Faculty of Medicine
Ain Shams University

Undergraduate Program Specifications
2018-2019

Basic Information	
Program Title	Bachelor Degree of Medicine and Surgery (MB BCh)
Program type	Single (√) Duple ( ) Joint ( ) Single major
Duration	5 Academic Years followed by two years for Internship
Pre-clerkship	3 years (two semesters each)
Clerkship	2 years (rotations)
Bylaws	2018
Program Coordinator	Prof. Ashraf Omar Vice Dean of Education and Students' Affairs

Attributes of the graduates of Faculty of Medicine, Ain Shams University

The Medical Graduate must:

1. Work to maintain health and promote human wellbeing.
2. Behave professionally and adheres to medical ethics.
3. 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. Work effectively with other health care professionals respecting their roles and their contribution to the team.
6. Recognize his/her role as a part of health care system, respecting its hierarchy and rules and using his managerial and leadership skills to add value to the system.
7. Contribute to the development and empowerment of his community.
8. Work as a lifelong learner on his/her own continuous professional development, including being equipped to engage in post- graduate and research studies.

1- Academic Standards (Benchmark for the Program)

National Academic Reference Standards (NARS 2017, 2nd edition) and its integration approach, issued by the National Authority for Quality Assurance and Accreditation in Education and the Sector Committee of Medicine of the Supreme Council of Universities.

2- Program Aims:

The program enables our Graduates to:

Aim_1	Demonstrate sufficient appropriate knowledge about established biomedical, clinical, statistical, and behavioral sciences relevant to medical practice and apply this knowledge to patient care.
Aim_2	Perform a wide variety of clinical skills to enable students to provide empathic, appropriate, effective and safe patient-centered care sharing in the management of common, emerging, and life-threatening health problems and promoting health and human wellbeing.
Aim_3	Start their medical career with appreciation, motivation, and readiness to continuous lifelong learning for evolving medical sciences and skills to contribute in the continuous development of his community.
Aim_4	Demonstrate interpersonal communication skills that result in effective information exchange and teaming with other health care professionals, patients and patients' families.
Aim_5	Review and evaluate their own patient care practices, appraise and assimilate scientific evidence, and find ways to improve their patient care outcomes, while adhering to the code of medical ethics.
Aim _6	Work effectively and professionally in the health care system, while respecting its hierarchy and rules and using system resources to provide an optimal value care.
Aim_7	Apply sound scientific research methodology to deal with practice uncertainty and knowledge gaps and to contribute to the development of his profession as well as his own academic development.

3- Competencies

Competency area I: The graduate as a health care provider

The graduate should provide quality, safe, patient-centered care, using his 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- taking into account the patient's condition and

preferences as well as the availability of resources. The graduate should be able to:

1.1. Prioritize issues to be addressed in a patient encounter.

1.2. Adopt strategies and apply measures that promote patient safety.

1.3. Take and record a structured, patient centered history while adopting an empathic approach to patients.

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

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

1.6. Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand while integrating the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

1.7. Establish patient-centered management plans in partnership with the patient, his/her family and other health professionals as appropriate.

1.8. Apply the appropriate pharmacological & nonpharmacological approaches to prevent, reduce, or stop pain sensations.

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

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

1.11. 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 (Evidence Based Medicine EBM).

1.12. Recognize and respond to the complexity and uncertainty inherent in medical practice.

1.13. Provide palliative care for seriously ill patients aiming to relieve their suffering and improve their quality of life and considering practical issues of law and 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 prevent diseases, reduce deaths and promote quality life style. The graduate should be able to:

2.1 Identify the basic determinants of health and principles of health improvement enlightening the role of nutrition and physical activity in health.

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

2.3 Identify the major health risks in his community, including occupational and environmental

risks, endemic diseases and prevalent chronic diseases and discuss ways to mitigate their effects.

2.4 Recognize the epidemiology of common diseases within his community and apply the systematic approaches useful in reducing the incidence and prevalence of those diseases including description of the principles of disease prevention plan.

2.5 Provide care for specific groups including pregnant women, newborns & infants, adolescents and the elderly as well as vulnerable individuals who may be suffering from abuse or neglect and take the proper actions to safeguard their welfare.

2.6 Adopt suitable measures for infection control.

2.7 Empower communities, by raising their awareness and building their capacity through implementing health education programs for individuals, specific groups or a given community.

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 in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, & respect.

3.2. Adhere to the professional standards and laws governing the practice as well as 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. Recognize basics of medico legal aspects of practice, malpractice and avoid common medical errors.

3.5. Recognize and manage conflicts of interest.

3.6. 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.

Competency area IV: The graduate as a scholar & scientist

The graduate should build his clinical practice on a base of knowledge of scientific principles & 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. The graduate should be able to:

4.1 Describe 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 Recognize the scientific basis and interpretation of common diagnostic modalities, including: imaging, electrocardiograms, chemistries, pathologic studies, and functional assessment tests.

4.9 Demonstrate basic sciences specific practical skills and procedures relevant to future practice.

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 care system, respecting its hierarchy and rules and using his administrative and leadership skills to add value to the system. The graduate should be able to:

5.1 Recognize and respect the important role played by other health care professions in patients' management and work cooperatively with them for effective patient management and shared decision making.

5.2 Share in all types of inter-professional activities including collaborative and shared learning.

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

5.4 Negotiate overlapping and shared responsibilities with physicians and other colleagues in the health care professionals.

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

5.6 Recognize own personal and professional limits and seek help from colleagues and supervisors when necessary and hand over the care of a patient to another health care professional to facilitate continuity of safe patient care.

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

5.8. Communicate data effectively using a written health record or electronic medical record.

5.9 Reflect on and evaluate his/her work and that of others using constructive feedback.

5.10 Apply fundamental knowledge of health economics to ensure the efficiency & effectiveness of the health care system.

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

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

5.13 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 and professional 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 methodology to deal with practice uncertainty and knowledge gaps and to contribute to the development of his profession as well as his own academic development. The graduate should be able to:

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

6.2 Identify opportunities and use various resources for learning.

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

6.4 Effectively manage time and resources and set priorities.

6.5 Demonstrate an understanding of the scientific principles of research including its ethical aspects and scholarly inquiry and the role of research evidence in health care.

6.6 Contribute to the work of a research study.

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

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

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

4- Program Outcomes:

I- Cognitive domain (knowledge):

I-1 List and prioritize issues to be addressed in a patient encounter.

I-2 Select the appropriate investigations and interpret their results.

I-3 Relate knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand while integrating the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

I-4 Design patient-centered management plans in partnership with the patient, his/her family and other health professionals as appropriate.

I-5 Describe the appropriate pharmacological & nonpharmacological approaches to prevent, reduce, or stop pain sensations.

I-6 Distinguish, judge, and appraise relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (Evidence Based Medicine EBM).

I-7 Outline the complexity and uncertainty inherent in medical practice.

I-8 Discuss palliative care for seriously ill patients aiming to relieve their suffering and improve their quality of life and considering practical issues of law and certification.

I-9 Identify the basic determinants of health and principles of health improvement enlightening the role of nutrition and physical activity in health.

I-10 Discuss the economic, psychological, social, and cultural factors that interfere with wellbeing.

I-11 Identify the major health risks in his community, including occupational and environmental risks, endemic diseases and prevalent chronic diseases and discuss ways to mitigate their effects.

I-12 Discuss the epidemiology of common diseases within his community including description of the principles of disease prevention plan.

I-13 Describe suitable measures for infection control.

I-14 Outline the professional standards and laws governing the practice as well as the national code of ethics issued by the Egyptian Medical Syndicate.

I-15 Explain basics of medico legal aspects of practice and malpractice.

I-16 Describe normal structure of the body and its major organ systems and explain their functions.

I-17 Explain the molecular, biochemical, and cellular mechanisms that are important in maintaining the body's homeostasis.

I-18 Describe main developmental changes in humans and the effect of growth, development and aging on the individual and his family.

