D4: Present information regarding epidemiology of a specific health problem (communicable/ Non-communicable).

(3) Course content:

Subjects	Lectures	Clinical	Practical	Field	Total Teaching Hours
▪ Definition & uses **of epidemiology &** Epidemiological models	0.5		-		**7.5 lectures** **15 practical**
▪ Epidemiological Studies: Descriptive, analytical & experimental studies	1.5		3		
▪ Screening for diseases & Survey study	1		2		
▪ Population pyramids, Measurement of Health & vital statistics	1.5		2		
▪ Medical Statistics: Definitions, types of variables & Sampling from population.	1		2		
▪ Descriptive statistics: Tables, figures & measurements of central tendency & dispersion	1		2		
▪ Normal curve & Tests of Hypotheses & Significance	1		4		

(4) Teaching methods:
1. Lectures
2. Seminars
3. Practical training.

(5) Assessment methods:
1. MCQ Examination (for assessment of knowledge & intelctual skills)
2. Written Examination (for assessment of knowledge & intelctual skills)
3. Oral examination (for assessment of knowledge, intelctual skills & Transferable skills)
4. Practical examination for assessment of practical skills.
5. Log book.

Assessment schedule:
Final exam: (Total marks = 100)
MCQ exam: 12 marks
Written exam: 48 marks
Oral exam: 20 marks
Practical exam: 20 marks
Other assessment without marks: seminars & log book assessment.

(6) References of the course:
6.1: Hand books: Course notes: books authorized by department
6.2: Text books:
Statistics in Medical Research, 4th ed. Blackwell Publishing company, 2003
Essential Medical Statistics, 2nd ed. Blackwell Publishing company, 2003
6.3: Websites:

Research Methods Knowledge Base at http://www.socialresearchmethods.net/kb/index.php
Statistical Medical Books Free, at http://medicalbooksfree.com/category/statistics

(7) Facilities & resources mandatory for course completion:

Candidates & their learning are supported in a number of ways:

□ **Lecture rooms**: available in the department**.**
□ **Computer Lab:** available in the department.
□ Induction course introducing study skills.
□ Candidates logbook.
□ Program Specification & Handbooks.
□ Library & other learning resources.
□ Intranet with a wide range of learning support material.

Course coordinator: **Prof. Dr. Mohamed Azmy Khafagy**

Head of the department: Prof. Dr. Mohamed Azmy Khafagy

Date: 27/3/2016