



Medical Doctorate (M.D.) Degree Program and Courses Specifications for Public Health and Community Medicine

(According to currently applied credit point bylaws)

DEPARTMENT OF PUBLIC HEALTH AND COMMUNITY MEDICINE

Faculty of Medicine Assiut University 2022-2023

| Contents | | |
|--|------|--|
| Item | Page | |
| Program Specification For Medical Doctorate (M.D.) Degree | | |
| in Public Health and Community Medicine | 3 | |
| 2022-2023 | | |
| B. Professional Information | 4 | |
| 1. Program aims | | |
| 2. Intended learning outcomes (ILOs) for the whole | | |
| program | | |
| 3. Program academic standards | | |
| 4. Program external references | | |
| 5. Program structure and contents | | |
| 6. Courses contents (Annex 1) | | |
| 7. Admission requirements | | |
| 8. Progression and completion requirements | | |
| 9. Assessment methods and rules | | |
| 10. Program evaluation | | |
| 11. Declaration | | |
| | | |
| - Annex 1, Courses/ specifications | 17 | |
| 1) Course 1 Medical Statistics and computer | 18 | |
| 2) Course 2 Research Methods | 25 | |
| 3) Course 3 Medico-legal ethics and medical reports | 33 | |
| 4) Course 4 Quality of health care | 39 | |
| 5) Course 5 Advanced statistics | 46 | |
| 6) Course 6 Advanced Public Health and Community Medicine. | 54 | |
| - Annex 2, Program academic standards | 66 | |
| - Annex 3, Teaching methods | 71 | |
| - Annex 4, Assessment methods | 74 | |
| - Annex 5, Program evaluation tools | 78 | |
| - Annex 6 Program matrixes: | 80 | |
| I-General Academic reference standards (GARS) versus Program | | |
| ARS | | |
| II-Program ARS versus program ILOs | | |
| III- Program ILOs versus courses ILOs | 101 | |
| - Annex 7, Additional information. | 101 | |



Assiut University Faculty of Medicine Quality Assurance Unit (QAU)



M. D. degree of Public Health and Community Medicine

A. Basic Information

- **Program Title: Doctoral degree of Public Health and Community Medicine**
- Nature of the program: Single.
- **Responsible Department: Public Health and Community Medicine**
- **♣** Program Academic Director (Head of the Department): Prof. Dr. Eman Morsy Mohamed

Coordinator (s):

Principle coordinator:
Prof. Ekram Mohamed Mohamed
Assistant coordinator (s)
Prof. Eman Mohamed Mohamed Monazea

- **♣** Internal evaluators: Prof. Mohammad Hasan Qayed
- **Lesson** External evaluator

Prof. Raffat Rawoof: Professor of Public Health El Menia Faculty of Medicine

- **♣** Date of Approval by the Faculty of Medicine Council of Assiut University: 23-9- 2014
- **♣** Date of most recent approval of program specification by the Faculty of Medicine Council of Assiut University: 27-11-2022
- **Total number of courses: 8 courses**, first part 5 courses, second part 1 course and 2 elective courses.

B. Professional Information

1- Program aims

I/1 to graduate a consultant in Public Health and Community Medicine

1/2 to graduate a specialist capable to maintain advanced medical education research for advance of public and community services and studies.

2-Intended learning outcomes (ILOs) for the whole program:

2/1Knowledge and understanding:

- A. Demonstrate in-depth knowledge and understanding of theories, basics and updated biomedical, clinical epidemiological and socio behavioral science relevant to his specialty as well as the evidence based application of this knowledge to patient care.
- B. Explain basics, methodology, tools and ethics of scientific medical, clinical research.
- C. Mention ethical, medico logical principles and bylaws relevant to his practice in the field of public health & community medicine.
- D. Mention principles and basics of quality assurance and quality improvement in medical education and in clinical practice of public health and community medicine.
- E. Mention health care system, public health and health policy, issues relevant to this specialty and principles and methods of system based improvement of patient care in common health problems of the field of public health & community medicine.

2/2 Intellectual outcomes

- A. Apply the basic and clinically supportive sciences which are appropriate to the specialty related conditions / problem / topics.
- B. Demonstrate an investigatory and analytic thinking "problem solving "approaches to clinical situation related to specialty.
- C. Plan research projects.
- D. Write scientific papers.
- E. Participate in clinical risk management as a part of clinical governance.

- F. Plan for quality improvement in the field of medical education and clinical practice in his specialty.
- G. Create / innovate plans, systems, and other issues for improvement of performance in his practice.
- H. Present and defend his / her data in front of a panel of experts.
- I. Formulate management plans and alternative decisions in different situations in the field of the Public Health and community medicine.

2/3 Skills

2/3/1 Practical skills

Students will be able to:

- A. Provide extensive level of public health that is compassionate, appropriate, and effective for the management of health problems and the promotion of health.
- p.s. Extensive level means in-depth understanding from basic science to evidence based clinical application and possession of skills to manage independently all problems in field of practice.
- B. Provide extensive level of practical skills relevant to public health and community medicine for all common techniques and /or experiments.
- C. Provide extensive level of practical skills *for non-routine, laboratory skills and techniques and under increasingly difficult circumstances*, while demonstrating compassionate, appropriate and effective care.
- D. Perform diagnosis of the main health problems and prevention procedures considered essential in the field of public health & community medicine
- E. Handles unexpected problems, while demonstrating compassion and sensitivity to community needs and concerns.
- F. Communicate effectively and demonstrate caring and respectful behaviors when interacting with people in public health & community medicine related situations.
- G. Gather essential and accurate information about people and community regarding public health & community medicine related conditions.
- H. Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence and clinical judgment for public health & community medicine related conditions.

- I. Develop and carry out health management plans for public health & community medicine related conditions.
- J. Counsel and educate people about public health & community medicine related conditions.
- K. Use information technology to support control and prevention decisions and health education in all public health & community medicine related clinical situations.
- L. Perform competently all diagnostic and preventives procedures considered essential for public health & community medicine related conditions / area of practices.
- M. Provide health care services aimed at preventing public health & community medicine related health problems.
- N. Lead health care professionals, including those from other disciplines, to provide patient-focused care in public health & community medicine related conditions.
- O. Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets.

2/3/2 General skills

Including:

- Practice-based Learning and Improvement
- Interpersonal and Communication Skills
- Professionalism
- Systems-based Practice.

Practice-Based Learning and Improvement

- A. Demonstrate the competency of health services in the different area of public health & community medicine.
- B. Appraise scientific evidence.
- C. Continuously improve his epidemiological skills based on constant self-evaluation and life-long learning.
- D. Conduct epidemiological Studies and surveys
- E. Participate in clinical audit and research projects.
- F. Practice skills of evidence-based Medicine (EBM).
- G. Educate and evaluate students, residents and other health professionals.
- H. Design logbooks.
- I. Design clinical guidelines and standard protocols of management.
- J. Appraise evidence from scientific studies related to the public' health problems.
- K. Apply knowledge of study designs and statistical methods to the appraisal of epidemiological studies.
- L. Use information technology to manage information, access on-line medical information; for the important topics.

Interpersonal and Communication Skills

- M. Master interpersonal and communication skills that result in the effective <u>exchange of information and collaboration</u> with other people, and health professionals, including:-
 - Counsel a client.
 - Write a report.
 - Timely and legible <u>medical records</u>.
 - Teamwork skills.
- N. Create and sustain an ethically sound relationship with people.
- O. Elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills.
- P. Work effectively with others as a member or leader of a health care team or other professional group.

Professionalism

- Q. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of people and society.
- R. Demonstrate a commitment to ethical principles including provision or withholding of health care, confidentiality of personal information, informed consent, and business practices.
- S. Demonstrate sensitivity and responsiveness to person's culture, age, gender, and disabilities.

Systems-Based Practice

- T. Work effectively in health care delivery settings and systems related to public health & community medicine.
- U. Practice cost-effective health care and resource allocation that does not compromise quality of care.
- V. Advocate for quality health care and assist people in dealing with system complexities.
- W. Design, monitor and evaluate specification of under and post graduate course and programs.
- X. Act as a chair man for scientific meetings including time management.

3- Program Academic Reference Standards (ARS) (Annex 2)

Academic standards for Medical Doctorate (MD) degree in Public Health & Community Medicine

Assiut Faculty of Medicine developed MD degree programs' academic standards for different clinical specialties.

In preparing these standards, the General Academic Reference Standards for post graduate programs (GARS) were adopted. These standards set out the graduate attributes and academic characteristics that are expected to be achieved by the end of the program.

These standards were approved by the faculty council on 20/3/2010. These standards were revised and approved without changes by Faculty Council on 23-9-2014. These standards were recently revised and reapproved without changes by Faculty Council on 27-11-2022.

4- Program External References (Benchmarks)

- 1. ACGME (Accreditation Council for Graduate Medical Education). http://www.acgme.org/acWebsite/navPages/nav_Public.asp
- 2- Johns Hopkins School of Public Health. http://en.wikipedia.org/wiki/johns_Hopkins_School_of_Public_Health.

5- Program Structure

A. Duration of program: 4 years

B. Structure of the program:

Total number of credit points: = 420 CP

Master degree: 180 credit point

Didactic #: 37 CP (23.1%), practical 123(76.9%), total 160

CP Thesis and researches: 80 **CP** (33.3%)

First part

Didactic 5 (50%), practical 5 (50 %), total 10 CP

Second part Didactic 24, (16.3 %), practical 123 (83.7 %),

total 147 CP

Elective courses: 3 credit points

#Didactic (lectures, seminars, tutorial)

According the currently applied bylaws:

Total courses: 8

Compulsory courses: 6

Elective courses: 2

| | Credit point | % from total |
|-----------------------------|--------------|--------------|
| Basic science courses | 10 | 4.1% |
| Humanity and social courses | 3 | 1.2% |
| Specialty courses | 147 | 61.3% |
| Others (Computer,) | - | 0 |
| Field training | 123 | 51.3% |

C. Program Time Table

Duration of program 4 years divided into

o Part 1

Program-related basic science courses

- Medical statistic
- Research methodology
- Medicolegal Aspects and Ethics in Medical Practice and Scientific Research

Students are allowed to sit the exams of these courses after 6 months from applying to the M D degree.

Students are allowed to sit the exams of the remaining basic science courses after 12 months from applying to the MD degree.

Thesis and 2 published researches

For the M D thesis;

MD thesis subject should be officially registered within 1 year from application to the MD degree,

Discussion and acceptance of the thesis should not be set before 24 months from registering the M D subject;

It could be discussed and accepted either before or after passing the second part of examination

o Part 2

Program -related specialty courses and ILOs

Students are not allowed to sit the exams of these courses before 4 years from applying to the MD degree.

Two elective courses can be set during either the 1st or 2nd parts. The students pass if they get 50% from the written exams and 60% from oral exams, 60% from clinical/practical exams of each course

and 60% of summation of the written exams, clinical/practical exams of each course

Total degrees 1700 marks.

500 marks for first part

1200 for second part

Written exam 40% - 70%.

Clinical/practical and oral exams 30% - 60%.

Curriculum Structure: (Courses):

↓Levels and courses of the program:

| Modules/ Units delivering courses and | Course | | | |
|---------------------------------------|----------------------|-----------|----------|-------|
| student work load list | Code | Didactics | training | total |
| First Part | | | | |
| Basic science courses | | | | |
| 1) Course 1: Medical Statistics | FAC309A | 0.5 CP | 0.5 | 1 CP |
| and computer. | | CP | | |
| 2) Course 2: Research | FAC309B | | | 1 CP |
| Methodology | | 0.75 CP | 0.25 | |
| | | CP | 0.20 | |
| Course 3: Medicolegal Aspects and | FAC310C | | | 1 CP |
| Ethics in Medical Practice and | 17103100 | | | 1 01 |
| Scientific Research | | 0.75 CP | 0.25 | |
| | | CP CP | 0.23 | |
| Two complementary courses | | CI | | |
| Course 1: Quality of health care | COM309A | 1 CP | 2 CP | 3 CP |
| Course 2: Advanced statistics | COM309B | 2 CP | 2 CP | 4 CP |
| Total | COMSOD | 2 C1 | 2 CI | 10 CP |
| Two elective courses | | | | |
| | E + C200E | | | 3 CP |
| Evidence based medicine. | FAC300F | | | 1.5 |
| | T. C2057.6 | | | CP |
| Advanced infection control | FAC307M | | | 1.5 |
| | | | | CP |
| Hospital management | -FAC309L | | | 1.5 |
| | | | | CP |
| Second Part | Specialty courses | | | |
| | Specialty Clinical W | ork | | |
| Specialty Courses | | | | |
| Course 1: Advanced Public | COM309C | 24 CP | 123 CP | 147 |
| Health and Community Medicine | | | | CP |
| mit in | | | | |
| Third Part | | 40 CD | 40 | 00 CP |
| Thesis and at least two published | | 40 CP | 40 | 80 CP |
| Mater Degree | | СР | | 40 CD |
| Mater Degree | | | | 40 CP |

6. Courses Contents (Annex 1)

The competency based objectives for each course/module/rotation are specified in conjunction with teaching/training methods, requirements for achieving these objectives and assessment methods.

See Annex 1 for detailed specifications for each course/ module Annex 6 II: Program Matrix

7-Admission requirements

- Admission Requirements (prerequisites) if any :
 - I. General Requirements:
 - Master degree in public heath and community medicine.
 - **II. Specific Requirements:**
 - Fluent in English (study language)

VACATIONS AND STUDY LEAVE

The current departmental policy is policy is one week in the midyear and two weeks during the summer months and after finishing the summer field work.

FEES:

As regulated by the postgraduate studies rules and approved by the faculty vice dean of post graduate studies and the faculty and university councils.

8-Progression and completion requirements

- ♣ Examinations of the first part could be set at 6 months from registering to the MD degree.
- → Discussion of the MD thesis could be set after 2 years from officially registering the MD subject, after setting the second part exams.
- ♣ The maximum duration of the program is 4 years could be extended to 5 in certain conditions.

The students are offered the degree when:

- 1. Passing the exams of all basic science and specialty courses of this program as regulated by the post graduates approved rules by the faculty council.
- 2. Discussion and acceptance of the MD thesis and publication of at least one scientific paper from the thesis in preferably specialized medical journals.

9-Program assessment methods and rules (Annex IV)

| Method | ILOs measured |
|----------------------------|-------------------|
| Written examinations: | K & I |
| Structured essay questions | |
| Objective questions | |
| MCQ | |
| Problem solving | |
| Practical: | K ,I, P &G skills |
| OSPE | |
| Structured oral | K ,I &G skills |
| Logbook assessment | All |
| Research assignment | I &G skills |

Weighting of assessments:

| Courses | | Degrees | | | |
|---|-----------------|-------------------------------|-----------|-----------|-------|
| First Part | Course | Written Exam | Oral and/ | or | Total |
| | code | | Practical | 1 Exam | |
| Basic science courses: | | | | | |
| Course 1:Medical Statistics | FAC309A | 35 | _ | 15 | 50 |
| Course 2: Research Methodology | FAC309B | 35 | - | 15 | 50 |
| Course 3: Medicolegal Aspects and Ethics in Medical Practice and Scientific Research | FAC310C | 35 | - | 15 | 50 |
| Complementary Courses: | | | | | |
| Course 4:Quality of health care | COM309A | 100 | 50 | 50 | 150 |
| Course 5: Advanced statistics | COM309B | 120 | 80 | 80 | 200 |
| Second Part | 2 0 1 1 2 0 7 2 | _ = _ = = | | 1 | |
| Specialty Course: | Course code | written | oral | Practical | total |
| Course6: Advanced public | COM309C | 800 | 200 | 200 | 1200 |
| health and community medicine | | 4 papers = 200 marks for each | | | |
| Epidemiology of communicable & non communicable diseases | % of marks | 12% | 15% | 3% | 30% |
| Health programs: EPI, MCH, IMCI, School health | | 6% | 7.5% | 1.5% | 15% |
| methodology | | 2% | 2.5% | 0.5% | 5% |
| advanced Statistics | | 2% | 2.5% | 0.5% | 5% |
| Risky behaviors: Smoking, Drug addiction, injury & disability | | 2% | 2.5% | 0.5% | 5% |
| Demography & population problems | | 2% | 2.5% | 0.5% | 10% |
| Health of Vulnerable Groups: Child& mother health, adolescents health, Geriatrics | | 2% | 2.5% | 0.5% | 10% |
| Public Health Administration & Management- | | 2% | 3% | - | 10% |
| Health Economics | | 5% | _ | - | 5% |
| Environmental & occupational health | | 2% | 3% | - | 5% |
| Total | | | | | 100% |
| * 250/ of the onel even | | u4 of look ool |] | | 100/0 |

^{* 25%} of the oral exam for assessment of logbook Total degree 1200

500 marks for first part

1200 for second part

Written exam 66.7% (800 marks).

Clinical /practical and oral exams 33.3% (400 marks)

Elective courses 200

Examination system:

First part:

- Written exam 2 hours in Medical Statistics and Research Methodology + oral examination
- Written exam 1 hours in Medicolegal Aspects and Ethics in Medical Practice and Scientific Research + oral examination
- Written exam 2 hours in Quality of health care + oral examination
- Written exam 3 hours in Advanced Statistics + practical examination

Second part:

Written exam in 4 papers; paper time-3 hours for each in Advanced Public Health and Community Medicine+ oral and clinical/practical exam.

Elective courses

- Written exam one paper 1 hour in Elective course 1 + Oral & Practical exam
- Written exam one paper 1 hour in Elective course 2 + Oral & Practical exam

10-Program evaluation

| By whom | Method | sample |
|--------------------------------------|----------------|--------|
| Quality Assurance Unit | Reports | # |
| | Field visits | |
| External Evaluator (s): According to | Reports | # |
| department council | Field visits | |
| External Examiner (s):According to | | |
| department council | | |
| Stakeholders | Reports | # |
| | Field visits | |
| | questionnaires | |
| Senior students | questionnaires | # |
| Alumni | questionnaires | # |

#Annex 5 contains evaluation templates and reports (joined in the departmental folder).

11-Declaration

We certify that all of the information required to deliver this program is contained in the above specification and will be implemented.

All course specifications for this program are in place.

| Contributor | | Name | | Signature | Date |
|---------------------|-----------|------------|-------|-----------|-----------|
| Program P | Principle | Prof. | Ekram | | 20/4/2022 |
| Coordinator: | | Mohamed | | | |
| Head of the Resp | ponsible | Prof. Eman | Morsy | | 20/4/2022 |
| Department (I | Program | | | | |
| Academic Director): | - | | | | |
| | | | | | |
| | | | | | |

Annex 1, Specifications for Courses / Modules

Annex 1: specifications for courses/ modules

Course 4 Quality of health care

5) Course 5 Advanced statistics

Annex 1: specifications for courses

First Part

Course 1: Medical Statistics

Course 2: Research Methodology

Course 3: Medicolegal Aspects and Ethics in Medical

Practice and Scientific Research. Course 4: Quality of health care Course 5: Advanced statistics.

Course 1: Medical statistics

Name of department: Public Health and Community Medicine
Faculty of medicine
Assiut University
2022-2023

1. Course data

- **4** Course Title: Medical statistics
- **♣** Course code: FAC309A
- **♣** Specialty: offered to all clinical and academic specialties
- Number of credit points: 1 credit point (0.5 didactics

and 0.5 practical)

- **♣ Department (s) delivering the course:** Pubic Health and Community Medicine
- Coordinator (s):
 - Course coordinator: Prof. Farag Mohammed Moftah
 - Assistant coordinator (s):

Prof. Medhat Araby Khalil Saleh

- Date last reviewed: January -2022
- Requirements (pre-requisites) if any:
 - Completed Master degree in any of the academic or clinical departments of Medicine.

2. Course Aims

Enable gradute students to use statistical principles to improve their professional work and develop the concept of critical interpretation of data

3. Intended learning outcomes (ILOs):To be able to use statistical principals to manage data

A knowledge and understanding

| ILOS | Methods of teaching/ | Methods of Evaluation |
|---|----------------------|--------------------------|
| | learning | |
| A. List the types of variables | Lecture and | Written |
| | discussion | examination |
| B. Identify the methods of data | Lecture and | Written |
| collection | discussion | examination |
| C. Describe the different sampling | Lecture and | Written |
| strategies | discussion | examination |
| D. Identify types of tabular and | Lecture and | Written |
| graphic presentation of data | discussion | examination |
| E. Identify measures of central | Lecture and | Written |
| tendency and dispersion | discussion | examination |
| F. Identify the characters of normal | Lecture and | Written |
| distribution curve. | discussion | examination |
| G. Detect the difference between | Lecture and | Written |
| parametric and non-parametric tests | discussion | examination |
| H. Identify the concepts of correlation | Lecture and | Written |
| and regression | discussion | examination |

B. intellectual

| ILOs | Methods of teaching/ learning | Methods of Evaluation |
|--|-------------------------------------|--------------------------|
| A. Describe the normal curves. | Lecture& Discussions | Written examination |
| B. Describe and summarize data | Lecture& Discussions | Written examination |
| C. Select the proper test of significance | Lecture& Discussions | Written examination |
| D. Interpret the proper test of significance | Lecture& Discussions | Written examination |
| E. Describe the difference between parametric and non-parametric tests | Lecture& Discussions | Written examination |

C. Practical skills

| ILOs | Methods of | Methods of |
|---|-------------|-------------|
| | teaching/ | Evaluation |
| | learning | |
| A. Design data entry files. | Tutorial on | Assignments |
| | SPSS | SPSS exam |
| B. Validate data entry. | Tutorial on | Assignments |
| , | SPSS | SPSS exam |
| C. Manage data files. | Tutorial on | Assignments |
| 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | SPSS | SPSS exam |
| D. Construct tables and graphs. | Tutorial on | Assignments |
| 2. Commune merce und Braphie. | SPSS | SPSS exam |
| E. Calculate measures of central | Tutorial on | Assignments |
| tendency and dispersion. | SPSS | SPSS exam |

| F. Select, apply and interpret the | Tutorial on | Assignments |
|------------------------------------|-------------|-------------|
| proper test of significance. | SPSS | SPSS exam |

D general skills

| ILOs | Methods of teaching/ | Methods of Evaluation |
|---|----------------------|---------------------------------|
| | learning | |
| A. Appraise scientific evidence | Discussions | Research assignment |
| B. Use information technology to manage information, access online medical information; for the important topics. | tutorial | Research and audits' assignment |

4. Course contents (topic s/modules/rotation Course Matrix

Time Schedule: First Part

| Topic | Covered ILOs | | | |
|--|--------------|--------------|---------------------|-------------------|
| _ | Knowledge | Intellectual | Practical skills | General Skills |
| | A | В | С | D |
| Introduction | A-F | A-D | - | A&B |
| Tables and graphics | D | A-D | | A&B |
| Sampling | С | - | - | A&B |
| Methodology of data collection | В | - | - | A&B |
| Type of variables | A | - | - | A&B |
| Proportion test& Chi-square test | E,F | C&D | - | A&B |
| Student T test& Paired T test | E,F | C&D | F | A&B |
| ANOVA test | E,F | C&D | F | A&B |
| Non parametric tests | E,F | C&D | F | A&B |
| Discrimination analysis factor analysis | E,F | C&D | - | A&B |
| SPSS Introduction | A-F | A-D | - | A&B |
| Data entry and cleaning of data | A | A-D | A-C | A&B |
| Transforming of variables | A | A&B | A-C | A&B |
| Descriptive statistics | D | A-D | D&E | A&B |
| Graphic presentation | D | A&B | D | A&B |
| Chi square and interpretation of results | E,F | C&D | F | A&B |
| Correlation Regression | E,F | C&D | F | A&B |
| Multiple and logistic Regression | E,F | C&D | F | A&B |

5. Course Methods of teaching/learning

- 1. Lectures
- 2. Assignments
- 3. Discussions
- 4. Exercises
- 5. Tutorial on SPSS v.16

6. Course assessment methods:

i. Assessment tools:

- 1. Attendance and active participation
- 2. Assignment
- 3. Practical SPSS examination
- 4. Written exam
- **ii. Time schedule:** After 6 months from applying to the M D degree.
- iii. Marks: 50 (35 for written exam and 15 for practical exam).

7. List of references

i. Lectures notes

Department lecture notes

ii. Essential books

- i. Essential books
 - Medical Statistics: Book by Ramakrishna HK 2016
 - Janet Peacock and Philip Peacock. Oxford Handbook of Medical Statistics (second edition.) Publisher: Oxford University Press, Print Publication Date: Nov 2010 Print ISBN-13: 9780199551286, Published online: Jun 2011. DOI: 10.1093/med/9780199551286.001.0001
 - Leslie E. Daly MSc, PhD, Hon MFPHM,, Geoffrey J. Bourke MA, MD, FRCPI, FFPHM, FFPHMI, Interpretation and Uses of Medical Statistics, Fifth Edition, First published:1 January 2000, Print ISBN:9780632047635 |Online ISBN:9780470696750 |DOI:10.1002/9780470696750
 - Marcello Pagano, Kimberlee Gauvreau: Principles of Biostatistics second edition published in 2000 by Brooks/Cole and then Cengage Learning. CRC Press, Feb 19, 2018 Mathematics 584 pages.

