

PROGRAM SPECIFICATIONS

Program Title:

**Master Degree:
Occupational & Environmental
Medicine**

Code: PHOM



Program Specification

A- Basic Information

1- **Program Title:** Master Degree of Occupational & Environmental Medicine

2- **Program Type:** Single Double Multiple

3- **Department (s):** Department of public Health, Community, Environmental and Occupational Medicine.

4- **Coordinator:** Prof. Amira Gamal

5- **External Evaluator(s):** Prof.

6- **Last date of program specifications approval:** the bylaws of the master program were approved 2016.

7- **Date of specification revision approval:** 2018

8- **Number of credit points for this degree:** 120 CP

A. Professional Information:

i. Programme Aims

At the completion of training, candidates should be able to:

- 1- Perform standardized, comprehensive occupational assessments; perform any necessary further investigations; and develop preventative, acute and long-term comprehensive treatment plans based on the worker's present and possible long-term rehabilitation symptoms.
- 2- Optimize treatment plans based on the knowledge of occupational and rehabilitation resources that include local, state, and federal agencies.
- 3- Coordinate ambulatory and in-worker care across health care providers, employers, and governmental agencies.
- 4- Communicate in a compassionate, knowledgeable manner, and address prevention, treatment and rehabilitation issues for both the employee and employer.

ii. Intended Learning Outcomes (ILOs)



Intended Learning Outcomes (ILOs)

A) Knowledge and Understanding

- a1 Define occupational physician duties within frame of occupational health & industrial medicine.
- a2 Recognize occupational health services with their essentially preventive functions responsible for advising the employer, the workers & their representatives for the requirements for safe & healthy working environment.
- a3 Identify physiology & prevention & control of various occupational physical hazards.
- a4 Describe workplace psychosocial hazards that could compromise worker's mental health.
- a5 Illustrate preventive measures for the identified risk factors for psychiatric disorders.
- a6 List differential diagnosis & up-to-date management steps of occupational diseases with special emphasis on occupational cancer.
- a7 Recall potential industrial hazardous exposure, their preventive & control measures.
- a8 List occupational safety standards
- a9 Define elements of occupational hygienic measures with emphasis on the role of biological monitoring.
- a10 Define the basis of ethical aspects of research.
- a11 Recognize the ethical aspects of occupational health practice.
- a12 Recognize and appreciate the basis for medico-legal and ethical aspects related to the care of patients and related to research and its reflection on environment.
- a13 Recognize basis and principles of quality assurance.

B) Intellectual Skills:

- b1. Analyze problems of special working groups with respect to medical code of ethics.
- b2. Differentiate between causes of poisoning using various investigations to reach the
- b3. Recognize possible sources of job stress with proposition of management program.
- b4. Distinguish various occupational physical hazards, their health impact & how to control them.
- b5. Criticize Egyptian environmental health program proposing upgrading efforts.
- b6. Discriminate the role of occupational physician in relation to environmental health.



- b7. Propose an occupational health program for prevention of poisoning at the workplace with management guidelines.
- b8. Construct a research design to study important occupational health problems with selection of proper statistical analysis.
- b9. Plan to improve performance related to occupational medicine.

C) Professional and Practical Skills:

- c.1 Practice duties of occupational health physician with cooperation with other members of the occupational health team.
- c.2 Apply workplace health promotion principles & other preventive & curative health services with advice to workers, their representative, & families.
- c.3 Create health-related database for workers with effective searching the web & conduction of research work with analysis of retrieved data.
- c.4 Manage various environmental health hazards in collaboration with environmental affairs agency.
- c.5 Respond to industrial incident with emergency personnel making use of the available information on different hazards.
- c.6 Assess environmental impact of an industrial activity on health to take the proper action if there is negative impact.
- c.7 Investigate occupational accidents & injuries with evaluation of available first aid facilities.
- c.8 Evaluate state of mental health of workers with application of risk assessment principles.
- c.9 Write professional reports

D) General and Transferable Skills:

- d1. Communicate effectively with peers and group facilitators.
- d2. Effectively utilize a range of information sources including information technology / health informatics.
- d3. Educate and evaluate performance of peers
- d4. perform self-evaluation and specify his own educational needs
- d5. Demonstrate efficient computer skills and manage time effectively
- d6. Function effectively in a team.
- d7. Be lifelong learner

3- Academic Standards

a) External References for Standards (Benchmarks)

The generic Academic Reference Standards (ARS) of NAQAAE for Postgraduate (2009)

b) Comparison of Provision to External References

4- Curriculum Structure and Contents



4a- Program duration: the program lasts for a minimum of 2 academic years and maximum 5 years, as specified in the internal bylaws for postgraduate studies based on credit points system in the Faculty of Medicine, Suez Canal University approved on February 7th, 2016.

4b- Program structure:

Master Program Credit points (CP) structure:

Total needed credit points for getting master degree 120 CP

The program consists of **First part 30 CP, Thesis 30 CP, and Second part 60 CP**

1. The first part:

Duration: 15 weeks for one academic semester

This part lasts for 6 months and ends in written, practical, and oral exams. It includes:

- A course in Research Methodology (Code: RB) planned and held in the Community Medicine Department of the Faculty of Medicine, Suez Canal University. This part includes I(4 CP).
- A courses in Research Ethics (Code: RE) planned and held in the Forensic and Toxicology Department of the Faculty of Medicine, Suez Canal University. This part includes (2 CP).
- One elective course (code: E), the students should select one elective among six available courses. This part includes (2 CP).
- The specialized courses in occupational medicine planned and held in the Community Medicine Department. It includes (22 CP).

2. **Master Thesis (30 CP):** (not included in the total marks of the Master degree)

The candidate has the right to register the thesis protocol 6 months after registration for the Master degree.

The thesis defense is allowed 6 months after the date of the Faculty Council approval of the thesis protocol and passing the First Part exam.

3. **The Second Part (60 CP):**

Duration: 45 weeks for 3 consecutive academic semesters.

The second part comprises of a specialized course in occupational Medicine, planned and held in the Community Medicine Department.

This part lasts for 1.5 years ending by written and practical exams.

4bi- No. of hours per week: 2 CP / week which equivalent 50 hours/ week, including lectures, tutorials, self-learning and hands-on training.

4bii- No. of credit Points: the Master program is 120 Credit Points

Every credit point include 25 working hour (30% = 7 hours for face to face learning activities, and 70% =18 hours for self-learning activities).

iii. Program Courses



a) Level/Year of Program: First Part Master

Compulsory:

Code No.	Course Title	Credit points	Written examination			Oral exam	Practical or clinical Exam
			No of papers	Duration in hours	Marks		
RB	Research methodology and Biostatistics	4	1	2	80		
RE	Research Ethics	2	1	1	40		
PHOM01	Fundamentals of Occupational and Environmental Medicine	2	1	1	30	10	
PHOM02	Occupational and Environmental Toxicology	6	1	2	90	30	
PHOM03	Industrial chemistry	6	1	2	80		40
PHOM04	Environmental Physiology	4	1	2	60		20
PHOM05	Advanced statistics	2	1	1	30		10
PHOM06	Behavioral science and its relationship with work and environment	2	1	1	40		
E	Elective	2	1	1	40		

b) Level/Year of Program: Second Part Master

Code No.	Course Title	Credit points	Written Examination			Oral exam	Practical or clinical Exam
			No of Papers	Duration	Marks		
PHOM07	Occupational Diseases, fitness & disability	60	3	3 hours each	330	110	330

c) Thesis: 2 faculty senior supervisors from the staff members are nominated by the department council to prepare a proposal of the thesis protocol after the selection of a subject that is complementary to the research plans of the department. Data collection, methodologies, study question, time table, ethical considerations and budget are formulated by the candidate under guidance of his supervisors into a research project. The research protocol is then peer reviewed by two different



staff members nominated by the Head of the department who share their ideas and comments with the supervisors to reach to the final form. The research protocol is discussed then openly in one of the department councils to be approved and diverted to the Faculty research committee where it is subjected to a critical appraisal to meet the research basic standards set by the committee. The final approvals of the research protocol are then issued by the committee of post graduate studies, the Faculty and University Council to be registered.

Elective: Student should select one course of the following as an elective course:
One elective course has 2 CP. The students should select one elective in first part of the Master degree

E01	Evidence Based medicine	(Community Department)
E02	Scientific Writing	(Community Medicine Department)
E03	Quality in Community Medicine	(Community Medicine Department)
E04	Infection Control	(Microbiology Department)
E05	Critical Appraisal	(Community Department)
E06	Communication Skills	(Community Medicine Department)

iv. Programme Admission Requirements

The program accepts candidates with Master in public health with a grade of GOOD at least.

Registration for the program opens 2 times/year, according to the internal bylaws for postgraduate studies of the Faculty of Medicine, Suez Canal University.

Student Assessment Methods

- 7.1 Written (MEQ)** to assess the cognitive domain.
- 7.2 MCQs** to assess the cognitive domain
- 7.3 Oral Viva Cards** to assess higher cognitive and attitude domains.
- 7.3 Observations** to assess practical and presentation skills.
- 7.4 Portfolio** to assess the cognitive, psychomotor and the affective domains.

8- Weighting of Assessments

Type of exam

First part (30 credit points= 600 mark)

• Written exam	490
• Oral and practical exam	110
• Total	600



Second part (60 credit points including 5 credit points not included in the total marks =1100 mark)

• Oral exam	150
• Practical exam	200
• Written exam	420
• Portfolio	330
<u>Total</u>	1100

Total of the Master degree 1700

9- Regulations for Progression and Program Completion

The regulations for program completion follow the regulations of Master degree of Community Medicine in the Faculty of Medicine, Suez Canal University approved by the Supreme Council of Universities.

First part

Passing level 60% of total marks of the exam

At least 50% passing level of the total written exam marks

Second part

Passing level 60% of total marks of the exam

Passing level 60% is prerequisite for MSC degree

Thesis

Passing thesis defense is prerequisite for getting MSc. Degree

10-Evaluation of Program Intended Learning Outcomes (ILOs)

Evaluator	Tool	Sample
1- Postgraduate students	Needs assessment questionnaires	Random sample of participants
2- Alumni	Self-administered questionnaires	Comprehensive sample
3- Stakeholders	Self-administered questionnaires	Random sample
4-External Evaluator(s) (External Examiner(s))	External audit of the program specifications	

Head of Department

Prof. Amani Waheed