I-19 Explain normal human behavior and interpret the varied responses of individuals, groups and societies to disease guided by the theoretical frameworks of psychology.

I-20 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).

I-21 Distinguish altered structure and function of the body and its major organ systems that are seen in various diseases and conditions.

I-22 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.

I-23 Identify the scientific basis and interpretation of common diagnostic modalities, including: imaging, electrocardiograms, chemistries, pathologic studies, and functional assessment tests.

I-24 Relate fundamental knowledge of health economics to health care system in order to ensure the efficiency & effectiveness of the health care system.

I-25 Develop and revise a personal learning plan to enhance professional practice.

I-26 Identify opportunities and outline various resources for learning.

I-27 Demonstrate an understanding of the scientific principles of research including its ethical aspects and scholarly inquiry and the role of research evidence in health care.

I-28 Critically appraise research studies and scientific papers in terms of integrity, reliability, and applicability.

I-29 Explain the basic statistical methods.

II- Psychomotor domain (skills)

II-1 Apply measures that promote patient safety.

II-2 Take and record a structured, patient centered history.

II-3 Perform full physical examination of patients appropriate to the age, gender, and clinical presentation of the patient.

II-4 Apply the appropriate pharmacological & nonpharmacological approaches to prevent, reduce, or stop pain sensations.

II-5 Perform diagnostic and intervention procedures in a skillful and safe manner, adapting to unexpected findings or changing clinical circumstances.

II-6 Provide the appropriate care in cases of emergency, including cardio-pulmonary resuscitation, immediate life support measures and basic first aid procedures.

II-7 Provide palliative care for seriously ill patients.

II-8 Provide care for specific groups including pregnant women, newborns & infants, adolescents and the elderly as well as vulnerable individuals and take the proper actions to safeguard their welfare.

II-9 Perform suitable measures for infection control.

II-10 Implement health education programs for individuals, specific groups or a given community.
II-11 Perform basic sciences specific practical skills and procedures relevant to future practice.

II-12 Document clinical encounters in an accurate, complete, timely, and accessible manner.

II-13 Communicate data effectively using a written health record or electronic medical record.

II-14 Use health informatics to improve the quality of patient care.

II-15 Apply a process of continuous quality improvement.

II-16 Implement and monitor a personal learning plan to enhance professional practice.

II-17 Contribute to the work of a research study and apply the scientific principles of research including its ethical aspects.

II-18 Professionally use numerical data of basic statistical methods.

II-19 Present with ease to professional and lay audiences the findings of relevant research and scholarly inquiry.

III- Affective domain (attitudes):

III-1 Adopt an empathic approach to patients while recording his history

III-2 Adopt a culturally sensitive approach while performing medical examination.

III-3 Consider cost/ effectiveness factors while selecting the appropriate investigations.

III-4 Establish patient-centered management plans in partnership with the patient, his/her family and other health professionals as appropriate.

III-5 Adapt to unexpected findings or changing clinical circumstances while performing diagnostic and intervention procedures.

III-6 Contribute to relief of suffering of seriously ill patients and improvement of their quality of life while offering palliative care.

III-7 Consider the welfare of specific groups and vulnerable individuals while providing care for them.

III-8 Empower communities, by raising their awareness and building their capacity.

III-9 Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, & respect.

III-10 Adhere to the professional standards and laws governing the practice and the national code of ethics.

III-11 Respect the different cultural beliefs and values in the community they serve.

III-12 Avoid common medical errors.

III-13 Manage conflicts of interest.

III-14 Avoid any unprofessional and unethical behaviors or physical or mental conditions related to himself, colleagues or any other person that might jeopardize patients' safety.

III-15 Respect the important role played by other health care professions in patients' management and work cooperatively with them for effective patient management and shared decision making.

III-16 Share in all types of inter-professional activities including collaborative and shared learning.

III-17 Support strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.

III-18 Negotiate overlapping and shared responsibilities with physicians and other colleagues in the health care professionals.

III-19 Apply leadership skills to enhance team functioning, the learning environment, and/or the health care delivery system.

III-20 Recognize own personal and professional limits and seek help from colleagues and supervisors when necessary and hand over the care of a patient to another health care professional to facilitate continuity of safe patient care.

III-21 Comply with regulatory and legal requirements while documenting clinical encounters.

III-22 Reflect on and evaluate his/her work and that of others using constructive feedback.

III-23 Demonstrate accountability to patients, society, and the profession and work to enhance professional practice.

III-24 Verify practice uncertainty and knowledge gaps in clinical and other professional encounters.

III-25 Effectively manage time and resources and set priorities.

5- Program Structure and Contents:

A credit hour system program where each credit hour reflects either of:
15 lectures hours
30 practical training hours
45 clinical training hours
60 field study hours

Total credit hours	215
Total Basic Sciences credit hours	85
Total Clinical credit hours	107
Total Professionalism credit hours	7
Total Research credit hours	5
Total Student Selected Components credit hours	8
Total Clinical Elective credit hours	3

6- Program Courses & Modules

Code	Course/module	Credit Hours	Total Marks
	Pre-clerkship		
IAE-1	Introduction to Anatomy & Embryology	3.5	88
IPHY-1	Introduction to Physiology	2.5	62
IBM-1	Introduction to Medical Biochemistry	2	50
IHC-1	Introduction to Histology & Cell Biology	2	50
IPAT-1	Introduction to Pathology	3.5	88
IPHA-1	Introduction to Clinical Pharmacology	2.5	62
MIM-1	Immunology Module	2	50
MGMB-1	Genetics & Molecular Biology Module	2	50
MINF-1	Infection Module	3	75
MLS-1	Locomotor Module	8	200
CMS_a-1	Clinical Applications of locomotor system	2	50
CMS_b-1	Basic life support + History taking & clinical examination	1	25
MBL-2	Blood & Lymphatic System Module	6	150
CMS_c-2	Clinical Applications of blood & Lymphatic system	1	25
MGL-2	GIT & Liver Module	9	225
CMS_d-2	Clinical Applications of GIT & Liver	2	50
MRS-2	Respiratory System Module	6	150
CMS_e-2	Clinical Applications of respiratory system	1	25
MCVS-2	Cardiovascular System Module	8	200
CMS_f-2	Clinical Applications of cardiovascular system	2	50
MCNS-3	Central Nervous System Module	9	225
MSS-3	Special Senses Module	2	50
CMS_g-3	Clinical Applications of central nervous system & special senses	3	75
MEM-3	Endocrine System & Metabolism Module	4	100
CMS_h-3	Clinical Applications of endocrine system & metabolism	1	25

MUG-3	Urogenital System Module	7	175
CMS_i-3	Clinical Applications of urogenital system	2	50
Clerkship			
MED1-4	Internal Medicine 1	10	250
MED2-5	Internal Medicine 2	10	250
SUR1-4	Surgery 1	10	250
SUR2-5	Surgery 2	10	250
PE1-4	Pediatrics 1	7	175
PE2-5	Pediatrics 2	8	200
OG1-4	Obstetrics and Gynecology 1	8	200
OG2-5	Obstetrics and Gynecology 2	7	175
OO-4	Ophthalmology	5	125
ORL-4	Ear, Nose & Throat	5	125
CEO-4	Community Environmental and Occupational Medicine	3	75
EM-5	Emergency Medicine	5	125
FT-5	Forensic Medicine & Clinical Toxicology	5	125
FAM-5	Family Medicine	2	50
Professionalism			
$P1_{C-E}$-1	English & Computer	1	25
P2-1	Learning skills – Time management – presentation skills	1	25
P3-2	Medical Ethics	1	25
P4-2	Behavioral science	1	25
P5-3	Communication skills (doctor-patient)	1	25
P6-4	Leadership skills & project management	1	25
P7-5	Communication skills (doctor-doctor)		25
Research			
R_a-1	Research methodology & data collection 1	1	25
R_b-2	Statistics	1	25
R_c-3	Research methodology & data collection 2	1	25
R_d-4	Data analysis	1	25

R_e-5	Research ethics & publication guidelines	1	25
Student Selected Components/Electives			
As chosen	SSC	8	Pass/Fail
As chosen	Elective	3	Pass/Fail
TOTAL		215	5100

7- Teaching Schedule:

Key

	Basic Sciences (Foundation)
	Basic Sciences (Systems & Integrated Modules)
	Clinical Sciences
	Professionalism thread
	Student as a researcher thread
	Student Selected Component SSC & Electives

Year One

Semester 1

Weeks		15 weeks 19 Credit hours							
1	Introduction to Anatomy, Embryology (3.5 Cr. hr.)	Introduction to Physiology (2.5 Cr. hr.)	Introduction to histology (2 cr. hr.)	Introduction to Biochemistry (2 cr. hr.)		Computer and English (1 cr. hr.)+ Presentation skills+ Learning skills+ Time management (1 cr. hr.)	Research Methodology and data collection 1 (1 cr. hr.)	SSC Block 1 or 2 (1 cr. hr.)	SSC Block 1 or 2 (1 cr. hr.)
2									
3									
4									
5									
6									
7									
8									
9				Genetics and molecular (2 cr. hr.)	Immunology (2 cr. hr.)				
10									
11									
12									
13									
14									
15									

Semester 2

Weeks	16 weeks 20 credit hours			
1	Introduction to Pathology (3.5 Cr. hr.)	Introduction to Pharmacology (2.5 Cr. hr.)	Infections & Infestations (3 cr. hr.)	Basic life support (Clinical Toxicology) Clinical (History taking & Clinical Examination) (1 cr. hr.)
2				
3				
4				
5				
6				
7				
8				
9	Locomotor & Skin (8 cr. hr.)		Clinical integrated sessions (locomotor) (2 cr. hr.)	
10				
11				
12				
13				
14				
15				
16				

Year Two

Semester 1

Weeks	15 weeks 20 credit hours			
1	Blood & Lymphatic (6 cr. hr.)	Integrated clinical session Blood and lymphatics (1 cr. hr.)	Medical Ethics (1 cr. hr.)	Biostatistics (1 cr. hr.)
2				
3				
4				
5				
6				
7	GIT & Liver (9 cr. hr.)	Integrated clinical session GIT/ Liver (2 cr. hr.)		
8				
9				
10				
11				
12				
13				
14				
15				

Semester 2

Weeks	15 weeks 20 credit hours			
1	Respiratory module (6 cr. hr.)	Integrated clinical session Respiratory (1 cr. hr.)	Behavioural (1 cr. hr.)	SSC Block 1 or 2 (2 cr. hr.)
2				
3				
4				
5				
6				
7	Cardiovascular module + Intermediate life support (8 cr. hr.)	Integrated clinical session Cardiovascular (2 cr. hr.)		
8				
9				
10				
11				
12				
13				
14				
15				

Year Three

Semester 1

Weeks	15 weeks 19 credit hours					
1	CNS, Head and neck (9 cr. hr.)	Integrated clinical session CNS and Special senses (3 cr. hr.)	Doctor patient communication (1 cr. hr.)	Data collection 2 (1 cr. hr.)	SSC Block 1 or 2 (1 cr. hr.)	SSC Block 1 or 2 (2 cr. hr.)
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12	Special senses (2 cr. hr.)					
13						
14						
15						

Semester

Weeks	15 weeks 17 credit hours	
1	Endocrine & Metabolism (4 cr. hr.)	Integrated clinical session Endocrine & Metabolism (1 cr. hr.)
2		
3		
4		
5		
6	Uro-genital (7 cr. hr.)	Integrated clinical session Urogenital (2 cr. hr.)
7		
8		
9		
10		
11		
12		
13		
14	Elective (3 cr. hr.)	
15		

Year Four

Weeks	40 weeks 50 credit hours		
10	General and Special Medicine (10 cr. hr.)	Community Medicine + occupational (3 cr. hr.)	
10	General and Special Surgery (10 cr. hr.)		
6	Pediatrics (7 cr. hr.)	Leadership skills and management skills [with focus on Project management] (1 cr. hr.)	Data analysis and interpretation (1 cr. hr.)
6	Obstetrics & Gynecology (8 cr. hr.)		
4	Ophthalmology (5 cr. hr.)		
4	ENT (5 cr. hr.)		