Iii- Recommended books

• Ji-Qian Fang (Sun Yat-Sen University, China) Handbook of Medical Statistics: https://doi.org/10.1142/10259 | September 2017.Pages: 852

- Robert H. Riffenburgh: Statistics in Medicine 4th Edition (2020). EvidenceEvidence Based Medicine How to practice and teach EBM.
- Discovering Statistics Using IBM SPSS Book by Andy Field, 2013.

i. Periodicals, Web sites, etc

- iv. **Periodicals , etc** Statistics in Medicine Wiley Online Library
- v. **Web sites** https://www.phc.ox.ac.uk/research/medical-statistics

8. Signatures

| Course Coordinator: Farag Mohammed Moftah | Head of the Department: Prof. Eman Morsy Mohamed |
|---|---|
| Date : 10-1-2022 | Date : 10-1-2022 |

Course 2: Research Methodology

Name of department: Public Health and Community Medicine Faculty of medicine Assiut University 2022-2023

1. Course data

- **Let Course Title: Research methodology**
- Course code: FAC309B
- Specialty: Offered to all clinical and academic specialties
 - Number of credit points: 1 credit point (0.75 didactics and 0.25 practical)
- 4
- **Department** (s) delivering the course: Department of public health
- Coordinator (s):
 - Course coordinator: Prof. Mahmoud Attia

Assistant coordinator (s): Prof. Ekram Mohamed

- Prof. Medhat Araby Khalil
- **Date last reviewed:** January 2022
- **Requirements** (prerequisites) if any:
 - ➤ Completed Master degree in any of the academic or clinical departments of Medicine.

2. Course Aims

To provide graduate students with the skills of:

- planning and implementing sound research
- writing a scientific research proposal

3. Intended learning outcomes (ILOs)

A knowledge and understanding

| understanding | |
|-----------------------|---|
| teaching/ learning | Methods of Evaluation |
| Lecture and | Written exam |
| discussion | Log book |
| Practical sessions | assignments |
| Workshops | Practical exam |
| Lecture and | Written exam |
| discussion | Log book |
| Practical sessions | assignments |
| | Practical exam |
| Lecture and | Written exam |
| discussion | Log book |
| Practical sessions | assignments |
| Lecture and | Written exam |
| discussion | Log book |
| Practical sessions | assignments |
| Workshops | Practical exam |
| Lecture and | Written exam |
| discussion | Log book |
| Practical sessions | assignments |
| Workshops | _ |
| Lecture and | Written exam |
| discussion | Log book |
| Practical sessions | assignments |
| Workshops | Practical exam |
| Lecture | Written exam |
| Discussion | Log book |
| | assignments |
| | Practical exam |
| Practical tutorial on | Log book |
| web | assignment |
| Lecture and | Written exam |
| | Methods of teaching/learning Lecture and discussion Practical sessions Workshops Lecture and discussion Practical sessions Lecture and discussion Practical sessions Lecture and discussion Practical sessions Workshops Lecture Discussion Practical tutorial on web |

| scientific writing. | discussion | Log book |
|--|--------------------|----------------|
| _ | Practical sessions | assignments |
| | Workshops | |
| J. Select the appropriate study design for | Lecture | Written exam |
| the research question. | Practical sessions | Practical exam |
| K. Minimize bias in designing research. | Lecture | Written exam |
| L. Screening & theoretical background | Lectures | Written exam |
| L. Screening & theoretical background | | Practical exam |
| M. Mention the basic ethics for conducting a | lectures | Written exam |
| research and medicolegal principles relevant | seminar | Practical |
| to data confidentiality. | | exam |

B. intellectual

| Competency and Skills | Methods of | Methods of |
|--|-------------|----------------|
| | teaching/ | Evaluation |
| | learning | |
| A-Apply basic science & knowledge for | Discussions | Written exam |
| appraising scientific literature. | &seminars | Practical exam |
| B- Design research and present study data, | lecture | log book |
| in seminars. | seminar | assignments |
| C- Design suitable epidemiological study. | lecture | log book |
| | seminar | assignments |
| D-Design strategies for resolving ethical | lecture | Written exam |
| concerns in research, law, and regulations. | Workshops | log book |
| | | assignments |
| E- Apply coherently synthesize ideas and | lecture | log book |
| integrate lateral and vertical thinking. | Workshops | assignments |
| F- Evaluate screening tests and interpreting | lecture | Written exam |
| their uses in different population. | | Practical exam |

C.Practical skills

| Competency and | Methods of | Methods of |
|---|------------|----------------|
| Skills | teaching/ | Evaluation |
| | learning | |
| A- Conduct epidemiological studies, screening | lectures | written exam |
| and surveys. | seminar | log book |
| | | assignments |
| B- Identify steps required in fielding the study. | Lecture | Assignments |
| | | Written exam |
| C- Managing data collection team. | lectures | log book |
| | seminar | assignments |
| D- Identify steps required for calculation | Lecture | Assignments |
| sensitivity, specificity, positive predictive | Practical | Written exam |
| value, negative predictive value, accuracy of | sessions | Practical exam |
| a screening test. | | |
| E- Be able to define and apply the | Lecture | Assignments |
| epidemiologic criteria of causality and be | Practical | Written exam |
| able to distinguish between a measure of | sessions | Practical exam |
| association and evidence of causality. | | |
| F- | | |
| G- Synthesize information from multiple | Lecture | Assignments |
| sources for research writing and the ability | Practical | Written exam |
| to perform paper critique. | sessions | Practical exam |
| H- Identify bias and confounding in | Lecture | Assignments |
| epidemiological study designs, their types | Practical | Written exam |
| and ways to control them in various types of | sessions | Practical exam |
| biases. | | |

D General skills

Practice-Based Learning and Improvement

| ILOs | Methods of teaching/ learning | Methods of Evaluation |
|---|--|------------------------------------|
| A- Scientific paper and proposal writing skills: be able to write an introduction, objectives and the methodological section. | Tutorial | Written examination |
| B- Learn authorship ethical rules. | Tutorial | Written examination |
| C- Perform practice-based improvement activities using a systematic methodology (audit, logbook, critical appraisal) | Lectures-Practicalsessions- Discussion- Readings | critical appraisal |
| D- Appraise evidence from scientific studies(journal club) | - Lectures -Practical sessions - Discussion - Readings | critical appraisal |
| E- Conduct epidemiological studies, screening and surveys. | - Lectures -Practical sessions - Discussion - Readings | attendance and participation |
| F- Facilitate training of junior students and other health care professionals in different screening activities. | Field work Participation in projects | attendance and participation |

Interpersonal and Communication Skills

| ILOs | Methods of teaching/ learning | Methods of Evaluation |
|---|----------------------------------|-----------------------|
| G-Maintain ethically sound relationship with | | Written |
| community members. | -Practical sessions | exams |
| | - Discussion | |
| | - Readings | |
| H- Provide information using effective nonverbal, | - Lectures | Written |
| explanatory, questioning, and writing skills. | -Practical sessions | exams |
| | - Discussion | Practical |
| | - Readings | exams |
| I- Present results of researches in seminars. | - Lectures | Log book |
| | -Practical sessions | assignments |
| | - Discussion | - |
| | - Readings | |

Professionalism

| ILOs | Methods of teaching/ | Methods of Evaluation |
|---|--|--|
| | learning | |
| J- Demonstrate respect, compassion, and integrity to the needs of society. | LecturesDiscussionReadings | Written exams |
| K- Manage potential conflicts of interest encountered by practitioners, researchers, and organizations. | LecturesDiscussionReadings | Written exams |
| L- Design strategies for resolving ethical concerns in research, law, and regulations. | Lectures - Discussion - Readings | Written exams Practical exams |
| M- Demonstrate ways to control for confounding in the analysis phase of a study | Lectures - Discussion - Readings | Written exams Practical exams |
| N-Demonstrate a commitment to ethical principles including confidentiality of participants' information and informed consent. | Lectures - Discussion - Readings | Written exams |
| O-Assess ethical considerations in developing communications and promotional initiatives. | LecturesDiscussionReadings | Written exams |

4. Course contents (topic s/modules/rotation Course Matrix

Time Schedule: First Part

| Topic | Covered ILOs | | | |
|--|--------------|--------------|---------------------|-------------------|
| | Knowledge | Intellectual | Practical skills | General Skills |
| | A | В | C | D |
| Over view on research conduction and research ethics | A&E | A-D | A-C | C-G, I,L&M-O |
| How to write a research proposal | F,I | Е | F | A-C&H |
| Observational study design | A& D | B & C | D | E & F |
| Experimental study design | A& D | B & C | В | E & F |
| Evaluation of diagnostic tests (Screening) | L | A | B& E | F |
| Systematic reviews and meta analysis | G, H & M | E& F | F | C, D |
| Confounding, bias & effect modification | B & K | D | E & G | M |

5. Course Methods of teaching/learning:

- 1. Lectures
- 2. Assignments
- 3. Discussion
- 4. Exercises

6. Course assessment methods:

i. Assessment tools:

- 1. Attendance and participation
- 2. Log book assignments
- 3. Written examination
- 4. Practical examination
- **ii. Time schedule:** After 6 months from applying to the M D degree.
- iii. Marks: 50 (35 for written exam and 15 for oral exam).

7. List of references

i. Lectures notes

• Department lecture notes

ii. Essential books

- Research Design: Qualitative, Quantitative and Mixed Methods Approaches 4th Edition by John W. CreswellSAGE Publications, Inc; 4th edition (January 1, 2014)
- Research methodology: A step by step Guide for Beginners.
 Ranjit Kumar, 2020. Second edition https://books.google.com.eg/books?
- Medical Research Essentials Rania Esteitie, McGraw Hill Professional, third edition, Feb 5, 2014 Medical 104 pages
- Research Methodology in the Medical and Biological Sciences Petter Laake, Haakon Breien Benestad, Bjorn R. Reino Olsen, 4th edition, Academic Press, Nov 5, 2007 - Science - 512 pages

ii. Recommended books

- Research Methods in Education 7th Edition, by Louis Cohen, Lawrence Manion, Keith Morrison Publisher: Routledge; (April 22, 2011) www.routledge.com/textbooks/cohen7e.
- Research Methodology: A Practical and Scientific Approach Vinayak Bairagi, Mousami V. Munot · 2019, Research Methodology: A Practical and Scientific Approach - Google Books
- Based Medicine How to practice and teach EBM. David Sachett, Sharon E. Straus, W. Scott Richardson, William Rosenberg R.Brain Haynes
- Dissertation workshop open courseware JHSPH

8. Signatures

| Course Coordinator: | Head of the Department: |
|----------------------------|--------------------------|
| Prof. Mahmoud Attia | Prof. Eman Morsy Mohamed |
| Date : 10-1-2022 | Date : 10-1-2022 |

Course 3: Medicolegal Aspects and Ethics in Medical Practice and Scientific Research

Name of department: Forensic medicine and clinical toxicology
Faculty of medicine
Assiut University

1. Course data

- **4** Course Title: Medicolegal Aspects and Ethics in Medical Practice and Scientific Research
- Course code: FAC310C

2022-2023

- ♣ Speciality: General medicine, Special medicine, Pediatrics, Public health, Oncology and Rheumatology and critical care Medicine (1st part).
- **♣** Number of credit points: 1 credit point
- **Department** (s) delivering the course: Forensic Medicine and Clinical Toxicology
- Coordinator (s):
 - Course coordinator:

Prof. Ghada omran

- Assistant coordinator (s) Assist.

Prof. Zaghloul Thabet

- Date last reviewed: 4-2022
- Requirements (prerequisites) if any :
 - > Completed Master degree.

2. Course Aims

To describe the basic ethical and medicolegal principles and bylaws relevant to practice in the field of General medicine, Special medicine, Pediatrics, Public health, Oncology and Rheumatology

3. Intended learning outcomes (ILOs):

A knowledge and understanding

| Competency and Skills | Methods of teaching/ | Methods of Evaluation |
|--|------------------------|--------------------------|
| | learning | |
| A. Mention principals of Taking consent. | Lecture and discussion | Oral &Written exam |
| B. Mention principals of Writing a death certificate | Lecture and discussion | Oral &Written exam |
| C. Mention principals of diagnosing death. | Lecture and discussion | Oral &Written exam |
| D. Mention principals of writing toxicological reports. | Lecture and discussion | Oral &Written exam |
| E. Explain principals of medical reports. | Lecture and discussion | Oral &Written exam |
| F. List indications and principals of induced emesis, gastric lavage and samples collection. | Lecture and discussion | Oral &Written exam |

B. intellectual

| Competency and | Methods of | Methods of |
|--|------------------------|--------------------|
| Skills | teaching/ | Evaluation |
| | learning | |
| A. Present case, seminars in death certificate | Lecture and discussion | Oral &Written exam |
| B. Present case, seminars in toxicological cases | Lecture and discussion | Oral &Written exam |

C. Practical skills

| Competency and Skills | Methods of teaching/ learning | Methods of Evaluation |
|--|-------------------------------------|---|
| A. Identify medical ethics and ethics in research. | Lecture and discussion | Reading Discussion |
| B. Prepare and write consent. | Lecture and discussion | Reading Discussion |
| C. Identify medical responsibilities. | Lecture and discussion | Reading Discussion |
| D. Write death certificate. | Lecture and discussion | Reading Discussion and active participation |
| E. Deal with a case of Suspicious death | Lecture and discussion | Reading Discussion and active participation |
| F. Perform gastric lavage, induce emesis, and obtain samples. | | |
| G. Write medical and toxicological reports | Lecture and discussion | Reading Discussion and active participation |
| H. Develop and carry out patient management plans for Euthanaesia, and Organ | | |

| | Transplantation | |
|----|------------------------------|--|
| I. | Counsel patients and their | |
| | families about speciality | |
| | related conditions including | |
| | Permanent infirmities, | |
| | Euthanasia, and Organ | |
| | Transplantation | |

D general skills

| Competency and Skills | Methods of teaching/ learning | Methods of Evaluation |
|---|-------------------------------------|--------------------------|
| A. Present a case. | Lecture and discussion | Global rating logbook |
| B. Write a consultation note | Lecture and discussion | Global rating logbook |
| C. Inform patients and maintaining comprehensive. | Lecture and discussion | Global rating logbook |
| D. Make timely and legible medical records | Lecture and discussion | Global rating logbook |
| E. Acquire the teamwork skills | Lecture and discussion | Global rating logbook |

4. Course contents (topic s/modules/rotation Course Matrix

Time Schedule: First Part

| Topic | Covered ILOs | | | |
|---------------------------------|--------------|--------------|------------------|-------------------|
| | Knowledge | Intellectual | Practical skills | General Skills |
| | \mathbf{A} | В | C | D |
| 1. Death and death certificate. | В,С | A | D,E | A |
| 2. Medical Reports | A | | G | A,D,E |
| 3. Toxicological reports | D,F | В | G,F | A,E |
| 4. Ethics in research. | A | | A | |
| 5. Medical ethics. | Е | | A,B,C,H,I | В,С,Е |

5. Course Methods of teaching/learning:

- 1. Lectures.
- 2. Discussions.
- 3. Exercises.

6. Course assessment methods:

i. Assessment tools:

- 1. Written examination.
- 2. Attendance and active participation.
- 3. Oral examination.
- **ii. Time schedule:** After 6 months from applying to the M D degree.
- iii. Marks: 50 (35 for written exam and 15 for oral exam).

7. List of references

i. Lectures notes

- Course notes.
- Staff members print out of lectures and/or CD copies.

ii. Essential books

• Bernard Knight and Pekka Saukko (2015: Knight Forensic Pathology. Hodder Arnold press

- Goldfrank, Lewis R.; Howland, Mary Ann; Hoffman, Robert S.; Nelson, Ewis S.; Lewin, Neal A (2019): Goldfrank's Toxicologic Emergencies, 11th ed. McGraw Hill / Medical.
 - Medical Ethics Manual. World medical association. Third edition 2015.
 - Medical ethics and law. Dominic Wilkinson, 3rdedition 2019.

iii. Recommended books

• Biswas Gautam (2021): Review of Forensic Medicine & Toxicology. 5th ed. Jaypee Brothers Medical Pub.

iv. Journal and web site

- Journals of all Egyptian Universities of Forensic Medicine and Clinical Toxicology.
- All International Journals of Forensic Medicine and Clinical Toxicology which available in the university network at www.sciencedirect.com. As:

Forensic Science International Journal. Toxicology Letter.

8. Signatures

| - Course Coordinator: Prof. Ghada Omran | - Head of the Department: Prof. Randa Hussein Abdel |
|--|--|
| | hady |
| Date : 17-4-2022 | Date : 17-4-2022 |

Complementary Courses

Course 4: Quality of Health Care

- Name of department: Public Health & Community Medicine
- Faculty of Medicine
- Assiut University
- **2022-2023**

1. Course data

- **4** Course Title: Quality of Health Care
- **♣** Course code: COM309A
- Number of points: Didactic 1 CP, (33.3%) practical 2 CP (66.7%). Total 3 credit points.
- **Department** (s) delivering the course: Public Health & Community Medicine
- Coordinator (s):
 - Course coordinator: Prof. Ekram Mohamed Abdel Khalek
 - Assistant coordinator (s).
- **♣** Date last reviewed: 21/4/2022
- **General requirements (prerequisites) if any:**
 - **♣** None
- **Requirements from the students to achieve course ILOs are clarified in the joining log book.**

2. Course Aims

- 2/1-Enhance an understanding and increase awareness of the graduate students of importance of quality in health care. 2/2-Take responsibility for controlling quality and to enable them to use quality methods to improve the process for
- 2/3- Prepare the health care professionals to plan, develop and implement successful continuous quality improvement/management programs in their organizations and health care regions.

3. Course intended learning outcomes (ILOs):

A-Knowledge and understanding

delivering the services.

| ILOS | Methods of | Methods of |
|---|-------------|-------------|
| | teaching/ | Evaluation |
| | learning | |
| A-Understand principles and basics | Lecture and | Written |
| of quality assurance and quality improvement process. | discussion | examination |
| improvement process. | | Oral exam |
| B- Identify the quality | Lecture and | Written |
| management. | discussion | examination |
| | | Oral exam |
| C- Know the steps of design quality | Lecture and | Written |
| improvement projects | discussion | examination |
| | | Oral exam |

B-Intellectual outcomes

| ILOS | Methods of | Methods of |
|------------------------------------|-------------|-------------|
| | teaching/ | Evaluation |
| | learning | |
| A- Analyze problems in their | Lecture and | Written |
| work places and selecting | discussion | examination |
| opportunity for improvement. | | |
| B- Select most appropriate quality | Lecture and | Written |
| improvement project | discussion | examination |

C- <u>Practical skills (Patient Care)</u>

| ILOS | Methods of | Methods of |
|--|------------|----------------|
| | teaching/ | Evaluation |
| | learning | |
| A- Facilitate development of | Tutorial | Assignments |
| leadership values and | | Oral exam |
| commitment to quality. | | |
| | | |
| B- Analyze and study the problem | Tutorial | Assignments |
| to identify its root causes. | | Oral exam |
| C- Apply and evaluate a quality | Tutorial | Assignments |
| improvement project. | | Practical exam |
| D-Use recent technologies to | Tutorial | Assignments |
| improve his practice in health care quality. | | Practical exam |

D-General Skills

| ILOS | Methods of | Methods of | |
|--|-------------|---------------------------------|--|
| | teaching/ | Evaluation | |
| | learning | | |
| A- Provide participants with a good knowledge of all the core elements of healthcare quality improvement | Discussions | Research assignment | |
| B- Apply problem-solving skills to analyze problems and issues related to quality. | tutorial | Research and audits' assignment | |
| C- Develop solutions and actions for improvement. | Discussions | Research assignment | |

4. Course contents (Course Matrix)

Time Schedule: First Part

| Topic | Covered ILOs | | | |
|------------------------------|--------------|--------------|-----------------|--------------|
| | Knowledge | Intellectual | Practical | General |
| | A | В | skills C | Skills D |
| Definitions and concept of | A | - | - | A |
| quality in health care. | | | | |
| Quality management tools | В | - | \mathbf{C} | \mathbf{A} |
| and theories. | | | | |
| | | | | |
| Quality assurance. | A & C | В | \mathbf{A} | \mathbf{A} |
| Measurement quality in | A -C | A& B | A& B | A-C |
| health care. | | | | |
| Risk management and patient | В | A | В | В |
| safety at all employment | | | | |
| levels and in all healthcare | | | | |
| settings. | | | | |
| | | | | |
| Quality improvement process. | C | В | D | - |
| Accreditation in Healthcare | A | - | C | D |
| quality. | | | | |
| | | | | |

5. Course Methods of teaching/learning:

- 1. Lectures& Discussions
- 2. Practical sessions& workshops
- 3. Assignments

6. Course Methods of teaching/learning: for students with poor achievements

- 1- More discussions
- 2- More assignments & exercises
- 3- Problem-solving

7. Course assessment methods:

i. Assessment tools:

- 1- Attendance and active participation through the Log book
- 2- Written exam
- 3- Oral exam
- ii. Time schedule: During first part
 - ii. Marks: 150 (100 for written exam and 50 for oral exam).

8. List of references

i. Lectures notes

Note of the staff lectures.

Note of the Institute of Quality Management, American University in Cairo.

Essential books

- Quality of care, WHO
- Introduction to healthcare quality management 2007, By Yosef D.

Dlugacz.

iii. Recommended books

• Standard of hospitals, Egyptian Ministry of Health and population 2013

• A practice based handbook on healthcare quality, Assaf F. Al-Assaf, Priscilla Pierce, Khaled Al-Hussein 2011

iv. Periodicals, Web sites, etc

- www. who. int
- Online courses of health care quality
- http://nationalqualitycenter.org

v. Others

Library

| 9. Signatures | |
|---------------|--|
| 9. Signatures | |
| 8 | |

| Course Coordinator: | Head of the Department: |
|---------------------|--------------------------|
| Prof. Ekram Mohamed | Prof. Eman Morsy Mohamed |
| Date: | Date: |

Course 5: Advanced Medical statistics

Name of department: Public Health and Community Medicine Faculty of medicine Assiut University 2022-2023

1. Course data

- **4** Course Title: Advanced Medical Statistics
- **♣ Course code:** COM309B
- **♣** Speciality: offered to all clinical and academic specialties
- **♣** Number of credit points: Didactic 2 CP, (50%) practical 2 CP (50%). Total 4 credit points.
 - **4** 4 credit points
 - **Department** (s) delivering the course: Pubic Health and Community Medicine
 - **4** Coordinator (s):
 - Course coordinator: Prof. Farag Mohammed Moftah
 - Assistant coordinator (s): Prof. Medhat Araby Khalil saleh

Date last reviewed: February 2022

- Requirements (pre-requisites) if any :
 - Completed Master degree in any of the academic or clinical departments of Medicine.
 - Complete the basic course of medical statistics offered by the department

2. Course Aims

2/1Enable post-gradute students to use advanced statistical methods in their thesis and to improve the quality of scientific research and international publication in all medical fields

3. Intended learning outcomes (ILOs):To be able to use statistical principals to manage data

A knowledge and understanding

| ILOS | Methods of | Methods of |
|--|-------------|-------------|
| | teaching/ | Evaluation |
| | learning | |
| A- Discuss and interpret Two – Way ANOVA | Lecture and | Written |
| 71140 171 | discussion | examination |
| B- Explain the concepts of Multivariate Analysis of Variance (MANOVA) | Lecture and | Written |
| Thialysis of Variance (With VOVT) | discussion | examination |
| C- Explain the concepts of Analysis of Covariance (ANCOVA) | Lecture and | Written |
| Covaliance (7114CCV71) | discussion | examination |
| D- Discuss Multivariate Analysis of Covariance (MANCOVA) | Lecture and | Written |
| Oovananoe (W/WOOV/) | discussion | examination |
| E- Explain the concepts of Factor Analysis | Lecture and | Written |
| | discussion | examination |
| F- Calculate average life expectancy with data found in life tables using STATA. | Lecture and | Written |
| data round in mo tables doing 517(17). | discussion | examination |
| G- Calculate the proportion of deaths of a given age group based on data in a life | Lecture and | Written |
| table. | discussion | examination |
| H- Interpret various life tables and survival including mortality rates and life | Lecture and | Written |
| expectancy. | discussion | examination |
| I- Discuss the methods for calculating survival curve | Lecture and | Written |
| Gai vivai Gai vo | discussion | examination |

| J- Describe the log-rank test for comparing survival curves | Lecture and discussion | Written examination |
|--|------------------------|---------------------|
| K- Describe the general features of a logistic regression model | Lecture and discussion | Written examination |
| L- Discuss the interpretation and methods for drawing inference on logistic regression | Lecture and discussion | Written examination |
| M- Discuss the role of indicator variables in linear regression models | Lecture and discussion | Written examination |
| N- Describe power and sample size calculations. | Lecture and discussion | Written examination |
| O- Describe concept of ROC curve | Lecture and discussion | Written examination |

B. intellectual

| ILOs | Methods of teaching/ learning | Methods of Evaluation |
|---|-------------------------------|--------------------------|
| F. Describe life tables. | Lecture& Discussions | Written examination |
| G. Interpret survival curve | Lecture& Discussions | Written examination |
| H. Select between parametric and non parametric tests | Lecture& Discussions | Written examination |
| I. Interpret the proper tests of significance | Lecture& Discussions | Written examination |
| J. Calculate and interpret sample size and power of the study | Lecture& Discussions | Written examination |
| K. Interpret regression modules | Lecture& Discussions | Written examination |
| L. Select proper multivariate analysis tests | Lecture& Discussions | Written examination |
| M. Interpret the ROC curve | Lecture& Discussions | Written examination |

