



PROGRAM SPECIFICATION Faculty of Medicine- Mansoura University

(A) Administrative information

| (1) Program Title & Code | Postgraduate degree of |
|--|--------------------------------------|
| | Public Health & Preventive Medicine. |
| (2) Final award/degree | Master degree |
| (3) Department (s) | Public Health & |
| | Community Medicine department |
| (4) Coordinators | Prof. Dr. Mohamed Azmy Khafagy |
| (5) External evaluator (s) | |
| (6) Date of approval by the Department's council | 27/3/2016 |
| (7) Date of last approval of program specification | |
| by Faculty council | |

(B) <u>Professional information</u>

(1) Program aims:

The broad aims of the Program are as follows:

To produce specialist in Public Health & Preventive Medicine who can:

- (1) Understand & utilize basic knowledge of epidemiology & preventive medicine, including basic knowledge related to microbiology & parasitology.
- (2) Use basics of epidemiology & biostatistics effectively & has the skills relevant to detection & investigation of public health problems including environmental & occupational health problems.
- (3) Understand & consider nutritional, ethical, cultural, & social issues related to health problems.
- (4) Understand & utilize the principles of communication & health care management.

(2) Intended Learning Outcomes (ILOs):

Intended learning outcomes (ILOs); Are four main categories: knowledge & understanding to be gained, intellectual qualities, professional/practical & transferable skills.

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

A- Knowledge & Understanding

- A1: Understand basic definitions such as health, disease, community medicine & public health.
- A2: Describe the spectrum & determinants of health.
- A3: Define patterns & levels of healthcare, & different healthcare programs.
- **A4:** Identify infectious cycles & methods of control of parasites & arthropods of public health significance.
- **A5:** Understand basics of microbiology including types of immunity, vaccines & antimicrobial agents.
- A6: Identify morphology, pathogenesis & diagnosis of the prevalent bacteria & viruses in Egypt.
- **A7:** Describe the epidemiology of the prevalent health problems in the community.
- A8: Explain principles of prevention & control programs of different health problems
- A9: Discuss characteristics, advantages & disadvantages of different epidemiological studies.
- **A10:** Discuss indications, criteria & steps of screening programs.
- A11: Describe & understand basic statistical tests.
- A12: Recognize different morbidity & mortality indices
- A13: Discuss definition, types, & components of the environment & its effect on health & disease.
- **A14:** how to prevent & control environmental problems (air, water, food)
- A15: Recognize occupational health problems & principles of occupational health programs.
- **A16:** Explain the relationship of nutrition with health & disease.
- A17: Discuss social & behavioral determinants of health & disease.
- A18: Explain appropriate communication & health education strategies
- **A19:** Recognize healthcare system management concepts & functions.
- **A20:** Recognize value & importance of therapeutic diet or dietetics.
- **B21:** Adopt principles & methods of therapeutic feeding.
- **A22:** Recognize healthcare system management & leadership concepts.
- A23: Understand hospital statistics & medical records.

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|-------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Aim 1 | • | • | • | • | • | • | | | | | | | | | | | | | | | | | |
| Aim 2 | | | | | | | • | • | • | • | • | • | • | • | • | | | | | | | | |
| Aim 3 | | | | | | | | | | | | | | | | • | • | | | • | • | | |
| Aim 4 | | | | | | | | | | | | | | | | | | • | • | | | • | • |

2- Intellectual activities (I)

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

B-Intellectual skills

- **B1:** Adopt principles of public health & preventive medicine to various health problems.
- B2: Integrate principles of microbiology into prevention & control of infectious diseases
- **B3:** Apply the suitable epidemiologic strategy for the research problem
- **B4**: Calculate indices of a specific health problem.
- **B5:** Interpret epidemiological findings into recommendations for a specific intervention.
- **B6:** Detect requirements of environmental health in different health problems.
- **B7:** Employ the principles of nutritional care for different age groups.
- **B8:** Detect resources required for prevention & control program implementation.
- **B9:** Test effectiveness of health program implemented to certain health problem.
- B10: Select appropriate communication & health education strategies for different health problems.
- **B11:** Adopt principles & methods of therapeutic feeding.
- B12: Develop skills in management & administration of appropriate health services.
- **B13:** Use objective measurable criteria such as epidemiological impact & cost effectiveness.

