COURSE SPECIFICATION
Infection Control Statistics

(A) Administrative information

(1) Program offering the course:	Postgraduate master degree of hospital infection control
(2) Department offering the program:	Medical Microbiology & Immunology
(3) Department responsible for teaching the course:	**Public Health & Community Medicine Dept.**
(4) Part of the program:	**First part**
(5) Date of approval by the Department`s council	**2-12-2014**
(6) Date of last approval of program specification by Faculty council	**9-8-2016**
(7) Course title:	**Infection control statistics**
(8) Course code:	**ICMIC507 ICS**
(9) Credit hours	2 Credit hours
(10) Total teaching hours:	30 h lectures

(B) Professional information

(1) Course Aims:

To provide the candidate with the basics of
1- The value & uses of epidemiologic methods.
2- The application of epidemiologic methods to infection control.
3- The basic principles of descriptive statistics (Tables, Graphs & Numbers).
4- The basic principles of inferential statistics.
5- Uses, strengths & limitations statistical analysis.

(2) Intended Learning Outcomes (ILOs):

Intended learning outcomes (ILOs); Are four main categories: knowledge & understanding to be gained, intellectual qualities, professional/practical & transferable skills.
On successful completion of the course, the candidate will be able to:

A- Knowledge & Understanding

A1- recognize essential definitions & basic concepts of research question, population, variables, data, statistics, sampling, statistical inference.
A 2- discuss the principals of inferential statistics & its role in interpretation of data.
A 3- Recognize relevance of statistical methods to infection control.

B- Intellectual skills:

B1- Use computational tools & packages
B2- Choose & perform the appropriate statistical technique for the analysis of means & proportions.
B3- Interpret the results of statistical analysis & communicate them in a clear & concise manner.
B4- Analyze & interpret laboratory data relevant to the cases of medical microbiology & immunology.
B5- Develop, under supervision, core reporting skills

(3) Course content:

Subjects	Lectures
Epidemiological Studies: descriptive; analytical & experimental studies	4 hours
Screening for diseases	4 hours
Survey study	4 hours
Types of data	4 hours
Sampling from population	4 hours
Descriptive statistics (Tables, figures & numbers)	4 hours
Inferential statistics (Tests of significance).	4 hours
Disease indicators (morbidities, mortalities) & Hospital statistics	2 hours

(4) Teaching methods:

1. Lectures 2. Seminars

(5) Assessment methods:

1. MCQ Examination A1-3, B1-5
2. Written Examination A1-3, B1-5
3. Oral examination A1-3, B1-5
5. Log book.

Assessment schedule:

Written exam: 56 marks that's is 56% of the total marks
MCQ exam. : 14 marks that's is 14% of the total marks
Structured oral exam: 30 marks that's is 30% of the total marks
Other assessment without marks: log book assessment & the minimum attendance is 70%

(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:

□ **Lecture rooms**: available in the department
□ **Computer Lab:** available in the department
□ Candidates logbook
□ Program Specification & Handbooks

Course coordinator: Dr. Nawal Salama Gouda
Head of the department: Prof. Dr. Mohamed Abo El Ela
Date: