M.B.B.CH. CREDIT HOURS
(5 + 2)
PROGRAM SPECIFICATION

THE SPECIAL PROGRAM

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(5 + 2)
PROGRAM SPECIFICATION
FOR
THE SPECIAL PROGRAM

لجنة المعايير الاكاديمية و التوصيف بالبرنامج	منسق البرنامج	عميد الكلية
د. أحمد حمدان	أ.د زينب عبدالعزيز قاسمي	أ.د/ محمد فهمي النعماني

A-Basic information

1. **Program Title:** Bachelor degree of Medicine and Surgery 2018-2019
2. **Program Type:** Single
3. **Department (s):** 33 departments (Integrated system)

N.	Department	N.	Department
1	Anatomy & Embryology	18	**Tropical medicine**
2	Histology	19	**Dermatology& Venerology**
3	Physiology	20	**Clinical Pathology**
4	Biochemistry	21	**Radiology**
5	Pathology	22	**Pediatrics**
6	Pharmacology	23	**General Surgery**
7	Microbiology & Immunology	24	**Urology**
8	Parasitology	25	**Orthopedics**
9	Ophthalmology	26	**Cardio-thoracic Surgery**
10	E.N.T	27	**Neuro-surgery**
11	Forensic medicine & Toxicology	28	**Plastic Surgery**
12	Community medicine	29	**Oncology& Radiotherapy**
13	Family medicine	30	**Anaesthesia and Intensive Care**
14	Internal medicine	31	**Obstetrics&& Gynaecology**
15	Psychiatry & Neurology	32	**Physical medicine, rheumatology and rehabilitation**
16	Chest	33	**Emergency Medicine**
17	**Cardiovascular medicine**		

4. Coordinator: Prof. Dr. Zeinab Kasemy
5. External Evaluator(s): Prof. Dr. Mona Ghaly
6. Date of Program specification approval: 8 -2018.

7.

B-Professional information

I- Program Aims:

The program aims to provide graduate physicians who can:

- **a-** Provide primary health care as family physician/general practitioner, with emphasis on disease prevention and health promotion.
- **b-** Achieve the clinical and practical standards through a patient-centered care required to compete in the national labor market.
- **c-** Adhere to professionalism and adopt the ethics of medical practice and respect the religious, cultural and humanity values.
- **d-** Collaborate with other health care professionals, appreciating their role, respecting the hierarchy of the health care system with acquisition of the skills of professionalism and leadership.
- **e-** Continue self-learning and research to cope with the advancement in the medical field.
- **f-** Employ the clinical practice for the service and improvement of the community.

II- Academic Standards:

The National Academic Reference Standards (NARS) for medicine approved by the National Authority for Quality Assurance and Accreditation of Education (2017) is used as the academic reference standards

The aims and Learning outcomes of the current program are comparable with the attributes of medical graduate (Annex 1) and competency areas provided by the national academic reference standards.

Competency areas & Key competencies of NARS 2017

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, andadhering to professional values. The graduate should collect and interpret information, make clinical decisions, and carry outdiagnostic and therapeutic interventions - with an understanding ofthe limits of his/her expertise- considering the patient'scircumstances and preferences as well as the availability ofresources. The graduate should be able to:

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 ofpatients appropriate to the age, gender, and clinical presentation ofthe 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, inorder to help solve a clinical problem based on evidence (EBM).

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

1.11. Perform diagnostic and intervention procedures2 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 endof life, including management of symptoms, practical issues of lawand certification

Competency Area II: 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 preventdiseases, reduce deaths and promote quality lifestyle. The graduateshould be able to:

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 inreducing 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.

Competency Area III: The graduate as a professional

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

3.1. Exhibit appropriate professional behaviors and relationships inall 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 categoryregardless of their social, cultural, 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 appropriate health facility at the appropriate stage.
3.9. Identify and report any unprofessional and unethical behaviorsor physical or mental conditions related to himself, colleagues or any other person that might jeopardize patients' safety.

Competency Area IV: The graduate as a scholar and scientist. The graduate should build his clinical practice on a base of the knowledge of scientific principles and methods of basic medicaland social sciences, applying this knowledge into clinical care, andusing it as a foundation for clinical reasoning, care provision,further professional development and research. The graduateshould be able to:

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; sideeffects 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.

Competency Area V: 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 caresystem, respecting its hierarchy and rules and using his/her administrative and leadership skills to add value to the system. Thegraduate should be able to:

5.1 Recognize the important role played by other health careprofessions 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 a written health record,electronic medical record, or other digital technology.
5.6 Evaluate his/her work and that of others using constructivefeedback.
5.7 Recognize own personal and professional limits and seek helpfrom colleagues and supervisors when necessary.
5.8 Apply fundamental knowledge of health economics to ensurethe 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 ofcontinuous quality improvement.
5.12 Demonstrate accountability to patients, society, and the profession.

Competency Area VI: The graduate as a lifelong learner and researcher

The graduate should demonstrate a lifelong commitment to excellence in practice through continuous learning andprofessional development. He should 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 methodologyto 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. The graduate should beable to:

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 contributeto collective improvements in practice.
6.5 Recognize practice uncertainty and knowledge gaps in clinicaland 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 thefindings of relevant research and scholarly inquiry.

III- Program Learning Outcomes (PLOs)

Competency Area 1: The graduate as a health care provider.

	Key competency	PLOs
1.1	Take and record a structured, patient-centered history.	1.1.1 List history-taking items. 1.1.2 Define Efficient prioritized history taking. 1.1.3 Describes the different components of history taking. 1.1.4 Describe the secondary resources for patient encounters. 1.1.5 Demonstrate customized efficient prioritized history-taking. 1.1.6. Obtain data from secondary resources. 1. 1.7. Demonstrate respect to the patient's rights during history taking. 1.1.8. Apply the legal and ethical standards during history taking.
1.2	Adopt an empathic and holistic approach to the patients and their problems.	1.2.1 Define empathic andholistic approaches in patient care. 1.2.2 Describe the patient's behaviorduring illness. 1.2.3 Describe a patient's illness experience in the patient's own words according to the corresponding system. 1.2.4 Demonstrate empathy in patient consultation. 1.2.5 Demonstrate respect towards patient's emotions about illness.

1.3	Assess the mental state of the patient.	1.3.1 Describe mental state assessment pillars. 1.3.2 Conduct a mental state assessment that is appropriately targeted to the patient's complaints and medical conditions 1.3.3 Demonstrate respect and support toward mentally disordered patients.
1.4	Perform an appropriately timed full physical examination of patients, appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive.	1.4.1 List physical examination components 1.4.2 Describe the disease finding (clinical manifestations) for the organ in the corresponding system. 1.4.3 Categorize different abnormalities of the organ in the corresponding system and their role in disease pathogenesis. 1.4.4 Conduct general clinical examination concentrating on the systemic signs for the organ in the corresponding system- 1.4.5 Perform local examination for the organ in the corresponding system- 1.4.6 Generate differential diagnosis for acute presentations for the organ in the corresponding system-based on the examination findings. 1.4.7 Demonstrate respect to the patient's rights during clinical examination. 1.4.8 Apply the legal and ethical standards during clinical examination. 1.4.9 Show professionalism while dealing with the patient.
1.5	Prioritize issues to be addressed in a patient encounter.	1.5.1. Recognize situations with a need for urgent or emergent medical care, including life-threatening conditions. 1.5.2. Recognize when to seek additional guidance. 1.5.3. Demonstrates knowledge of care coordination. 1.5.4. Describe the psychosocial factors related to the situation. 1.5.5. Discuss the effect of the psychosocial factors on management plans. 1.5.6. Develop a prioritized differential diagnosis for a patient's condition. 1.5.7. Modify a differential diagnosis depending on emergent situations. 1.5.8. Coordinates care of patients in routine clinical situations effectively utilizing the roles of the interprofessional team member

		1.5.9. Counsel the patients and caregivers by incorporating the psychological element. 1.5.10. Demonstrate respect to the psychosocial factors affecting the patient and his clinical condition
1.6	Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.	1.6.1. List the appropriate diagnostic investigations for common diseases of the system/organ 1.6.2. Describe the basic interpretation of common diagnostic testing. 1.6.3. Select the proper diagnostic test for the patient complaint taking into consideration the effectiveness factor. 1.6.4. Interpret the findings of different diagnostic tests for a specific disease 1.6.5. Demonstrate respect to the patient's socioeconomic standard during investigation selection.
1.7	Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice.	1.17.1 Define uncertainty, complexity, and ambiguity 1.17.2 Identify the uncertainty, ambiguity, and complexity in different patient encounters. 1.17.3 List the different causes of uncertainty and ambiguity in patient diagnosis. 1.17.4 Outline the approach for dealing with uncertainty, ambiguity, and complexity. 1.17.5 Provide a thorough differential diagnosis of a patient with an undifferentiated illness. 1.17.6 Schedule a patient with a chronic illness for a return visit to continue the work-up Level. 1.17.7 Demonstrate respect towards the opinions of other colleagues and senior staff regarding the assessment of patients with uncertain diagnoses. 1.17.8 Show empathy toward a patient with uncertainty, ambiguity, or complexity in clinical diagnosis.
1.8	Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand.	1.15.1. Define clinical and biomedical sciences. 1.15.2. Describe the different aspects of the clinical sciences relevant to the problem related to the current. 1.15.3. Outline the different parameters of biomedical sciences relevant to the clinical situation related to the current. 1.15.4. Integrate the clinical and biomedical knowledge to reach a provisional diagnosis for the patient's problem.

		1.15.5. Show cooperation with other health team members in patient management. 1.15.6. Demonstrate respect to the teamwork in a healthcare setting.
1.9	Retrieve, analyze, and evaluate relevant and current data from the literature, using information technologies and library resources, to help solve a clinical problem based on evidence (EBM).	1.9.1 Define evidence-based medicine. 1.9.2 Identify different sources of evidence. 1.9.3 List the steps for evidence appraisal. 1.9.4 Identify evidence-based guidelines related to the patient's problem. 1.9.5 Discuss potential evidence-based treatment options in respect to patient preference. 1.9.6 Formulate a patient problem-directed search question. 1.9.7 Locate the trustable sources of data and information needed for the clinical work. 1.9.8 Appraise different types of evidence. 1.9.9 Apply the best available evidence, integrated with patient preference, to the care of patients. 1.9.10 Demonstrate respect to the copyrights of different data sources. 1.9.11 Show accuracy and honesty during the collection and presentation of data.
1.10	Integrate the results of history, physical examination and laboratory test findings into a meaningful diagnostic formulation.	1.10.1. List the different steps for a diagnostic approach. 1.10.2. Identify the proper order for the diagnostic steps including history, examination, and investigations. 1.10.3. Follow the proper order for the diagnostic steps in relation to the patient encounter. 1.10.4. Integrate the findings of history, clinical examination, and investigations to reach an accurate diagnosis concerning the patient complaint in the corresponding system. 1.10.5. Interpret all the available data in the diagnostic process without disregard for minor or irrelevant findings
1.11	Perform diagnostic and intervention procedures in a skillful and safe manner, adapting to unanticipated findings or changing clinical circumstances.	1.11.1. Describe the different standard steps of diagnostic maneuvers for the clinical problem related to the current system. 1.11.2. Identify the different intervention protocols for the clinical problem related to the current system. 1.11.3. Recognize the principles of patient safety and infection controls during the relevant diagnostic and intervention maneuvers.

		1.11.4. Perform the basic diagnostic maneuvers relevant to the clinical problem of the current system. 1.11.5. Apply the standards of patient safety and infection control during dealing with patients in different clinical situations. 1.11.6. Apply critical thinking skills to deal with unexpected clinical findings and challenging situations. 1.11.7. Seek the opinions of seniors and other colleagues in unexpected critical situations. 1.11.8. Appraise his/her skills during diagnostic and intervention maneuvers concerning patient benefit and safety. 1.11.9. demonstrate respect to the opinions of seniors and other colleagues in emergent critical situations.
1.12	Adopt strategies and apply measures that promote patient safety.	1.12.1. List patient misidentification or medication errors as common patient safety events. 1.12.2. Identify medical errors to improve patient safety in all practice settings. 1.12.3. Describes how to report errors in a clinical setting. 1.12.4. Participate in effective and safe hand-offs and transitions of care. 1.12.5. Demonstrate respect to the rules of patient safety in clinical practice
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.	1.13.1. Describe the evidence-based guidelines for the management of clinical problems relevant to the current system. 1.13.2. Collaborate with other colleagues in decision making 1.13.3. Apply a patient-centered approach in patient or caregiver counseling. 1.13.4. Demonstrate respect to the patient or his caregivers' rights in decision-making. 1.13.5. Demonstrate respect to the opinions of other colleagues in decision-making
1.14	Respect patients' rights and involve them and /or their families/carers in management decisions.	1.14.1 Identify the rights of the patients or their caregivers regarding decision-making in different clinical situations. 1.14.2 Describe the ethical dilemma. 1.14.3 Document and report clinical information truthfully in a confidential way. 1.14.4 Formulate a management plan taking into consideration the patient's rights.

		1.14.5 Treat patients with dignity, civility, and respect, regardless of race, culture, gender,ethnicity, age, or socioeconomic status
1.15	Provide the appropriate care in cases of emergency, including cardio-pulmonary resuscitation, immediate life support measures, and basic first aid procedures.	1.15.1. Describe the approaches for the management of common emergencies related to the current system 1.15.2. Define the steps of cardio-pulmonary resuscitation and basic life support. 1.15.3. Identify the main first aid measures related to the emergencies of the current. 1.15.4. Perform cardiopulmonary resuscitation and basic life support. 1.15.5. Apply main first aid measures. 1.15.6. Set priorities in dealing with clinical emergencies. 1.15.7. Demonstrate respect to the contextual factors of emergencies and 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.	1.16.1 Define palliative care. 1.16.2 Identify the basic pharmacological lines for pain management. 1.16.3 Describe the non-pharmacological approaches for pain management 1.16.4 List the indications and methods for palliative measures for seriously ill patients. 1.16.5 Formulate a management plan for chronic pain. 1.16.6 Design a protocol for palliative care for seriously ill patients. 1.16.7 Show empathy in dealing with seriously ill patients
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.	1.17.1 Define end-of-life care. 1.17.2 Describe different patient – centered approaches for management of end-of-life situations. 1.17.3 Recognize the regulations of death declaration. 1.17.4 Identify the legal issues regarding death certification. 1.17.5 Practice writing of death certifications 1.17.6 Demonstrate respect to the feelings of the patient's family while reporting end of life state and death situation.

Competency Area 2: The graduate as a health promoter.

Competency		PLOs
2.1	Identify the basic determinants of health and principles of health improvement.	2.1.1. Define the basic health determinants. 2.1.2. Describe the principles of health improvement. 2.1.3. Utilize basic health determinants according to the system complaint in relation to the system. 2.1.4. Show continuous motivation for health improvement.
2.2	Recognize the economic, psychological, social, and cultural factors that interfere with wellbeing.	2.2.1. List the socioeconomic factors that affect health. 2.2.2. Identify the psychological factors involved in health maintenance. 2.2.3. Describe the effect of cultural variation on individual well-being. 2.2.4. Analyze the factors affecting the health status of an individual. 2.2.5. Demonstrate respect to the socioeconomic, psychological, and cultural variation among different individuals in clinical practice.
2.3	Discuss the role of nutrition and physical activity in health.	2.3.1. Define the essential nutritional needs in relation to the life cycle stage. 2.3.2. Identify the physical activity requirements in relation to the life cycle stage. 2.3.3. Describe the effect of nutritional status on an individual's well-being. 2.3.4. Describe the effect of different types of physical activity on health status. 2.3.5. Calculate the nutritional requirements according to the life cycle stage. 2.3.6. Provide advice regarding physical activity to individuals of different life cycle stages to improve their well-being. 2.3.7. Demonstrate respect to the role of nutrition and physical activity in well-being. 2.3.8. Apply effective communication skills in counselling.
2.4	Identify the major health risks in his/her community, including demographic, occupational and environmental risks; endemic diseases, and prevalent chronic diseases.	2.4.1. List the demographic end environmental risk factors in the community. 2.4.2. Describe different occupational hazards in the community. 2.4.3. Discuss endemic and prevalent chronic diseases in the community.

		2.4.4. Analyze the risk factors, occupational and environmental hazards in a simulated field visit. 2.4.5. Apply analytical thinking in collecting data
2.5	Describe the principles of disease prevention, and empower communities, specific groups or individuals by raising their awareness and building their capacity.	2.5.1. Describe different approaches for disease prevention. 2.5.2. Identify the role of health education in the community and individual welfare. 2.5.3. Discuss different approaches to increase individual and community awareness. 2.5.4. Identify capacity building programs to increase the community awareness. 2.5.5. Formulate a plan for a specific disease prevention 2.5.6. Design a setting for health education. 2.5.7. Deliver a health education message 2.5.8. Use communication and presentation skills effectively.
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.	2.6.1. Identify the basics of disease epidemiology. 2.6.2. Describe the common community disease epidemiology. 2.6.3. Identify the steps to reduce the incidence and prevalence of a specific disease. 2.6.4. Calculate the incidence and prevalence of a specific disease. 2.6.5. Formulate a management plan for common community diseases. 2.6.6. Show accuracy while analyzing data.
2.7	Provide care for specific groups including pregnant women, newborns and infants, adolescents and the elderly.	2.7.1. Identify the characteristic features of each specific group of individuals. 2.7.2. Describe the health promotion and anticipatory care for each specific group. 2.7.3. Tailor the health care service according to the targeted specific group. 2.7.4. Demonstrate respect to variations among different individuals and their specific needs.
2.8	Identify vulnerable individuals that may be suffering from abuse or neglect and take the proper actions to safeguard their welfare.	2.8.1. Define disadvantageous groups in health care. 2.8.2. Describe different types of abuse and neglect. 2.8.3. Discuss the approach for the management of different types of abuse. 2.8.4. Identify the approach for dealing with various forms of neglect. 2.8.5. Detect the type of abuse in a presented scenario.

		2.8.6. Identify the actions of neglect in a given case scenario. 2.8.7. Formulate a management plan for a case of abuse or neglect. 2.8.8. Show compassion, empathy, and sympathy in dealing with cases of abuse or neglect.
2.9	Adopt suitable measures for infection control.	2.9.1. Define nosocomial infection. 2.9.2. Identify different sources of infection in a clinical setting. 2.9.3. List infection control steps in different clinical situation. 2.9.4. Apply different infection control measures in a clinical setting like hand washing. 2.9.5. Manage a case of nosocomial infection. 2.9.6. Show commitment to infection control regulations.

Competency Area 3: The graduate as a professional.

Key competency		PLOs
3.1	Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.	3.1.1. Define professionalism. 3.1.2. List the academic and professional behaviors in all aspects of the practice. 3.1.3. Identify the principles of building appropriate academic and professional relationships. 3.1.4. Presents him or herself in a respectful and professional manner. 3.1.5. Demonstrate honesty, integrity, commitment, compassion, and respect in a patient encounter. 3.1.6. Complete clinical, administrative, and curricular tasks on time. 3.1.7. Dress and behave appropriately. 3.1.8. Demonstrate appropriate professional relationships with patients, families, and staff
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	3.2.1. Identify the code of ethics issued by the Egyptian Medical Syndicate. 3.2.2. Identify the laws governing the clinical practice. 3.2.3. Decide the different law consequences to a given clinical situation. 3.2.4. Apply the national code of ethics to curricular activities and different clinical situations. 3.2.5. Demonstrate respect to the national code of ethics and laws in a patient encounter.

3.3	Respect the different cultural beliefs and values in the community they serve.	3.3.1. Identify the value of cultural differences. 3.3.2. Demonstrate respect towards community diversity presented in case vignettes. 3.3.3. Behave positively respecting different cultural beliefs and values in the community.
3.4	Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural or ethnic backgrounds, or their disabilities.	3.4.1. Identify the code of ethics regarding patient equality 3.4.2. Define stigmatized and different marginalized patient groups in clinical settings. 3.4.3. Point out the improper behavior in presented video or role play. 3.4.4. Demonstrate equality while dealing with patients of different marginalized groups.
3.5	Ensure confidentiality and privacy of patients' information.	3.5.1. Define the code of ethics regarding patient confidentiality. 3.5.2. Identify the points of violation of patient confidentiality in a given case scenario. 3.5.3. Demonstrate respect toward patient privacy.
3.6	Recognize basics of medico-legal aspects of practice, malpractice and avoid common medical errors.	3.6.1 Identify the basics of legal responsibility for medical errors. 3.6.2 Outline the different medicolegal aspects of malpractice. 3.6.3 Describe the common causes of medical errors and how to avoid them. 3.6.4 Differentiate between different types of malpractice and medical errors. 3.6.5 Document the presented health service for medicolegal aspects properly. 3.6.6 Deal with patients according to the standards of clinical practice to avoid medical errors.
3.7	Recognize and manage conflicts of interest.	3.7.1. Define conflict of interest 3.7.2. Describe conflict of interest management 3.7.3 Point out conflicts of interest in different situations. 3.7.4 Demonstrate honesty by declaring a conflict of interest when present
3.8	Refer patients to the appropriate health facility at the appropriate stage.	3.8.1. Identify the hierarchy of the healthcare system in Egypt 3.8.2. List the indications for patients' referral. 3.8.3. Take the decision of patient referral when indicated.

		3.8.4. Deliver all available health care to the patients till referral.
3.9	Identify 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.	3.9.1. Describe unethical behaviors that might endanger patient safety. 3.9.2. Identifies the appropriate channels to report unprofessional or unethical behavior. 3.9.3. Points out when to report unprofessional, unethical, or unsuitable behavior in presented videos or role play. 3.9.4. Exhibits self-awareness, self-management, social awareness, and relationship management.

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

Competency		PLOs
4.1	Describe the normal structure of the body and its major organ systems and explain their functions.	4.1.1. Describe the normal anatomy of the organ/system related to the 4.1.2. Identify the normal physiology of the target organ and systems involved in the disease. 4.1.3. Describe the normal structure of different tissues of the body. 4.1.4. Discriminate between the different normal anatomical landmarks. 4.1.5. Interpret the relationship between different physiological tests and organ functions. 4.1.6. Relate the difference in tissue structure to the difference in their function. 4.1.7. Integrate the anatomical, physiological, and histological criteria of different organs. 4.1.8. Apply search methods to improve basic knowledge.
4.2	Explain the molecular, biochemical, and cellular mechanisms that are important in maintaining the body's homeostasis.	4.2.1. Describe the basics of the biochemistry involved in different homeostasis processes in the human body. 4.2.2. Identify the different homeostasis mechanisms at the cellular level. 4.2.3. Describe the molecular basis for the human genome. 4.2.4. Relate molecular, biochemical, and cellular homeostasis to functions of different body functions.

		4.2.5. Demonstrate analytical thinking while assessing different body functions.
4.3	Recognize and describe main developmental changes in humans and the effect of growth, development and aging on the individual and his family.	4.3.1. Describe the general process of embryogenesis. 4.3.2. Identify the steps of embryological development of the target organ/system. 4.3.3. Describe the developmental changes in the human life cycle. 4.3.4. Identify the effect of growth and development on family dynamics. 4.3.5. Outline the effect of aging on different body systems with consequent disease processes. 4.3.6. Relate the difference in body structure and function to different age groups. 4.3.7. Apply a patient-centered approach in patient encounters taking into consideration the family dynamics aspects. 4.3.8. Demonstrate respect to the effect of growth and development on family dynamics
4.4	Explain normal human behavior and apply theoretical frameworks of psychology to interpret the varied responses of individuals, groups and societies to disease.	4.4.1. Explain the application of psychodynamic theories of human thought and behavior in describing and analyzing individuals, groups, or societies' behavior. 4.4.2. Describe the basics of the human mind and behavior with various diseases. 4.4.3. Interpret the different behaviors of patients and their families in response to different clinical settings. 4.4.4. Adapt to different behaviors of patients and their families in different clinical situations.
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).	4.5.1. Define the causative factors, risk factors, and precipitating factors for different disease processes. 4.5.2. Describe the etiopathogenesis of common diseases of the specified system/ and its emergent conditions. 4.5.3. Analyze different case scenarios to reach the underlying etiology. 4.5.4. Show analytical thinking while analyzing different clinical situations.
4.6	Describe altered structure and function of the body and its major	4.6.1. Compare different abnormalities of the body structure about their role in disease pathogenesis.

	organ systems that are seen in various diseases and conditions.	4.6.2. Outline different abnormalities of the function of different body systems concerning the development of various diseases. 4.6.3. Integrate the structural abnormalities with the clinical presentations of different diseases. 4.6.4. Relate the disorders in organ functions to the disease process. 4.6.5. Value the holistic approach in the management of different clinical problems.
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.	4.7.1. Describe the pharmacokinetics and pharmacodynamics of different drug families 4.7.2. Define the indications and contraindications for the main medications involved in the current. 4.7.3. List the adverse effects and drug-drug interactions for a certain medication. 4.7.4. Define different types of medication abuse and its hazards on the individual and society. 4.7.5. Select the proper drug according to the clinical situation. 4.7.6. Combine different drugs respecting their mechanism of action and drug-drug interaction. 4.7.7. Demonstrate rational drug use while prescribing medications respecting patient contextual factors. 4.7.8. Guard against medication abuse while prescribing treatment for different clinical situations.
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.	4.8.1. Identify the principles of basic science practical tests for structure identification like gross and microscopic examination. 4.8.2. Identify the principles of tests of body physiology and biochemical reactions. 4.8.3. Describe different findings of different laboratory tests relevant to the 4.8.4. Discuss different findings of imaging studies relevant to the disease 4.8.5. Identify the pathological findings of different diseases. 4.8.6. List different functional tests for the organ /system included in the disease and their findings Practice basic science practical skills. 4.8.7. Relate the findings of basic science practical tests to clinical practice.

	4.8.8. Interpret the different findings of investigations ordered for the patient. 4.8.9. Collaborate with other healthcare providers to reach a diagnosis.

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

Competency		PLOs
5.1	Recognize the important role played by other healthcare professionals in patient' management.	5.1.1 Define health care team. 5.1.2 Describe the role of the health care team in patients' management. 5.1.3 Practice teamwork in role play for different clinical situations. 5.1.4 Collaborate with other healthcare team members. 5.1.5 Demonstrate respect toward other healthcare colleagues
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.	5.2.1 Define overlapping and shared responsibilities of the health care team in effective patient management. 5.2.2 Identify the role of every healthcare team member in the process of decision-making. 5.2.3 Practice collaborative decision-making in simulated scenarios for different clinical presentations. 5.2.4 Collaborate with other healthcare team members 5.2.5 Demonstrate respect towards each member of the healthcare team 5.2.6 Demonstrate respect towards the professionalism of other colleagues
5.3	Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.	5.3.1 Outline different causes for conflict in health team practice. 5.3.2 Identify different strategies for conflict management in health care provision. 5.3.3 Practice conflict management in adopted role-play scenarios. 5.3.4 Communicate effectively with other colleagues to resolve conflict and overcome differences in opinions. 5.3.5 Demonstrate respect to the solution for the conflict in favor of collaborative teamwork and patient care

5.4	Apply leadership skills to enhance team functioning, the learning environment, and/or the health care delivery system.	5.4.1 Identify different leadership styles 5.4.2 Identify the criteria of a successful leader 5.4.3 Describe different strategies to deal with different obstacles encountered by leadership. 5.4.4 Practice leadership skills in simulated scenarios for different clinical situations. 5.4.5 Demonstrate respect and appreciation while dealing with juniors and other healthcare team members while being a leader 5.4.6 Apply practices for continuous improvement of the work environment while being a leader.
5.5	Communicate effectively using written health records, electronic medical records, or other digital technology.	5.5.1 List the components of a health record. 5.5.2 Identify different types of health records and describe their pros and cons 5.5.3 List the advantages of digital technology in health data. 5.5.4 Practice written health record writing. 5.5.5 Criticize the electronic data recording system effectively. 5.5.6 Demonstrate honesty and accuracy while recording and presenting health data. 5.5.7 Demonstrate respect to using medical records in patient encounters
5.6	Evaluate his / her work and that of others using constructive feedback	5.6.1 Define constructive feedback 5.6.2. Discuss the value of constructive feedback. 5.6.3 Practice constructive feedback in simulated scenarios. 5.6.4 Demonstrate respect to the given feedback in a professional and effective way
5.7	Recognize own personal and professional limits and seek help from colleagues and supervisors when necessary.	5.7.1. Identify when to seek personal and professional help in patient encounters. 5.7.2. Outline different types of limitations in patient encounters and how to deal with them 5.7.3. Point out different limitations in a given role-play 5.7.4. Identify the indications for counseling in a given case scenario. 5.7.5. Apply patient-centered care despite the presence of personal limitations Consistently demonstrate compassion, respect, and empathy
5.8	Apply fundamental knowledge of health economics to ensure	5.8.1 Discuss the basic health economics. 5.8.2 Define the efficiency and effectiveness of the healthcare system

