QAU

INTEGRATED BASED CURRICULUM

FOR MBBCH

FACULTY OF MEDICINE, MERIT UNIVERSITY

2020-2021

1-Basic information

Name of Program: Bachelor of Medicine and Surgery (MBBCh)

Nature of the program: Single Major

Departments responsible for the program: 20 departments

1- Human Anatomy and Embryology.

2- Histology and Cell Biology.

3- Physiology.

4- Medical Biochemistry.

5- Pathology.

6- Medical Pharmacology.

7- Medical Microbiology and Immunology.

8- Medical Parasitology.

9- Ophthalmology.

10- Ear, Nose and Trachea.

11- Forensic Medicine and Toxicology.

12- Public Health and Community Medicine.

13- Pediatric Medicine.

14- Internal Medicine.

15- Gynecology and Obstetrics.

16- General Surgery.

17-Orthopedic Surgery.

18- Uro-surgery.

19-Family Medicine.

20-Medical Education Development Center

Final award: MBBCh

Institution/ body: Merit University

Faculty of Study: Faculty of Medicine

Length of the program: 5+2 years

Method of study: Fulltime

Program Coordinator: prof. Mohamad Esa Tolba
Internal evaluator : Dr. Ahmad Nashaat

2- Professional Information

1-Program Aims/Objectives

Aims: The broad aim of the program is that new graduates should have the clinical competence to work as Foundation Doctors, combined with the potential to develop along the continuum of medical education into humane and rational doctors. They will be able to apply their knowledge and skills in a competent and ethical manner and using their ability to provide leadership and to analyze complex and uncertain situations.

Objectives:

1. Provide the student basic medical knowledge in integrated manner.

2. Provide the graduate practical and transferable skills in the context of a doctor as professional, scholar and practioner with adherence to the medical ethics.

3. Prepare the graduate to provide quality and safe patient-centered care, focusing on primary health care and dealing with common health problems in his/her community.

4. Value the importance of a good doctor/ patient relationship, and work to establish and maintain it.

5. Qualify the graduate to work effectively with other health care professionals respecting their roles and their contribution to the team and using his managerial and leadership skills to add value to the system.

6. Work as a lifelong learner- on his/her own continuous professional development, including being equipped to engage in post- graduate and research studies.

7. Give students the chance to choose some elective courses.

2- Intended Learning Outcomes (ILOs)

The program aims at providing the students with the **competencies and skills** that allow them to be able to be:

1-Competency Area I: The graduate as a health care provider

The graduate should provide quality, safe, patient-centered care, drawing upon his/her integrated knowledge and clinical skills, and adhering to professional values. The graduate should collect and interpret information, make clinical decisions, and carry out diagnostic and therapeutic interventions - with an

understanding of the limits of his/her expertise- considering the patient's circumstances and preferences as well as the availability of resources.

1.1 Take and record a structured, patient centered history.

1.2 Adopt an empathic and holistic approach to the patients and their problems.

1.3 Assess the mental state of the patient.

1.4 Perform appropriately-timed full physical examination of patients, appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive.

1.5 Prioritize issues to be addressed in a patient encounter.

1.6 Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

1.7 Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice.

1.8 Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand.

1.9 Retrieve, analyze, and evaluate relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM).

1.10 Integrate the results of history, physical examination and laboratory test findings into a meaningful diagnostic formulation.

1.11 Perform diagnostic and intervention procedures in a skillful and safe manner, adapting to unanticipated findings or changing clinical circumstances.

1.12 Adopt strategies and apply measures that promote patient safety.

1.13 Establish patient-centered management plans in partnership with the patient, his/her family and other health professionals as appropriate, using Evidence Based Medicine in management decisions.

1.14 Respect patients' rights and involve them and /or their families / carers in management decisions.

1.15 Provide the appropriate care in cases of emergency, including cardio-pulmonary resuscitation, immediate life support measures and basic first aid procedures.

1.16 Apply the appropriate pharmacological and nonpharmacological approaches to alleviate pain and provide palliative care for seriously ill people, aiming to relieve their suffering and improve their quality of life.

1.17 Contribute to the care of patients and their families at the end of life, including management of symptoms, practical issues of law and certification.

2- Competency Area 2: The graduate as a health promoter

The graduate should advocate for the development of community and individual measures which promote the state of well-being, he/she should empower individuals and communities to engage in healthy behaviors, and put his/her knowledge and skills to prevent diseases, reduce deaths and promote quality life style.

2.1 Identify the basic determinants of health and principles of health improvement.

2.2 Recognize the economic, psychological, social, and cultural factors that interfere with wellbeing.

2.3 Discuss the role of nutrition and physical activity in health.

2.4 Identify the major health risks in his/her community, including demographic, occupational and environmental risks; endemic diseases, and prevalent chronic diseases.

2.5 Describe the principles of disease prevention, and empower communities, specific groups or individuals by raising their awareness and building their capacity.

2.6 Recognize the epidemiology of common diseases within his/her community, and apply the systematic approaches useful in reducing the incidence and prevalence of those diseases.

2.7 Provide care for specific groups including pregnant women, newborns and infants, adolescents and the elderly.

2.8 Identify vulnerable individuals that may be suffering from abuse or neglect and take the proper actions to safeguard their welfare.

2.9 Adopt suitable measures for infection control.

3- Competency Area 3: The graduate as a professional

The graduate should adhere to the professional and ethical codes, standards of practice, and laws governing practice.

3.1 Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.

3.2 Adhere to the professional standards and laws governing the practice, and abide by the national code of ethics issued by the Egyptian Medical Syndicate.

3.3 Respect the different cultural beliefs and values in the community they serve.

3.4 Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural or ethnic backgrounds, or their disabilities.

3.5 Ensure confidentiality and privacy of patients' information.

3.6 Recognize basics of medico-legal aspects of practice, malpractice and avoid common medical errors.

3.7 Recognize and manage conflicts of interest.

3.8 Refer patients to the appropriate health facility at the appropriate stage.

3.9 1dentify and report any unprofessional and unethical behaviors or physical or mental conditions related to himself, colleagues or any other person that might jeopardize patients' safety.

4- Competency Area 4: The graduate as a scholar and scientist

The graduate should build his clinical practice on a base of knowledge of scientific principles and methods of basic medical and social sciences, applying this knowledge into clinical care, and using it as a foundation for clinical reasoning, care provision, further professional development and research.

4.1 Describe the normal structure of the body and its major organ systems and explain their functions.

4.2 Explain the molecular, biochemical, and cellular mechanisms that are important in maintaining the body's homeostasis.

4.3 Recognize and describe main developmental changes in humans and the effect of growth, development and aging on the individual and his family.

4.4 Explain normal human behavior and apply theoretical frameworks of psychology to interpret the varied responses of individuals, groups and societies to disease.

4.5 Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of illness/disease and explain the ways in which they operate on the body (pathogenesis).

4.6 Describe altered structure and function of the body and its major organ systems that are seen in various diseases and conditions.

4.7 Describe drug actions: therapeutics and pharmacokinetics; side effects and interactions, including multiple treatments, long term conditions and non-prescribed medication; and effects on the population.

4.8 Demonstrate basic sciences specific practical skills and procedures relevant to future practice, recognizing their scientific basis, and interpret common diagnostic modalities, including: imaging, electrocardiograms, laboratory assays, pathologic studies, and functional assessment tests.

5- Competency Area 5: The graduate as a member of the health team and a part of the health care system

The graduate should work and collaborate effectively with physicians and other colleagues in the health care professions, demonstrating an awareness of and a respect for their roles in delivering safe, effective patient- and population-centered care. He/she should be committed to his/her role as a part of health care system, respecting its hierarchy and rules and using his/her administrative and leadership skills to add value to the system.

5.1 Recognize the important role played by other health care professionals in patients' management.

5.2 Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities and engaging in shared decision-making for effective patient management.

5.3 Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.

5.4 Apply leadership skills to enhance team functioning, the learning environment, and/or the health care delivery system.

5.5 Communicate effectively using written health records, electronic medical records, or other digital technology.

5.6 Evaluate his / her work and that of others using constructive feedback.

5.7 Recognize own personal and professional limits, and seek help from colleagues and supervisors when necessary.

5.8 Apply fundamental knowledge of health economics to ensure the efficiency and effectiveness of the health care system.

5.9 Use health informatics to improve the quality of patient care.

5.10 Document clinical encounters in an accurate, complete, timely, and accessible manner, in compliance with regulatory and legal requirements.

5.11 Improve the health service provision by applying a process of continuous quality improvement.

5.12 Demonstrate accountability to patients, society, and the profession.

6- Competency Area 6: The graduate as a lifelong learner and researcher

The graduate should demonstrate a lifelong commitment to excellence in practice through continuous learning and professional development. He sho uld reflect on his own performance, and plan for his own development making use of all possible learning resources. The graduate should have an inquisitive mind and adopt sound scientific research methodology to deal with practice uncertainty and knowledge gaps and to contribute to the development of his profession as well as for the purpose of his own academic development.

6.1 Regularly reflect on and assess his / her performance using various performance indicators and information sources.

6.2 Develop, implement, monitor, and revise a personal learning plan to enhance professional practice.

6.3 Identify opportunities and use various resources for learning.

6.4 Engage in inter-professional activities and collaborative learning to continuously improve personal practice and contribute to collective improvements in practice.

6.5 Recognize practice uncertainty and knowledge gaps in clinical and other professional encounters, and generate focused questions that address them.

6.6 Effectively manage learning time and resources and set priorities.

6.7 Demonstrate an understanding of the scientific principles of research including its ethical aspects and scholarly inquiry and Contribute to the work of a research study.

6.8 Critically appraise research studies and scientific papers in terms of integrity, reliability, and applicability.

6.9 Analyze and use numerical data including the use of basic statistical methods.

6.10 Summarize and present to professional and lay audiences the findings of relevant research and scholarly inquiry.

7-Practical skills to be achieved from this curriculum

- Dissecting the different parts and organs of the human body
- Performing Biochemical and microscopic urine and stool analysis
- Performing basic biochemical blood tests
- Preparing urine and stool specimen for microscopic examination
- Identification of parasites and parasitic ova under the microscope
- Identification of different normal tissue sections under the microscope
- Identification of different pathological alterations in tissue sections under the microscope
- Identification of gross pathological alterations in different body organ specimens
- Determining blood group and performing cross matching and computability tests
- Preparing and examining blood films and assessing hemoglobin value in a blood sample
- Obtaining and handling a blood sample for culture
- Performing and interpreting basic respiratory function tests.
- Identifying different bacteria and fungi under the microscope

- Differentiating different bacterial growth in culture

8-**Fundamental physical examination skills** to be achieved from this curriculum:

- Measuring body temperature
- .Measuring pulse rate, respiratory rate and blood pressure
- Anthropometric Measurements and assessment of nutritional status
- Chest examination
- Heart examination
- Abdominal examination
- Locomotor system examination
- Nervous system examination
- Examination of the jugular veins
- Ear examination
- Throat examination
- External Eye and fundus examination
- Breast examination
- Examination of the thyroid
- Lymph nodes examination
- PV examination
- Assessment of uterine fundus level in pregnancy
- PR examination
- Examining lumps

9-**Basic diagnostic and intervention procedures** to be achieved from this curriculum

- Performing venipuncture and collect blood samples.
- Inserting a cannula into peripheral veins.
- Establishing peripheral intravenous access and setting up an infusion; use of infusion devices
- Giving intramuscular, subcutaneous, intradermal and intravenous injections.
- Suturing of superficial wounds.
- Performing cardiopulmonary resuscitation and basic life- support
- Performing and interpreting basic bedside laboratory tests

- Performing and interpreting ECG

Managing an electrocardiograph (ECG) monitor

- Using a nebulizer for administration of inhalation therapy
- Performing male and female bladder catheterization
- Administering basic oxygen therapy
- Wound care and basic wound dressing
- Managing Blood transfusion
- Inserting a nasogastric tube.
- Administering local anesthetics
- Performing the procedure of normal labor
- Taking swabs for different diagnostic purposes

3- Academic standards

National Academic Reference Standards (NARS) offered by the Egyptian Authority for Quality Assurance and Accreditation for Education (NAQAAE) in 2017 is adopted.

4- Benchmarking

Authority for Quality Assurance and Accreditation for Education (NAQAAE) in 2017 is adopted.

5- Curriculum structure and contents

5-1- Program duration:

5 academic years followed by two years clinical training as house officers.

5-2-Principles of program strategy

SPICES model of Medical curriculum:

Student-centered, **P**roblem-based, **I**ntegrated, **C**ommunity-based , **E**lectives , Systematic.

5-3- Program structure:

a. Pre-clinical stage: introduction - general basic medical sciences - patient, physician and Society (two semesters)

b. Pre-clinical stage: Organ System Blocks - Introduction to patient care- Scholarly Investigation and Research (three semesters)

c. Clinical Rotations& Family Medicine (five semesters).

d. House officer (Internship) (2 years)

5-4 - No. of Credit points: 318 points

Level 1 /1st semester (30 points/15 weeks)

Level 1 /2nd semester (30 points/16 weeks)

Level 2 /1st semester (30 points/15 weeks)

Level 2 /2nd semester (30 points/17 weeks)

Level 3 /1st semester (30 points/16 weeks)

Level 3 /2nd semester (33 points/18 weeks)

Level 4 (65 points/35 weeks)

Level 5 (70 points/40 weeks)

No. of points of compulsory courses: 40 courses / 301 points = 94.7 %

No. of courses /points of elective courses: 6 courses/ 17 points = 5.3 %

6- Courses contributing to the program

Level 1 /1st semester

Final exam hours	Total	Hours\Week	Points	Code	Departments	Block	
0.5	15	1 week	1	PSM-	Medical Education Development & Training Center	Principles of studying medicine	1
3	180	7 weeks	12	PMS-	Human Anatomy & Embryology Histology	Principles of microscopic and macroscopic structures	2
3	180	7 weeks	12	CBF-	Medical Physiology Medical Biochemistry	Cell biology and function	3
1.5	75	4 hours/week	5	PPS-	Forensic Medicine & Clinical Toxicology, Neurology &Psychiatry	Patient, Physician & Society: - Introduction to being a Physician. - Ethics, law & Professionalism. -Behavioral Medicine.	4

**Anatomy,Histology,Biochemistry,Physiology,Pathology,Pharmacology,Microbiology,Parasitology

Level 1 /2nd semester

Final exam hours	Total marks	Hours\Week	Points	Code	Departments	Block	
3	187.5	8 weeks	12.5	MPT-104	Pathology Medical pharmacology	Mechanisms and principles of diseases & therapy	1
3	187.5	8 weeks	12.5	INI- 105	Medical Microbiology & Immunology Medical Parasitology	Infection and immunity	2
1.5	75	4 hours/week	5	IPC-133	Medical Education Development & Training Center	Introduction to Patient Care 1: -Medical Interviewing. -Introduction to Physical Examination1. -Clinical Experiences 1.	3

**Anatomy,Histology,Biochemistry,Physiology,Pathology,Pharmacology,Microbiology,Parasitology

Level 2 / 3rd semester

Final exam hours	Total marks	Hours\Week	Points	Code	Departments	Block	
2	120	5 weeks	8	CAS-206	All departments of Basic Sciences**	Cardiovascular system	1
2	120	5 weeks	8	GIT-207	All departments of Basic Sciences**	GIT, Gastrointestinal system	2
2	120	5 weeks	8	SMU-208	All departments of Basic Sciences**	Skin & Musculoskeletal system	3
0.5	30	2 hours/week	2	IPC-234	Medical Education Development & Training Center	Introduction to Patient Care 2:- Advanced Physical Examination 2. Clinical Experiences 2. Advanced Medical Interviewing. Clinical Procedures.	4
1	60	4 hours/week	4	ELE1		Elective 1	5

**Anatomy,Histology,Biochemistry,Physiology,Pathology,Pharmacology,Microbiology,Parasitology

Level 2 / 4th semester

Final exam hours	Total marks	Hours\Week	Points	Code	Departments	Block	#
2.5	142.5	7 weeks	9.5	RRS-209	All departments of Basic Sciences**	Respiratory and renal systems	1
1.5	75	3 weeks	5	HEM-210	All departments of Basic Sciences**	Hematology:Blood & lymph system	2
2.5	142.5	7 weeks	9.5	HIC-211	Public Health & Community Medicine	Health & illness in the community	3
0.5	30	2 hours/week	2	IPC-235	Medical Education Development & Training Center	Introduction to Patient Care 3: -Advanced Physical Examination 2. -Clinical Experiences 2. -Advanced Medical Interviewing. -Clinical Procedures	4
1	60	4 hours/week	4	ELE2		Elective 2	5

**Anatomy,Histology,Biochemistry,Physiology,Pathology,Pharmacology,Microbiology,Parasitology

Level 3 / 5th semester

Final exam hours	Total marks	Hours\Week	Points	Code	Departments	Block	
3	187.5	8 weeks	12.5	NEU-	All departments of basic sciences**	Neurosciences	1
3	187.5	8 weeks	12.5	ERD-	All departments of basic sciences**	Endocrinology, Reproduction & Developmental Biology	2
0.5	30	2hours/week	2	EBM	Medical Education Development & Training Center	Evidence Based Medicine - Fundamentals	3
0.5	22.5	1.5 hour/week	1.5	IDP-	Medical Education Development & Training Center	Investigation and Discovery/Scholarly Project Epidemiology and data management	4
0.5	22.5	1.5 hour/week	1.5	ELE		Elective 3	5

**Anatomy,Histology,Biochemistry,Physiology,Pathology,Pharmacology,Microbiology,Parasitology

Level 3 / 6th semester

Final exam hours	Total marks	Hours\ Week	Points	Code	Departments	Block	
2.5	200	6 weeks	10	MED-314	Internal Medicine	**Medicine 1:** Introduction to general medicine, hematology, endocrinology, nephrology.	1
3.5	260	8 weeks	13	SUR-315	General Surgery Oncology	**Surgery I:** -Wound Healing, bleeding, shock, blood transfusion, hemostasis, surgical infections, postoperative complications, abdominal trauma emergencies, surgical anuria, surgical nutrition (enteral and parenteral), Surgery of head and neck, lymphatic system (3 weeks). -Thyroid and Para thyroid, supra renal gland, abdominal walls and hernias, Breast (4weeks). -Oncology-principles (one week).	2
1.5	120	4 weeks	6	FMT-316	Forensic Medicine & Clinical Toxicology	Forensic medicine and toxicology	3
0.5	40	2 hours/week	2	IDP- 338	Medical Education Development & Training Center	Investigation and Discovery/Scholarly Project Epidemiology and data management	4
0.5	40	2 hours/ week	2	ELE4		Elective 4	5