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|-------|---|---|---|---|---|---|---|---|---|----|----|----|----|
| Aim 1 | • | • | | | | | | | | | | | |
| Aim 2 | | | • | • | • | • | | | | | | | |
| Aim 3 | | | | | | | • | | | | • | | |
| Aim 4 | | | | | | | | • | • | • | | • | • |

C- Professional/practical skills

C1: Develop skills to evaluate individual & population health problems.

C2: Design, implement & evaluate health services for both individuals & populations health problems.

C3: Utilize the available resources to formulate a prevention & control program.

C4: Develop skills in identifying selected micro-organisms & parasites.

C5: Carry out an epidemiological research.

C6: Perform statistical analysis of data.

C7: Perform risk assessment for different environmental health problems

C8: Select study design appropriate to its objectives.

C9: Apply appropriate statistical tests when needed.

C10: Apply nutritional standards to different vulnerable groups.

C11: Analyze specific health problems taking into account nutritional & social issues.

C12: Evaluate the performance of healthcare facility in terms of standards & indicators

C13: Apply appropriate communication & health education strategies for different health problems

C14: Develop skills in management & administration of appropriate health services.

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|-------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|
| Aim 1 | • | • | • | • | | | | | | | | | | |
| Aim 2 | | | | | • | • | • | • | • | | | | | |
| Aim 3 | | | | | | | | | | • | • | | | |
| Aim 4 | | | | | | | | | | | | • | • | • |

D- Communication & Transferable skills

D1: Develop communication skills & express themselves freely & adequately.

D2: Develop team skills during student's presentations.

D3: Use computers to calculate various indices & indicators

D4: Search the literature to maximize their educational experiences.

D5: Adopt scientific principles of solving public health problems.

D6: Present information regarding epidemiology of a specific health problem.

(3) Academic standards:

Academic standards for the program are attached in Appendix I. in which **NARS** issued by the National Authority for Quality Assurance & Accreditation in Education are used.

A table of comparison between the ARS, NARS and program ILOS is attached in Appendix II.

(4) Curriculum structure & contents:

a-Duration of the program (in years or months): 36 months

b-Program structure:

The program consists of two parts; the first part composed of six courses which are: Principles of Public Health & Preventive Medicine, Behavioral & Social Health, Epidemiologic Methods & Biostatistics, Environmental Health, Parasitology related to public Health, Microbiology related to public Health & second part composed of single courses which is **Public Health & Preventive Medicine**

Candidates should fulfill a total of 45 credit hours:

1. Number of credit hours: First part 5 - Second part: 18 - Thesis: 6.

Semesters of the second part (master degree)

| Semester | Topics |
|-------------|---|
| Semester 1: | 1. Principles of Preventive Medicine. (PHPM 518T a) |
| | 2. Epidemiology of Communicable & Non Communicable diseases. (PHPM 518T b) |
| Semester 2: | 1. PHC, Reproductive Health, MCH, National & Global Health Program. (PHPM 518T c) |
| | 2. Principles of Family Medicine. (PHPM 518T d) |
| | 3. Principles of Mental Health. (PHPM 518T g) |
| | 4. Health Care of Vulnerable Groups. (PHPM 518T h) |
| | 5. Principles of Occupational &Industrial Medicine. (PHPM 518T f) |
| Semester 3: | 1. Principles of Nutrition & Relation to health & disease. (PHPM 518T e) |
| | 2. Elective courses(one of the following): |
| | 3. Health Care Management including economics. (PHPM 518T i) |
| | 4. Quality Management. (PHPM 518T j) |
| | Clinical nutrition & dietetics (PHPM 518 CND) |
| | 2. Healthcare management & Administration (PHPM 518 HMA) |

(5) Program courses:

First Part:

| | | NO. of ho | ours per w | eek | | Total | |
|--|----------|-----------|------------|-------|--------|-------------------------------|---------------------------------------|
| Course Title (Course Code) | Theor | etical | Practical | Field | Total | teaching hours | ILOs covered |
| · · | Lectures | seminars | | | Credit | Hours | covered |
| A- Compulsory courses: | | | | | | | |
| Principles of Public Health & Preventive Medicine (PHPM 518 PPH) | 1 | | | | 1 | 15 lectures | A1-3 B1 D1-6 |
| Behavioral & Social Health (PHPM 518 BSH) | 1 | | | | 1 | 15 lectures | A17 B1 D1,2,5 |
| Epidemiologic Methods & Biostatistics (PHPM 518 EpiSt1) | 0.5 | | 0.5 | | 1 | 7.5 lectures 15 practical | A9-12 B3-5 C5,6,8,9 D1,2,3,6 |
| Environmental Health (PHPM 518 ENV) | 1 | | | | 1 | 15 lectures | A13,14 B6 C7 D4,5,6 |
| Parasitology related to public Health (PHPM 508) | 0.25 | | 0.25 | | 0.5 | 3.5 lectures 7.5 practical | A4 B2 C4 D1,2,4,5 |
| Microbiology related to public Health (PHPM 507) | 0.25 | | 0.25 | | 0.5 | 3.5 lectures 7.5 practical | A5,6 B2 C4 D4 |
| Total | 4.0 | | 1.0 | | 5 | 44.5 lectures 30 practical | |
| B- Elective courses: none | | | | | | | |

Second Part:

| | | NO | . of hours p | er week | | Total | |
|----------------------|---------------------|-----------|--------------|---------------|---------------|--------------------------|-------------------|
| Course Title | Theoretic | al | Practical | Field | Total | teaching | ILOs |
| (Course Code) | Lectures | seminars | | | Credit | hours | covered |
| A- Compulsory of | ourses: (thesis | will be i | ncluded ir | n this table) | | | |
| Public Health & | 5 per week in | | | 1 per week | 6 per week in | Per | A7,8,15, 16,18,19 |
| Preventive | Semester 2&3 | | | per | Semester 2&3 | semester: | B7-10 |
| Medicine | | | | semester | | Lectures:75 | C1-3,10-14 |
| (PHPM 518 T) | 4 per week in 5 per | | | | 5 per week in | (60 in 4 th) | D1-6 |
| | Semester 4 | | | | Semester 4 | Field: 60 | |
| B- Elective cours | es: | | | | | | |
| Clinical nutrition & | 1 | | | | 1 | 15 | |
| dietetics | | | | | | | |
| (PHPM 518 CND) | | | | | | | |
| Health care | 1 | | | | 1 | | A3,19,23 |
| management & | | | | | | | B12,13 |
| administration | | | | | | | D7-11 |
| (PHPM 518 HMA) | | | | | | | |

Program -Courses ILOs Matrix

Program ILOs are enlisted in the first row of the table (by their code number: a1, a2.....etc), then the course titles or codes are enlisted in first column, & an "x" mark is inserted where the respective course contributes to the achievement of the program ILOs in question.

P.S. All courses` specifications are attached in Appendix III.