	the efficiency and effectiveness of the health care system.	5.8.3 Outline different approaches to improve the healthcare system taking into consideration the efficacy and effectiveness. 5.8.4 Analyze different work situations to define the points of strengths and weaknesses. 5.8.5 Demonstrate accuracy and analytical thinking in different situations 5.8.6 Formulate an approach to improve the efficacy of a healthcare system
5.9	Use health informatics to improve the quality of patient care.	5.9.1 Define health informatics. 5.9.2 List different types of health informatics. 5.9.3 Differentiate between different types of data according to source and usage. 5.9.4 Apply honesty and accuracy while providing medical care.
5.10	Document clinical encounters in an accurate, complete, timely, and accessible manner, in compliance with regulatory and legal requirements.	5.10.1 Identify the regulations that govern clinical data documentation 5.10.2 Define the legal responsibility of the clinician regarding clinical documentation. 5.10.3 Practice different forms of clinical documentation. 5.10.4 Demonstrate honesty and accuracy while dealing with clinical data
5.11	Improve the health service provision by applying a process of continuous quality improvement	5.11.1 Identify the standards of quality in a clinical setting 5.11.2 Formulate a plan for quality improvement in a clinical setting 5.11.3 Demonstrate accountability to patients, society, and the profession.
5.12	Show commitment toward continuous improvement of quality in the clinical setting.	5.12.1 Define the role of the physician toward patients, society, and the profession. 5.12.2 Define accountability in inpatient encounters. 5.12.3 Identify the points of dereliction in simulated clinical situations. 5.12.4 Show commitment towards different roles of the clinician.

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

Competency		PLOs
6.1	Regularly reflect on and assess his / her performance using various performance indicators and information sources.	6.1.1 List the main performance indicators 6.1.2 Describe different information sources for performance assessment

		6.1.3 Apply the use of performance indicators in clinical situations 6.1.4 Show integrity and accuracy while assessing his/her performance
6.2	Develop, implement, monitor, and revise a personal learning plan to enhance professional practice	6.2.1 Define personal learning plan 6.2.2 Identify the required skills to design a personal learning plan 6.2.3 Identify the value of continuous medical education, 6.2.4 List different approaches for continuous medical education 6.2.5 Design a Personal Learning Plan 6.2.6 Implement a personal learning plan 6.2.7 Monitor a personal learning plan 6.2.8 Criticize a Personal Learning Plan 6.2.9 Show enthusiasm and commitment during implementing a learning plan
6.3	Identify opportunities and use various resources for learning.	6.3.1 Define a learning opportunity 6.3.2 List different resources for learning 6.3.3 Select the proper learning opportunity to meet personal demands and capabilities 6.3.4 Use various resources to enhance personal learning 6.3.5 Demonstrate respect to proper learning opportunity
6.4	Engage in inter-professional activities and collaborative	6.4.1 List inter-professional activities 6.4.2 Define collaborative learning 6.4.3 Apply teamwork and collaboration with other colleagues
6.5	Recognize practice uncertainty and knowledge gaps in clinical and other professional encounters and generate focused questions that address them.	6.5.1 Define practical uncertainty 6.5.2 Outline causes of uncertainty in different clinical situations. 6.5.3 Use focused question generation for situations of uncertainty 6.5.4 Identify gaps in clinical and professional encounters 6.5.5 Demonstrate respect to the role of research methods in addressing knowledge gaps
6.6	Effectively manage learning time and resources and set priorities.	6.6.1 Define time management. 6.6.2 List different learning resources

		6.6.3 Outline causes for waste of time during the learning process. 6.6.4 Prepare a time plan for learning 6.6.5 Set priorities in the learning process 6.6.6 Demonstrate respect to time and resources in the learning process.
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.	6.7.1 Recognize the basics of research methods including different study designs. 6.7.2 Identify the ethical principles for research. 6.7.3 Prepare a research protocol. 6.7.4 Point out unethical points in a research protocol 6.7.5 Demonstrate honesty and ethics while conducting research.
6.8	Critically appraise research studies and scientific papers in terms of integrity, reliability, and applicability	6.8.1 Define the parameters for the critical appraisal of a scientific paper. 6.8.2 Describe the approach for the critical appraisal of a scientific paper. 6.8.3 Practice critical appraisal for a sample of scientific papers 6.8.4 Show accurate analytical thinking while appraising a scientific paper
6.9	Analyze and use numerical data including the use of basic statistical methods.	6.9.1 Define statistical methods 6.9.2 List different types of statistical data. 6.9.3 Identify the main types of statistics. 6.9.4 Outline the main inferential statistic tests and their indications for use. Practice basic statistical tests. 6.9.5 Show accuracy while collecting and analyzing data
6.10	Summarize and present to professional and lay audiences the findings of relevant research and scholarly inquiry.	6.10.1 Identify the criteria of an efficient research presentation. 6.10.2 Practice presentation of scientific topics in Student seminars 6.10.3 Demonstrate proper language, dress code, and communication skills during a scientific presentation

V- Curriculum Structure and Contents

- ***4.a- Program duration (years) :*** 5 years(10 terms) + Pre-Registration House Officer (PRHO) two training year.

4.b- Program structure:

- 1- First stage (pre-clinical stage) (5 terms)
- 2- second stage (Clinical stage) (5terms)

Academic year		No. of study hours			Number of study weeks/term	Total credit hour / term	Total marks /term
		Theoretical	Practical	Activities			
First stage:							
Level 1*	**Term 1**	129	171	**342**	**16**	21.5	475
	Term 2	111	144	**297**	**16**	19.5	425
Level 2	**Term 1**	**108**	**162**	**324**	**16**	21.5	500
	Term 2	**114**	**171**	**342**	**16**	**20.5**	**475**
Level 3	**Term 1**	**96**	**144**	**288**	**16**	**18.5**	**525**
Second stage :							
Level 3	**Term 2**	**114**	**171**	**342**	**16**	**20.5**	**475**
Level 4	**Term 1**	**114**	**171**	**342**	**16**	**21.5**	**500**
	Term 2	**120**	**180**	**360**	**16**	**21.5**	**500**
Level 5	**Term 1**	**102**	**153**	**306**	**16**	**19.5**	**450**
	Term 2	**114**	**171**	**342**	**16**	**20.5**	**475**
	Total for first stage					**101.5**	**2400**
	Total for second stage					**103.5**	**2400**
	Percentage of total first stage / total program					**49.5%**	**50%**
	Percentage of total second stage / total program					**50.5%**	**50%**

- **Modules contributing to the program:**

1- Compulsory modules (181 credit hours)

Compulsory modules (foundation; musclоskletal1,2 ; blood &lymphatic ; cardiovascular; respiratory; nutrition, gastrointestinal ; renal &urinary; reproductive & breast; Endocrine; CNS &special sense1,2 ;basic medical examination; dermatology, community; primary health care and elderly; child health; investigations; oncology; heart & chest; clinical pathology ; endocrinology & breast; hematology and lymphatics; Obstetric; renal , urinary diseases and andrology; Gynecology; family medicine; Gastroenterology, hepatology & infectious disease ; psychiatry & neurological diseases ; ear, nose and throat ; pediatric surgery & plastic surgery; ophthalmology ; emergency & critical care; vascular surgery; orthopedic& rheumatology ; forensic & toxicology.

2- Longitudinal Modules (7 credit hours):

Behavioral and Human Sciences, Medical professionalism and communication; evidence-based medicine basic medical research and biostatistics; basic life support; ethical &legal issues in medical practice; patient safety & infection control, and Clinical psychology.

3- Elective Modules (10 credit hours)

	Medical :	Non Medical :	
1	Medical Engineering	- Painting	1
2	Stem cells	Graphics and Photography	2
3	Biomedical genetics	Music	3
4	Molecular Biology	Computer and Programming languages	4
5	Advanced Life Support	Clothes design and fashion	5
6	Tissue culture (Pharmacology Department)	Digital and social media	6
7	Experimental Animal Model (Pharmacology Department)	History of medicine	7
8	Echo / Sonar	Training of trainers (TOT)	8
9	Parental nutrition	Financial management	9
10	Surgical intensive care	Strategic marketing	10
11	Complementary and alternative medicine	Medical informatics (Healthcare IT)	11
12	Hospital Administration	Languages (English – Germany – France)	12
13	Hospital Management for health professionals	Translation	13
14	Emergency and critical care medicine	Health Economics	14
15	Disaster management for health professionals	Physics	15
16	Application of computer programs in medical field	Health care quality	16
		Philosophy	17
		Art (Portrait – glass – wood burn – graffiti)	18
		Handmade works	19
		Cooking	20
		Acting and theatre	21
		Calligraphy	22
		Leadership and project management	23

	Time management	24
	- Creativity and mind mapping	25
	Human Resources	26
	- Public Relations	27

4- Modules for University/ faculty requirements (2 credit hours)

Module code	Module title	Credit hours (Lecture)	Total
- UN 01	**Human rights**	**1**	**1**
- EN 02	**Quality entrance**	**1**	**1**

5- Ten vertical Integration modules (10 modules/ 5 credit hours)

Total credit hours for the program 205 credit hours as follow:

Courses and Modules		First stage	Second stage	total
Compulsory Courses and Modules	**Courses &integrated Modules**	**88**	**93**	**181**
	Longitudinal Modules	**4**	**3**	**7**
Elective Modules		**5**	**5**	**10**
Integrated longitudinal Modules		**2.5**	**2.5**	**5**
University requirement		**2**	**-**	**2**
Total		**101.5**	**103.5**	**205**

First Level

Semester I:

	Code		department	Total hours			weeks	Credit hour	marks
				T	p	A			
1	INTRO-ANAT/EMB /HIST 1101	Foundation	Anatomy-embryology+ histology	33	49.5	99	4	5.5	137.5
	INTRO-PHYS/BIO 1102		Physiology + Biochemistry	15	22.5	45	2	2.5	62.5
	INTRO-PATH/PHAR 1103		Pathology+ pharmacology	39	58.5	117	6	6.5	162.5
	INTRO-PARA/MICRO1104		Parasitology+ microbiology	27	40.5	81	4	4.5	112.5
2	UN 01	Introduction to quality & accreditation in higher education*		15	All the semester			1	25
3	ELE	Elective Modules*		All the semester				1	25
4		*Integrated longitudinal Modules		Weekly all the semester				0.5	12.5
Total				129	171	342	16	21.5	475

*not included in marks

T: theoretical P : practical A : Activities

Semester 2

	Code		Total hours			weeks	Credit hour	Marks
			T	P	A			
1	MSI 1201	Musculoskeletal(1)	30	45	90	6	5	125
2	MSII 1202	Musculoskeletal(2)	24	36	72	4	4	100
3	PL/LYM 1203	Blood & Lymphatics	42	63	126	6	7	175
4	PC1204	Medical Professionalism and communication skills	All the semester				1	25
5	ELE	Elective Module*	All the semester				1	25
6	UN 02	Human ethics	15		All the semester		1	25
7		*Integrated longitudinal Modules	All the semester				0.5	12.5
Total			111	144	297	16	19.5	425

*Not included in marks T: theoretical P: practical A : Activities

Second level

Semester III:

	Code		Total hours			weeks	Credit hour	Marks
			T	P	A			
1	CVS 2101	Cardiovascular system	57	85.5	171	8	9.5	237.5
2	RES 2102	Respiratory system	36	54	108	6	6	150
3	NUT 2103	Nutrition	15	22.5	45	2	2.5	62.5
4	EBM/BMR/B 2104	EBM, Basics of medical research and biostatistics	All the semester (weekly)				2	50
5	ELE	*Elective Modules	All the semester (weekly)				1	25
6		*Integrated longitudinal Modules	All the semester (weekly)				0.5	12.5
Total			108	162	324	16	21.5	500

*Not included in marks T: theoretical P: practical A: Activities

Semester IV:

	Code		Total hours			Weeks	Credit hour	Marks
			T	p	A			
1	GIT 2201	Gastrointestinal system	48	72	144	7	8	200
2	URIN 2202	Renal & Urinary system	30	45	90	4	5	125
3	REP/BR 2203	Reproductive system & Breast	36	54	108	5	6	150
4	ELE	*Elective Modules	All the semester (weekly)				1	25
5		*Integrated longitudinal Modules	All the semester (weekly)				0.5	12.5
Total			114	171	342	16	20.5	475

*Not included in marks T: theoretical P: practical A: Activities

Third level

Semester V:

	Code		Total hours			Weeks	Credit hour	Marks
			T	P	A			
1	ENDO 3101	Endocrine	36	54	108	5	6	150
2	CNS/SPI 3102	CNS &Special Senses (1)	30	45	90	5	5	125
3	CNS/SPII 3103	CNS & Special Senses (2)	30	45	90	6	5	125
4	BLS 3104	Basic life support	All the semester (weekly)				1	25
5	ELE	*Elective Modules	All the semester (weekly)				1	25
6		*Integrated longitudinal Modules	All the semester (weekly)				0.5	12.5
	Total		96	144	288	16	18.5	425

***Not included in marks T: theoretical P: practical A: Activities**

Semester VI:

	Code		Total hours			Weeks	Credit hour	Marks
			T	P	A			
1	BME 3201	Basic clinical examination	15	22.5	45	2	2.5	62.5
	DERMA 3202	Dermatology	12	18	36	2	2	50
2	COM 3203	Community Medicine	30	45	90	5	5	125
3	PHC/ELD 3204	Primary health care and elderly care	15	22.5	45	2	2.5	62.5
4	CHLD 3205	Child Health	15	22.5	45	2	2.5	62.5
5	INVEST 3206	Investigations	15	22.5	45	2	2.5	62.5
6	ONCO 3207	Onchology	6	9	18	1	1	25
7	PSYCH 3208	Clinical Psychology	6	9	18	All the semester	1	25
8	ELE	*Elective Modules	All the semester (weekly)				1	25
9		*Integrated longitudinal Modules	All the semester (weekly)				0.5	12.5
Total			114	171	342	16	20.5	475

***Not included in marks T: theoretical P: practical A: Activities**

Fourth Level

Semester VII :

	Code		Total hours			Weeks	Credit hour	Marks
			T	P	A			
1	CVS/CHEST 4101	Heart and chest diseases	42	63	126	6	7	175
2	ENDO /BR 4102	Endocrinology and Breast	27	40.5	81	4	4.5	112.5
3	HEMA 4103	Hematology and lymphatics	15	22.5	45	2	2.5	62.5
4	GYN 4104	Gynecology	30	45	90	4	5	125
5	PS/IC 4105	Patient safety and infection control	All the semester (weekly)				1	25
6	ELE	*Elective Modules	All the semester (weekly)				1	25
7		*Integrated longitudinal Modules	All the semester (weekly)				0.5	12.5
Total			114	171	342	16	21.5	500

***Not included in marks T: theoretical P: practical A: Activities**

Semester VIII

	Code		Total hours			Weeks	Credit hour	Marks
			T	P	A			
1	GE/URIN 4201	Renal and urinary diseases and andrology	33	49.5	99	5	5.5	137.5
2	OBS/FAML 4202	Obstetrics and family medicine	39	58.5	117	5	6.5	162.5
3	GIT/HEPT/ID 4203	Gastroentrology, Hepatology and infectious diseases	48	72	144	6	8	200
4	ELE	*Elective Modules	All the semester (weekly)				1	25
5		*Integrated longitudinal Modules	All the semester (weekly)				0.5	12.5
	Total		120	180	360	16	21.5	500

***Not included in marks T: theoretical P: practical A: Activities**

Fifth Level

Semester IX:

	Code		Total hours			Weeks	Credit hour	Marks
			T	P	A			
1	**PSYCH/NEUE/NEUS 5101**	**Psychiatry and neurology**	**36**	**54**	**108**	**5**	**6**	**150**
2	**ENT 5102**	**Ear, Nose and Throat**	**27**	**40.5**	**81**	**4**	**4.5**	**112.5**
3	**PEDIA/PLAST 5103**	**Pediatric and plastic surgery**	**9**	**13.5**	**27**	**2**	**1.5**	**37.5**
4	**OPHTH 5104**	**Ophthalmology**	**30**	**45**	**90**	**5**	**5**	**125**
5	**ETHICS 5105**	**Ethical and legal issues in medical practice**	**All the semester (weekly)**				**1**	**25**
6	**ELE**	*Elective Modules	All the semester (weekly)				**1**	**25**
7		*Integrated longitudinal Modules	All the semester (weekly)				**0.5**	**12.5**
Total			**102**	**153**	**306**	**16**	**19.5**	**450**

***Not included in marks T: theoretical P: practical A: Activities**

Semester X :

	Code		Total hours			Weeks	Credit hour	Marks
			T	P	A			
1	**EMERG 5201**	**Emergency and critical care**	**42**	**63**	**126**	**6**	**7**	**175**
2	**VAS 5202**	**Vascular surgery**	**6**	**9**	**18**	**1**	**1**	**25**
3	**ORTH/ RHEM 5203**	**Orthopedics and Rheumatology**	**30**	**45**	**90**	**4**	**5**	**125**
4	**FORE/ TOX 5204**	**Forensic medicine and Toxicology**	**36**	**54**	**108**	**5**	**6**	**150**
5	ELE	*Elective Modules	All the semester (weekly)				1	25
6		*Integrated longitudinal Modules	All the semester (weekly)				0.5	12.5
	Total		**114**	**171**	**342**	**16**	**20.5**	**475**

***Not included in marks T: theoretical P: practical A: Activities**

V- Module Specification (Annex 2)

Competencies -Modules Matrix (Annex 3)

Program Learning Outcomes – Modules Matrix (Annex 4)

VI-Program admission requirements

Registration to the faculty of medicine requires the student to have the Egyptian general 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.

VII- Regulations for progression and program completion:

The regulations for student progression are as follows:

The student should achieve at least 40% of the written exam of the module or the course, and 60% of the total marks of the module to pass the module.

Progression Level	Condition
Progression to Second level	Failing in less than 11 credit hours of the total credit hours with marks considered in the GPA
Progression to Third Level	Failing in less than 14 credit hours of the total credit hours with marks considered in the GPA
Progression to Fourth level	Failing in less than 10 credit hours of the total credit hours with marks considered in the GPA
Progression to Fifth Level	Failing in less than 13 credit hours of the total credit hours with marks considered in the GPA

To complete the program, the student should pass all the modules within the programs whether their marks are considered in the GPA or not.

VIII-Teaching and learning methods:

The teaching and learning in Menoufia Faculty of Medicine follows a strategy written in a code of good practice for effective teaching and learning.

Theoretical teaching:

- Interactive lectures
- **The lecturers are conducted using:**
  a. Brain storming
  b. Case based learning
  c. Audiovisual aids through animations and diagrams
  d. Interaction with the students through questions
  e. Student engagement with discussion
  f. Team based learning

Practical Teaching: using equipped laboratories with anatomy specimens, microscopes, and different tools for practical training

Clinical Teaching: conducted using:

a) Clinical rounds
b) Simulated patients
c) Web based video and Multimedia applications
d) Problem solving
e) Skill lab

Field training: through field visits organized by the department of public health in its related modules, and hospital visits in some clinical modules.

IX- Student Assessment methods:

A. Attendance criteria:

The minimum acceptable attendance is 75%, otherwise students failing toreach that percentage will be prevented from attending the final examination.

B. Types of Assessment:

- **Formative:** This form of assessment is designed to help the students to identify areas for improvement. It includes a multiple-choice questions, problems-solving exercises and independent learning activities in all subjects. These will be given during tutorial and practical sessions. The Answers are presented and discussed immediately with you after the assessment. The results will be made available to the students.
- **Summative** This type of assessment is used for judgment or decisions to be made about the students' performance. It serves as:

1. Verification of achievement for the student satisfying requirement
2. Motivation of the student to maintain or improve performance
3. Certification of performance
4. Grades

C- Assessment Tools:

Evaluation of Students level of performance is achieved by observation of rating scales and by applying variable types of tests as follows:

I. Assessment of cognitive skills is achieved by a written exam including:

- Questions recalling knowledge in the form of:
  - Short essay questions.
  - Multiple choice questions
  - Extended Matching questions
  - Short-answer questions
- Interpretation of specific data: by
  - Problem solving questions: though setting short, questions preceded by case history
  - Case Based multiple choice questions and extended matching questions.

II. Assessment of psychomotor skills through setting:

- Evaluation of student activities
- Objective Structured Practical exams (OSPE).

- Objective Structured Clinical cases exams (OSCE).

III. Assessment of affective skills:

Through evaluation of presentations and observation of different student activities including role play, specially prepared stations in OSCE examinations

D- Summative Assessment methods, their weight and schedule:

Assessment Method	Percentage	Description	Timing
Regular Evaluation	30%	10% written at the end of and periodicals including problem-solving, multiple-choice questions, give reason, matching, extended matching, complete and compare.	At the end of the module
		20% Participation in the tutorials, TBL, Research.	During the module
Final practical exam	30%	OSPE/ISCE Exam	At the end of the module
Final Written	40%	It Includes problem-solving, multiple-choice questions, give a reason, matching, extended matching, complete and compare.	At the end of the semester

D- Grading by GPA System:

%	Grade	Grade Points per credit	
90 - 100	A	3.5 - 4.00	Excellent
85 - 90		3.25 - 3.5	
75 - 85	B	2.75 - 3.25	Very good
65 – 75	C	2.25 - 2.75	Good
60 – 65	D	2.00 - 2.25	Pass
< 60	F	0.00	Failed
Withdraw	W	Incomplete	IC

X- Evaluation of program Learning Outcomes of the Module

The acquisition of program PLOs would be evaluated as shown in the following table.

Evaluator	Tool	Sample
1- Senior students	**-Questionnaires** **-Review of assessment Methods** **-Review of examination results**	**Students in the last year**
2- Alumni	**-Questionnaires** **- Group discussions**	**Recently graduated within 5 years**
3- Stakeholders	**-Questionnaires** **- Focus group discussions**	**1-Directors of ministry of health and population** Hospitals, **medical Insurance.** **2-Adminstrative staff in the Ministry of health (hospital)**
4-External Evaluator(s) (External Examiner(s))	**-Reports**	**External examiners in Each Module**
5- Other (academic leaders of the faculty)	**-Questionnaires** **- focus group discussions**	**Dean, Vise deans, directors of faculty Hospitals, heads of departments**

Annex 1

Academic Reference Standards (NARS 2017) Program aims Matrix

National Academic Reference Standards (Attributes of Medical Graduates)	M.B.B.CH. program (5+2 credit hours) aims
Work to maintain health and promote human well-being.	Provide primary health care as family physician/general practitioner, with emphasis on disease prevention and health promotion.
Behave professionally and adhere to medical ethics.	Adhere to professionalism and adopt the ethics of medical practice and respect the religious, cultural and humanity values.
Provide -quality and safe patient-centered care, focusing on primary health care and dealing with common health problems in his/her community.	Achieve the clinical and practical standards through a patient-centered care required to compete in the national labor market.
Value the importance of a good doctor/ patient relationship, and work to establish and maintain it.	Achieve the clinical and practical standards through a patient-centered care required to compete in the national labor market.
Work effectively with other health care professionals respecting their roles and their contribution to the team.	Collaborate with other health care professionals, appreciating their role, respecting the hierarchy of the health care system with acquisition of the skills of professionalism and leadership.
Contribute to the development and empowerment of his/her community.	Employ the clinical practice for the service and improvement of the community.
Work as a lifelong learner- on his/her own continuous professional development, including being equipped to engage in post-graduate and research studies.	Continue self-learning and research to cope with the advancement in the medical field.

Annex 3

Key Competencies/ Program Learning Outcomes vs Modules

Key Competency	Program Learning Outcomes	Foundation 1	Foundation 2	Foundation 3	Foundation 4	Musculoskeletal 1	Musculoskeletal 2	Blood and Lymph	Communication	Respiratory	Cardiovascular	Nutrition	Gastrointestinal	Renal and Urinary System	Reproductive and Breast	Endocrine	CNS and special senses 1	CNS and special senses 2	Basic clinical examination	Dermatology	Community	Primary Health care and elderly care	Child Health	Investigations	Oncology	Clinical Psychology	Heart and Chest diseases	Endocrinology and Breast	Hematology and Lymphatics	Gynecology	Renal and urinary diseases and andrology	Obstetrics and family medicine	Gastroenterology and hepatology	Psychiatry and neurological diseases	Pediatrics and plastic surgery	Ear, Nose and Throat	Ophthalmology	Emergency and critical care	Orthopedics and rheumatology	Forensic medicine and toxicology	Vascular Medicine	Evidence Based Medicine	Basic Life support	Patient safety	Ethical and medicolegal issues	Vertical Integration Modules	Introduction to quality
1.1	1.1.1 to 1.1.8																		x	x		x	x		x		x	x	x	x	x	x	x	x	x	x	x	x	x	x						
1.2	1.2.1 to 1.2.5																		x	x		x	x		x		x	x	x	x	x	x	x	x	x	x	x	x	x	x						
1.3	1.3.1 to 1.3.3																																x														
1.4	1.4.1 to 1.4.9																		x	x		x	x		x	x	x	x	x	x	x	x	x		x	x	x	x	x	x						
1.5	1.5.1 to 1.,5.10																		x	x		x	x		x		x	x	x	x	x	x	x	x	x	x	x	x	x	x						
1.6	1.6.1 to 1.6.6																			x		x	x	x	x		x	x	x	x	x	x	x	x	x	x	x									
1.7	1.7.1 to 1,.7.8																		x	x		x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x						
1.8	1.8.1 to 1.8.6																		x	x		x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x					x	
1.9	1.9.1 to 1.9.11																																								x						
1.10	1.10.1 to 1.10.11																		x	x		x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x					x	
1.11	1.11.1 to 1.11.9																			x		x	x		x		x	x	x	x	x	x	x	x	x	x	x	x	x	x						

Key Competency	Program Learning Outcomes	Foundation 1	Foundation 2	Foundation 3	Foundation 4	Musculoskeletal 1	Musculoskeletal 2	Blood and Lymph	Communication	Respiratory	Cardiovascular	Nutrition	Gastrointestinal	Renal and Urinary System	Reproductive and Breast	Endocrine	CNS and special senses 1	CNS and special senses 2	Basic clinical examination	Dermatology	Community	Primary Health care and elderly care	Child Health	Investigations	Oncology	Clinical Psychology	Heart and Chest diseases	Endocrinology and Breast	Hematology and Lymphatics	Gynecology	Renal and urinary diseases and andrology	Obstetrics and family medicine	Gastroenterology and hepatology	Psychiatry and neurological diseases	Pediatrics and plastic surgery	Ear, Nose and Throat	Ophthalmology	Emergency and critical care	Orthopedics and rheumatology	Forensic medicine and toxicology	Vascular Medicine	Evidence Based Medicine	Basic Life support	Patient safety	Ethical and medicolegal issues	Vertical Integration Modules	Introduction to quality
1.12	1.12.1 to 1.12.5																																									x			
1.13	1.13.1 to 1.13.5																			x		x	x		x		x	x	x	x	x	x	x	x	x	x	x	x	x	x						
1.14	1.14.1 to 1.14.5								X																																						
1.15	1.15.1 to 1.15.7																					x	x		x		x	x	x	x	x	x	x	x	x	x	x	x	x	x			x				
1.16	1.16.1 to 1`.16.7																								x																						
1.17	1.17.1 to 1.17.7																						x																		x				x		
2.1	2.1.1 to 2.1.4																				x																										
2.2	2.2.1 to 2.2.5																				x																										
2.3	2.3.1 to 2.3.8											x									x	x																										
2.4	2.4.1 to 2.4.5																				x																										
2.5	2.5.1 to 2.5.8																				x																										

Key Competency	Program Learning Outcomes	Foundation 1	Foundation 2	Foundation 3	Foundation 4	Musculoskeletal 1	Musculoskeletal 2	Blood and Lymph	Communication	Respiratory	Cardiovascular	Nutrition	Gastrointestinal	Renal and Urinary System	Reproductive and Breast	Endocrine	CNS and special senses 1	CNS and special senses 2	Basic clinical examination	Dermatology	Community	Primary Health care and elderly care	Child Health	Investigations	Oncology	Clinical Psychology	Heart and Chest diseases	Endocrinology and Breast	Hematology and Lymphatics	Gynecology	Renal and urinary diseases and andrology	Obstetrics and family medicine	Gastroenterology and hepatology	Psychiatry and neurological diseases	Pediatrics and plastic surgery	Ear, Nose and Throat	Ophthalmology	Emergency and critical care	Orthopedics and rheumatology	Forensic medicine and toxicology	Vascular Medicine	Evidence Based Medicine	Basic Life support	Patient safety	Ethical and medicolegal issues	Vertical Integration Modules	Introduction to quality
2.6	2.6.1 to 2.6.6																				x																									
2.7	2.7.1 to 2.7.4											x									x	x																									
2.8	2.8.1 to 2.8.8																																							x							
2.9	2.9.1 to 2.9.6																		x	x		x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x			x		x	
3.1	3.1.1 to 3.1.8	x	x	x	x	x	x	X	X	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
3.2	3.2.1. to 3.2.5																																													x		
3.3	3.3.1 to 3.3.3								X																																							
3.4	3.4.1 to 3.4.4								X										x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
3.5	3.5.1 to 3.5.3																																													x		
3.6	3.6.1 to 3.6.6																																													x		
3.7	3.7.1 to 3.7.4								X																																						
3.8	3.8.1 to 3.8.4								X										x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
3.9	3.9.1 to 3.9.4								X																																				x		
4.1	4.1.1 to 4.1.8	x	x			x	x	X		x	x	x	x	x	x	x	x	x																													

