



## Program Specification for Doctorate Degree in Occupational and Environmental Medicine

**Program type:** Single

**Program code:** OEM 921

**Department offering the program:** Occupational and Environmental Medicine Department

**Total credit points:** 100

**Academic year:** 2016/2017

**Program Coordinator:** Prof. Inas Mohamed Fawzy Gaballah

**Assistant Coordinator** Assist. Prof. Dr. Aisha Mohamed Samir  
Lecturer. Dr. Rateba Said

**External Evaluator:** Professor Dr. Ahmed Alsaid Asmat Shouman,  
Professor of Occupational Health Department, Faculty of Medicine, Ain  
Shams University, Egypt.

### I. Aim of Program

The program aims at ensuring the acquisition of knowledge, skills and positive attitudes related its applications in the field of occupational and environmental medicine with the development of an appropriate background covering the emergency situations of environmental disasters and their management. It also ensures the gaining of professional skills needed for research development in occupational and environmental medicine to help in the implementation of suitable control and risk management programs in the community.

### II. Intended learning outcomes of program (ILOs)

- A. **Knowledge and Understanding:** By the end of the program, the candidate should be able to:
1. Describe the theories and fundamentals related to the field of occupational and environmental medicine and the related areas.
  2. Identify the reciprocal influence between professional practices and their impacts on the environment.
  3. Discuss the scientific developments in the field of occupational and environmental medicine.
  4. Define the moral and legal principles of professional practices in the area of occupational and environmental medicine.
  5. Demonstrate the basics and principles of quality in the professional practices in the field occupational and environmental medicine.

## **B. Intellectual Skills**

By the end of the Doctorate's program, the graduate in the field of occupational and environmental medicine will gain intellectual skills to be able to:

1. Analyze and evaluate information in the field of occupational and environmental medicine to be used for solving problems.
2. Solve specialized problems in the field of occupational and environmental medicine in the absence of some data.
3. Integrate the different facts for solving professional problems.
4. Formulate research studies and/or writing scientific methodology on a research problem.
5. Assess the risk in professional practices in the area of occupational and environmental medicine.
6. Design plan for the development of performance in the field of occupational and environmental medicine.
7. Provide professional decisions in various professional contexts.

## **C. Professional Skills: By the end of the program, candidate should be able to:**

1. Perform the basic current and recent professional skills in the field of occupational and environmental medicine.
2. Construct occupational and environmental medicine professional reports
3. Evaluate the existing methods and tools in the area of occupational and environmental medicine.

## **D. General and Transferable Skills: By the end of the program, the candidate should be able to:**

1. Interact effectively in all different ways with workers for the increase in awareness and the provision of health education.
2. Use the information technology to remain updated with the advances in knowledge so as to serve the professional practices.
3. Assess one's self to identify the personal learning needs.
4. Manage time and different resources effectively to obtain the knowledge and information.
5. Develop rules and indicators to monitor and evaluate performance of others at work in the field of occupational and environmental medicine.
6. Work in a team and group leading in the occupational field visits and environmental projects.
7. Manage time with efficiency.
8. Adopt the self and the continuous learning approaches.

### III. Academic Standards

1. accredited by the departmental council
2. **External References for Standards:**
  - Department of Environmental and Occupational Medicine, Oxford University, UK
  - Department of Environmental and Occupational Medicine, Ohio University, USA

### IV. Program Admission Requirements

Potential students should hold an honor Master degree in Occupational and Environmental Medicine from an approved institution. Students are advised to have overview of advanced medical statistics with some research experience. They are also advised to have ready access to a personal computer with the following minimum specifications: Windows 2000/XP/Vista/W7; Soundcard/speakers and headphones and 24 x CD ROM drive; A 56 kbs or greater internet connection with Explorer or Netscape; A Quick-Time Player or Windows Media Player to run interactive exercises.

### V. Program Structure and Contents

**Program duration:** Three academic years.

**Program structure:** Total Credit points 100

- Compulsory courses
  - Industrial Medicine & Occupational Diseases **20 credit points**
    - a. Industrial Medicine 5 credit points
    - b. Occupational Diseases 12 credit points
    - c. Industrial Toxicology 3 credit points
- Elective courses **5 credit points**
- Scientific activities **3 credit points**
- Clinical/Practical training program **32 credit points**
- Doctorate Thesis **40 credit points**

Courses		Credit Points		ILOs
		CPs	Total	
Code	Title			
<b>COMPULSORY COURSES</b>				
<i>OEM 921</i>	Industrial Medicine	5	20	
<i>OEM 921</i>	Occupational Diseases	12		
<i>OEM 921</i>	Industrial Toxicology	3		
<b>ELECTIVE COURSES (MEDC) choose 2 courses</b>				
<i>OEM 92ACTox</i>	Advanced clinical toxicology	5	5	
<i>OEM 921 FR</i>	Fitness and rehabilitation	5		
<i>OEM 921 IC</i>	Infection control	5		
<i>OEM 921 AEK</i>	Advanced ergonomics and kinesiology	5		
<b>SCIENTIFIC ACTIVITIES</b>				
<i>Sc.Act.</i>	Scientific activities	3	3	
<b>TRAINING PROGRAM</b>				
<i>OEM 921 C/P</i>	Clinical/Practical training program	32	32	
<b>DOCTORATE THESIS</b>				
	Doctorate Thesis	40	40	

### **PRACTICAL TRAINING PROGRAM**

All candidates should complete the specialized clinical training related to the area of Occupational and Environmental Medicine Department for duration of two academic years to acquire the needed credit points. During this period the candidates should attend clinical rounds and share in the scientific activities to acquire skills in the diagnosis and proper management of acutely and chronically occupationally affected adults patients. Additionally, the candidates will acquire the knowledge and skills related to the proper interpretation of medical interventions essential for the correct evaluation of occupationally exposed persons.

*NB: The details of the training program are provided in separate document.*

## **DOCTORATE THESIS**

All doctorate degree candidates should prepare a thesis in the area of Occupational and Environmental medicine after obtaining the approval of the department and the ethical committees on the protocol of the research. The doctorate degree thesis is a specialized research in the field of Occupational and Environmental Diseases that includes a review part and a research part. The thesis is supervised by one or more of the senior staff members from the Occupational and Environmental Medicine Department and may include staff members from other specialties according to the necessities of research. The research is then evaluated and approved by a committee of three professors comprising one of the supervising staff members together with an internal evaluator from the same department and an external evaluator from a scientific institution other than the faculty of medicine, Cairo University.

## **SCIENTIFIC ACTIVITIES**

The students should participate in the scientific activities of the departments such as:

- *Journal club.*
- *Seminars (including recent topics and controversial issues). Students are expected to participate in the discussions.*
- *Scientific meetings arranged by the department.*

Each activity is monitored and given credit points registered in a special section in the residency-training logbook. The student should collect all required points before he is allowed to sit for the final exam.

## **VI. Regulations for Progression and Completion**

After collecting the required credit points for courses, clinical training, and scientific activities, the candidate will be eligible to sit for the final examination. In case the student fails to pass the examination, he may proceed in the Doctorate thesis and can resubmit for the next examination. After passing the final examination, he/she should finish the thesis so as to receive the degree. Doctorate degree must be obtained within a maximum of 10 years following registration date.

## **VII. Assessment**

### **A: Assessment Tools**

- **Supervision and Monitoring of Training Program**

According to the Faculty of Medicine, Cairo University Bylaws for Practical Training Programs, the staff members carry out continuous assessment during the program. A practical training program logbook will be kept for each candidate to document all the practical activities in addition to the participation in different scientific activities. The head of department provides permission for the candidates to attend the final examination upon completion of the training program and gathering of credit points needed.

- **Formal Assessment**

According to the Faculty of Medicine, Cairo University Bylaws for Post Graduate Programs (July 2009), students should be assessed at the end of the Doctorate degree.

- **Industrial Medicine:** A three-hour written exam includes long and short essay questions and multiple choice and problem solving questions as well as an oral exam.
- **Occupational Diseases :** A three-hour written exam includes long and short essay questions and multiple choice questions together with a clinical exam and an oral exam.
- **Industrial Toxicology:** A three-hour written exam includes long and short essay questions and multiple choice questions together with a clinical exam and an oral exam.
- **Elective Course:** A three-hour separate written exam includes long and short essay questions and problem solving questions as well as an oral exam.

## B: Assessment Schedule:

### Doctorate Final Exam:

*The written exam will be held in April/October (four days):*

*Day one: Industrial Medicine (3 hours)*

*Day two: Occupational Diseases (3 hours)*

*Day three: Industrial Toxicology (3 hours)*

*Day four: Elective course (3 hours)*

*This will be followed by the clinical and oral exams in separate days*

## C: Weighing Of Assessment (Marks allocated to courses):

(50 marks for each credit point)

Courses		Marks			
Code	Title	Written	Oral	Clinical	Total
<b>DOCTORATE DEGREE</b>					
<i>OEM 921</i>	Industrial Medicine	175		---	1000
	Occupational Diseases	175	150	125	
	Industrial Toxicology	175		200	
<i>OEM.921ACTox</i>	Advanced Clinical Toxicology	175	75	---	250
<i>OEM.921.FR</i>	Fitness and Rehabilitation				
<i>OEM.921.AEK</i>	Advanced ergonomics and kinesiology				
<i>OEM 921 IC</i>	Infection Control				
<b>Total First Part</b>					<b>1250</b>

### Remarks

- It is mandatory to pass all the papers of written exams separately.
- The passing mark in any written exam is  $\geq 60\%$ .

## VIII. Evaluation of Program Intended Learning Outcomes

<b>Evaluator</b>	<b>Tool</b>	<b>Sample</b>
1. Senior Students	Questionnaire at the end of the program	All the PG students
2. Alumni	The faculty is currently developing an Alumni office for postgraduates	Not yet determined
3. Stakeholders	A meeting will be arranged during annual conference of the department	Available representatives from: National medical insurance Medical syndicate Ministry of health
4. External Evaluators	Review program and courses Attending the final exam	Once before implementation Bi-annual report
5. Quality Assurance Unit	Annual program reviewer	

**Date of approval by department:**

***Program Coordinator***

*Assist. Prof. Dr. Aisha Mohamed Samir  
Lecturer. Dr. Rateba Said*

***Head of Department***

*Prof. Dr.Khaled Mahgoub*