Year Five

<table>
<tr><th>Weeks</th><th colspan="4">40 weeks 50 credit hours</th></tr>
<tr><td>10</td><td>General and Special Medicine
(10 cr. hr.)</td><td colspan="3" rowspan="2">Family Medicine
(2 cr. hr.)</td></tr>
<tr><td>10</td><td>General and Special Surgery
(10 cr. hr.)</td></tr>
<tr><td>6</td><td>Pediatrics
(8 cr. hr.)</td><td rowspan="4">[Doctor- Doctor Communication
(1 cr. hr.)</td><td rowspan="4">Ethics and politics of publishing (1 cr. hr.)</td><td rowspan="4">SSC Block 3 (1 cr. hr.)</td></tr>
<tr><td>6</td><td>Obstetrics & Gynecology
(7 cr. hr.)</td></tr>
<tr><td>4</td><td>Emergency Medicine & Trauma
(5 cr. hr.)</td></tr>
<tr><td>4</td><td>Forensic Medicine & Clinical Toxicology
(5 cr. hr.)</td></tr>
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Longitudinal tracks:

- **Professionalism thread:**

It includes courses focusing on personal and professional development offered through the 5 years of study. These include presentation skills, learning skills, time management skills, medical ethics, behavioral science, communication skills and leadership skills.

- **Research thread:**

It includes courses focusing on all aspects of medical research offered through the 5 years of study. These include research methodology, data collection and analysis, statistics and publishing.

- **Student Selected Components (SSC):**

It includes three bundles each comprising of a number of courses with the same theme.

Bundle 1 (Personal and Professional Development)
Bundle 2 (Languages)
Bundle 3 (Clinical)

- **Electives:**

Clinical training for two weeks in a clinical department of preference at the end of the third study year.

8- Courses Content: Attached

9- Program Admission Requirements

The process of application, selection and approval for admission in the Egyptian State Universities is carried out through the National Admission Office (www.tansik.egypt.gov.eg/) supervised by the Ministry of Higher Education. Egyptian students are categorized according to their high school grades. Ninety five percent of admissions are reserved for those holding the Egyptian high (secondary) school certificate, while the remaining 5% are reserved for recognized International and Arab qualifications.

Applicants:
Egyptian high schools graduated from the scientific section, science specialty
Egyptian certificates graduates must fulfill a course of advanced biology in addition to other scientific courses and English.
International certificates graduates must pass their course of Arabic otherwise they have to pass an Arabic re-sit exam for graduation.

10- Regulations of progression and program completion:

Pre-clerkship phase (years 1,2,3):
Students are automatically transferred from the first semester to the second semester without consideration to his grades. At the end of each academic year and after the re-sit exams, students who failed to pass courses of a total of 10 credit hours or less, are transferred to the next level (year) and they have to do another re-sit exams in the courses they failed. However if students failed to pass courses of a total exceeding 10 credit hours, they are not transferred to the next level (year) and they are only reexamined in the courses they failed. Students are not transferred to the clerkship phase unless they pass all courses except the courses in the longitudinal tracks.

Clerkship phase (years 4,5):
At the end of year 4 and after the re-sit exams, students who failed to pass courses of a total of 15 credit hours or less, are transferred to year 5 and they have to do another re-sit exams in the courses they failed. However if students failed to pass courses of a total exceeding 15 credit hours, they are not transferred to year 5 and they are only reexamined in the courses they failed. At the end of year 5 students should have passed all courses in order to graduate.

Pre-registration house officer years (PRHO) :
Program specifications of the 2 training years are supplied separately.