Key Competency	Program Learning Outcomes	Foundation 1	Foundation 2	Foundation 3	Foundation 4	Musculoskeletal 1	Musculoskeletal 2	Blood and Lymph	Communication	Respiratory	Cardiovascular	Nutrition	Gastrointestinal	Renal and Urinary System	Reproductive and Breast	Endocrine	CNS and special senses 1	CNS and special senses 2	Basic clinical examination	Dermatology	Community	Primary Health care and elderly care	Child Health	Investigations	Oncology	Clinical Psychology	Heart and Chest diseases	Endocrinology and Breast	Hematology and Lymphatics	Gynecology	Renal and urinary diseases and andrology	Obstetrics and family medicine	Gastroenterology and hepatology	Psychiatry and neurological diseases	Pediatrics and plastic surgery	Ear, Nose and Throat	Ophthalmology	Emergency and critical care	Orthopedics and rheumatology	Forensic medicine and toxicology	Vascular Medicine	Evidence Based Medicine	Basic Life support	Patient safety	Ethical and medicolegal issues	Vertical Integration Modules	Introduction to quality
4.2	4.2.1 to 4.2.5	x				x		X		x	x	x	x	x		x		x																												
4.3	4.3.1 to 4.3.8	x																				x	x																								
4.4	4.4.1 to 4.4.4																																	x													
4.5	4.5.1 to 4.5.4	x	x	x	x	x	x	X		x	x	x	x	x	x	x	x	x					x																								
4.6	4.6.1 to 4.6.5	x	x			x	x	X		x	x	x	x	x	x	x	x	x																												
4.7	4.7.1 to 4.7.8	x					x	X		x	x	x	x	x	x	x	x																													
4.8	4.8.1 to 4.8.9	x	x	x	x	x	x	X		x	x	x	x	x	x	x	x	x																												
5.1	5.1.1 to 5.1.5								X																																					X	
5.2	5.2.1 to 5.2.6	x	x	x	x	x	x	X	X	x	x	x	x	x	x	x	x	X	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
5.3	5.3.1 to 5.3.5								X																																				
5.4	5.4.1 to 5.4.6								X																																				
5.5	5.5.1 to 5.5.7								X																																				
5.6	5.6.1 to 5.6.4								X																																				
5.7	5.7.1 to 5.7.5								X																																				

Key Competency	Program Learning Outcomes	Foundation 1	Foundation 2	Foundation 3	Foundation 4	Musculoskeletal 1	Musculoskeletal 2	Blood and Lymph	Communication	Respiratory	Cardiovascular	Nutrition	Gastrointestinal	Renal and Urinary System	Reproductive and Breast	Endocrine	CNS and special senses 1	CNS and special senses 2	Basic clinical examination	Dermatology	Community	Primary Health care and elderly care	Child Health	Investigations	Oncology	Clinical Psychology	Heart and Chest diseases	Endocrinology and Breast	Hematology and Lymphatics	Gynecology	Renal and urinary diseases and andrology	Obstetrics and family medicine	Gastroenterology and hepatology	Psychiatry and neurological diseases	Pediatrics and plastic surgery	Ear, Nose and Throat	Ophthalmology	Emergency and critical care	Orthopedics and rheumatology	Forensic medicine and toxicology	Vascular Medicine	Evidence Based Medicine	Basic Life support	Patient safety	Ethical and medicolegal issues	Vertical Integration Modules	Introduction to quality
5.8	5.8.1 to 5.8.6																				x	x																									
5.9	5.9.1 to 5.9.4																				x																											
5.10	5.10.1 to 5.10.4								X													x																										
5.11	5.11.1 to 5.11.3																																															x
5.12	5.12.1 to 5.12.4								X																																						x
6.1	6.1.1 to 6.1.4								X																																						
6.2	6.2.1 to 6.2.9	x	x	x	x	x	x	X	X	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
6.3	6.3.1 to 6.3.5	x	x	x	x	x	x	X	X	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
6.4	6.4.1 to 6.4.3								x																																						
6.5	6.5.1 to 6.5.5								x																																						
6.6	6.6.1 to 6.6.6	x	x	x	x	x	x	X	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
6.7	6.7.1 to 6.7.5																																										x					
6.8	6.8.1 to 6.8.4																																										x					

Key Competency	Program Learning Outcomes	Foundation 1	Foundation 2	Foundation 3	Foundation 4	Musculoskeletal 1	Musculoskeletal 2	Blood and Lymph	Communication	Respiratory	Cardiovascular	Nutrition	Gastrointestinal	Renal and Urinary System	Reproductive and Breast	Endocrine	CNS and special senses 1	CNS and special senses 2	Basic clinical examination	Dermatology	Community	Primary Health care and elderly care	Child Health	Investigations	Oncology	Clinical Psychology	Heart and Chest diseases	Endocrinology and Breast	Hematology and Lymphatics	Gynecology	Renal and urinary diseases and andrology	Obstetrics and family medicine	Gastroenterology and hepatology	Psychiatry and neurological diseases	Pediatrics and plastic surgery	Ear, Nose and Throat	Ophthalmology	Emergency and critical care	Orthopedics and rheumatology	Forensic medicine and toxicology	Vascular Medicine	Evidence Based Medicine	Basic Life support	Patient safety	Ethical and medicolegal issues	Vertical Integration Modules	Introduction to quality
6.9	6.9.1 to 6.9.5																																								x					
6.10	6.10.1 to 6.10.3																																									x					

Annex 4

Modules *vs* Teaching and Assessment Methods

Module	Teaching Methods												Assessment Methods								
													Formative Assessment			Summative Assessment					
	Recorded Lecture	Inverted Lecture	Interactive Lectures	Case Based Learning	Team Based Learning	Practical Sessions	Clinical Rounds	Bedside Clinical Teaching	Skill Lab	Jigsaw learning	Field Training	Self-Directed Learning	Theoretical	Practical	Clinical	Written	OSPE	OSCE	Assignments	Quizzes	Participation
Foundation 1			x	x		x						x	x	x		x	x		x	x	x
Foundation 2			x	x		x						x	x	x		x	x		x	x	x
Foundation 3			x	x		x						x	x	x		x	x		x	x	x
Foundation 4			x	x		x						x	x	x		x	x		x	x	x
Vertical Integration 1			x									x	x			x			x	x	x
Introduction to Quality			x	x								x	x			x			x	x	x
Musculoskeletal 1			x	x		x						x	x	x		x	x		x	x	x
Musculoskeletal 2			x	x		x						x	x	x		x	x		x	x	x
Blood and Lymphatics			x	x		x						x	x	x		x	x		x	x	x
Communication Skills and Medical Professionalism			x	x								x	x			x			x	x	x
Vertical Integration 2			x	x								x	x			x			x	x	x
Social Issues			x									x	x			x			x	x	x
Respiratory System			x	x		x						x	x	x		x	x		x	x	x
Cardiovascular System			x	x		x						x	x	x		x	X		x	x	x
Nutrition			x	x		x						x	x	x		x	X		x	x	x
EBM, Basics of Medical research and Biostatistics			x	x								x	x			x			x	x	x
Vertical Integration 3			x	x								x	x			x			x	x	x
Gastrointestinal System			x	x		x			X			x	x	x		x	x		x	x	x

Module	Teaching Methods												Assessment Methods								
													Formative Assessment			Summative Assessment					
	Recorded Lecture	Inverted Lecture	Interactive Lectures	Case Based Learning	Team Based Learning	Practical Sessions	Clinical Rounds	Bedside Clinical Teaching	Skill Lab	Jigsaw learning	Field Training	Self-Directed Learning	Theoretical	Practical	Clinical	Written	OSPE	OSCE	Assignments	Quizzes	Participation
Renal and Urinary System			x	x		x						x	x	x		x	x		x	x	x
Reproductive System and Breast			x	x		x			x			x	x	x		x	x		x	x	x
Vertical integration 4			x	x								x	x			x			x	x	x
Endocrine			x	x		x						x	x	x		x	x		x	x	x
CNS & Special Senses (1)			x	x		x						x	x	x		x	x		x	x	x
CNS & Special Senses (2)			x	x		x						x	x	x		x	x		x	x	x
Basic Life Support			x	x								x	x			x			x	x	x
Vertical Integration 5			x	x								x	x			x			x	x	x
Basic Clinical Examination			x	x	x		x					x	x		x	x		x	x	x	x
Dermatology	x	x		x	x		x					x	x		x	x		x	x	x	x
Community Medicine	x	x		x	x		x				x	x	x		x	x		x	x	x	x
Primary Health care and Elderly Care	X	X		x	x		x			x	x	x	x		x	x		x	x	x	x
Child Health	x	x		x	x		x	x				x	x		x	x		x	x	x	x
Investigations	x	x		x	x		x					x	x		x	x		x	x	x	x
Oncology	x	x		x	x							x	x		x	x		x	x	x	x
Clinical Psychology	x	x		x								x	x			x			x	x	x
Vertical Integration 6	x	x		x			x					x	x			x			x	x	x
Heart and Chest Diseases	x	x		x	x		x	x	x			x	x		x	x		x	x	x	x
Endocrinology and Breast	x	x		x	x		x	x				x	x		x	x		x	x	x	x
Hematology and Lymphatics	x	x		x	x		x	x	x		x	x	x		x	x		x	x	x	x
Gynecology	x	x		x	x		x	x				x	x		x	x		x	x	x	x

Module	Teaching Methods												Assessment Methods								
													Formative Assessment			Summative Assessment					
	Recorded Lecture	Inverted Lecture	Interactive Lectures	Case Based Learning	Team Based Learning	Practical Sessions	Clinical Rounds	Bedside Clinical Teaching	Skill Lab	Jigsaw learning	Field Training	Self-Directed Learning	Theoretical	Practical	Clinical	Written	OSPE	OSCE	Assignments	Quizzes	Participation
Patient Safety and Infection Control	x	x										x	x			x			x		x
Vertical Integration 7	x	x		x								x	x			x			x	x	x
Renal and urinary Diseases and Andrology	x	x		x	x		x	x				x	x		x	x		x	x	x	x
Obstetrics and family Medicine	x	x		x	x		x	x	x			x	x		x	x		x	x	x	x
Gastroentrology, hepatology, and infectious diseases	x	x		x	x		x	x				x	x		x	x		x	x	x	x
Vertical Integration 8	x	x		x	x							x	x			x			x	x	x
Psychiatry and Neurology	x	x		x	x		x	x				x	x		x	x		x	x	x	x
Ear, Nose and Throat	x	x		x	x		x					x	x		x	x		x	x	x	x
Pediatric and Plastic Surgery	x	x		x	x		x	x				x	x		x	x		x	x	x	x
Ophthalmology	x	x		x	x		x					x	x		x	x		x	x	x	x
Ethical and Legal Issues in Medical Practice	x	x										x	x			x			x	x	x
Vertical Integration 9	x	x		x								x	x			x			x	x	x
Emergency and Critical Care	x	x		x	x		x	x	x			x	x		x	x		x	x	x	x
Vascular Surgery	x	x		x	x		x	x				x	x		x	x		x	x	x	x
Orthopedics and Rheumatology	x	x		x	x		x	x				x	x		x	x		x	x	x	x
Forensic Medicine and Toxicology	x	x		x	x		x					x	x		x	x		x	x	x	x
Vertical integration 10	x	x		x								x	x			x			x	x	x

Annex 5

Key Competencies/ Program Learning Outcomes vs Teaching and Assessment Methods

Key Competency	Program Learning Outcomes	Teaching Methods											Assessment Methods								
													Formative Assessment			Summative Assessment					
		Recorded Lecture	Inverted Lecture	Interactive Lectures	Case Based Learning	Team Based Learning	Practical Sessions	Clinical Rounds	Bedside Clinical Teaching	Skill Lab	Jigsaw Learning	Field Training	Self-Directed Learning	Theoretical	Practical	Clinical	Written	OSPE	OSCE	Assignments	Quizzes	participation
1.1	1.1.1 to 1.1.8							x	x							x			x	x		x
1.2	1.2.1 to 1.2.5				x			x	x							x			x			x
1.3	1.3.1 to 1.3.3			x			x						x				x			x		x
1.4	1.4.1 to 1.4.9							x	x							x			x	x		x
1.5	1.5.1 to 1.,5.10	x	x	x	x	x		x					x	x		x	x		x		x	x
1.6	1.6.1 to 1.6.6	x	x	x	x	x		x	x				x	x		x	x		x		x	x
1.7	1.7.1 to 1,.7.8				x			x						x			x					
1.8	1.8.1 to 1.8.6	x	x	x	x	x							x	x			x			x	x	x
1.9	1.9.1 to 1.9.11																					
1.10	1.10.1 to 1.10.11				x	x		x					x	x		x	x		x		x	x
1.11	1.11.1 to 1.11.9							x	x							x		x				x
Key	Program Le		Teaching Methods											Assessment Methods								

		Recorded Lectures	Inverted Lecture	Interactive Lectures	Case Based Learning	Team Based Learning	Practical Sessions	Clinical Rounds	Bedside Clinical Teaching	Skill Lab	Jigsaw Learning	Field Training	Self-Directed Learning	Formative Assessment			Summative Assessment				
														Theoretical	Practical	Clinical	Written	OSPE	OSCE	Assignments	quizzes	participation
1.12	1.12.1 to 1.12.5	x	x										x	x			x			x		x
1.13	1.13.1 to 1.13.5	x	x					x						x		x	x		x		x	
1.14	1.14.1 to 1.14.5	x	x										x	x			x			x	x	x
1.15	1.15.1 to 1.15.7				x			x	x					x		x	x		x		x	x
1.16	1.16.1 to 1`.16.7	x	x		x			x					x	x		x	x		x	x	x	x
1.17	1.17.1 to 1.17.7	x	X		x			x					x	X		x	x		x	x	x	x
2.1	2.1.1 to 2.1.4	x	x		X	x		x				x	x	x		x	x		x	X	x	x
2.2	2.2.1 to 2.2.5	x	x		x	x		x				x	x	x		x	x		x	x	x	x
2.3	2.3.1 to 2.3.8	x	x		x	x		x				x	x	x		x	x		x	x	x	x
2.4	2.4.1 to 2.4.5	x	x		x	x		x				x	x	x		x	x		x	x	x	x
2.5	2.5.1 to 2.5.8	x	x		x	x		x				x	x	x		x	x		x	x	x	x
2.6	2.6.1 to 2.6.6	x	x		x	x							x	x			x				x	x

Key Competenc	Program Learning Outcomes	Teaching Methods												Assessment Methods	
		Recorded	Inverted	Interacti	Case Base	Team	Practical	Clinical	Bedside	Skill Lab	Jigsaw	Field	Self-Dire	Formative Assessment	Summative Assessment

													Theoretical	Practical	Clinical	Written	OSPE	OSCE	Assignments	quizzes	participation
2.7	2.7.1 to 2.7.4	x	x		x	x		x					x	x		x	x		X	x	x	x
2.8	2.8.1 to 2.8.8	x	x		x	x		x					x	x		x	x		X	x	x	x
2.9	2.9.1 to 2.9.6							x	x							x			x			x
3.1	3.1.1 to 3.1.8							x	x							x			x			x
3.2	3.2.1. to 3.2.5	x	x										x	x			x				x	
3.3	3.3.1 to 3.3.3	x	x										x	x			x				x	
3.4	3.4.1 to 3.4.4							x	x							x			x			x
3.5	3.5.1 to 3.5.3	x	x										x	x			x				x	
3.6	3.6.1 to 3.6.6	x	x										x	x			x				x	
3.7	3.7.1 to 3.7.4	x	x										x	x			x				x	
3.8	3.8.1 to 3.8.4							x	x							x			x			x
3.9	3.9.1 to 3.9.4	x	x										x	x			x				x	
4.1	4.1.1 to 4.1.8			x	x								x	x			x			x	x	x
4.2	4.2.1 to 4.2.5			x	x								x	x			x			x	x	x
4.3	4.3.1 to 4.3.8			x	x								x	x			x			x	x	x
Key Competenc	Program Learning Outcomes	Teaching Methods											Assessment Methods									
		Recorded	Inverted	Interacti	Case Base	Team	Practical	Clinical	Bedside	Skill Lab	Jigsaw	Field	Self-Dire	Formative Assessment		Summative Assessment						

													Theoretical	Practical	Clinical	Written	OSPE	OSCE	Assignments	quizzes	participation
4.4	4.4.1 to 4.4.4			x	x							x	x			x			x	x	x
4.5	4.5.1 to 4.5.4			x	x							x	x			x			x	x	x
4.6	4.6.1 to 4.6.5			x	x							x	x			x			x	x	x
4.7	4.7.1 to 4.7.8			x	x							x	x			x			x	x	x
4.8	4.8.1 to 4.8.9			x	x							x	x			x			x	x	x
5.1	5.1.1 to 5.1.5			x			x	x				x	x			x			x	x	x
5.2	5.2.1 to 5.2.6			x			x	x				x	X			x			x	x	x
5.3	5.3.1 to 5.3.5			x	x							x	x			x			x	x	x
5.4	5.4.1 to 5.4.6			x	x							x	x			x			x	x	x
5.5	5.5.1 to 5.5.7			x	x							x	x			x			x	x	x
5.6	5.6.1 to 5.6.4			x	x							x	x			x			x	x	x
5.7	5.7.1 to 5.7.5			x	x							x	x			x			x	x	x
5.8	5.8.1 to 5.8.6	x	x	x	x	x						x	x			x				x	x
5.9	5.9.1 to 5.9.4	x	x	x	x	x						x	x			x				x	x
Key Competenc	Program Learning Outcomes	Teaching Methods											Assessment Methods								
		Recorded	Inverted	Interacti	Case Base	Team	Practical	Clinical	Bedside	Skill Lab		Field	Self-Dire	Formative Assessment		Summative Assessment					

													Theoretical	Practical	Clinical	Written	OSPE	OSCE	Assignments	quizzes	participation
5.10	5.10.1 to 5.10.4							x					x			x			x	x		x
5.11	5.11.1 to 5.11.3			x									x	x			x				x	
5.12	5.12.1 to 5.12.4			x									x	x			x				x	
6.1	6.1.1 to 6.1.4			x	x								x	x			x			x	x	
6.2	6.2.1 to 6.2.9												x	x	x	x	x	x	x	x	x	x
6.3	6.3.1 to 6.3.5												x	x	x	x	x	x	x	x	x	x
6.4	6.4.1 to 6.4.3			x	c								c	c			c			c	c	c
6.5	6.5.1 to 6.5.5												x	x	x	x	x	x	x	x	x	x
6.6	6.6.1 to 6.6.6			x	c								c	c			c			c	c	c
6.7	6.7.1 to 6.7.5			x	c								c	c			c			c	c	c
6.8	6.8.1 to 6.8.4			x	c								c	c			c			c	c	c
.9	6.9.1 to 6.9.5			x	c								c	c			c			c	c	c
6.10	6.10.1 to 6.10.3			x	c								c	c			c			c	c	c