COURSE SPECIFICATION

(Scientific Working Methods and Scientific Conduct)

Faculty of Medicine– Mansoura University

(A) Administrative information

(1) Programme offering the course:	Postgraduate PhD degree of Regenerative Medicine/ RMD
(2) Department offering the programme:	Inter-departmental (Faculty of Medicine)
(3) Department responsible for teaching the course:	**Public Health & Community Medicine**
(4) Part of the programme:	Second part (Semester V)
(5) Date of approval by Faculty council	9/8/2016
(6) Date of last approval of programme specification by Faculty council	9/8/2016
(7) Course title:	Scientific Working Methods and Scientific Conduct
(8) Course code:	RMD618BS4
(9) Total credit hours:	3 Theoretical + 1.5 Laboratory/Practical

(B) Professional information

(1) Course Aims:

The broad aims of the course are as follows:

The course provides students with knowledge about scientific working methods and issues of appropriate versus inappropriate conduct in scientific studies, and the conflicts that can arise. By the end of the course the students will know

- How to prepare and present a scientific talk
- What makes a good and bad scientific manuscript
- How to identify fundable research projects
- How to distinguish successful strategies for preparing and submitting research proposals
- The importance and laws of intellectual property
- How to determine what can/should be patented
- What is considered proper ethical behavior in scientific investigations
- How to detect fraudulent behavior
- How to respond when fraudulent and other ethical behaviors have potentially been discovered.

(2) Intended Learning Outcomes (ILOs):

B- Intellectual skills:

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

B1: Analyze and solve problems related to molecular biology and genetics.

B2: Identify the ethical implications of the work in the field of regenerative medicine.

B3: Execute and report a research project in order to develop skills necessary for independent research.

B4: Apply theoretical concepts to the study of the molecular biology and genetics and evaluate the relationships between theory and practice.

B5: Display an awareness of the existence and nature of value judgments.

B6: Demonstrate, at a level appropriate to the award, a critical approach in enquiry and a readiness to test hypotheses, interpret scientific data and evaluate published literature.

C- Professional/practical skills:

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

C1: Practice appropriate laboratory skills, including safe working practices where relevant.

C2: Practice appropriate computer skills.

D- Communication & Transferable skills:

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

D1: Communicate effectively using a variety of formats.

D2: Use effectively a range of information sources.

D3: Organize and present intellectual argument commensurate with the level of award.

D4: Work effectively both alone (e.g. on assignments or during the project) and as part of a team (e.g. in group work, during group discussions and workshops).

D5: Demonstrate key skills in the retrieval, preparation, analysis and interpretation of information from different sources.

D6: Acquire continued self-managed professional development.

D7: Apply the principle of reflective practice.

(3) Course content:

Subjects	Lectures	Clinical	Laboratory	Field	Total Hours
Scientific Working Methods and Scientific Conduct/ RMD618BS4			15W		
1- Bio-ethics 1 2- Bio-ethics 2 3- Bio-ethics 3 4- Bio-statistics 1 5- Bio-statistics 2 6- Bio-statistics 3	3		1.5		4.5 hours

(4) Teaching methods:

4.1: Lectures

4.2: Practical lab work

(5) Assessment methods:

5.1: Exam Description

The final exam is composed of:

Two written exams (200 marks) **3 hours (Short Essay questions 2 hours 160 marks + MCQ 1 hour 40 marks)**

Final Practical exam (OSPE) (100 marks): five stations exam.

Final oral exam (OSCE) (100 marks): five stations exam.

Percentage of each Assessment to the total mark:

Written exam: 50% Practical exam: 25% Oral exam: 25%

Other assessment without marks: seminars and log book activities.

5.2: Marks

Course/ code	Marks					
	Written Exam			Practical Exam	Oral Exam	Total
	Short Essay questions	MCQ	Total			
Scientific Working Methods and Scientific Conduct/ RMD618BS4	**160**	**40**	**200**	**100**	**100**	**400**

(6) References of the course:

Text books: Scientific papers and presentations

(7) Facilities and resources mandatory for course completion:

Lecture halls and data show and MERC labs

Course coordinator: Dr. Mohamed Salama

Programme Director: Prof.Mohamed Sobh

Date: