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:	Second 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:	Occupational and Environmental Diseases and Work Injuries
(8) Course code:	PHPM 518OED-WI
(9) Credit hours	9 Cr. hours academic Lectures + 8 Cr. hours Practical
(10) Total teaching hours:	135 hrs teaching lectures **240 hrs Clinical and Practical**

(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 essentials of Occupational & Environmental Diseases and the epidemiology, prevention and control of work-related injuries.

(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 mechanisms of injury to body organs caused by occupational exposures.
A2: Describe clinical picture and complications induced by injury to body organs.
A3: Explain diagnosis and differential diagnosis of occupational diseases in details, e.g. pulmonary function tests and CXR.
A4: Explain lines of management of occupational diseases and principles for prevention.
A5: Identify OSHA standards and guidelines for allowable exposure to hazardous agents.
A6: Discuss the preventable nature and characteristics of occupational cancer.
A7: Describe classification of work-induced injuries, risk factors, and prevention programs.

2- Intellectual activities (I)

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

B- Intellectual skills

B1: Differentiate between diverse Occupational Lung Disorders.
B2: Interpret pulmonary function tests' readings.
B3: Interpret ILO classification of Chest X-rays for pneumoconiosis.
B4: Categorize Occupational and non-occupational causes of Organ and system disorders.
B5: Propose Occupational Health Services Program for prevention and control of Occupational body organs and systems disorders.
B6: Illustrate characteristics and preventable nature of occupational cancer.
B7: Organize a proactive prevention strategy for occupational injuries.

C- Professional/practical skills

C1: Be capable of clinical assessment of patients.
C2: Diagnose work-related ill health and advice on prognosis, prevention and management.
C3: Carry out and evaluate health surveillance including biological monitoring for workers.
C4: Customize assessments to subgroups (such as pregnant women, diabetics).
C5: Refer to other specialties when needed.
C6: Monitoring and investigation of accidents, incidents and near-misses (root cause analysis).
C7: Evaluate and advise on first aid facilities in the workplace relevant for trauma.

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	Clinical
Module 1 **First Topic: Occupational Diseases (Organ system- lung).** (1)Mechanism of Occupational Lung Diseases and Disorders. (2)Anatomy of Respiratory System, Particle Deposition, Pulmonary Defense Mechanisms. Occupational Lung Diseases: Pneumoconiosis. (3)Pulmonary Function Testing (Spirometry). (4)International Classification of Radiographs of Pneumoconiosis. (5)Asbestosis and Asbestos-related diseases. **Title of Lectures** (6) Silicosis and health effects of exposure to Silica dust.	**45 hrs**	**60 hrs**

(7) Exposure to Coal dust and health effects in coal miners. (8) Exposure to and health effects of Talc and Aluminum dust. (9) Hypersensitivity pneumonitis. (10) Inhalation fevers. (11) Occupational and Environmental Bronchial Asthma. (12) Byssinosis. (13) Agricultural Lung Diseases. (14) Lung Disease induced by Respiratory tract irritants. (15) Other subjects.		
Module 2 **Second Topic: Occupational Diseases (Organ system- Other organs).** (1) Occupational Skin Diseases (Contact Dermatitis). (2) Occupational Contact Urticaria. (3) Occupational Skin Infections. Self-learning activity. (4) Occupational Musculoskeletal Disorders. (5) Occupational Neurological Disorders. (6) Occupational Liver Disease. (7) Occupational Kidney Disease and urinary tract disease. (8) Occupational Injuries	**45 hrs**	**90 hrs**
Module 3 **Second topic: Occupational Diseases (Organ System-other organs).** (1) Occupational Ophthalmologic Disorders. (2) Occupational Ophthalmologic Injuries. (3) Occupational Infections. (4) Occupational Cardiovascular Disease. (5) Occupational Hematological Disorders. (6) Occupational hazards to male and female reproduction. **Third topic: Occupational Cancer.** Occupational Cancer.	**45 hrs**	**90 hrs**

(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 each semester (15th week)

Assessment 2: Written exam after 36 months of the start of the job.

Assessment 3: Oral exam 36 months of the start of the job.

Assessment 4: Clinical exam 36 months of the start of the job.

Percentage of each Assessment to the total mark:

Written:80 Marks

MCQ 20 Marks ::

Three MCQ exams one for each module (at the end of each semester);

- Module 1; 7 Marks
- Module 2 :7 marks
- Module 3 :6 Marks

Structured Oral: 40 Marks

OSCE Clinical: 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
- Internet 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.