| Course | | | | | | | | | | | | | Α | | | | | | | | | | | | | | | | | | В | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|---|---|---|---|---|---|---|---|----|----|----|-----|
| Title/Code | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| Principles of Public | • | • | • | | | | | | | | | | | | | | | | | | | | | • | | | | | | | | | | | | |
| Health & Preventive | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | ı |
| Medicine | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | ı |
| PHPM 518 PPH | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Behavioral & Social | | | | | | | | | | | | | | | | | • | | | | | | | • | | | | | | | | | | | | ı |
| Health | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| PHPM 518 BSH | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | l |
| Epidemiologic | | | | | | | | | • | • | • | • | | | | | | | | | | | | | | • | • | • | | | | | | | | |
| Methods & | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | ł |
| Biostatistics | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | ł |
| PHPM 518 EpiSt1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Environmental | | | | | | | | | | | | | • | • | | | | | | | | | | | | | | | • | | | | | | | ł |
| Health | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | ł |
| PHPM 518 ENV | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | ł |
| Parasitology related | | | | • | | | | | | | | | | | | | | | | | | | | | • | | | | | | | | | | | ł |
| to public Health | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | ł |
| PHPM 508 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | i |
| Microbiology related | | | | | • | • | | | | | | | | | | | | | | | | | | | • | | | | | | | | | | | ł |
| to public Health | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | ł |
| PHPM 507 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | i |
| Public Health & | | | | | | | • | • | | | | | | | • | • | | • | • | | | | | | | | | | | • | • | • | • | | | ł |
| Preventive Medicine | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | ł |
| PHPM 518 T | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | l |
| Clinical nutrition & | | | | | | | | | | | | | | | | | | | | • | • | | | | | | | | | | | | | • | | 1 |
| dietetics (elective) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | ł |
| PHPM 518 CND | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | l |
| Healthcare | | | | | | | | | | | | | | | | | | | | | | • | • | | | | | | | | | | | | • | • |
| management & | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | l |
| Administration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | l |
| (elective) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | ł |
| PHPM 518 HMA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 1 |

Program -Courses ILOs Matrix

Program ILOs are enlisted in the first row of the table (by their code number: a1, a2.....etc), then the course titles or codes are enlisted in first column, & an "x" mark is inserted where the respective course contributes to the achievement of the program ILOs in question.

P.S. All courses` specifications are attached in Appendix III.

| Course | | | | | | | | С | | | | | | | | | | D | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|---|---|---|---|---|---|
| Title/Code | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 1 | 2 | 3 | 4 | 5 | 6 |
| Principles of Public Health & | | | | | | | | | | | | | | | • | • | • | • | • | • |
| Preventive Medicine | | | | | | | | | | | | | | | | | | | | |
| PHPM 518 PPH | | | | | | | | | | | | | | | | | | | | |
| Behavioral & Social Health | | | | | | | | | | | | | | | • | • | | | • | |
| PHPM 518 BSH | | | | | | | | | | | | | | | | | | | | |
| Epidemiologic Methods & | | | | | • | • | | • | • | | | | | | • | • | • | | | • |
| Biostatistics | | | | | | | | | | | | | | | | | | | | |
| PHPM 518 EpiSt1 | | | | | | | | | | | | | | | | | | | | |
| Environmental Health | | | | | | | • | | | | | | | | | | | • | • | • |
| PHPM 518 ENV | | | | | | | | | | | | | | | | | | | | |
| Parasitology related to public | | | | • | | | | | | | | | | | • | • | | • | • | |
| Health | | | | | | | | | | | | | | | | | | | | |
| PHPM 508 | | | | | | | | | | | | | | | | | | | | |
| Microbiology related to public | | | | • | | | | | | | | | | | | | | • | | |
| Health | | | | | | | | | | | | | | | | | | | | |
| PHPM 507 | | | | | | | | | | | | | | | | | | | | |
| Public Health & Preventive | • | • | • | | | | | | | • | • | • | • | • | • | • | • | • | • | • |
| Medicine | | | | | | | | | | | | | | | | | | | | |
| PHPM 518 T | | | | | | | | | | | | | | | | | | | | |
| Clinical nutrition & dietetics | | | | | | | | | | | | | | | • | | • | • | | |
| (elective) | | | | | | | | | | | | | | | | | | | | |
| PHPM 518 CND | | | | | | | | | | | | | | | | | | | | |
| Healthcare management & | | | | | | | | | | | | | | | • | | • | • | | |
| Administration (elective) | | | | | | | | | | | | | | | | | | | | |
| PHPM 518 HMA | | | | | | | | | | | | | | | | | | | | |

(6) Program admission requirements:

- General requirements: According to the faculty postgraduate bylaws Appendix IV.
- Specific requirements (if applicable): No specific requirements

(7) Regulations for progression & program completion:

- Student must complete minimum of 45 credit hours in order to obtain the master degree, which include the courses of first & second parts, assay & activities of the log book.
- Courses description are included in Appendix III.
- Registration for the master assay is allowed 6 months from the day of registration to the program & must fulfill a total of 8 credit hours including material collection, laboratory work, patients follow-up, & meetings with supervisors.

Log book fulfillment:

- Student must fulfill a minimum of 12 credit of log book activities.
- Lectures & seminars of the previously described courses (page 11&12) must be documented in the log book & signed by the lecturer.
- Works related to thesis must be documented in the log book & signed by the supervisors.
- Any workshops, conferences & scientific meetings should be included in the log book

Final exam:

First part

| إجمالي | | ـــدرجة | الـ | الاختبار | المقرر | | | | | | | |
|--------|-------------------|---------|---------------|---|---|--|--|--|--|--|--|--|
| إجساني | عملي | شفهي | تحريري | · | الشكرر | | | | | | | |
| | | ٤٠ | * | إختبار تحريري مدته ثلاث ساعات + اختبار شفهي | مبادئ الصحة العامة والطب الوقائي | | | | | | | |
| | | ٤٠ | * | إختبار تحريري مدته ثلاث ساعات + اختبار شفهي | العلوم السلوكية والاجتماعية وعلاقتها بالصحة العامة | | | | | | | |
| | ۲. | ۲. | * | إختبار تحريري مدته ثلاث ساعات + اختبار شفهي + اختبار عملي | الإحصاء الطبي وعلم طرق دراسة الوبائيات | | | | | | | |
| | | ٤٠ | * | إختبار تحريري مدته ثـلاث سـاعات + اختبـار شفهي | دراسة البيئة وعلاقتها بالصحة العامة | | | | | | | |
| |) · +) · | · + | ۳، + ۳، | إختبار تحريري (ورقتان) مدته ثلاث ساعات + اختبار شفهي + اختبار عملي | الميكروبيولوجيا والطفيليات وعلاقتها بالصحة العامة | | | | | | | |
| ٥., | إجمالي الدرجة ٠٠٠ | | | | | | | | | | | |

Second part:

| إجمالي | · | ــــدرجة | الا | الاختبار | المقرر |
|--------|------|----------|--------|---|--------------------|
| إجساني | عملي | شفهي | تحريري | - , | الشكرر |
| | | | 10. | إختباران تحريريان مدة كل منهما ثلاث ساعات + | الصحة العامة والطب |
| | 10. | 10. | + | اختبار شفهي + بحث ميداني حقلي عن احدى | _ |
| | | | 10. | الخدمات الصحية ذات العلاقة | الوقائي والاجتماعي |
| 70 | | 10 | ۲. | اختبار تحريري مدته ساعة +اختبار شفهي | المقرر الاختياري |
| 770 | | | | | إجمالي الدرجة |

(8) Evaluation of Program's intended learning outcomes (ILOs):

| Evaluator | Tools* | Sample size |
|---|------------------------|-------------|
| Internal evaluator (s) Prof. Dr. Olfat Farag Prof. Dr. Nadia montaser | Focus group discussion | Not yet |
| External Evaluator (s) | Evaluation checklist | Not yet |
| Senior student (s) | None | Not yet |
| Alumni | None | Not yet |
| Stakeholder (s) | None | Not yet |
| others | None | Not yet |

^{*} Tools= questionnaire, interview, workshop, communication, e-mail

| We certify that all information required to deliver this program is contained in the above specification & will be implemented. All course specification for this program are in place. | |
|---|-------------------|
| Program coordinator: | Signature & date: |
| Prof. Dr. Mohamed Azmy Khafagy | |
| Head of the department | Signature & date: |
| Prof. Dr. Mohamed Azmy Khafagy | |
| Dean: | Signature & date: |
| Prof. Dr. El Said Abdel Hady | |
| Executive director of the quality assurance unit: | Signature & date: |
| Prof. Dr. Seham Gad El Hak | |
| | |