11- Teaching Methods and Student Assessment:

Teaching Strategy:

- Vertical and horizontal integration between basic and clinical medical sciences (system-based modules)
- Student-centered learning (interactive learning - self-directed learning – collaborative learning)
- Competency-based learning

Teaching Methods:

Theoretical:
- Interactive lectures
- Tutorials (practical & clinical sessions for small groups and computer-assisted learning)

- Small group discussion (problem-oriented learning)
- Student centered learning activities (research and self-directed learning)
- E-learning

Practical & Clinical:

- Practical classes (pre-labs - computer-assisted learning)
- Clinical classes (virtual clinical teaching - role play)
- Skills lab training
- Clinical rounds (rotations in hospital wards with clinical teaching on real patients)
- Community based activities (field visits - outreaching community activities research and projects)

Student assessment methods:

According to pre-set exam blue prints based on program competencies fields

1- Formative exams (portfolio)
2- Summative exams:
   a- Continuous assessment (MCQ)
   b- Final written exam (MCQ and structured short essay)
   c- Final practical exams (labs & OSPE)
   d- Final clinical exams (OSCE)

Grades distribution:-

Continuous student evaluation	30%
Practical and clinical training assessment	30%
Final written exam	40%

A minimum of 50% in the final written exams and 60% overall should be obtained in order to pass every single course or module

Grading system:
The course is graded by a 4 points-GPA (Grade Point Average) grading system. Results are displayed as GPA points and corresponding percentage certificates are issued upon request.

Percentage	Grade points	Grade sign
97% and above	4.0	A +
From 93% to less than 97%	4.0	A
From 89% to less than 93%	3.7	A -
From 84% to less than 89%	3.3	B +
From 80% to less than 84%	3.0	B
From 76% to less than 80%	2.7	B -
From 73% to less than 76%	2.3	C +
From 70% to less than 73%	2.0	C
From 67% to less than 70%	1.7	C -
From 64% to less than 67%	1.3	D +
From 60% to less than 64%	1.0	D
From 0% to less than 60%	0.0	F

11- Evaluation of Program Outcomes
The program will be evaluated after graduation of the first cohort.

NARS competencies & program outcomes matrix

	I	II	III
1.1.		II-2	
1.2.			III-1
1.3.		II-3	
1.4.		II-3	III-2
1.5.	I-1		
1.6.	I-2		III-3
1.7.	I-7		
1.8.	I-3		
1.9.	I-6		
1.10.	I-3		
1.11.		II-5	III-5
1.12.		II-1	
1.13.			III-4
1.14.	I-4		
1.15.		II-6	
1.16.	I-5, I-8	II-4, II-7	III-6
1.17.	I-8		
2.1.	I-9		
2.2.	I-10		
2.3.	I-9		
2.4.	I-11		
2.5.		II-10	III-8
2.6.	I-12		
2.7.		II-8	III-7
2.8.			III-7
2.9.	I-13	II-9	
3.1.			III-9
3.2.	I-14		III-10
3.3.			III-11
3.4.	I-14		III-10
3.5.	I-14		III-10
3.6.	I-15		III-12
3.7.			III-13
3.8.			III-20
3.9.			III-14
4.1.	I-16		
4.2.	I-17		
4.3.	I-18		
4.4.	I-19		
4.5.	I-20		
4.6.	I-21		
4.7.	I-22		
4.8.	I-23	II-11	

5.1.			III-15
5.2.			III-18
5.3.			III-17
5.4.			III-19
5.5.	II-13		
5.6.			III-22
5.7.			III-20
5.6.	I-24		
5.7.		II-14	
5.8.		II-12	III-21
5.9.		II-15	
5.10.			III-23
5.11.			III-15
5.12.			III-18
6.1.			III-22
6.2.	I-25	II-16	
6.3.	I-26		
6.4.			III-16
6.5.			III-24
6.6.			III-25
6.7.	I-27	II-17	
6.8.	I-28		
6.9.	I-29	II-18	
6.10.		II-19	

Coordinator: Vice Dean of Education and Students affairs
Signature:
Date of Program Specifications Approval: