



COURSE SPECIFICATION

Faculty of Medicine– Mansoura University

(A) Administrative information

(1) Programme offering the course:	Master Science Degree of Industrial Medicine and Occupational Health
(2) Department offering the programme:	Public health and community medicine department
(3) Department responsible for teaching the course:	Public health and community medicine department
(4) Part of the programme:	First Part
(5) Date of approval by the Department's council	
(6) Date of last approval of programme specification by Faculty council	9/8/2016
(7) Course title:	Principles of Occupational & Environmental Medicine & Research Methodology
(8) Course code:	PHPM 518 POEM-EM
(9) Credit hours	2 Cr. hours
(10) Total teaching hours:	30 hrs lectures

(B) Professional information

(1) Course Aims.

The broad aims of the course are as follows: (either to be written in items or as a paragraph)

To support acquisition of basic knowledge of the Principles of Occupational & Environmental Medicine and practical skills in Research Methodology.

(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:

(1) A- Knowledge and Understanding

- A1: Recognize Occupational Medicine as a distinct clinical medical specialty.
- A2: Describe the functions of the Occupational Medicine/ Health Physician.
- A3: Discuss the basic structure of Occupational Health Services Program.
- A4: Identify work needs of women, children, and vulnerable groups.
- A5: Recognize medical ethics pertinent to Occupational and Environmental Medicine.
- A6: Recognize how to conduct research work and how to use Medical Biostatistics.

2- Intellectual activities (I)

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

B- Intellectual skills

- B1: Illustrate functions of occupational medicine physician in exemplary industries and workplaces.
- B2: Design occupational health services program to varying-scale industries.
- B3: Propose solutions to problems of women employment and child labor.
- B4: Practise Medical ethics in diverse occupational medicine scenarios.
- B5: Choose suitable epidemiologic methods to solve occupational health problems.
- B6: Choose suitable statistical tests for analysis of data sets.

C- Professional/practical skills

- C1: Develop skills of work with multidisciplinary occupational health team.
- C2: Practice activities required of Occupational health Physician.
- C3: Manage Occupational Health Services.
- C4: Practice workplace-based health promotion.
- C5: Access web sites and health related databases.
- C6: Choose adequate bio-statistical tests for analysis of a set of data.
- C7: Apply ethical principles when communicating with others about patients/workers.

D- Communication & Transferable skills

- D1: Learn teaching and learning skills.
- D2: Design and deliver a teaching event/ or short course.
- D3: Identify Intended learning outcomes of a teaching event.
- D4: Teach large and small groups effectively.
- D5: Select and use appropriate teaching resources.
- D6: Give constructive effective feedback.
- D7: Evaluate programs and events.
- D8: Learn how to work as a team member and as a team leader.
- D9: Develop critical thinking and peer-reviewing skills.

Course content:

Subjects	Lectures	Practical
First Topic: Principles of Occupational and Environmental Medicine (POEM). (1) Introduction to Occupational Health Curriculum. (2) Occupational Health Team and Role of Occupational Physician. (3) Industrial processes and health outcomes. (4) Introduction to Occupational Health Services Program. (5) Occupational Health Program in Developing Countries. (6) Occupational Health Services in Rapidly Industrializing Countries.	14 hrs	

<p>(7)Occupational Health Services in Developed Countries. (8)Occupational Health Services in Small-scale/Large-scale Industries. (9)Occupational health Services Program in Healthcare. (10)Occupational Health Services Program in Agricultural. (11)International Agencies/Databases in Occupational Health. (12) Sources of Information Including Books and Journals. Second Topic: Research Methodology (RM). (1)Introduction to Biostatistics and Research Methodology. (2)Descriptive statistics. (3) Distribution of data (Parametric and nonparametric). (4)Inferential statistics: The case of two groups (the t-test). (5)Analysis of variance: The case of more than two groups. 3rd and 4thTopics (6)Analyzing rates and proportions: The Chi-square test. (7)The P-value, statistical significance, and errors (I and II). (8) Correlation and regression analysis. (9) Non-parametric statistics. (10)Types of Epidemiological studies. (11) Mortality, Morbidity and adjustment of rates. (12)Sampling, Bias, and confounding. (13)The principles of causal association. Third Topic: Employment of groups with special needs. (1)Women employment, hazards and health effects. (2)Pregnancy in the workplace. (3)Child labor, hazards and health effects. (4)Employment of disabled workers. Fourth Topic: Medical Ethics in Occupational Medicine. (1)Conflicts of interest in Occupational Medicine. (2)Patient confidentiality. (3)Ethics of Occupational Health Research. (4)Codes of Ethics in Occupational Medicine. (5)Ethical aspects of genetic testing in the workplace. (6)Ethical aspects of drug testing in the workplace.</p>	<p>10 hrs</p> <p>2 hrs</p> <p>4 hrs</p>	
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(2) Teaching methods:

4.1.... Lectures

4.2: ... Seminars

4.3: ... Tutorial

4.4: ... Workshops

(3) Assessment methods:

5.1 Written exam for assessment of knowledge and intellectual ILOs

5.2 Oral exam for assessment of knowledge and intellectual ILOs

5.3 Practical exam knowledge and intellectual ILOs

5.4 MCQ exam for assessment of intellectual ILOs

Assessment schedule:

Assessment 1: MCQ.....at the end of semester (15th week)

Assessment 2: Written exam after 6 months of the start of the job.

Assessment 3: Oral exam 6 months of the start of the job.

Assessment 4: Practical exam 6 months of the start of the job.

Percentage of each Assessment to the total mark.

Written: 144 Marks

MCQ 36 marks

Oral: 60 Marks

OSCE Practical : 60 Marks

(4) References of the course.

6.1. Handouts of lectures and handbooks authorized by the department.

6.2. Text books:

- **Environmental and Occupational Medicine** (4th ed.) by William N. Rom.
- **Textbook of Clinical Occupational and Environmental Medicine** (2nd ed.) by Cullen M and Rosenstock L.
- **Pocket Consultant of Occupational Health**, UK.
- **Text book of Public Health**, Maxcy Roseneau (Wallace, 14th ed).

6.3. Journals... Publications of national and international Occupational and Environmental Medicine Associations: Egyptian Society of Occupational and Environmental Medicine Journal, American College of Occupational and Environmental Medicine Journal (OEM), OSHA and NIOSH publications, ILO publications.

6.4. Websites:

http://www.ilo.org/safework_bookshelf/english?d&nd=170000102&nh=0

<http://www.niosh.com> + <http://www.acoem.com>

(5) Facilities and resources mandatory for course completion.

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

- Induction course introducing study skills
- Candidates logbook
- Programme Specification and Handbooks
- Extensive library and other learning resources
- Computer laboratories with a wide range of software
- Intranet with a wide range of learning support material
- Ph.D Dissertation Supervisor
- Others

Course coordinator: Prof. Emily kamel, Prof. Adel El-Weheidi, Dr. Nabil Joseph, Dr. Hala Samir

Head of the department: Prof. Mohamed Azmy Khafagy

Date:

P.S. This specification must be done for each course.