C. Practical skills

| ILOs | Methods of | Methods of |
|-------------------------------------|---|-------------------|
| | teaching/ | Evaluation |
| | learning | |
| A. Manage data files. | Tutorial on | Assignments |
| A. Wanage data mes. | STATA | STATA exam |
| B. Construct tables and graphs. | Tutorial on | Assignments |
| B. Construct tubies and graphs. | STATA | STATA exam |
| C. Calculate measures of central | Tutorial on | Assignments |
| tendency and dispersion. | STATA | STATA exam |
| D. Select, apply and interpret the | Tutorial on | Assignments |
| proper test of significance. | STATA | STATA exam |
| E. Describe Life Tables from WHO | WHO | Assignments |
| Demonstration Demonstration | WEB SITE | |
| F. Apply and interpret Two – Way | Tutorial on SPSS | Assignments |
| ANOVA | | SPSS exam |
| G. Apply and interpret Multivariate | Tutorial on SPSS | Assignments |
| Analysis of Variance | | SPSS exam |
| (MANOVA) | | |
| , | Tutorial on SPSS | Assignments |
| H. Apply and interpret Analysis of | | SPSS exam |
| Covariance (ANCOVA) | | SI SS CAUIII |
| I. Apply and interpret Multivariate | Tutorial on SPSS | Assignments |
| | | SPSS exam |
| Analysis of Covariance | | |
| (MANCOVA) | T · · · · · · · · · · · · · · · · · · · | |
| J. Apply and interpret Factor | Tutorial on SPSS | Assignments |
| Analysis | | SPSS exam |
| K. Apply and interpret Survival | Tutorial on | Assignments |
| Analysis | STATA | STATA exam |
| L. Apply and interpret Product- | Tutorial on | Assignments |
| Limit Method | STATA | STATA exam |

| M. □ Apply and interpret Logrank Test | Tutorial on STATA | Assignments STATA exam |
|---|----------------------|---------------------------|
| N. Apply and interpret Logistic Regression | Tutorial on STATA | Assignments STATA exam |
| O. Apply and interpret Regression Models | Tutorial on STATA | Assignments STATA exam |

D general skills

| ILOs | Methods of teaching/ learning | Methods of Evaluation |
|---|-------------------------------------|---------------------------------|
| D. Appraise scientific evidence | Discussions | Research assignment |
| E. Use information technology to manage information, access online medical information; for the important topics. | tutorial | Research and audits' assignment |

4. Course contents (topic s/modules/rotation Course Matrix

Time Schedule: First part

| Topic | Covered ILOs | | | |
|---|--------------|--------------|-----------|---------|
| | Knowledge | Intellectual | Practical | General |
| | | | skills | Skills |
| | A | В | C | D |
| Two – Way ANOVA | A | D&G | F | A&B |
| Multivariate Analysis of Variance (MANOVA) | B&C | D&G | G | A&B |
| Analysis of Covariance (ANCOVA) | B&C | D&G | Н | A&B |
| Multivariate Analysis of Covariance (MANCOVA) | D | D&G | I | A&B |
| Factor Analysis | E | D&G | J | A&B |
| Survival Analysis | F-J | A&B | K | A&B |
| Product-Limit Method | G-I | A&B | L | A&B |
| Log-rank Test | J | A&B | M | A&B |
| Logistic Regression | K-M | F | N | A&B |
| Regression Models | K-M | F | O | A&B |
| Propensity Scores | L&M | F | O | A&B |
| Introduction to Life Tables | F | A&B | K-M | A&B |
| Calculating Life Tables | F-H | A&B | K-M | A&B |
| Interpreting Life Tables | Н | A&B | K-M | A&B |
| Life Tables from WHO Demonstration | F | A&B | K-M | A&B |
| STATA Introduction | F | С-Е | A-D | A&B |
| Descriptive statistics in STATA | G | С-Е | B&C | A&B |
| Graphic presentation | G-H | С-Е | В | A&B |
| Chi square and interpretation of results | G-H | C&D | D | A&B |
| Sensitivity and Specificity | О | Н | A-D | A&B |
| ROC curve | 0 | Н | D | A&B |

5. Course Methods of teaching/learning

- 1. Lectures
- 2. Assignments
- 3. Discussions
- 4. Exercises
- 5. Tutorial on SPSS v.16 and STAT v.10

6. Course assessment methods:

Assessment tools:

- 1. Practical examination
- 2. Attendance and active participation
- 3. Assignments
- 4. SPSS and STATA examination
- 5. written exam
- **ii. Time schedule:** After one year from applying to the M D degree.
- **iii. Marks:** 200 (120 for written exam and 80 for Practicall exam).

7. List of references

i. Lectures notes

Department lecture notes

iii.Essential books

Medical Statistics: Book by Ramakrishna HK 2016

iii. Recommended books

Discovering Statistics Using IBM SPSS Book by Andy Field, 2013.

- iv. Periodicals, Statistics in Medicine Wiley Online Library
- v. Web sites, etc

https://www.phc.ox.ac.uk/research/medical-statistics

8. Signatures

| Course Coordinator: | Head of the Department: |
|-----------------------------|-------------------------|
| Prof. Farag Mohammed Moftah | Prof. Dr. Eman Morsy |
| Date: | Date: |

Course 6: Advanced Public health and Community Medicine

Public Health & Community Health: Faculty of medicine Assiut University 2022-2023

I. Course data

- **♣** Course code: COM309C
- **♣** Specialty offered to all Public Health and Community Medicine
- Number of CP: Didactic 24CP (16.3%) practical 123 CP(83.7%).Total 147CP
- **Department** (s) delivering the course: Public Health & Community Health
- Coordinator (s):
 - Course coordinator: Prof. Ekram Mohamed Assistant coordinator (s):
- **♣** Date last reviewed April 2022
- Requirements (prerequisites) if any :
 - **Completed Master degree in any of the academic or clinical departments of Medicine.**

Passing the First part of the medical doctoral degree

Requirements from the students to achieve course ILOs are clarified in the joining log book.

2. Course Aims

- 2/1-be able to put prevention strategies to different communicable and non communicable diseases
- 2/2-can leads a health team
- 2/3-have the ability to do community diagnosis of different health problems
- 2/4-acquire the skills of critical appraisal of different scientific publications
- 2/5-Be able to have the responsibility of a research projects Define and give the Rationale for Statistics in Medicine.
- 2/6-Measure disease risk factors.

3. Course intended learning outcomes (ILOs)

A-Knowledge and understanding

| ILOs | Methods of teaching/ | Methods of Evaluation |
|---|--|----------------------------------|
| | learning | |
| A. Demonstrate health and social care quality of the community and target population | Lectures Seminars Reading | Written & Oral examination |
| B. Demonstrate principles & details epidemiology of communicable and non communicable health problems | Lectures Seminars Reading | Written & Oral examination |
| C. Demonstrate the important health programs such as MCH, PHC, EPI, IMCI, School health, Reproductive health, Family medicine | Lectures Practical sessions Field visits | Written & Oral examination |
| D. Demonstrate the health of vulnerable groups and related health problems such as: Children, women, adolescents, geriatrics, people with special needs | Lectures Seminars Reading | Written & Oral examination |
| E. Explain the basic and clinically supportive sciences which are appropriate to health economics and financial management including: | Lectures Workshops Seminars | Written & Oral examination |
| 1- Major aspects of health economics: financing, cost analysis, and cost-effectiveness | | |
| 2- Principles of cost analysis and define measures for cost | | |

| containment | | |
|---|--|-------------------------------------|
| F. Describe Advanced Statistical Methods including: 1. Applied Regression Analysis for the Education Sciences 2. Multivariate Analysis in Educational Research 3. Quantitative Methods in the Behavioral Sciences | Lectures Practical sessions | Written & Oral examination |
| 4. Applied Multivariate Analysis | T | XX ' |
| G-Describe Demography including: 1. Vital statistics 2. Population dynamics; causes and its consequences 3. Demographic Methods: Rates and Structures 4. Current Research Topics in Demography | Lectures Practical sessions Workshops Seminars | Written exam Oral exam |
| 5. Human Fertility and population problems | Lectures | Written exam |
| H. Demonstrate health promotion and life style, disease and disability prevention | Workshops | Oral exam |
| I- Describe nutrition for people in communities, nutritional disorders and strategies for prevention and control | Lectures | Written exam Oral exam |
| J- Demonstrate occupational and environmental health including: 1- Status of environmental health 2- Environmental and ecological risk assessment 3- Occupational safety and health standards 4- Environmental and work related diseases 5- Prevention and control measures of environmental and | Lectures Seminars Case study Field visits | Written examination Oral exam |
| work related diseases K- Illustrate mental health and behaviors including: 1- interaction among physical and mental symptoms and illnesses | Lectures Field visits Seminars | Written exam Oral examination |
| 2- risky behaviors and behavior change theories | | |
| 3- factors affecting mental health (psychological, social, and biological) | | |
| 4- primary and secondary prevention in mental health | | |
| L- Demonstrate health administration and management as | Lectures Report writing | Written exam Oral exam |

| follows: 1. management functions: planning, implementation, and evaluation | Workshops | |
|---|----------------------|---------------------------|
| 2. steps for community needs assessment | | |
| 3. data/information for situation analysis and identification and prioritization of health and health-related problems | | |
| 5. principles of leadership and team building | | |
| evaluation function and demonstrate the ability to evaluate inputs, process, and outputs by the use of appropriate indicators | | |
| quality and quality assurance and the dimensions of quality in health care | | |
| M. Illustrate Evidence Based Medicine. | Lectures Workshop | Written exam Oral exam |
| N. Give update information related to public health | Internet Seminars | Written exam Oral exam |
| O. Mention ethical, medico logical principles and | | |
| bylaws relevant to his practice in the field of | | |
| public health and community medicine. | | |

B-Intellectual outcomes

| ILOs | Methods of teaching/ learning | Methods of Evaluation |
|--|--|---------------------------------------|
| A. Design / present case , seminars in common problems in our community | Practical assignment & Discussion | Written& oral exam |
| B. Interpret and compute different mortality and morbidity related measures | Practical exercises & Discussion | Written& oral exam |
| C. Compute and interpret different fertility related measures | Practical exercises & Discussion | Written& oral exam |
| D. Apply frequency distribution to a given data and its interpretation. | Practical exercises & Discussion | Written& oral exam |
| E. Criticize different scientific publications. | Lecture Workshops | Assignments |
| F. Create different types of epidemiological studies in research. | Lecture Practical exercises & Discussion | Written& oral exam Field visits |
| G. Evaluate health programs. | Lecture Practical exercises & Discussion | Assignments |
| H. Formulate and implement an intervention to solve a certain health problem in the community. I. Participate in clinical risk management as a part of clinical governance. J. Plan for quality improvement in the field of medical education and professional practice in public health & community medicine. K. Present and defend his/her data in front of a panel of experts. | Reading Publications Seminars | Written& oral exam Assignments |

C-Practical skills

| ILOs | Methods of teaching/ learning | Methods of Evaluation |
|--|-------------------------------------|-----------------------------------|
| A. Carry out medical research. | Lectures Workshop Discussion | Assignments |
| B. Acquire the ability to teach public health topics to medical students | Training Discussion | Observation |
| C. Acquire the skills of critical appraisal of different scientific publications | Lectures workshops | Assignments |
| D. Conduct public health surveillance | Lectures Reading Field visits | Written and oral exam |
| E. Prepare the steps of an outbreak investigation | Lectures Reading Field visits | Written and oral exam |
| F. Interpret a given data | Tutorial on SPSS | SPSS exam |
| G. Prepare and apply of tables, graphs and charts. | Tutorial on SPSS | Written exam Practical exam |
| H. Use information technology to support decisions in Common conditions related to public health and community medicine. | | |
| I. Provide health care services aimed at preventing the public health & community medicine related conditions like; Disability Communicable diseases. Over population. Risky behaviors. Sexually transmitted diseases. Malnutrition. J. Work with health care professionals, including those from other disciplines, to provide patient- focused care. K. Write and evaluate competently all forms of professional | Field visits | Observation logbook |
| reports, paper critique related to public health & community medicine. | | |

D-General Skills

Practice-Based Learning and Improvement

| ILOs | Methods of teaching/ learning | Methods of Evaluation |
|---|---|------------------------------------|
| A. Conduct surveillance and assessment of the population's health and common health problems. | Field visits Research Case study | Seminars Reports Discussion |
| B. Assess the evidence of effectiveness of interventions, programs and services to improve population health and wellbeing. | Analyzing policy Developing legislative proposals | Discussion |
| C. Develop policy strategy and implementation for population health and wellbeing. | Designing & implementing public health program | Discussion with the professionals |
| D. Perform leadership and collaborative working for population health. | in service training Work performance Work Organization | Observation Log book |
| E. Use information technology to support practical decisions and students education in public health related practical skills for the followings: Program & policy evaluation. Analytic methods for Public health practice. | Specialty dissertation on a major Public health problem Lectures Practical sessions Reading | Seminars Discussion Paper critique |
| F. Work effectively with other professionals, including those from other disciplines, to provide practical/laboratory-focused care in specialty related conditions for the following: Mental health Therapeutic nutrition | Practical sessions | Observation Log book |

Interpersonal and Communication Skills

| ILOs | Methods of teaching/ learning | Methods of Evaluation |
|---|--|---------------------------|
| G. Create and sustain an ethically sound relationship with people | Practice Field visits | Observation Log book |
| H. Perform the following oral communications: Communication and counseling for adolescent's health problems. Reproductive health problems. Malnutrition Communicate with students, a staff member, a leader & a client. | Lectures Training Work shops Field visits | Observation Discussion |
| I. Fill the following reports: Case study reports. Field study report. Progress report. Cost benefits analysis report. | Practical sessions | Discussion |
| J. Work effectively with others as a member or leader of a health care team. | Practice | Observation |

Professionalism

| ILOs | Methods of teaching/ Learning | Methods of Evaluation |
|--|--|---|
| k. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supersedes self-interest. | Practice | 1. Objective structured clinical examination 2.Community survey |
| L. Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices. | Lectures Work shops | 360o global rating |
| M. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities | Lectures Practice | Observation |

Systems-Based Practice

| ILOs Methods Methods of | | | | | | |
|--|--------------|--|--|--|--|--|
| ILOS | | Methods of | | | | |
| | of | Evaluation | | | | |
| | teaching/ | | | | | |
| | learning | | | | | |
| N. Work effectively in different health care delivery | Lectures | A. 360o | | | | |
| settings and systems. | Practical | global | | | | |
| settings and systems. | sessions | rating | | | | |
| | Work shop | | | | | |
| | Internet | | | | | |
| | navigations | | | | | |
| | Field visits | | | | | |
| O. Practice cost-effective health care and resource | Lectures | 1. Check list | | | | |
| allocation that does not compromise quality of care. | Work | evaluation of | | | | |
| anocation that does not compromise quanty of care. | shops | live or | | | | |
| | • | recorded | | | | |
| | | performance | | | | |
| P. Advocate for quality patient care and assist patients | Self | - 360o global | | | | |
| in dealing with system complexities. | reading | rating | | | | |
| in deaning with system complexities. | Research | | | | | |
| | Internet | -Patient survey | | | | |
| | navigation | , and the second | | | | |
| O Portner with health care managers and health care | Problem- | Observation | | | | |
| Q. Partner with health care managers and health care | | Log book | | | | |
| providers to assess, coordinate, and improve health care | based | | | | | |
| and predict how these activities can affect system | | | | | | |
| performance. | learning | | | | | |
| | 6 | | | | | |
| | | | | | | |
| | | l . | | | | |

5. Course contents (topic s/modules/rotation) Course Matrix

Time Schedule: Second Part

| Topic | Covered ILOs | | | |
|--|---------------|--------------|--------------------------------|--------------------------------|
| | Knowledge | Intellectual | Practical skill | General Skills |
| General Epidemiology | A,B, H | A-D | В | A |
| Epidemiology of communicable diseases | B,L | A-K | A-K | A,B |
| Chronic diseases | В, Н,L | A-K | A-D, F,G- K | A, B |
| PHC | C | G, H | A,B | B,C,E |
| Family Health | C, D | A-D,G, H | A,B | B,C,E |
| Health of Vulnerable Groups | D | A- D, G, H | A-C, F,G | в,с |
| Communication & Health Education | M | G | В | C,E,F |
| Demography, Population Dynamics and Vital Statistics | G | А-Н | A, F,G | С |
| Reproductive health | G | A-K | A,B,F,G | в,с |
| Nutrition | I | A-K | A-C,F,G,I | B,C, F |
| Health administration &management | ${f L}$ | A, G, H | A-C | B , D , E |
| Health Economics | E | A, F, G | A, B | E |
| Mental Health and behaviors | K, L | A, E-H | A-C, F,G | B,C,F |
| Environmental & Occupational health | J,N,O | F-H | A,B, E-K | A-C-Q |
| Advanced Statistics | ${f F}$ | B-D | B , F , G | E |
| Evidence based medicine | M | A, E | B, C | |
| Rural health | J | A | A,B,D-G | B,C, G-Q |
| Pubic health updates | A& N | A & J | B& G | C&E |

5. Course Methods of teaching/learning:

- Lectures
- Practical sessions
- Self Reading
- seminars
- Work shops
- Field work & visits

6. Course Methods of teaching/learning: for students with poor achievements

- Lectures
- Practical sessions
- Self Reading
- seminars
- Work shops
- Field work & visits
- Discussions
- More exercises

7. Course assessment methods:

- i. Assessment tools:
- 1. Practical examination
- 2. Attendance and active participation
- 3. Assignments
- 4. written exam
- ii. Time schedule: at the end of 2nd part
- iii. Marks: 1200 marks: 4 papers written 3 hours= 800 marks
- + 200 oral and 200 practical= 1200 marks.

8. List of references

i. Lectures notes

Department lecture notes

Note of the Egyptian Society of Public Health

iii. Essential books

- Textbook of Community Medicine, 4/e Paperback 1
 April 2021, Wolters Kluwer India Pvt. Ltd.
- by Bhalwar (Maxcy-Rosenau (2014): Public health and preventive medicine, Prentice- Hall International Inc. 15th edition
- Park K. (2014) eighteenth edition: Environment and Health at Park's textbook of preventive and social medicine. Ms Banarsidas Bhanot, ., India.
- R. Beaglehole , R.Bonita and T Kjellström (2016): Basic Epidemiology

iv. Recommended books

- Community Medicine: Practical Manual Paperback 29
 January 2018 by Rajkumar Patil, Elsevier India
- Dimensions of Community Health, Boston Burr Ridge Dubuque, short Textbook of preventive and social Medicine 2012.

Community Medicine with Recent Advances Paperback – 1 March 2019 by AH Suryakantha, Jaypee Brothers Medical Publishers

iv. Periodicals, Web sites, ... etc

- Dissertation workshop open courseware JHSPH
- International Journal of epidemiology
- ECMA periodicals
- www. Who. Int
- www.cdc.org
- www. BMJ.com
- www. JAMA.com

vi. Others: Library

9. Signatures

| Course Coordinator: | Head of the Department: |
|-------------------------|-------------------------|
| Prof. Dr. Ekram Mohamed | Prof. Dr. Eman Morsy |
| Date: | Date: |
| | |

ANNEX 2 Program Academic Reference Standards (ARS)

1- Graduate attributes for medical doctorate in Public health and community medicine

The Graduate (after residence training and medical doctorate years of study) must:

- **1-** Demonstrate competency and mastery of basics, methods and tools of scientific research and clinical audit in Public health and community medicine
- **2-** Have continuous ability to add knowledge to Public health and community medicine through research and publication.
- **3-** Appraise and utilise relevant scientific knowledge to continuously update and improve clinical practice.
- **4-** Acquire excellent level of medical knowledge in the basic biomedical, behavioural and clinical sciences, medical ethics and medical jurisprudence and apply such knowledge in patient care and scientific research.
- **5-** Function as a leader of a team to provide patient care that is appropriate, effective and compassionate for dealing with health problems and health promotion.
- **6-** Identify and create solutions for health problems in Public health and community medicine.
- **7-** Acquire an in depth understanding of common areas of Public health and community medicine, from basic clinical care to evidence based clinical application, and possession of required skills to manage independently all problems in these areas.

- 8- Demonstrate leadership competencies including interpersonal and communication skills that ensure effective information exchange with individual patients and their families and teamwork with other health professions, the scientific community and the public.
- **9-** Function as teacher in relation to colleagues, medical students and other health professions.
- **10-** Master decision making capabilities in different situations related to Public health and community medicine.
- 11- Show leadership responsiveness to the larger context of the health care system, including e.g. the organisation of health care, partnership with health care providers and managers, practice of cost-effective health care, health economics, and resource allocations.
- 12- Demonstrate in depth awareness of public health and health policy issues including independent ability to improve health care, and identify and carryout systembased improvement of care.
- 13- Show model attitudes and professionalism.
- 14- Demonstrate commitment for lifelong learning and maintenance of competence and ability for continuous medical education and learning in subsequent stages and in Public health and community medicine or one of its subspecialties.
- **15-** Use recent technologies to improve his practice in Public health and community medicine.
- **16-** Share in updating and improving clinical practice in Public health and community medicine.

2- Competency based Standards for medical doctorate in Public health and community medicine

22.1- Knowledge and understanding

By the end of the program, the graduate should demonstrate satisfactory knowledge and understanding of

- **2-1-A-** Established, updated and evidence- based theories, basics and developments of Public health and community medicine and relevant sciences.
- **2-1-B-** Basics, methods and ethics of medical research.
- **2-1-C-** Ethical and medicolegal principles of medical practice related to Public health and community medicine.
- **2-1-D-** Principles and measurements of quality in Public health and community medicine.
- **2-1-E-** Principles and efforts for maintenance and improvements of public health.

2- Intellectual skills

By the end of the program, the graduate should be able to demonstrate the following

- **2-2-A-** Application of basic and other relevant science to solve Public health and community medicine related Problems.
- **2-2-B-** Problem solving based on available data.
- **2-2-C-** Involvement in research studies related to Public health and community medicine.
- **2-2-D-** Writing scientific papers.
- **2-2-E-** Risk evaluation in the related clinical practice.
- **2-2-F-** Planning for performance improvement in Public health and community medicine.
- **2-2-G-** Creation and innovation in Public health and community medicine.
- **2-2-H-** Evidence based discussion.
- **2-2-I-** Decision making in different situations related to Public health and community medicine.

2.3- Clinical skills

By the end of the program, the graduate should be able to Competency-based outcomes for Patient Care:-

- 2-3-A- MD students must be able to provide extensive level of health patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health extensive level means in depth understanding and from basic science to evidence based clinical application and possession of skills to manage independently all problems in Public health and community medicine.
- **2-3-B-** Master patient care skills relevant to Public health and community medicine for patients with all diagnoses and procedures.
- **2-3-C-** Write and evaluate reports for situations related to the Public health and community medicine.

2.4- General skills

By the end of the program, the graduate should be able to

Competency-based outcomes for Practice-based Learning
and Improvement

- **2-4-A-**Master practice-based learning and improvement skills that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, improvements in patient care and risk management
- **2-4-B-** Use competently all information sources and technology to improve his practice.
- **2-4-C-** Master skills of teaching and evaluating others.
 - Competency-based objectives for Interpersonal and Communication Skills
- **2-4-D-**Master interpersonal and communication skills that result in effective information exchange and teaming with patients, their families, and other health professionals.

- **Lesson** Competency-based objectives for Professionalism
- **2-4-E-**Master Professionalism behavior, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.
 - **4** Competency-based objectives for Systems-based Practice:
- **2-4-F-**Demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively use system resources to provide care that is of optimal value.
- **2-4-G-** Participate in improvement of the education system.
- **2-4-H-** Demonstrate skills of leading scientific meetings including time management.
- **2-4-O-** Demonstrate skills of self and continuous learning.

Annex 3, Methods of teaching/learning

Annex 3, Methods of teaching/learning

| | Patient care | Medical knowledge | Practice- based learning/ Improvemen t | and communicatio | Professionalism | Systems- based practice |
|---|-----------------|----------------------|--|---------------------|-----------------|-------------------------------|
| Didactic (lectures, seminars, tutorial) | X | X | | X | X | X |
| journal club, | X | X | X | | | |
| Educational prescription | X | X | X | X | X | X |
| Present a case (true or simulated) in a grand round | X | X | X | X | X | |
| Observation and supervision | X | | X | X | X | X |
| conferences | | X | X | X | | X |
| Written assignments | X | X | X | X | X | X |
| Oral assignments | X | X | X | X | X | X |

Teaching methods for knowledge

- ❖ Didactic (lectures, seminars, tutorial)
- journal club
- Critically appraised topic
- ❖ Educational prescription (a structured technique for following up on clinical questions that arise during rounds and other venues).
- Present a case (true or simulated) in a grand round
- Others

Teaching methods for patient care

- Observation and supervision /Completed tasks procedure/case logs
- On-the-job" training without structured teaching is not sufficient for this skill (checklists).
- Simulation is increasingly used as an effective method for skill/teamwork training.

Teaching methods for other skills

- Written communication (e.g., orders, progress note, transfer note, discharge summary, operative reports, and diagnostic reports).
- ❖ Oral communication (e.g., presentations, transfer of care, interactions with patients, families, colleagues, members of the health care team) and/or non verbal skills (e.g., listening, team skills)
- ❖ Professionalism, including medical ethics, may be included as a theme throughout the program curriculum that includes both didactic and experiential components (e.g., may be integrated into already existing small group discussions of vignettes or case studies and role plays, computer-based modules) and may be modeled by the faculty in clinical practice and discussed with the resident as issues arise during their clinical practice.