Level 4

Final exam hours	Total marks	Hours\ Week	Points	Code	Departments	Block	
4 2 papers	300	8 weeks	15 (3.5 tropical)	MTR-	Internal Medicine Tropical Medicine and Gastrointestinal Tract	Medicine II: -Liver–biliary system (2 weeks). -Nutrition, GIT, (2 weeks). -Rheumatology and clinical immunology (2 weeks) -Tropical medicine (2 weeks).	1
5 2 papers	360	10 weeks	18	OBG-	Gynecology & Obstetrics	Gynecology & obstetrics	2
5 2 papers	360	10 weeks	18	PED-	Pediatrics	Pediatrics	3
1	80	3 weeks	4	PYS-	Neurology & Psychiatry	Psychiatry	4
1	80	2 weeks	4	SUR-	Anesthesia & Intensive Care	Surgery II Anesthesia, pain management, intensive care, fluids and electrolytes and body response to trauma.	5
1	60	2 hours/week	3	ELE5		Elective 5	6
1	60	2 weeks	3	FAM-	Pediatrics Internal Medicine Gynecology & Obstetrics General Surgery	Family medicine (at end of year)	7

Level 5

Final exam hours	Total marks	Hours\Week	Points	Code	Departments	Block	
2	180	6 weeks	9	OPH-	Ophthalmology	Ophthalmology#	1
2	150	4 weeks	7.5	ENT-	Ear, Nose & Throat	Ear, Nose & Throat	2
2	130	4 weeks	6.5	MCI-	Clinical pathology Diagnostic Radiology	Medicine 3: Clinical investigations (laboratory and infection control: 2 weeks and radiology: 2 weeks).	3
1.5	120	4 weeks	6	SSS-	Brain & Neurosurgery Plastic Surgery Cardiothoracic Surgery Vascular Surgery	Surgery 4: Cardiothoracic surgery, plastic surgery, Neurosurgery, Vascular surgery (one week each).	4
1	110	4 weeks	5.5	ORT-	Orthopedics Surgery & Traumatology	Surgery 4: Orthopedics& trauma	5
1	110	4 weeks	5.5	URO-	Urology	Surgery 4: Urology	6
2	150	4 weeks	7.5	SUR-	General Surgery	Surgery 3 a: GIT, Liver–biliary system, pancreas, abdomen and peritoneum	7

Final exam	Total marks	Hours\ Week	Points	Code	Departments	Block	
2	130	4 weeks	6.5	MND-	Neurology & Psychiatry Dermatology &Venereology	**Medicine 4:** Neurology & Dermatology	8
2	130	4 weeks	6.5	MCC-	Cardiology Chest diseases	**Medicine 4:** Cardiology & Chest	9
0.5	50	2 hours/week for 15 weeks	2.5	ELE6		Elective 6	10
1	80	2 weeks	4	SUR-	General Surgery	**Surgery 3b:** # acute emergencies	11
1	60	2 hours/week For 36 weeks	3	FAM-	Pediatrics Internal Medicine Obstetrics & Gynecology General Surgery	Family medicine (2 hours/week for 36 weeks)	12

Program competency- course Matrix

NARS Competencies	Courses / Blocks	Domain	Teaching Methods	Assessment Methods
1.1 Take and record a structured, patient centered history.	Introduction to Patient Care 1 (IPC-133)	Know how, Show how (I & C)	Practical sessions, Case scenario	OSPE / OSCE exams, Assignments
1.2 Adopt an empathic and holistic approach to the patients and their problems.	Introduction to Patient Care 1 (IPC-133)	Know how, Show how (I & C)	Practical sessions, Role play	OSPE / OSCE exams, Formative assessment
1.3 Assess the mental state of the patient.	Introduction to Patient Care 1 (IPC-133), Medicine 4: Neurology (MND-530)	Know how, Show how (I & C)	Practical sessions, Group discussion	OSPE / OSCE exams
1.4 Perform appropriately-timed full physical examination of patients, appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive.	Introduction to Patient Care 1 (IPC-133)	Know how, Show how (I & C)	Practical sessions	OSPE / OSCE exams
1.5 Prioritize issues to be addressed in a patient encounter.	Introduction to Patient Care 1 (IPC-133)	Know, Know how, Show how (K, I & C)	Group discussion, Practical sessions	Written exams, OSPE / OSCE exams
1.6 Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.	Medicine 3: Clinical investigations (MCI-525), Principles of studying medicine (PSM-101)	Know how, Show how (I & C)	Lectures, Practical sessions	Written exams, OSPE / OSCE exams
1.7 Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice.	Principles of studying medicine (PSM-101)	Know how, Show how, Does (I, C & G)	Group discussion, Seminars	Formative assessment, Assignments
1.8 Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand.	Principles of studying medicine (PSM-101), Intro to Patient Care 1,2&3 (IPC-133, 234, 235), Family medicine (FAM-539)	Know, Know how (K & I)	Lectures, Case scenario	Written exams, Assignments
1.9 Retrieve, analyze, and evaluate relevant and	Investigation and Discovery/Scholarly Project	Know how, Show how,	Self-directed learning, Group	Assignments (Reports),

NARS Competencies	Courses / Blocks	Domain	Teaching Methods	Assessment Methods
current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM).	(IDP-337 & 338), EBM (EBM-336)	Does (I, C & G)	discussion	Formative assessment
1.10 Integrate the results of history, physical examination and laboratory test findings into a meaningful diagnostic formulation.	Introduction to Patient Care 1,2&3 (IPC-133, 234, 235)	Know how, Show how (I & C)	Practical sessions, Case scenario	OSPE / OSCE exams, Written exams
1.11 Perform diagnostic and intervention procedures in a skillful and safe manner, adapting to unanticipated findings or changing clinical circumstances.	Principles of studying medicine (PSM-101), Intro to Patient Care 1,2&3 (IPC-133, 234, 235)	Know how, Show how (I & C)	Practical sessions, Role play	OSPE / OSCE exams
1.12 Adopt strategies and apply measures that promote patient safety.	Principles of studying medicine (PSM-101), Intro to Patient Care 1,2&3 (IPC-133, 234, 235), Patient, Physician & Society (PPS-132)	Know how, Show how (I & C)	Group discussion, Practical sessions	OSPE / OSCE exams, Written exams
1.13 Establish patient-centered management plans in partnership with the patient, his/her family and other health professionals as appropriate, using Evidence Based Medicine in management decisions.	Intro to Patient Care 1&2 (IPC-133 & 234), Family medicine (FAM-539)	Know how, Show how (I & C)	Practical sessions, Case scenario	OSPE / OSCE exams
1.14 Respect patients' rights and involve them and /or their families / carers in management decisions.	Patient, Physician & Society (PPS-132), Intro to Patient Care 1&2 (IPC-133 & 234)	Know how, Show how, Does (I, C & G)	Role play, Group discussion	OSPE / OSCE exams, Formative assessment
1.15 Provide the appropriate care in cases of emergency, including cardio- pulmonary resuscitation, immediate life support measures and basic first aid procedures.	Intro to Patient Care 2&3 (IPC-234 & 235), Surgery I (SUR-315), Surgery II (SUR-421)	Know how, Show how (I & C)	Practical sessions	OSPE / OSCE exams

NARS Competencies	Courses / Blocks	Domain	Teaching Methods	Assessment Methods
1.16 Apply the appropriate pharmacological and nonpharmacological approaches to alleviate pain and provide palliative care for seriously ill people, aiming to relieve their suffering and improve their quality of life.	Surgery II: Anesthesia, pain management, intensive care, fluids and electrolytes and body response to trauma (SUR-421)	Know, Know how, Show how (K, I & C)	Lectures, Practical sessions	Written exams, OSPE / OSCE exams
1.17 Contribute to the care of patients and their families at the end of life, including management of symptoms, practical issues of law and certification.	Patient, Physician & Society (PPS-132), Family medicine (FAM-422 & 539)	Know, Know how, Show how (K, I & C)	Lectures, Case scenario	Written exams, Assignments
2.1 Identify the basic determinants of health and principles of health improvement.	Health & illness in the community (HIC-211)	Know, Know how, Show how (K, I & C)	Lectures, Group discussion	Written exams, Assignments
2.2 Recognize the economic, psychological, social, and cultural factors that interfere with wellbeing.	Health & illness in the community (HIC-211), Patient, Physician & Society (PPS-132), Family medicine (FAM-422 & 539)	Know, Know how, Show how (K, I & C)	Lectures, Seminars	Written exams, Formative assessment
2.3 Discuss the role of nutrition and physical activity in health.	Medicine II: Nutrition (MTR-317)	Know, Know how, Show how (K, I & C)	Lectures, Group discussion	Written exams, Assignments
2.4 Identify the major health risks in his/her community, including demographic, occupational and environmental risks; endemic diseases, and prevalent chronic diseases.	Health & illness in the community (HIC-211), Intro to Patient Care 1 (IPC-133), Epidemiology and data management (IDP-337 & 338)	Know, Know how, Show how (K, I & C)	Lectures, Self-directed learning	Written exams, Assignments
2.5 Describe the principles of disease prevention, and empower communities, specific groups or individuals by raising their awareness and building their capacity.	Health & illness in the community (HIC-211), Family medicine (FAM-422 & 539), Med 3: Infection control (MCI-525), Infection and immunity (INI-105), Med II: Tropical (MTR-317)	Know, Know how, Show how (K, I & C)	Lectures, Practical sessions	Written exams, OSPE / OSCE

NARS Competencies	Courses / Blocks	Domain	Teaching Methods	Assessment Methods
2.6 Recognize the epidemiology of common diseases within his/her community, and apply the systematic approaches useful in reducing the incidence and prevalence of those diseases.	Epidemiology (IDP-337 & 338), Health & illness in the community (HIC-211), EBM (EBM-336)	Know, Know how, Show how (K, I & C)	Lectures, Group discussion	Written exams, Assignments
2.7 Provide care for specific groups including pregnant women, newborns and infants, adolescents and the elderly.	Family medicine (FAM-422 & 539), Pediatrics (PED-419), Gynecology & obstetrics (OBG-418)	Show how, Does (G & C)	Practical sessions, Case scenario	OSPE / OSCE exams
2.8 Identify vulnerable individuals that may be suffering from abuse or neglect and take the proper actions to safeguard their welfare.	Forensic medicine and toxicology (FMT-316), Family medicine (FAM-422 & 539)	Know, Know how, Show how (K, I & C)	Lectures, Seminars	Written exams, Assignments
2.9 Adopt suitable measures for infection control.	Med 3: Infection control (MCI-525), Infection and immunity (INI-105), Med II: Tropical (MTR-317), Health & illness (HIC-211)	Know, Know how, Show how (K, I & C)	Lectures, Practical sessions	Written exams, OSPE / OSCE
3.1 Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.	Patient, Physician & Society (PPS-132), Principles of studying medicine (PSM-101)	Show how, Does (G & C)	Role play, Group discussion	OSPE / OSCE exams, Formative assessment
3.2 Adhere to the professional standards and laws governing the practice, and abide by the national code of ethics issued by the Egyptian Medical Syndicate.	Patient, Physician & Society (PPS-132)	Show how, Does (G & C)	Seminars, Role play	OSPE / OSCE exams, Assignments
3.3 Respect the different cultural beliefs and values in the community they serve.	Patient, Physician & Society (PPS-132), Health & illness in the community (HIC-211)	Show how, Does (G & C)	Group discussion	OSPE / OSCE exams, Formative assessment
3.4 Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural or ethnic	Patient, Physician & Society (PPS-132), Health & illness in the community (HIC-211)	Show how, Does (G & C)	Role play, Case scenario	OSPE / OSCE exams

NARS Competencies	Courses / Blocks	Domain	Teaching Methods	Assessment Methods
backgrounds, or their disabilities.				
3.5 Ensure confidentiality and privacy of patients' information.	Patient, Physician & Society (PPS-132)	Show how, Does (G & C)	Lectures, Seminars	Written exams, OSPE / OSCE
3.6 Recognize basics of medico-legal aspects of practice, malpractice and avoid common medical errors.	Patient, Physician & Society (PPS-132)	Know, Know how (I & K)	Lectures, Case scenario	Written exams, Assignments
3.7 Recognize and manage conflicts of interest.	Patient, Physician & Society (PPS-132)	Know, Know how, Does (I, K & G)	Lectures, Group discussion	Written exams, Formative assessment
3.8 Refer patients to the appropriate health facility at the appropriate stage.	Family medicine (FAM-422 & 539), Health & illness in the community (HIC-211)	Know how, Show how, Does (I, G & C)	Case scenario, Seminars	OSPE / OSCE exams, Assignments
3.9 1dentify and report any unprofessional and unethical behaviors or physical or mental conditions related to himself, colleagues or any other person that might jeopardize patients' safety.	Patient, Physician & Society (PPS-132)	Know, Know how, Does (I, G & K)	Group discussion, Seminars	Formative assessment
4.1 Describe the normal structure of the body and its major organ systems and explain their functions.	Principles of micro/macro structures (PMS-102), Cell biology (CBF-103), Cardiovascular (CAS-206), GIT (GIT-207), Skin & Musc (SMU-208), Resp/Renal (RRS-209), Hematology (HEM-210), Neurosciences (NEU-312), Endocrinology/Reproduction (ERD-313)	Know, Know how (K & I)	Lectures, Practical sessions	Written exams, Formative assessment
4.2 Explain the molecular, biochemical, and cellular mechanisms that are important in maintaining the body's homeostasis.	Cell biology and function (CBF-103), Immunity (INI-105), Principles of micro/macro structures (PMS-102)	Know, Know how (K & I)	Lectures	Written exams, Assignments
4.3 Recognize and describe main developmental changes in	Principles of micro/macro structures (Embryology) (PMS-102),	Know, Know how (K & I)	Lectures, Group discussion	Written exams

NARS Competencies	Courses / Blocks	Domain	Teaching Methods	Assessment Methods
humans and the effect of growth, development and aging on the individual and his family.	Endocrinology/Reproduction (ERD-313), Pediatrics (PED-419), Medicine 1 (MED-314)			
4.4 Explain normal human behavior and apply theoretical frameworks of psychology to interpret the varied responses of individuals, groups and societies to disease.	Psychiatry (PYS-420)	Know, Know how (K & I)	Lectures, Case scenario	Written exams, Assignments
4.5 Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of illness/disease and explain the ways in which they operate on the body (pathogenesis).	Mechanisms and principles of diseases (MPT-104), Infection and immunity (INI-105), Medicine 1, II, III&IV, Surgery I, II, III, IV & Oncology, Ophthalmology, ENT, Pediatrics, Gynecology & obstetrics	Know, Know how (K & I)	Lectures, Self-directed learning	Written exams, Assignments
4.6 Describe altered structure and function of the body and its major organ systems that are seen in various diseases and conditions.	Mechanisms and principles of diseases (MPT-104), Infection and immunity (INI-105), Medicine 1, II, III&IV, Surgery I, II, III, IV & Oncology, Ophthalmology, ENT, Pediatrics, Gynecology & obstetrics	Know, Know how (K & I)	Lectures, Practical sessions	Written exams, Formative assessment
4.7 Describe drug actions: therapeutics and pharmacokinetics; side effects and interactions, including multiple treatments, long term conditions and non-prescribed medication; and effects on the population.	Mechanisms and principles of diseases (MPT-104), Medicine 1, II&IV (MED-314, MTR-317, MND-530 & MCC-531)	Know, Know how, Show how, Does (K, I, C & G)	Lectures, Case scenario	Written exams, Assignments
4.8 Demonstrate basic sciences specific practical skills and procedures relevant to future practice, recognizing	Intro to Patient Care 1,2&3 (IPC-133, 234 & 235), Medicine 3: Clinical investigations (MCI-525)	Know, Know how, Show how (C, K & I)	Practical sessions, Group discussion	OSPE / OSCE exams, Written exams

NARS Competencies	Courses / Blocks	Domain	Teaching Methods	Assessment Methods
their scientific basis, and interpret common diagnostic modalities, including: imaging, electrocardiograms, laboratory assays, pathologic studies, and functional assessment tests.				
5.1 Recognize the important role played by other health care professionals in patients' management.	Principles of studying medicine (PSM-101), Health & illness in the community (HIC-211), Patient, Physician & Society (PPS-132), Family medicine (FAM-422 & 539)	Show how, Does (C & G)	Group discussion, Seminars	Formative assessment, OSPE / OSCE
5.2 Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities and engaging in shared decision-making for effective patient management.	Patient, Physician & Society (PPS-132), Family medicine (FAM-422 & 539)	Show how, Does (C & G)	Role play, Practical sessions	OSPE / OSCE exams
5.3 Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.	Principles of studying medicine (PSM-101), Patient, Physician & Society (PPS-132), Family medicine (FAM-422 & 539)	Show how, Does (C & G)	Group discussion, Role play	Formative assessment, OSPE / OSCE
5.4 Apply leadership skills to enhance team functioning, the learning environment, and/or the health care delivery system.	Principles of studying medicine (PSM-101), Family medicine (FAM-422 & 539)	Know, Show how, Does (G, K & C)	Seminars, Self-directed learning	Assignments, Formative assessment
5.5 Communicate effectively using written health records, electronic medical records, or other digital technology.	Intro to Patient Care 1,2&3 (IPC-133, 234 & 235), Patient, Physician & Society (PPS-132), Family medicine (FAM-422 & 539), Epidemiology (IDP-337 & 338), Health & illness in the community (HIC-211)	Show how, Does (C & G)	Practical sessions, Case scenario	OSPE / OSCE exams, Assignments

NARS Competencies	Courses / Blocks	Domain	Teaching Methods	Assessment Methods
5.6 Evaluate his / her work and that of others using constructive feedback.	Principles of studying medicine (PSM-101), Patient, Physician & Society (PPS-132), Epidemiology (IDP-337 & 338)	Show how, Does (C & G)	Group discussion, Seminars	Formative assessment
5.7 Recognize own personal and professional limits, and seek help from colleagues and supervisors when necessary.	Principles of studying medicine (PSM-101), Patient, Physician & Society (PPS-132)	Show how, Does (G & C)	Group discussion, Role play	Formative assessment
5.8 Apply fundamental knowledge of health economics to ensure the efficiency and effectiveness of the health care system.	EBM (EBM-336), Health & illness in the community (HIC-211), Patient, Physician & Society (PPS-132), Family medicine (FAM-422 & 539)	Know, Know how, Show how (K, I & C)	Lectures, Seminars	Written exams, Assignments
5.9 Use health informatics to improve the quality of patient care.	EBM (EBM-336), Epidemiology and data management (IDP-337 & 338)	Does (G)	Self-directed learning	Assignments (Reports)
5.10 Document clinical encounters in an accurate, complete, timely, and accessible manner, in compliance with regulatory and legal requirements.	Patient, Physician & Society (PPS-132), Intro to Patient Care 1,2&3 (IPC-133, 234, 235), Family medicine (FAM-539)	Show how, Does (C & G)	Practical sessions, Case scenario	OSPE / OSCE exams, Assignments
5.11 Improve the health service provision by applying a process of continuous quality improvement.	Epidemiology and data management (IDP-337 & 338), EBM (EBM-336)	Know, Know how, Show how (K, I & C)	Group discussion, Lectures	Written exams, Assignments
5.12 Demonstrate accountability to patients, society, and the profession.	Epidemiology and data management (IDP-337 & 338)	Show how, Does (C & G)	Seminars, Role play	Formative assessment
6.1 Regularly reflect on and assess his / her performance using various performance indicators and information sources.	Principles of studying medicine (PSM-101), Epidemiology and data management (IDP-337 & 338)	Know, Know how, Show how, Does (G, C, K & I)	Self-directed learning, Group discussion	Assignments (Reports), Formative assessment
6.2 Develop, implement, monitor, and revise a personal learning plan to enhance professional	Principles of studying medicine (PSM-101), Epidemiology and data management (IDP-337 &	Know, Know how, Does (G, K & I)	Self-directed learning	Assignments (Presentations)

NARS Competencies	Courses / Blocks	Domain	Teaching Methods	Assessment Methods
practice.	338)			
6.3 Identify opportunities and use various resources for learning.	Principles of studying medicine (PSM-101), Epidemiology and data management (IDP-337 & 338)	Know, Know how, Show how, Does (G, P, K & I)	Self-directed learning, Seminars	Formative assessment
6.4 Engage in inter-professional activities and collaborative learning to continuously improve personal practice and contribute to collective improvements in practice.	Principles of studying medicine (PSM-101), Epidemiology and data management (IDP-337 & 338)	Know, Know how, Show how, Does (G, P, K & I)	Group discussion, Seminars	Assignments, Formative assessment
6.5 Recognize practice uncertainty and knowledge gaps in clinical and other professional encounters, and generate focused questions that address them.	Epidemiology and data management (IDP-337 & 338)	Know how, Show how, Does (I, G & P)	Group discussion, Case scenario	Assignments
6.6 Effectively manage learning time and resources and set priorities.	Epidemiology and data management (IDP-337 & 338), Principles of studying medicine (PSM-101)	Know, Know how, Does (G, K & I)	Self-directed learning	Formative assessment
6.7 Demonstrate an understanding of the scientific principles of research including its ethical aspects and scholarly inquiry and Contribute to the work of a research study.	Epidemiology and data management (IDP-337 & 338)	Know, Know how, Show how (K, I & P)	Lectures, Seminars	Written exams, Assignments
6.8 Critically appraise research studies and scientific papers in terms of integrity, reliability, and applicability.	EBM (EBM-336), Epidemiology and data management (IDP-337 & 338)	Know, Know how, Show how, Does (G, K, I & P)	Group discussion, Self-directed learning	Assignments (Reports), Written exams
6.9 Analyze and use numerical data including the use of basic statistical methods.	Epidemiology and data management (IDP-337 & 338)	Know, Know how, Show how (K, I & P)	Lectures, Practical sessions	Written exams, Assignments
6.10 Summarize and present to professional and lay audiences the findings of relevant	Principles of studying medicine (PSM-101), Epidemiology and data management (IDP-337 &	Know, Know how, Show how, Does (G, K, I & P)	Seminars, Presentations	Assignments (Presentations)

NARS Competencies	Courses / Blocks	Domain	Teaching Methods	Assessment Methods
research and scholarly inquiry.	338)			

K = knowledge I = intellectual C = clinical or practical G = general

Fundamental physical examination skills/ Courses matrix

Clinical skills	Block	ILO Type*
Measuring body temperature.	**Introduction to Patient Care 1 Code: IPC-133**	**K, I, C & G**
Measuring pulse rate, respiratory rate and blood pressure .	**Introduction to Patient Care 1 Code: IPC-133**	**K, I, C & G**
Anthropometric Measurements and assessment of nutritional status .	**1-Introduction to Patient Care 1 Code: IPC-133** **2-Pediatrics Code: PED-419**	**K, I, C & G**
Chest examination .	**Introduction to Patient Care 3 Code: IPC-235**	**K, I, C & G**
Heart examination .	**Introduction to Patient Care 2 Code: IPC-234**	**K, I, C & G**
Abdominal examination.	**Introduction to Patient Care 2 Code: IPC-234**	**K, I, C & G**
Locomotor system examination.	**1-Introduction to Patient Care 2 Code: IPC-234** **2- Medicine 2: Rheumatology Code: MTR-317** **3- Medicine 4: Neurology Code: MND-530** **4- Surgery 4: Orthopedics Code: ORT-527**	**K, I, C & G**
Nervous system examination.	**Medicine 4: Neurology Code: MND-530**	**K, I, C & G**
Examination of the jugular veins.	**Introduction to Patient Care 1 Code: IPC-133**	**K, I, C & G**
Ear examination.	**Ear, Nose & Throat Code: ENT-524**	**K, I, C & G**

Throat examination.	**Ear, Nose & Throat** **Code: ENT-524**	**K, I,** **C & G**
External Eye and fundus examination.	**Ophthalmology** **Code: OPH-523**	**K, I,** **C & G**
Breast examination.	**Surgery I Code:** **SUR-315**	**K, I,** **C & G**
Examination of the thyroid.	**1- Introduction to Patient Care 1** **Code: IPC-133** **2- Surgery I Code:** **SUR-315** **3- Medicine 1: Endocrinology** **Code: MED-314**	**K, I,** **C & G**
Lymph nodes examination .	**1- Introduction to Patient Care 1** **Code: IPC-133** **2- Surgery I** **Code: SUR-315** **3- Medicine 1: Hematology** **Code: MED-314**	**K, I,** **C & G**
PV examination.	**1-Gynecology & obstetrics** **Code: OBG-418** **2-Introduction to Patient Care 2** **Clinical Procedures** **Code: IPC-234**	**K, I,** **C & G**
Assessment of uterine fundus level in pregnancy.	**Gynecology & obstetrics** **Code: OBG-418**	**K, I,** **C & G**
PR examination.	**1-Introduction to Patient Care 2** **Clinical Procedures** **Code: IPC-234** **2-Surgery I** **Code: SUR-315**	**K, I,** **C & G**
Examining lumps.	**Surgery I** **Code: SUR-315**	**K, I,** **C & G**
Skin examination.	**1-Introduction to Patient Care 1** **Code: IPC-133** **2-Medicine 4: Dermatology** **Code: MND-530**	**K, I,** **C & G**

K = knowledge **I = intellectual** **C = clinical or practical** **G = generic**

Basic diagnostic and intervention procedures/ Courses matrix

procedure N.	Block	ILO Type*
venipuncture and collect blood samples.	**1-Introduction to Patient Care 1 Clinical Procedures Code: IPC-133** **2-Medicine 3: Clinical investigations (laboratory) Code: MCI-525**	**C & G**
Inserting a cannula into peripheral veins.	**Introduction to Patient Care 1 Clinical Procedures Code: IPC-133**	**C & G**
Establishing peripheral intravenous access and setting up an infusion; use of infusion devices.	**Introduction to Patient Care 3 Clinical Procedures Code: IPC-235**	**C & G**
Giving intramuscular, subcutaneous, intradermal and intravenous injections.	**Introduction to Patient Care 3 Clinical Procedures Code: IPC-235**	**C & G**
Suturing of superficial wounds.	**1-Surgery I Code: SUR-315** **2-Introduction to Patient Care 3 Clinical Procedures Code: IPC-235**	**K, I** **C & G**
Performing cardiopulmonary resuscitation and basic life-support.	**1-Introduction to Patient Care 3 Clinical Procedures Code: IPC-235** **2-Surgery II: Intensive care Code: SUR-421**	**K, I, C & G**
Performing and interpreting basic bedside laboratory tests.	**Medicine 3: Clinical investigations (laboratory) Code: MCI-525**	**K, I, C & G**
Performing and interpreting ECG.	**1-Cardiovascular system (Physiology) Code: CAS-206**	**K, I, C & G**

	2- Introduction to Patient Care 3 Clinical Procedures Code: IPC-235 **3-Medicine 4: Cardiology & Chest Code:MCC-531**	
Managing an electrocardiograph (ECG) monitor .	**1-Introduction to Patient Care 3 Clinical Procedures Code: IPC-235** **2-Surgery II: Intensive care Code: SUR-421**	**C & G**
Taking swabs for different diagnostic purposes.	**1-Medicine 3: Clinical investigations (laboratory) Code: MCI-525** **2-Ear, Nose & Throat Code: ENT-524**	**C & G**
Using a nebulizer for administration of inhalation therapy.	**Introduction to Patient Care 3 Clinical Procedures Code: IPC-235**	**K, I** **C & G**
Performing male and female bladder catheterization.	**Introduction to Patient Care 3 Clinical Procedures Code: IPC-235**	**C & G**
Administering basic oxygen therapy .	**1-Introduction to Patient Care 3 Clinical Procedures Code: IPC-235** **2-Medicine 4: Cardiology & Chest Code: MCC-531**	**K, I, C & G**
Wound care and basic wound dressing.	**1-Surgery I Code: SUR-315** **2-Introduction to Patient Care 3 Clinical Procedures Code: IPC-235**	**K, I, C & G**
Managing Blood transfusion.	**1-Surgery I Code: SUR-315** **2-Introduction to Patient Care 3 Clinical Procedures Code: IPC-235** **3-Medicine 4: Hematology Code: MED-314**	**K, I, C & G**

Inserting a nasogastric tube.	**Introduction to Patient Care 3** **Clinical Procedures** **Code: IPC-235**	**C & G**
Administering local anesthetics.	**1-Surgery II: Anesthesia** **Code: SUR-421** **2-Introduction to Patient Care 3** **Clinical Procedures** **Code: IPC-235**	**K, I** **C & G**
Performing the procedure of normal labor.	**Gynecology & obstetrics** **Code: OBG-418**	**K, I** **C & G**

K = knowledge I = intellectual C = clinical or practical G = generic

7- Program admission requirements

- General Egyptian Secondary Education Certificate or equivalent certificates or degrees approved by the Egyptian ministry of higher education with qualifying grades according to the guidelines put annually by the Ministry of higher education.
- International students are admitted according to the rules and conditions set by the Department of Expatriates at the Ministry of Higher Education.

8- Regulations for progression and program

- The student considered pass in any curriculum if he gains at least 60% of the maximum score and at least 40% of the maximum score of the final written exam of this curriculum.

- The student cannot pass from one level to the next except if he pass all curricula at that level.
- If the student does not pass any curriculum he can register to reenter the exam in the summer course.
- In case of re-exam in any curriculum the student gain maximum 64.9%.

9- Teaching methods

1- Lectures

2- Practical sessions

3- Group Discussion

4- Self-directed learning

5- Seminars

6- Role play

7- Case scenario

10- Assessment methods

1-Assignments: quiz, reports, presentation**.**

2-Formative assessment

3-Written exams. : MCQs and short questions

4-OSPE or OSCE exams.

11- Program evaluation

1.Senior student : Questionnaire ,interviews

2.Alumni : Questionnaire, interviews

3.Stakeholder (Employers) : Questionnaire , interviews

4.External Evaluator(s) : Report

Program Coordinator: Vice dean for Education & Students' Affairs

Dean: Professor/ Eman Abo Dief

Date of first approval of program specifications: 14/2/2021