Annex 4, Assessment methods

Annex 4, ILOs evaluation methods for MD students.

| Method | Practical skills | K | Intellectual | | Gener | al skills | |
|-------------------------------|------------------|---|--------------|--|---------------------------------------|-----------------|------------------------|
| | Patient care | K | I | Practice-based learning/ Improvement | Interpersonal and communication | Professionalism | Systems-based practice |
| Record review | X | X | Х | | skills X | X | X |
| Checklist | X | | | | X | | |
| Global rating | X | X | X | X | X | X | X |
| Simulations | X | X | X | X | X | X | |
| Portfolios | X | X | X | X | X | | |
| Standardized oral examination | X | X | Х | Х | X | | X |
| Written examination | X | X | Х | Х | | | X |
| Procedure/ case log | X | X | | | | | |
| OSCE | Х | Х | X | X | Х | X | X |

Annex 4, Glossary of MD students assessment methods

- ❖ Record Review Abstraction of information from patient records, such as medications or tests ordered and comparison of findings against accepted patient care standards.
- Chart Stimulated Recall Uses the MD doctor's patient records in an oral examination to assess clinical decisionmaking.
- ❖ Mini clinical evaluation: Evaluation of Live/Recorded Performance (single event) − A single resident interaction with a patient is evaluated using a checklist. The encounter may be videotaped for later evaluation.
- ❖ Standardized Patients (SP) Simulated patients are trained to respond in a manner similar to real patients. The standardized patient can be trained to rate MD doctor's performance on checklists and provide feedback for history taking, physical examination, and communication skills. Physicians may also rate the MD doctor's performance.
- ❖ Objective Structured Clinical Examination (OSCE) A series of stations with standardized tasks for the MD doctors to perform. Standardized patients and other assessment methods often are combined in an OSCE. An observer or the standardized patient may evaluate the MD doctors.
- ❖ Procedure or Case Logs MD doctors prepare summaries of clinical experiences including clinical data. Logs are useful to document educational experiences and deficiencies.
- ❖ PSQs Patients fill out Patient Survey questionnaires (PSQs) evaluating the quality of care provided by MD doctors.

- Case /problems assess use of knowledge in diagnosing or treating patients or evaluate procedural skills.
- ❖ Models: are simulations using mannequins or various anatomic structures to assess procedural skills and interpret clinical findings. Both are useful to assess practice performance and provide constructive feedback.
- ❖ 360 Global Rating Evaluations MD doctors, faculty, nurses, clerks, and other clinical staff evaluate MD doctors from different perspectives using similar rating forms.
- ❖ Portfolios A portfolio is a set of project reports that are prepared by the MD doctors to document projects completed during the MD study years. For each type of project standards of performance are set. Example projects are summarizing the research literature for selecting a treatment option, implementing a quality improvement program, revising a medical student clerkship elective, and creating a computer program to track patient care and outcomes.
- ❖ Examination MCQ A standardized examination using multiple-choice questions (MCQ). The in-training examination and written board examinations are examples.
- ❖ Examination Oral Uses structured realistic cases and patient case protocols in an oral examination to assess clinical decision-making.
- ❖ Procedure or Case Logs MD doctors prepare summaries of clinical experiences including clinical data. Logs are useful to document educational experiences and deficiencies.
- ❖ PSQs Patients fill out Patient Survey questionnaires (PSQs) evaluating the quality of care provided by MD doctors.

Annex 5, program evaluation tools

| By whom | Method | sample |
|--------------------|----------------|--------|
| Quality Assurance | Reports | #1 |
| Unit | Field visits | |
| External Evaluator | Reports | #2 |
| (s):According to | Field visits | |
| department council | | |
| External Examiner | | |
| (s): According to | | |
| department council | | |
| Stakeholders | Reports | #5 |
| | Field visits | |
| | questionnaires | |
| Senior students | questionnaires | #2 |
| | | |
| Alumni | questionnaires | # |
| | | |

Annex 6, program Correlations:

مصفوفة توافق المعايير القومية القياسية العامة لبرامج الدكتوراه مع المعايير الأكاديمية المعتمدة من كلية الطب 🗆 جامعة أسيوط لدرجة الدكتوراه في الصحة العامة وطب المجتمع

1-General Academic Reference Standards (GARS) versus program ARS.

1- Graduate attributes

| Faculty ARS | NAQAAE General ARS for Postgraduate Programs |
|---|--|
| 1- Demonstrate competency and mastery of basics, methods and tools of scientific research and clinical audit in Public health and community medicine. | 1-إتقان أساسيات و منهجيات البحث العلمي |
| 2- Have continuous ability to add knowledge new developments to Public health and community medicine through research and publication. | 2-العمل المستمر علي الإضافة للمعارف في مجال التخصص |
| 3- Appraise and utilise scientific knowledge to continuously update and improve clinical practice and relevant basic sciences. | 3-تطبيق المنهج التحليلي والناقد للمعارف في مجال التخصص و المجالات ذات العلاقة |
| 4- Acquire excellent level of medical knowledge in the basic biomedical, clinical, behavioural and clinical sciences, medical ethics and medical jurisprudence and apply such knowledge in health patient care and scientific. | 4-دمج المعارف المتخصصة مع المعارف ذات العلاقة مستنبطا و مطورا للعلاقات البينية بينها |
| 5- Function as a leader of a team to provide patient care that is appropriate, compassionate for dealing with effective and health Problems and health promotion. 7- Acquire an in depth understanding of common areas of speciality, from basic clinical care to evidence based clinical application, and possession of skills to manage independently all problems in these areas. | 5-إظهار وعيا عميقا بالمشاكل الجارية و النظريات الحديثة في مجال التخصص |
| 6- Identify and create solutions for health problems in Public health and community medicine. | 6-تحديد المشكلات المهنية و إيجاد حلولا مبتكرة لحلها |
| 5- Function as a leader of a team to | 7-إتقان نطاقا واسعا من المهارات المهنية في |

| provide patient care that is appropriate, effective and compassionate for dealing with health problems and health promotion. 7- Acquire an in depth understanding of common areas of Public health and community medicine, from basic clinical care to evidence based clinical application, and possession of skills to manage independently all problems in these areas. | مجال التخصص |
|--|--|
| 8 - Share in updating and improving clinical practice in Public health and community medicine. - Function as teacher in relation to colleagues, medical students and other health professions. | 8- التوجه نحو تطوير طرق و أدوات و أساليب جديدة للمزاولة المهنية |
| 9- Use recent technologies to improve his practice in Public health and community medicine. | 9-استخدام الوسائل التكنولوجية المناسبة بما يخدم ممارسته المهنية |
| 8- Demonstrate leadership competencies including interpersonal and communication skills that ensure effective information exchange with individual patients and their families and teamwork with other health professions, the scientific community and the public. 5- Function as a leader of a team to provide patient care that is appropriate, effective and compassionate for dealing with health problems and health promotion. | 10-التواصل بفاعلية و قيادة فريق عمل في سياقات مهنية مختلفة |
| 10- Master decision making capabilities in different situations related to Public health and community medicine. | 11 اتخاذ القرار في ظل المعلومات المتاحة |
| 11- Show leadership responsiveness to the larger context of the health care system, including e.g. the organisation of health care, partnership with health care providers and managers, practice of costeffective health care, health economics, and resource allocations. | 12-توظيف الموارد المتاحة بكفاءة و تنميتها والعمل على إيجاد موارد جديدة |
| 12- Demonstrate in depth awareness of public health and health policy issues including | 13-الوعي بدوره في تنمية المجتمع والحفاظ |

| independent ability to improve health care, and identify and carryout system-based improvement of care. | على البيئة |
|---|---|
| 13- Show model attitudes and professionalism. | 14-التصرف بما يعكس الالتزام بالنزاهة و المهنة المهنة |
| 14- Demonstrate commitment for lifelong learning and maintenance of competence and ability for continuous medical education and learning in subsequent stages and in Public health and community medicine or one of its subspecialties. 15- Use recent technologies to improve his practice in Public health and community medicine. | 15-الالتزام بالتنمية الذاتية المستمرة و نقل علمه و خبراته للآخرين |

2- Academic standards

| Faculty ARS | NAQAAE General ARS for Postgraduate Programs |
|---|--|
| 2.1. A- Established, updated and evidence- based theories, basics and developments of Public health and community medicine and relevant sciences. | 2-1-أ- النظريات و الأساسيات والحديث من المعارف في مجال التخصص والمجالات ذات العلاقة |
| 2.1. B- Basic, methods and ethics of medical research. | 2-1-ب -أساسيات و منهجيات و أخلاقيات البحث العلمي و أدواته المختلفة |
| 2.1. C- Ethical and medicologal principles of medical practice related to Public health and community medicine. | 1-2-ج- المبادئ الأخلاقية و القانونية للممارسة المهنية في مجال التخصص |
| 2.1. D- Principles and measurements of quality in Public health and community medicine. | 1-2-د مبادئ و أساسيات الجودة في الممارسة المهنية في مجال التخصص |
| 2.1. E- Principles and efforts for maintains and improvements of public health. | 1-2-هـ المعارف المتعلقة بآثار ممارسته المهنية على البيئة وطرق تنمية البيئة وصيانتها |
| 2.2. A- Application of basic and other relevant science to solve Public health and community medicine related problems. | 2-2-أ -تحليل و تقييم المعلومات في مجال التخصص و القياس عليها و الاستنباط منها |
| 2.2.B- Problem solving based on available data. | 2-2-ب -حل المشاكل المتخصصة استنادا علي المعطيات |

| | المتاحة |
|--|---|
| 2.2.C- Involvement in research studies related to Public health and community medicine | 2-2-ج -إجراء دراسات بحثية تضيف إلى المعارف |
| 2.2. D- Writing scientific papers. | 2-2-د- صياغة أوراق علمية |
| 2.2. E- Risk evaluation in the related clinical practice. | 2-2—ه تقييم المخاطر في الممارسات المهنية |
| 2.2.F- Planning for performance improvement in Public health and community medicine | 2-2-و التخطيط لتطوير الأداء في مجال التخصص |
| 2-2-G- Creation and innovation in the Public health and community medicine. | 2-2-ز - الابتكار /الإبداع |
| 2.2. H- Evidence – based discussion. | 2-2-ح- الحوار والنقاش المبني علي البراهين والأدلة |
| 2.2.I- Discussion making in different situations related to Public health and community medicine. | 2-2-ط -اتخاذ القرارات المهنية في سياقات مهنية مختلفة |
| 2.3. A- MD students must be able to provide extensive level of patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health extensive level means in depth understanding and from basic science to evidence — based clinical application and possession of skills to manage | 2-3-أ -إتقان المهارات المهنية الأساسية و الحديثة في مجال التخصص |
| independently all problems in Public health and community medicine. 2.3. B- Master patient care skills | |

| relevant to Public health and | |
|--|--|
| community medicine or patients | |
| with all diagnoses and procedures. | |
| 2.3. C- Write and evaluate reports for | 2-3-ب- كتابة و تقييم التقارير المهنية. |
| situations related to the field of | . , |
| Public health and community | |
| medicine. | |
| 2.4.A-Master practice-based learning and | 2-3-ج -تقييم و تطوير الطرق |
| improvement skills that involves investigation and evaluation of their | والأدوات القائمة في مجال |
| own patient care, appraisal and | التخصص |
| assimilation of scientific evidence, | |
| improvements in patient care and | |
| risk management | |
| 2.4. B- Use competently all information | 2-3-د - استخدام الوسائل التكنولوجية |
| sources and technology to improve | بما يخدم الممارسة المهنية |
| his practice. | بف یکدم الممارسد المهنید |
| 2.4.A-Master practice-based learning and | 2-3-ه التخطيط لتطوير الممارسة |
| improvement skills that involves investigation and evaluation of their | المهنية وتنمية أداء الآخرين |
| own patient care, appraisal and | - 4- |
| assimilation of scientific evidence, | |
| improvements in patient care and | |
| risk management | |
| 2.4. G- Participate in improvement of the | |
| education system. | |

II-Program ARS versus program ILOs

Comparison between ARS- ILOS for medical doctorate

| (ARS) | (ILOs) |
|---|--|
| 2-1- Knowledge and understanding | 2-1- Knowledge and understanding |
| 2-1-A- Established, updated and evidence-based Theories, Basics and developments of Public health and community medicine and relevant sciences. | 2-1-A- Demonstrate in-depth knowledge and understanding of theories, basics and updated biomedical, clinical epidemiological and socio behavioral science relevant to his specialty as well as the evidence — based application of this knowledge to patient care. |
| 2-1-B Basic, methods and ethics of medical research. | 2-1-B- Explain basics, methodology, tools and ethics of scientific medical, clinical research. |
| 2-1-C- Ethical and medicolegal principles of medical practice related to Public health and community medicine field. | 2-1-C- Mention ethical, medico logical principles and bylaws relevant to his practice in the field of Public health and community medicine. |
| 2-1-D- Principles and measurements of quality in the Public health and community medicine. | 2-1-D- Mention principles and measurements of quality assurance and quality improvement in medical education and in clinical practice of Public health and community medicine. |
| 2-1-E-Principles and efforts for maintains and improvements of public health. | 2-1-E- Mention health care system, public health and health policy, issues relevant to this speciality and principles and methods of system based improvement of patient care in common health problems of the field of Public health and community medicine. |
| 2-2- Intellectual skills: | 2-2- Intellectual skills: |
| 2-2-A-Application of basic and other relevant science to solve Public health and community medicine | 2-2-A- Apply the basic and clinically supportive sciences which are appropriate to Public health and |

| related problems. | community medicine related conditions / problem / topics. |
|---|---|
| 2-2-B-Problem solving based on available data. | 2-2-B- Demonstrate an investigatory and analytic thinking "problem – solving "approaches to clinical situation related to Public health and community medicine. |
| 2-2-C- Involvement in research studies related to the Public health and community medicine . | 2-2-C- Plan research projects. |
| 2-2-D Writing scientific papers. | 2-2-D- Write scientific paper. |
| 2-2-E- Risk evaluation in the related clinical practice. | 2-2-E- Participate in clinical risk management as a part of clinical governance. |
| 2-2-F- Planning for performance improvement in the Public health and community medicine field. | 2-2-F- Plan for quality improvement in the field of medical education and clinical practice in his speciality. |
| 2-2-G- Creation and innovation in the specialty field. | 2-2-G- Create / innovate plans, systems, and other issues for improvement of performance in his practice. |
| 2-2-H- Evidence – based discussion. | 2-2-H- Present and defend his / her data in front of a panel of experts. |
| 2-2-I- Decision making in different situations related to Public health and community medicine fields. | 2-2-I- Formulate management plans and alternative decisions in different situations in the field of the Public health and community medicine. |

continuous (ARS)

continuous (ILOS)

2-3- Clinical skills:

- 2-3-A- MD students must be able to provide extensive level of patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health extensive level means in depth understanding and from basic science to evidence based clinical application and possession of skills to manage independently all problems in his field of practice.
- **2-3-B-** Master patient care skills relevant to Public health and community medicine for patients with all diagnoses and procedures.

2/3/1/Practical skills (Patient care :)

- 2-3-1-A- Provide extensive level of Public health that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. *p.s.* Extensive level means in-depth understanding from basic science to evidence based clinical application and possession of skills to manage independently all problems in field of practice.
- **2-3-1-B-** Provide extensive level of practical skills relevant to public health and community medicine for all common techniques and / or experiments.
- 2-3-1-C- Provide extensive level of practical skills for non routine, laboratory skills and techniques and under increasingly difficult circumstances, while demonstrating compassionate, appropriate and effective care.
- **2-3-1-D-** Perform diagnosis of the main health problems and prevention procedures considered essential in the field of Public health and community medicine
- 2-3-1-E- Handles unexpected problems, while demonstrating compassion and sensitivity to community needs and concerns.
- **2-3-1-F-** Communicate effectively and demonstrate caring and respectful behaviors when interacting with people in the Public health and community medicine related situations.
- **2-3-1-G-** Gather essential and accurate

- information about people and community regarding Public health and community medicine related conditions.
- 2-3-1-H Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence and clinical judgment for the Public health and community medicine related conditions.
- **2-3-1-I-** Develop and carry out health management plans for Public health and community medicine related conditions.
- **2-3-1-J-** Counsel and educate people about Public health and community medicine related conditions.
- 2-3-1-K- Use information technology to support control and prevention decisions and health education in all Public health and community medicine related clinical situations.
- **2-3-1-L-** Perform competently all diagnostic and preventive procedures considered essential for the Public health and community medicine related conditions / area of practices.
- **2-3-1-M-** Provide health care services aimed at preventing

 Public health and community medicine related health problems.
- **2-3-1-N-** Lead health care professionals, including those from other disciplines, to provide patient-focused care in Public health and community medicine

| | related conditions. |
|---|---|
| 2-3-C- Write and evaluate reports for situations related to the field Public health and community medicine. | 2-3-1-O- Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets. |
| 2-4- General skills | 2/3/2 General skills |
| 2-4-A- Master practice-based learning and improvement skills that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, improvements in patient care and risk management | 2-3-2-A- Demonstrate the competency of continuous evaluation of different types of care provision to patients in the different area of Public health and community medicine |
| | 2-3-2-B- Appraise scientific evidence. |
| | 2-3-2-C- Continuously improve patient care based on constant self-evaluation and <u>life-long learning</u>. 2-3-2-D- Conduct epidemiological studies and surveys. 2-3-2-E. Participate in clinical audit and research projects. |
| | 2-3-2-F- Practice skills of evidence-based Medicine (EBM). |
| | 2-3-2-H- Design logbooks. |
| | 2-3-2-I- Design clinical guidelines and standard protocols of management. 2-3-2-J- Appraise evidence from scientific studies related to the patients' health problems. |

| 2-4-B- Use competently all information source and technology to improve his practice. | 2-3-2-K- Apply knowledge of study designs and statistical methods to the appraisal of clinical studies. 2-3-2-L- Use information technology to manage information, access online medical information; for the important topics. |
|--|--|
| 2-4-C- Master skills of teaching and evaluating others. | 2-3-2-G- Educate and evaluate students, residents and other health professionals. |
| 2-4-D- Master interpersonal and communication Skills that result in effective information exchange and teaming with patients, their families, and other health professionals. | 2-3-2-M- Master interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals, including:- Present a case. Write a consultation note. Inform patients of a diagnosis and therapeutic plan Completing and maintaining comprehensive. Timely and legible medical records. Teamwork skills. 2-3-2-N- Create and sustain a therapeutic and ethically sound relationship with patients. 2-3-2-O- Elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills. 2-3-2-P- Work effectively with others as a member or leader of a health care team or other professional group. |
| 2-4-E- Master Professionalism behavior, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population. | 2-3-2-Q- Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society. 2-3-2-R- Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of |

| | patient information, informed consent, and business practices. |
|---|---|
| | 2-3-2-S- Demonstrate sensitivity and |
| | responsiveness to patients' |
| | culture, age, gender, and |
| | disabilities. |
| 2-4-F- Demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to | 2-3-2-T- Work effectively in health care delivery settings and systems related to Public health and community |
| effectively use system resources to provide care that is of optimal value. | medicine including good administrative and time management. |
| 2-4-G - Participate in improvement of the educ system. | 2-3-2-U- Practice cost-effective health care and resource allocation that does not compromise quality of care. 2-3-2-V- Advocate for quality patient |
| | care and assist patients in dealing with system complexities. |
| | 2-3-2-W- Design, monitor and evaluate specification of under and post graduate courses and programs. |
| 2-4-H- Demonstrate skills of leading scientific meetings including time management | 2-3-2-X- Act as a chair man for scientific meetings including time management |
| | 2-3-2-T- Work effectively in health care delivery settings and systems related to Public health and community medicine including good administrative and time management. |

III-Program matrix Knowledge and understanding

| Course | Program covered ILOS | | | | | | | | |
|-----------------------------------|----------------------|----------|-------|----------|-------|--|--|--|--|
| | 2/1/A | 2/1/B | 2/1/C | 2/1/D | 2/1/E | | | | |
| Course 1 : Medical statistics and | | | | ✓ | | | | | |
| computer | | | | | | | | | |
| course 2 : Research Methods | | ✓ | | ✓ | | | | | |
| course 3: Medical reports and | | ✓ | | | | | | | |
| medical ethics | | | | | | | | | |
| Course 4: Quality of health care | | | | ✓ | | | | | |
| Course 5 : Advanced statistics | | ✓ | | √ | | | | | |
| Course 6 : Advanced public | | ✓ | | | | | | | |
| health and community medicine | | | | | | | | | |

Intellectual

| Course | P ₁ | Program covered ILOS | | | | | | | |
|---|----------------|----------------------|----------|----------|----------|-------|----------|----------|----------|
| | 2/2/A | 2/2/B | 2/2/C | 2/2/D | 2/2/E | 2/2/F | 2/2/G | 2/2/H | 2/2/I |
| Course 1 : Medical statistics and computer | | | √ | √ | | | | √ | |
| course 2 : Research Methods | | | √ | ✓ | | | | √ | |
| course 3 : Medical reports and medical ethics | | | | | | | | √ | |
| Course 4: Quality of medical care | | | | | | | | √ | |
| Course 5: Advanced statistics | | | | | | | | √ | |
| Course 6: Advanced public health and community medicine | √ | √ | √ | √ | √ | ✓ | √ | √ | √ |

Practical Skills (Patient Care)

| Course | Program covered ILOS | | | | | | | |
|---|----------------------|----------|---------|----------|----------|---------|----------|-------------|
| | 2/3/1/A | 2/3/1/B | 2/3/1/C | 2/3/1/D | 2/3/1/E | 2/3/1/F | 2/3/1/G | 2/3/1/H |
| Course 1 : Medical statistics and computer | | | | | | ✓ | | |
| course 2 : Research Methods | | ✓ | | | | ✓ | | |
| course 3: Medical reports and medical ethics | | ✓ | | ✓ | | | | > |
| Course 4: Quality of health care | | | | ✓ | | | | √ |
| Course 5: Advanced statistics | | | | √ | | | | √ |
| Course 6: Advanced public health and community medicine | ✓ | ✓ | ✓ | √ | √ | ✓ | √ | √ |

Practical Skills (Patient care)

| Course | Program covered ILOS | | | | | | |
|---|----------------------|----------|----------|----------|----------|----------|----------|
| | 2/3/1/I | 2/3/1/J | 2/3/1/K | 2/3/1/L | 2/3/1/M | 2/3/1/N | 2/3/1/0 |
| Course 1 : Medical statistics and computer | | | | | | | |
| course 2 : Research Methods | | | √ | | | | |
| course 3 : Medical reports and medical ethics | √ | √ | √ | | | | √ |
| course 4 : Quality of health care | √ | √ | | | | | ✓ |
| course 5 : Advanced statistics | √ | √ | | | | | ✓ |
| Course 6: Advanced public health and community medicine | √ | √ | √ | √ | √ | √ | √ |

General Skills

| | | Program covered ILOS | | | | | | | |
|---|----------|----------------------|----------|----------|----------|----------|----------|----------|--|
| Course | 2/3/2/A | 2/3/2/B | 2/3/2/C | 2/3/2/D | 2/3/2/E | 2/3/2/F | 2/3/2/G | 2/3/2/H | |
| Course 1 : Medical statistics and computer | | √ | | | | | √ | | |
| course 2 : Research Methods | | ✓ | | ✓ | ✓ | | ✓ | | |
| course 3 : Medical reports and medical ethics | | | | | | | ✓ | | |
| course 4 : Quality of health care | | ✓ | | | | | ✓ | | |
| course 5 : Advanced statistics | | ✓ | | | | | | | |
| Course 6: Advanced public health and community medicine | √ | √ | √ | √ | √ | √ | √ | √ | |

General skill

| Course | | Program covered ILOS | | | | | | |
|---|----------|----------------------|----------|----------|----------|----------|----------|----------|
| | 2/3/2/I | 2/3/2/J | 2/3/2/K | 2/3/2/L | 2/3/2/M | 2/3/2/N | 2/3/2/O | 2/3/2/P |
| Course 1 : Medical statistics and computer | ✓ | √ | √ | | | | ✓ | |
| course 2 : Research Methods | ✓ | ✓ | | | | √ | ✓ | |
| course 3 : Medical reports and medical ethics | | | | √ | | ✓ | | |
| course 4 : Quality of health care | | | | √ | | | | |
| course 5 : Advanced statistics | | | | √ | | | | |
| Course 6: Advanced public health and community medicine | ✓ | √ | √ | √ | √ | ✓ | √ | √ |

General Skills

| Course | | Program covered ILOS | | | | | | |
|---|---------|----------------------|---------|----------|----------|----------|----------|----------|
| | 2/3/2/Q | 2/3/2/R | 2/3/2/S | 2/3/2/T | 2/3/2/U | 2/3/2/V | 2/3/2/W | 2/3/2/X |
| Course 1 : Medical statistics and computer | | ✓ | | | ✓ | | | |
| course 2 : Research Methods | | √ | | | √ | | | |
| course 3 : Medical reports and medical ethics | | | | √ | | | √ | |
| Course 4: Quality of health care | | √ | | √ | | | ✓ | |
| Course 5: Advanced statistics | | ✓ | | | | | | |
| Course 6: Advanced public health and community medicine | ✓ | ✓ | ✓ | √ | √ | √ | ✓ | √ |

Annex 7, Additional information:

Department information: Public Health and Community Medicine

Staff members:

Prof. Eman Morsy Mohamed

Prof. Farida Ahmed Morshed Allam

Prof. Ali Hussein Zarzour

Prof. Mohammad Hassan Qayed

Prof. Ahmed Mohamed Mahmoud Hany

Prof. Hosnia Said Abdel Megeed

Prof. Omaima El-Gibaly Mohamed Helmy

Prof. Randa Mohamed Shams El-Deen Moustafa

Prof. Eman Mohamed Mohamed Monazea

Prof. Ekram Mohamed Abdel bdel Khalek

Prof Dalia Galal Mahran

Prof Hala Abou Fadan

Prof Faten Rabee

Prof Medhat Araby Khalil

Prof Manal Moustafa Darwish

Prof Ahmed Khair Shabib

Ass. Prof. Doaa Mazen

Ass. Prof. Asmaa Mohamed Ahmed Soliman Ass. Prof. Tagreed Ismail Ass. Prof. Mirret Mamdoh Wesly

Ass. Prof. Doaa Mohamed

Ass. Prof. Shiemaa Abdel Sameea

Dr. Mariam Roshdy

Dr. Heba Mahmoud

Dr. Sheima Hosny

Dr. Heba Ghaffar

Opportunities within the department:

- Post graduate Computer Lab
- Internet availability
- Specialist of computer and statistics

Department quality control insurance for completing the program:

- Evaluation by the department head and stuff members.
- Regular assessments.
- Log book monitoring.

(End of the program specifications)