Undergraduate Program & Courses Specifications

PROGRAM SPECIFICATIONS
of UNDERGRADUTE STUDENTS (5+2).

Sohag University **Faculty of Medicine**

1- **Program title**: MBBCh
2- **Program type**: Single
3- **Departments**: (Major= 33) Anatomy & embryology- Physiology- Biochemistry- Histology- Pharmacology- Pathology- Microbiology & Immunology - Medical Parasitology- Public health & Community medicine- Ophthalmology- Otorhinolaryngology
- Forensic medicine & medical toxicology- Internal Medicine- Pediatrics- General Surgery- and Obstetrics & Gynecology.
4- **Coordinator:** Professor Dr. Salah Roshdy; Vice-dean for students affairs.
5- **External evaluator:** Prof. Ahmad Maklouf.
6- **Academic year:** 2018/2019
7- **Last date of Program specifications approval:** Faculty council decree (549), in its session No. (296), dated 13/6/2017.

B- Professional Information:

1- Program aims:

Our aim is to graduate competent physicians capable of practicing medicine at a basic level determined by the Competancy-based National Academic Reference Standards (Competancy-based NARS), following the medical ethics, leading subordinates, having the ability to engage in further training in any branch of medicine and to conduct medical researches through providing:

1. Work to maintain health and promote human wellbeing.
2. Behave professionally and adhere 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/ her community.

Undergraduate Program & Courses Specifications

PROGRAM SPECIFICATIONS of UNDERGRADUTE STUDENTS (5+2).

Sohag University **Faculty of Medicine**

1- **Program title**: MBBCh
2- **Program type**: Single
3- **Departments**: (Major= 33) Anatomy & embryology- Physiology- Biochemistry- Histology- Pharmacology- Pathology- Microbiology & Immunology - Medical Parasitology- Public health & Community medicine- Ophthalmology- Otorhinolaryngology
- Forensic medicine & medical toxicology- Internal Medicine- Pediatrics- General Surgery- and Obstetrics & Gynecology.
4- **Coordinator:** Professor Dr. Salah Roshd**y;** Vice-dean for students affairs.
5- **External evaluator:** Prof. Ahmad Maklouf.
6- **Academic year:** 2018/2019
7- **Last date of Program specifications approval:** Faculty council decree (549), in its session No. (296), dated 13/6/2017.

B- Professional Information:

1- Program aims:

Our aim is to graduate competent physicians capable of practicing medicine at a basic level determined by the Competancy-based National Academic Reference Standards (Competancy-based NARS), following the medical ethics, leading subordinates, having the ability to engage in further training in any branch of medicine and to conduct medical researches through providing:

1. Work to maintain health and promote human wellbeing.
2. Behave professionally and adhere 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/ her 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.

2- Intended learning outcomes (ILOs):

1. Knowledge and understanding:

By the end of the program the student should be able to:

1.1. Take and record a structured, patient centered history

1.2. Adopt an empathic and holistic approach to the patient
1.3. Assess the mental state of the patient
1.4. Perform appropriately timed full physical examination of patients appropriate to the age gender, and clinical presentation of the patient while being culturally sensitive
1.5. Prioritize issues to be addressed in a patient encounter
1.6. Select the appropriate investigations and interpret their results taking into consideration cost/effectiveness factors.
1.7. Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice
1.8. Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand
1.9. Retrieve, analyze, and evaluate literature, using information technologies 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 procedures in a skillful and safe manner; adapting to unanticipated findings or changing clinical circumstances
1.12. Adopt strategies and apply measures that promote patient safety
1.13. Establish patient-centered management plans in partnership with the patient his/her family and other health professionals as appropriate, using Evidence based Medicine in management decisions
1.14. Respect them 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 &non pharmacological approaches; to prevent, reduce, or stop pain sensations
1.17. Provide palliative care for seriously ill people. aiming to relieve their suffering and improve their quality of life
1.18. Contribute to the care of patients and their families at the end of life, including management of symptoms, practical issues of law and certification

2. Intellectual skills:

By the end of this Program the student should 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 community, including occupational and environmental risks endemic diseases and prevalent chronic diseases
2.5. Describe the principles of disease prevention plan and implement health programs for individuals, specific groups or a given community
2.6. Recognize the epidemiology of common diseases within his community, and apply the systematic approaches useful in reducing the incidence and prevalence of those diseases
2.9. Identify vulnerable individuals that may be suffering from abuse or neglect and take the proper actions to safeguard their welfare
2.10. Adopt suitable measures for infection control

2.11. Empower communities, by raising their awareness and building their capacity

c- Professional and Practical skills:

By the end of this Program the student 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 and ethical codes, standards and laws governing the practice
3.3. Abide by the national code of ethics issued by the Egyptian Syndicate
3.4. Respect the different cultural beliefs and values in the community they serve
3.5. Treat all patients equally, and avoid stigmatizing regardless of their social, cultural ،
Ethnic backgrounds, or their disabilities
3.6. Ensure confidentiality and privacy of patients
3.7. Recognize basics of medico legal aspects of practice, malpractice and avoid common medical errors
3.8. Recognize and manage conflicts of interest
3.9. Recognize his/her own limitations of knowledge and skills and refer patients to appropriate health facility at the appropriate stage
3.10. Identify and report any unprofessional and unethical behaviors or physical or mental conditions related to himself, colleagues or any other that might jeopardize patients' safety

House Officers should be able, under appropriate supervision, (according to Outcome-based NARS) to:

c1. Ensure confidentiality and privacy of patients'information.
c2. Treat all patients equally, and avoid stigmatizing any category regardless of believes, culture, and behaviors.
c3. Demonstrate respect and work cooperatively with other health care professions for effective patient management.
c4. Be willing to share in all types of inter-professional activities including collaborative and shared learning
c5. Ensure the cost effectiveness of health care management.
c6. Notify/report about any physical or mental conditions related to himself, colleagues or any other person that might jeopardize patients safety.

d. General and Transferable skills:

By the end of this Program the student 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 maintaining the body's homeostasis

4.3. Recognize and describe main development 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 special skills and procedures relevant to future practice3

House Officers should be able; (according to Outcome-based NARS) to:

d1. Use Evidence Based Medicine in management decisions.
d2. Effectively manage time and resources and set priorities.
d3. Work efficiently within the health care team and as an
d4. effective team leader.
d5. Solve problems related to patients, work management, and among colleagues.
d6. Cope with a changing work environment.
d7. Apply safety and infection control measures during practice.
d8. Evaluate their work and that of others using constructive feedback.

3- Academic Standards:

3a- External references for standards (Benchmarks)

Competancy-based National academic reference standards (Competancy-based NARS) provided by the national authority for quality assurance and accreditation of education (NAQAAE) for undergraduate program in medicine were chosen. The adoption of these NARS was approved by the Faculty Council decree No.431, in its cession No.294 Dated: 13/5/2017.

3b- Comparison of provision to external references

The ILOs of the Faculty Program cover all areas of the chosen academic standards (NARS):

- **The aims:**
  There are similarities (complete matching) between the aims of Sohag faculty of Medicine Program (MBBCh) and NARS.

- **The Intended Learning Outcomes (ILOs.):**
  - **The knowledge:** By the end of this MBBCh program the student will gain knowledge that covers fields offered by NARS.
  - **The skills:** All skills in NARS are achieved in this MBBCh program.

4- Curriculum structure and contents:

4.1.Program duration: 5 academic years followed by Two year clinical training as house officers.

4.2.Program structure: (total: 318 points)

4.1.1 First semester: 15 weeks
4.1.2 Second semester: 16 weeks
4.1.3 Third semester: 15 weeks
4.1.4 Fourth semester: 17 weeks
4.1.5 Fifth semester: 16 weeks
4.1.6 Sixth semester: 18 weeks
4.1.7 Fourth year: 35 continuous weeks
4.1.8 Fifth year: 40 continuous weeks

Block	**points**	**days/week**	learning activities		
			contact hours/points	formative assessment/feedback	assignment
Principles of studying medicine	1	1 week	15hours 0.5 point	---	0.5
Principles of microscopic and macroscopic structures first year first semester	12points	7 weeks	156 hours; -60 lecture -32 practical -Student learning activities: 64 hours {SDL, group discussion, seminars & quiz}	1point	5 points
Cell biology and functions first year first semester	12 points	7 weeks	147hours; 74 hrslecture 30 hrspractical	9hrs	34 points
, "Patient, Physician & Society first year first semester	5 Points	vertical	65 2.5 points	0.5point	2 points
Infection And Immnity first year second semester	12.5	8 weeks	162 6.5 points	0.5point	5.5 points
Principles OF Diseases And The Pharmacological Basis of Theraputics Course first year second semester	12	8 weeks	160	32point	128 points

Introduction to Patient Care first year second semester	5 Points	vertical	65 2.5 points	0.5point	2 points
Cardiovascular system	8	5 weeks	100 4 points	0.5 point	3.5 point
GIT,	8	5 weeks	100 4 points	0.5 point	3.5 point
Skin & Musculoskeletal	8	5 weeks	100 4 points	0.5 point	3.5 point
Introduction to Patient Care Block Advanced Physical Examination 2 Clinical Experiences 2 Advanced Medical Interviewing Clinical Procedures	2	vertical:	30 1 point	0.25 point	0.75 point
Elective	4	Vertical	60 2 points	0.5 point	1.5 points
Respiratory and renal systems	9.5	7 weeks	143 5 points	1 points	3.5 points
Hematology	5	3 weeks	75 2.5 points	0.5 points	2 points
Health & illness in the community	9.5	7 weeks	143 5 points	1 point	3.5 points
Introduction to Patient Care Block Advanced Physical Examination 2 Clinical Experiences 2 Advanced Medical Interviewing Clinical Procedures	2	vertical:	30 1 point	0.25 points	0.75 points
elective 2	4	vertical: 4 hours/week/semester	60 2 points	0.5 point	1.5 points
Neurosciences	12.5	8 weeks	162 6.5 points	I point	5 points

Endocrinology, Reproduction & Developmental Biology	12.5	8 weeks	162 6.5 points	I point	5 points
Evidence-Based Medicine - Fundamentals	2	vertical:	30 1 point	0.25 point	0.75 point
Investigation and Discovery/Scholarly Project **Epidemiology and data management**	1.5	vertical:	22.5 0.75 Point	0.5 point 0.25 Point	1.5 points 0.50 Point
elective 3	1.5	vertical:	22.5 0.75 Point	0.5 point 0.25 Point	1.5 points 0.50 Point
Medicine 1 **Introduction to general medicine, Hematology, Endocrinology, Nephrology, Third year/ Sixth Semester**	10	6weeks	135 4.5 points	1 point	3.5 points
Surgery I **Wound Healing, bleeding, shock, blood transfusion, haemostasis, surgical infections, postoperative complications, abdominal trauma emergencies, surgical anuria, surgical nutrition (enteral and parenteral)Surgery of head and neck, lymphatic system (3 weeks)** **Thyroid and Para thyroid, supra renal gland, abdominal walls and hernias, Breast. (4 weeks) Oncology (principles) .(one week) Third**	13	8 weeks	195 6.5 points	1.5 points	5 points

year/ Sixth Semester					
Forensic Medicine and toxicology Third year/ Sixth Semester	6	4 weeks	90 3 points	0.5 point	2.5 point
Investigation and Discovery/Scholarly Project Epidemiology and data management Third year/ Sixth Semester	2	vertical:	30 1 point	0.25 point	0.75 point
elective 4 Third year/ Sixth Semester	2	vertical:	30 1 point	0.25 point	0.75 point
Medicine II a- Liver–biliary system (2 weeks) b- Tropical medicine (2 weeks) c- Nutrition, GIT, (2 weeks) d- Rheumatology and clinical immunology (2 weeks) Fourth year	15 (3.5 tropical)	8 weeks#	195 6.5 points	1.5 points	5 points
Gynecology & Obstetrics Fourth year	18	10 weeks	250 9 points	2 points	6.5 points
Pediatrics. Fourth year	18	10 weeks	250 9 points	2 points	6.5 points
Physichatry Fourth year	4	3 weeks*	75 2.5 points	0.05 point	2 points
Surgery II Anesthesia, pain management ,intensive care, fluids and electrolytes and body response to trauma. Fourth year	4	2 weeks*	60 2 points	0.5 point	1.5 points
elective 5 Fourth year	3	vertical:	45 1.5 points	0.5 point	1 points
Family medicine (at end of year) Fourth year	3	2 weeks	45, 1.5 points	0.5 points	1.5 points
Ophthalmology# Fifth year	9	6weeks	135/4.5 points	1 point	3.5 points
Ear, Nose & Throat Fifth year	7.5	4 weeks	105/3.5 Points	0.5 points	3 points
Medicine III Clinical investigations (laboratory and infection control :2	6.5	4 weeks	105/3.5 Points	0.5 points	3 points

weeks and radiology: 2 weeks) Fifth year					
Surgery IV cardiothoracic surgery, plastic surgery,Neurosurgery, Vascular surgery(one week each) Fifth year	6	4 weeks	105/3.5 Points	0.5 points	3 points
Surgery IV Orthopedics & trauma Fifth year	5.5	4 weeks	100/3 Points	0.5 points	3 points
Surgery IV Urology Fifth year	5.5	4 weeks	100/3 Points	0.5 points	3 points
Surgery III a GIT, Liver–biliary system, pancreas, abdomen and peritoneum Fifth year	7.5	4 weeks	105/3.5 Points	0.5 points	3 points
Medicine IVNeurology, Dermatology Fifth year	6.5	4 weeks	105/3.5 Points	0.5 points	3 points
Medicine IVcardiology, chest Fifth year	6.5	4 weeks	105/3.5 Points	0.5 points	3 points
Elective 6 Fifth year	2.5	vertical: 2 hrs/week first 15 weeks	23 1.25 points	0.25 points	1 points
Surgery IIIb # acute emergencies Fifth year	4	2 weeks	60, 2 points	0.5 points	1.5 points
Family medicine Fifth year	3	vertical: 2 ours/week 36 weeks	45, 1.5 points	0.5 points	1 points
Total	318 Points				

Curriculum structure and contents:

4.3.Program duration: Program duration: 5 academic years followed by Two year clinical training as house officers.

4.4.Program structure: (total: 318 points)

4.1.9 First semester: 15 weeks
4.1.10 Second semester: 16 weeks
4.1.11 Third semester: 15 weeks
4.1.12 Fourth semester: 17 weeks
4.1.13 Fifth semester: 16 weeks
4.1.14 Sixth semester: 18 weeks
4.1.15 Fourth year: 35 continuous weeks
4.1.16 Fifth year: 40 continuous weeks

The five years of study for the Bachelor of Medicine and Surgery are divided into three levels (stages) and include the following:
- The first level: ((Principles level and includes the total semester (2,1)

- The second level: ((organ system level and includes the total classroom (5,4,3)
- The third level: (clinical level) and includes (semester 6, and the total of two academic years (5,4)

4.5. Program Courses

- All courses are compulsory, no elective or optional.

5.1. Level/Year of program: first year first semester

Block	points	days/week	learning activities			ILOs
			contact hours/points	formative assessment/ feedback	assignment	
Principles of studying medicine	1	1 week	15hours 0.5 point	---	0.5	A1,2,3,4,5,6,7,9, 10,11,12,16 B1,2,3 C1,4,5 D1,2,3,4,5
Principles of microscopic and macroscopic structures first year first semester	12points	7 weeks	156 hours; -60 lecture -32 practical -Student learning activities: 64 hours {SDL, group discussion, seminars & quiz}	1point	5 points	A1,2,3,4,5,6,7,8, 9,10,11,12,13,14 ,15,16,17,18,19, 20,21,22,23,24,2 5,26,27,28,29,30 ,31,32,33,34,35, 36,37, B1,4,5,6,7,11,13 ,14,15,16,17,18, 21,22,23,24,27,2 8 C1,2,3,4,5,6,7,8, 9,10,11,14,15,16 ,17 D1,2,3,4
Cell biology and functions first year first semester	12 points	7 weeks	147hours; 74 hrslecture 30 hrspractical	9hrs	34 points	A1.1,1.2,3.1,3.2, 4.1,4.2 A5,6,7,8,9,10 B1.1, 1.2,3.1,3.2,3.2,4. 2,4.3,4.4,4.5 B5,6,7,8,9,10 C4,5,6,7,8,9,10 D1,2,3,4,
, "Patient, Physician & Society first year first semester	5 Points	vertical	65 2.5 points	0.5point	2 points	A1,2,3,4,5,6,7 B1,2,3,4 C1,2,3

- **first year second semester**

Infection And Immnity first year second semester	12.5	8 weeks	162 6.5 points	0.5point	5.5 points	A1,2,3,4,5,7,8,9,10,11,12,13.1,14.1,15.1,16,17,18,19 B1,2,4,7,8.1,8.4,9.1,9.6,11 C1.1,2,3,4,6.1,7.1 D1,2,3,10
Principles OF Diseases And The Pharmacological Basis of Theraputics Course first year second semester	12	8 weeks	160	32point	128 points	A1,4,5,7,8,10,11,16,17,21,22,29,31,32,33,34,35,36,37,38,39,42,43,46,47,50,51,54,55,56,57,58,59,60,61,62 , B1,3,4 C1,2, D1,11
Introduction to Patient Care first year second semester	5 Points	vertical	65 2.5 points	0.5point	2 points	1.1,1.2,1.3,1.4,1.14 2.1,2.2,2.3,2.11 3.1,3.6

- **second year third semester**

Cardiovascular system	8	5 weeks	100 4 points	0.5 point	3.5 point
GIT,	8	5 weeks	100 4 points	0.5 point	3.5 point
Skin & Musculoskeletal	8	5 weeks	100 4 points	0.5 point	3.5 point
Introduction to Patient Care Block Advanced Physical Examination 2 Clinical Experiences 2 Advanced Medical Interviewing Clinical Procedures	2	vertical:	30 1 point	0.25 point	0.75 point
Elective	4	Vertical	60 2 points	0.5 point	1.5 points

- **second year fourth semester**

Respiratory and renal systems	9.5	7 weeks	143 5 points	1 points	3.5 points
Hematology	5	3 weeks	75 2.5 points	0.5 points	2 points
Health & illness in the community	9.5	7 weeks	143 5 points	1 point	3.5 points
Introduction to Patient Care Block Advanced Physical Examination 2 Clinical Experiences 2 Advanced Medical Interviewing Clinical Procedures	2	vertical:	30 1 point	0.25 points	0.75 points
elective 2	4	vertical: 4 hours/week/semester	60 2 points	0.5 point	1.5 points

Third year/ Fifth Semester

Neurosciences	12.5	8 weeks	162 6.5 points	I point	5 points
Endocrinology, Reproduction & Developmental Biology	12.5	8 weeks	162 6.5 points	I point	5 points
Evidence-Based Medicine - Fundamentals	2	vertical:	30 1 point	0.25 point	0.75 point
Investigation and Discovery/Scholarly Project Epidemiology	1.5	vertical:	22.5 0.75 Point	0.5 point 0.25 Point	1.5 points 0.50 Point

and data management					
elective 3	1.5	vertical:	22.5 0.75 Point	0.5 point 0.25 Point	1.5 points 0.50 Point

Third year/ Sixth Semester

Medicine 1 Introduction to general medicine, Hematology, Endocrinology, Nephrology, Third year/ Sixth Semester	10	6weeks	135 4.5 points	1 point	3.5 points
Surgery I Wound Healing, bleeding, shock, blood transfusion, haemostasis, surgical infections, postoperative complications, abdominal trauma emergencies, surgical anuria, surgical nutrition (enteral and parenteral)Surgery of head and neck, lymphatic system (3 weeks) Thyroid and Para thyroid, supra renal gland, abdominal walls and hernias, Breast. (4 weeks) Oncology (principles) .(one week) Third year/ Sixth Semester	13	8 weeks	195 6.5 points	1.5 points	5 points
Forensic Medicine and toxicology Third year/ Sixth Semester	6	4 weeks	90 3 points	0.5 point	2.5 point
Investigation and Discovery/Scholarly Project Epidemiology and data management Third year/ Sixth Semester	2	vertical:	30 1 point	0.25 point	0.75 point
elective 4 Third year/ Sixth Semester	2	vertical:	30 1 point	0.25 point	0.75 point

Fourth year: 35 weeks 65 points clinical phase (clinical rotations)

Medicine II a- Liver–biliary system (2	15	8 weeks#	195 6.5 points	1.5 points	5 points

weeks) b- Tropical medicine (2 weeks) c- Nutrition, GIT, (2 weeks) d- Rheumatology and clinical immunology (2 weeks) Fourth year	(3.5 tropical)				
Gynecology & Obstetrics Fourth year	18	10 weeks	250 9 points	2 points	6.5 points
Pediatrics. Fourth year	18	10 weeks	250 9 points	2 points	6.5 points
Physichatry Fourth year	4	3 weeks*	75 2.5 points	0.05 point	2 points
Surgery II Anesthesia, pain management ,intensive care, fluids and electrolytes and body response to trauma. Fourth year	4	2 weeks*	60 2 points	0.5 point	1.5 points
elective 5 Fourth year	3	vertical :	45 1.5 points	0.5 point	1 points
Family medicine (at end of year) Fourth year	3	2 weeks	45, 1.5 points	0.5 points	1.5 points

- Fifth year: 40 weeks/ 70points: clinical phase (clinical rotations and family medicine)

Ophthalmology# Fifth year	9	6weeks	135/4.5 points	1 point	3.5 points
Ear, Nose & Throat Fifth year	7.5	4 weeks	105/3.5 Points	0.5 points	3 points
Medicine III Clinical investigations (laboratory and infection control :2 weeks and radiology: 2 weeks) Fifth year	6.5	4 weeks	105/3.5 Points	0.5 points	3 points
Surgery IV cardiothoracic surgery, plastic surgery,Neurosurgery,Vascular surgery(one week each) Fifth year	6	4 weeks	105/3.5 Points	0.5 points	3 points
Surgery IV Orthopedics & trauma Fifth year	5.5	4 weeks	100/3 Points	0.5 points	3 points
Surgery IV Urology Fifth year	5.5	4 weeks	100/3 Points	0.5 points	3 points
Surgery III a GIT, Liver–biliary system, pancreas,	7.5	4 weeks	105/3.5 Points	0.5 points	3 points

abdomen and peritoneum Fifth year					
Medicine IVNeurology, Dermatology Fifth year	6.5	4 weeks	105/3.5 Points	0.5 points	3 points
Medicine IVcardiology, chest Fifth year	6.5	4 weeks	105/3.5 Points	0.5 points	3 points
Elective 6 Fifth year	2.5	vertical: 2 hrs/week first 15 weeks	23 1.25 points	0.25 points	1 points
Surgery IIIb # acute emergencies Fifth year	4	2 weeks	60, 2 points	0.5 points	1.5 points
Family medicine Fifth year	3	vertical: 2 ours/wee k 36 weeks	45, 1.5 points	0.5 points	2 points
Total	318 Points				

5- Program admission requirements

Registration to the faculty of Medicine requires the student to have the General Egyptian Secondary Education Certificate or equivalent certificates or degrees- approved by the Egyptian ministry of higher education with qualifying grades according to the guidelines put annually by the Ministry of higher education.

6- Regulations for progression and Program completion

1. First semester: 15 weeks
2. Second semester: 16 weeks
3. Third semester: 15 weeks
4. Fourth semester: 17 weeks
5. Fifth semester: 16 weeks
6. Sixth semester: 18 weeks
7. Fourth year: 35 continuous weeks
8. Fifth year: 40 continuous weeks

The five years of study for the Bachelor of Medicine and Surgery are divided into three levels (stages) and include the following:

- The first level: ((Principles level and includes the total semester (2,1)
- The second level: ((organ system level and includes the total classroom (5,4,3)
- The third level: (clinical level) and includes (semester 6, and the total of two academic years (5,4)

7- Methods of student assessments:

Assessment task	The assessed ILOs
Mid term examination (MCQs) 30%	-general transferable skills, intellectual skills,
Final written Exams (MCQs & SAQs) 45%	-knowledge intellectual skills
OSPE / OSCEexam 25%	- Practical skills, intellectual skills

Annex 3

Students', Alumni, and Stalk holder's Opinions

Evaluator	Tool	Sample
1- Senior students	Questionnaire	
2- Alumni	Questionnaire	
3- Stakeholders (Employers)	Questionnaire	
4-External Evaluator (s) 5-External Examiner (s)	Report Report	
5- Other		

PARAMETER	Agreement %
Program aims & ILOs	
Did the Program helped you to acquire skills needed to diagnose and manage the patients	62.5 acceptable 12.5 good
Does the current Program give you the skills needed to reach a provisional diagnoses	87.5
Are Sohag alumni motivated to increase their professional knowledge and skills	37
Does the teaching Program give the acceptable ethical behaviour	75
Does the current Program motivate the alumni for continuous medical education	87.5
Do Sohag alumni perform good communication with their patients	75 acceptable
Do Sohag alumni have computer skills needed for their work.	50
Do Sohag alumni perform team work	87.5
Can Sohag alumni react well to emergency	75
Can Sohag alumni reach a satisfactory preliminary diagnosis	87.5
Can Sohag alumni choose the proper diagnostic methods	75
Can Sohag alumni distinguish complicated cases above his own and establishment abilities	37.5
Do Sohag alumni perform community health education	37.5
Do Sohag alumni show scientific interest to widen their knowledge and study for post graduate degrees	87.5

Specifications of the Program BLOCKS

BLOCK Specifications of Principles of Studying Medicine for 1st year1 st semester. Undergraduates

Course Specifications of Principles of Studying Medicine for 1st year Undergraduates

Sohag University **Faculty of Medicine**

A-Basic Information:

Program on which the course is given: bachelor of medicine and surgery (M.B., B.Ch.).
Elements (major or minor) of the program: (undergraduate):
Departments offering the course: (Education development centre)
Academic year/level: 1st year, 1st semester.
Date of specification approval: .....
Θ Title: Principles of microscopic and macroscopic structures
Θ Code: ……..
Θ Credit points: 1
Θ Lecture: 8 hours
Θ Practical: 3 hours
Θ Student learning activities: hours {self directed learning (SDL), group discussion, seminars & quiz} 4 hours
Θ Total: 15 hours

Block Map of: Principles of studying medicine

Block	points	days/week	learning activities		
			contact hours/points	formative assessment/feedback	assignment
Principles of studying medicine	1	1 week	15hours 0.5 point		0.5 point

B- Professional Information

I- Block aims:

Θ Overall aim of the block:
The aim of this module is to prepare the new entrants to the Medical School to get acquainted with the study of medicine and help the students to become familiar with the learning environment in higher education emphasizing the principles of adult learning, the new learning modalities, and the use of English and applications of principles of medical terminology.

II- Intended Learning Outcomes:

At the end of this module, the students will be able to:
a) Knowledge and understanding:

a1. Recognize the basic principles of Adult Learning.
a2. Identify college policies and procedures.
a3. Recognize the role of Intended Learning Outcomes (ILOs) in directing the learning process.
a4. Identify the core competencies/ILOs expected to be achieved by the end of their undergraduate medical education.
a5. Discuss the concept and approaches of student-centered learning.
a6. Recognize the e-learning system of the Faculty and the Faculty communication and e-mailing system.
a7. Point out the word root from which a medical term is coined.
a8. Tell an appropriate medical term that can replace a long phrase.
a9. Apply the general rules of medical terminology to the study of different organ systems of the body.
a10. Identify common methods used for assessing student performance in medical education and how to respond appropriately.
a11. Identify different sources of stress experienced by medical students and possible coping strategies to alleviate stress.
a12. Recognize students' role in course and program evaluation.

b) Intellectual skills

b1. Determine their strengths and weaknesses in relation to personal study skills, using a specially designed questionnaire.
b2. Plan an approach to strengthen their problem areas.
B3. Construct a medical term using its basic units.

c) Professional and practical skills

c1. Demonstrate ability to present information to a group of colleagues at a basic starting level.
c2. Use automatic scoring sheet appropriately to solve an Objective Written Exam.
c3. Retrieve information and data from the Internet efficiently with more emphasis on medical portals.
c4. Use the Faculty e-learning portal in their study and communication with each other and with their professors.
c5. Apply the general rules of medical terminology to the study of the different organ systems of the body.

d) General and transferable skills

d1. Cooperate with his colleagues, tutors and teaching staff to accomplish group work duties effectively and solve issuing problems.
d2. Practice self and peer to peer appraisal and evaluation using a checklist.
d3. Practice the general rules of medical terminology to the study of the different organ&systems of the body.

d4. Prepare and deliver an effective PowerPoint presentation using appropriate medical terms.

Course content:

Topics to be Covered			
List of Topics		**No. of Weeks**	**Contact Hours**
A. Lectures			
1	Welcome from Dean and Vice dean	1st	
2	NARS, outline of the whole program	1st	
3	learning in higher education, adult learning, effective study skills	1st	1 hours
4	Student centered approaches used in the program/Techniques for Learning.	1st	1 hours
5	How to prepare and present assignment	1st	1 hours
1	Introduction to medical terminology	1st	1 hour
2	Pertaining to Medical Terminology	1st	1 hour
3	Prefixes Pertaining to Medical Terminology.	1st	1 hour
4	Suffixes Pertaining to Medical Terminology.	1st	1 hour
5	**Developing your academic writing skills**	1st	1 hour
1	Revisions and Exam	1st	1
TOTAL		**1 Weeks**	8
B. Practical Sessions			
1	How to prepare and present assignment	1st	1 hours
2	Techniques for Learning	1st	1 hours
1	**Developing your academic writing skills**	1st	1 hours
TOTAL		**1 Weeks**	3
Self Directed Learning (SDL)			1st
1	How to prepare and present assignment	1st	1hours
2	Techniques for Learning	1st	1 hours
1	**Developing your academic writing skills**	2nd	1 hour

2	• Self-assessment in medical terminology	2nd	1 hour
total			4 hours

Assignments/ learning activities:

number	title of activities	week number	..% of points
1	**SDL** 1	1st	
2	**SDL** 2	1st	
3	**SDL** 3	1st	
4	**SDL** 4	1st	

Course components (total contact hours and credits per semester):							
	Lecture	Practical	SDL	Tutorial (Discussion)	Seminars	Quiz	Total
Contact Hours	**8**	**3**	**4**	**0**	**0**	**0**	**15**
Credit							

4- <u>Teaching and learning Methods</u>

1- Lectures for knowledge and intellectual skill outcomes.

2- Practical sessions to gain practical skills .

3-Self directed learning (SDL) for the topics studied in lectures or related topics; including libraries, E learning (practical photographs and questions of different topics available online for student's assessments) and consulting professors for gathering of information.

5- Student assessment:

Assessment task	Proportion of Total Assessment
Mid term examination (MCQs)	30%
Final written Exams (MCQs & SAQs)	45%
OSPE exam	25%

<u>Student Assessment Plan</u>:

1- End of block written exam: 20% of total
2- End of block practical exam: 5% of total
3- Evaluation of portfolio: 5%
4- Final written exam: 45%
5- Final OSPE exam: 25%

6- List of text books and references:

1- Power point handout

2- ABC of Learning and Teaching in Medicine

Edited by

Peter Cantilon

Senior lecturer in medical informatics and medical education, National University of Ireland, Galway , Republic of Ireland

LINDA Hutchinson

Director of education and workforce development and consultant Paediatrician, University Hospital Lewishamand

DIANA WOOD

Director of Medical education, University of Cambridge School of Clinical Medicine, Addenbrookes Hospital, Cambridge 2003 BMJ Publishing Group

Facilities required for teaching and learning:

1-Data Show for power point presentations.
Computer clup in the Faculty with net Access
Libraries with available textbooks for gathering of information

Course Coordinator: Prof.Dr./ Moustafa Abd Elkhalek

Date:

BLOCK Specifications of Principles of microscopic and macroscopic structures for 1st year1 st semester. Undergraduates

BLOCK Specifications of Principles of microscopic and macroscopic structures for 1st year1 st semester for Undergraduate Medical Students

Sohag University **Faculty of Medicine**

Course Specifications:

A-Basic Information:

Program on which the course is given: bachelor of medicine and surgery (M.B., B.Ch.).

Elements (major or minor) of the program: (undergraduate):

Departments offering the course: Integrated (Anatomy and Histology)

Academic year/level: 1st year, 1st semester.

Date of specification approval: .....

- Θ Title: Principles of microscopic and macroscopic structures
- Θ Code: ……..
- Θ Credit points: 12
- Θ Lecture: 60 hours
- Θ Practical: 32 hours
- Θ Student learning activities: 64 hours {self directed learning (SDL), group discussion, seminars & quiz}
- Θ Total: 156 hours

Block Map of: Principles of microscopic and macroscopic structures

Block	points	days/week	learning activities		
			contact hours/points	formative assessment/ feedback	assignment
Principles of microscopic and macroscopic structures	12 points	7 weeks	156 hours; -60 lecture -32 practical -Student learning activities: 64 hours {SDL, group discussion, seminars & quiz}	1points	5points

B- Professional Information

I- Block aims:

Θ Overall aim of the block:

By the end of the block, the student will be able to: understand the main principles of studying human body in terms of gross anatomy, cytology and general histology and general embryology.

By the end of this block, the students are expected to be able to:

1) Describe basic anatomical knowledge.
2) Describe layers of dissection.
3) Describe basic anatomical knowledge about muscles, bones, joints and nerves.
4) Describe basic anatomical knowledge about cardiovascular system, respiratory system, lymphatic system, digestive system and urinary system.
5) Know about the methods of studying cells and tissues.
6) Recognize the reflection of the method used on the picture observed and become familiar with the various staining methods and their applications.
7) Have an appropriate background about the relationship between the structure of cell components with their functions.
8) Know basic information of chromosomal structure, cell cycle, cell development and cell death.
9) Know basic information about stem cells and tissue renewal.
10) Identify the structure and types of epithelial tissue.
11) Recognize the structure and types of connective tissue.
12) Describe the structure and types of cartilage and bone.
13) Describe basic embryological development starting from the process of gametogenesis, fertilization, implantation up to delivery.
14) Identify various developmental aspects of twins formation.
15) Describe the genetic basis of human development.

16) Outline the milestones of birth defects.
17) Enable the development and application of appropriate ethical principles, and communication skills.

Plans for developing and improving the course:

1) Continuous updating of the information, knowledge and skills included in the course through the continuous search for new knowledge and skills available in recent publications (books, researches, internet and others).
2) Continuous improvements in teaching methods to encourage the students to participate effectively in the various academic activities.
3) Continuous evaluation of the course content, students performance and establish plans accordingly.

II- Intended Learning Outcomes:

A- Knowledge

By the end of the course, students should be able to:

A1- Recognize the anatomical terms, use them correctly.

A2- Reproduce general anatomic criteria of internal organs

A3-Describe layers of dissection.

A4- List structures derived from fascia.

A5- Describe anatomical aspects of bones and cartilages**.**

A6- Define types of body joints and general joint structures.

A7- Define types of body muscles and general formula of muscles.

A8- Recall general structures of nervous, cardiovascular, lymphatic, respiratory, digestive and urinary system.

A9- Identify different types of microscopes &their functions.

A10- Describe various methods of staining cells and tissues.

A11- Describe the histological characteristics of normal cells.

A12- Describe the structure of plasma membrane.

A13- Define & list membranous organelles and describe their structure.

A14- List non-membranous organelles and describe their structure.

A15- Define and list the cell inclusions.

A16- Describe the nuclear components and identify their functions.

A17- State the normal structure and the method of studying chromosome.

A18- Define cell cycle and describe its phases.

A19- Define apoptosis and know its characteristic features.

A20- Define stem cells & recognize progenitor cells.

A21- Know the different rates of tissue renewal.

A22- Describe structural characteristics of epithelial tissue.

A23- Define basement membrane and mention its structure & function.

A24- Classify intercellular junctions & describe their structure.

A25- Recognize the structure & function of microvilli, stereocilia & cilia.

A26- Identify the types of covering & lining epithelium and their sites.

A27- Define & classify secretory epithelium.

A28- List the structural characteristics of connective tissue.

A29- Describe the connective tissue cells, fibers and ground substance.

A30- Recognize the main types of connective tissue.

A31- Recognize the general features and types of cartilage, describe the structure of chondrocytes, cartilage matrix & perichondrium.

A32- Describe the structure of bone cells, bone matrix, periosteum & endosteum, know the types of bone, and identify osteogenesis & bone growth at the epiphyseal plate.

A33- Identify the process of formation of human gametes.

A34- List stages of fertilization and zygot formation.

A35- State stages of implantation and formation of embryonic germ discs.

A36- Memorize different stages of embryonic development in utero.

A37- Describe different types of fetal membranes.

A38- List different types of human twins.

A39- Name common birth defects (the etiology, mechanism and clinical presentation of congenital malformations).

A40- Label types and sources of embryonic stem cells.

B-intellectual Skills

By the end of the course, students should be able to:

B1- Demonstrate the ability to gain dissection and practical skills guiding him to recognize and differentiate vessels, nerves and viscera of the body.

B2- Compare between different types of bones, cartilages, and muscles.

B3- Illustrate the general anatomical characters of internal organs.

B4- Demonstrate the uses of cell culture.

B5- Identify biopsies.

B6- Demonstrate the clinical correlations of different cell organelles.

B7- Discriminate clinical correlations of cell inclusions.

B8- Correlate between cell differentiation & cell cycle.

B9- Differentiate between cell death by apoptosis & necrosis.

B10- Determine the tissue's potential to regeneration.

B11- Correlate the histological structure and function of cells and tissues with clinical data.

B12- Recognize the functions of basement membrane.

B13- Identify the medical significance of intercellular junctions & apical cell specializations.

B14- Recognize changes of epithelium with chronic vitamin A deficiency.

B15- Identify the changes of epithelium in smokers.

B16- Identify abnormal growth of epithelium & acne.

B17- Demonstrate the clinical correlations of connective tissue cells.

B18- Identify clinical disorders related to collagen & elastic fibers.

B19- Discriminate methods of cartilage growth and repair.

B20- Demonstrate bone remodeling & repair.

B21- Categorize stages of fertilization and zygot formation.

B22- Demonstrate clinical correlates about chromosomes.

B23- Differentiate between the normal and abnormal sites of implantation.

B24- Explain abnormal Gametes.

B25- Identify time of Ovulation.

B26- Demonstrate infertility (male and female factors based on topics studied)

B27- Illustrate formation of embryonic germ discs and embryonic development.

B27- Distinguish different birth defects & embryonic stem cells.

B28- Identify Fetal membranes.

C- Psychomotor Skills

By the end of the course, students should be able to:

C1- Display anatomical aspects of bones and cartilages**.**

C2- Display general structures of joints, muscles, nervous, cardiovascular, respiratory, digestive and urinary system.

C3- Manipulate the different parts of the ordinary light microscope and know how to prepare tissue for microscopy.

C4- Identify the histological slides with the microscope efficiently.

C5- Use the microscope to differentiate between various types of stains used in studying the cells.

C6- Identify the normal variation in cell shape & cell size.

C7- Identify electron micrographs & diagrams of plasma membrane, cell organelles, nucleus & chromosomes.

C8- Identify rough endoplasmic reticulum, Golgi bodies, mitochondria, glycogen & fat.

C9- Use the microscope to differentiate between active & inactive nucleus.

C10- Identify and label diagrams of basement membrane, intercellular junctions & apical cell specializations.

C11- Use the microscope to differentiate between different types of covering and lining epithelium & secretory epithelium.

C12- Use the microscope to differentiate between main types of connective tissue.

C13- Use the microscope to differentiate between different types of cartilage.

C14- Use the microscope to differentiate between different types of bone.

C15- Identify the photographs (light and electron photographs) of various cells and tissues.

C16- Draw the structures they have seen in electron photomicrographs and seen by light microscope during practical classes.

C17- Construct stages of oogenesis, implantation and formation of embryonic germ discs, and embryonic development.

C18- Display different birth defects & embryonic stem cells.

D- General skills

By the end of the course, students should be able to:

D1- Practice the skill of self-learning.

D2- Demonstrate personal responsibility.

D3- Practice the skill of respect colleagues.

D4- Adhere the value of team work by acting in small group.

D5- Qualify adequate cooperation with his/her colleagues.

D6- Justify the efforts required to accomplish the tasks in specified time.

D7- Set the use of sources of biomedical information to remain current with advances in knowledge and practice.

D8- Display freely, keeping an ethical behavior

D9- Share in the work efficiently with the instruments and equipments of the department in a responsible manner keeping them intact and clean.

D10- Modify his capability to describe, discuss and solve problems.

D11- Reflect on and assess his/her performance using various performance indicators and information sources.

Course content:

Topics to be Covered			
List of Topics		**No. of Weeks**	**Contact Hours**
A. Lectures			
1	Overview and introduction to anatomy (A1,2)	1st	1 hour
2	Skin, Fascia/Muscles (A3, 4)	1st	1 hours
3	Bones, cartilage and joints (A5, 6, 7)	1st	2 hours
4	Nervous system (A8)	1st	2 hours
5	Cardiovascular, lymphatic and respiratory system (A8)	1st	2 hours
6	Digestive and urinary system (A8)	1st	2 hours
1	Histology and its methods of study A9,10	2nd	1 hour
2	Cytology: Plasma membrane A11, 12	2nd	1 hour
3	Cytology: membranous organelles A13	2nd	1 hour
4	Cytology: membranous organelles (continued) A13	2nd	1 hour
5	Cytology: non membranous organelles A14	2nd	1 hour
6	Cytology: cell inclusions A15	2nd	1 hour
7	Cytology /Nucleus A16	2nd	1 hour
8	Cytology: Structure of chromosome & karyotyping A17	2nd	1 hour
9	Cytology: Cell cycle &cell death A18, 19, B8,9	2nd	1 hour
10	Cytology: Stem cells and tissue renewal A20, 21, B10	2nd	1 hour
1	General Histology / Epithelium: Characteristic features & basement membrane A22,23 , B12	3rd	1 hour

2	General Histology / Epithelium: Intercellular junctions& apical cell specializations A24, 25	3rd	1 hour
3	General Histology: Covering &lining epithelium A26	3rd	1 hour
4	General Histology: Secretory epithelium & glands A27	3rd	1 hour
5	General Histology / Connective tissue: Cells A28, 29	3rd	1 hour
6	General Histology / Connective tissue: Fibers A29	3rd	1 hour
7	General Histology / Connective tissue: Ground substance &Types A29, 30	3rd	1 hour
8	General Histology: Cartilage A31 , B19	3rd	1 hour
9	General Histology / Bone cells, bone matrix, periosteum & endosteum A32	3rd	1 hour
10	General Histology: Types of bone Bone growth, remodeling &repair A32, B20	3rd	1 hour
1	The Chromosome Theory of Inheritance (A33)	4th	1 hour
2	Male reproductive System (A33) Spermatogenesis(A33)	4th	2 hour
3	Female reproductive System(A33) Oogenesis(A33)	4th	2 hour
4	**1st Week of Developm ent** Ovarian cycle- Ovulation(A33)	4th	1 hour
5	Fertilization(A34)	4th	1 hour
6	Cleavage-Blastocyst Formation(A33)	4th	1 hour
7	Uterus at Time of Implantation(A35)	4th	2 hour
1	**2nd Week of Development** Day 8-9(A35)	5th	1 hour
2	Day 11-13(A35)	5th	1 hour
3	**3rd Week of Development** Gastrulation and notochord formation (A35)	5th	1 hour
4	Further Development of the Trophoblast (A35)	5th	1 hour

5	**3rd to 8th Week (The Embryonic Period)** Derivatives of the Ectodermal Germ Layer- Neurulation (A36)	5th	2 hour
6	Derivatives of the mesodermal germ layer(A36)	5th	2 hour
7	Derivatives of the endodermal germ layer(A36)	5th	1 hour
8	External Appearance During the Second Month (A36)	5th	1 hour
1	**3rd month to birth (fetus and placenta)** Monthly changes-Time of birth (A36)	6th	1 hour
2	Placenta(A37)	6th	2 hours
3	Amnion, amniotic fluid and umbilical cord(A37)	6th	2 hours
4	Twins(A38)	6th	1 hours
5	Birth defects and prenatal diagnosis(A37)	6th	4 hours
1	Revisions and Exam	7th	
TOTAL		**7Weeks**	**60 hours**
B. Practical Sessions			
1	Demonstration of anatomical position, terms, different movements, skin, fascia and bones, joints (classifications of bones and joints, their general features, structure and functions - important joints of the body, their movements and the muscles producing these movements- Interpret normal radiological images of the bones and joints) (B1-C1&2-D2&3).	1st	2 hours
2	Demonstration of muscles, nerves, CVS, respiratory system, digestive system & urinary system. (B1-C1&2- D2&3)	1st	2 hours
1	Parts of ordinary microscope & how to use it General staining technique: Acidophilic &basophilic structures C3,4,5	2nd	2 hours
2	Cytology: Diagrams of plasma membrane, slides / diagrams of membranous organelles C6,7,8,16	2nd	2 hours
3	Slides / diagrams of non-membranous organelles &cell inclusions C7,8,16	2nd	2 hours
4	Slides /diagrams of nucleus and diagrams of chromosomes C7,9,16	2nd	2 hours

1	Slides /diagrams of simple & stratified epithelium, mucous, serous & mixed exocrine glands, diagrams of basement membrane, intercellular junctions & apical cell specializations C10,11,15,16	3rd	2 hours
2	Slides/diagrams of main types of connective tissue & labeled diagrams of connective tissue cells C12,15,16	3rd	2 hours
3	Slides /diagrams of different types of cartilage and labeled diagrams of chondrocytes C13,15,16	3rd	2 hours
4	Slides /diagrams of compact & cancellous bone, growing bone and labeled diagrams of osteoblasts, osteocytes & osteoclasts C14,15,16	3rd	2 hours
1	Museum and Audiovisual lap (B21-C17-D2&3).	4th	2 hours
2	Museum and Audiovisual lap (B21-C17-D2&3).	4th	2 hours
1	Museum and Audiovisual lap (C17-D2&3).	5th	2 hours
2	Museum and Audiovisual lap (C17-D2&3).	5th	2 hours
1	Museum and Audiovisual lap (C17-D2&3).	6th	2 hours
2	Museum and Audiovisual lap (B23-C18-D2&3).	6th	2 hours
1	**Revisions and Exam**	7th	
TOTAL		**7Weeks**	**32 hours**
Self Directed Learning (SDL)			
1	Lines of cleavage, sebaceous cyst, skin burns, fascia and infections (B1-D1,2,3&4).	1st	2hours
2	* Muscle tone, bone fracture and epiphyseal plate disorders, joint dislocation (B1&2). * Radiographic anatomy (B1, 2 3-D1,2,3&4).	1st	2 hours
1	-Gathering & interpretation of information from available resources. B11 -Student activities (Presentation, videos or reports) clarifying: • Uses of cell culture B4 • Biopsies. B5	2nd	1 hour

2	-Gathering & interpretation of information from available resources. B11 -Student activities (Presentation, videos or reports) clarifying: • Clinical correlations of endoplasmic reticulum, mitochondria, lysosomes & peroxisomes B6 • Clinical correlations of proteasomes & intermediate filaments B6 • Hemosiderosis B7	2nd	1 hour
1	-Gathering & interpretation of information from available resources. B11 - Student activities (Presentation, videos or reports) clarifying: ✓ Medical significance of tight junction, desmosome, microvilli & cilia. B13	3rd	1 hour
2	-Gathering & interpretation of information from available resources. B11 - Student activities (Presentation, videos or reports) clarifying: ✓ Epithelium in individuals with chronic vitamin A deficiency. B14 ✓ Epithelium in smokers. B15 ✓ Abnormal growth of epithelium B16 ✓ Acne B16 ✓ Role of mesenchymal cells in regenerative medicine B17 ✓ Role of fibroblasts in wound healing B17 ✓ Medical application about macrophages & plasma cells B17 ✓ Clinical disorders related to collagen & elastic fibers B18	3rd	1 hour

1	Clinical correlates about chromosomes (B22-D1, 2, 3&4) * Chromosomal abnormalities(numerical or structural) * Down syndrome, klinefelter syndrome, turner syndrome)	4th	2 hours
2	* Abnormal Gametes (B24-D1, 2, 3&4). * Detection of time of Ovulation (B25-D1, 2, 3&4). * Infertility (male and female factors based on topics studied) and IVF (B21-D1, 2, 3&4).	4th	2 hours
1	Abnormal Implantation (B23-D1, 2, 3&4).	5th	2 hours
2	* Teratogenesis Associated With Gastrulation(B27-D1, 2, 3&4). * Neural tube defect (B27-D1, 2, 3&4).	5th	2 hours
1	* Placental barrier, Erythroblastosis fetalis, fetal hydrops (B28-D1, 2, 3&4). * Amniotic bands (B28-D1, 2, 3&4).	6th	2 hours
2	*Anomalies associated with twins (B22-D1, 2, 3&4). * Prevention of birth defects (B22-D1, 2, 3&4).	6th	2 hours
1	Revisions and Exam	7th	
TOTAL		**7Weeks**	**20 hour**
	Group Discussion		
1	Lines of cleavage, sebaceous cyst, skin burns, fascia and infections (B1-D1,2,3&4).	1st	2 hours
2	* Muscle tone, bone fracture and epiphyseal plate disorders, joint dislocation (B1&2). * Radiographic anatomy (B1, 2 3-D1,2,3&4).	1st	2 hours
1	-Gathering & interpretation of information from available resources. -Student activities (Presentation, videos or reports) clarifying: • Uses of cell culture B4 • Biopsies. B5	2nd	2hours

2	-Gathering & interpretation of information from available resources. -Student activities (Presentation, videos or reports) clarifying: • Clinical correlations of endoplasmic reticulum, mitochondria, lysosomes & peroxisomes B6 • Clinical correlations of proteasomes & intermediate filaments B6 • Hemosiderosis B7	2nd	2hours
1	-Gathering & interpretation of information from available resources. - Student activities (Presentation, videos or reports) clarifying: ✓ Medical significance of tight junction, desmosome, microvilli & cilia. B13	3rd	2 hours
2	-Gathering & interpretation of information from available resources. - Student activities (Presentation, videos or reports) clarifying: ✓ Epithelium in individuals with chronic vitamin A deficiency. B14 ✓ Epithelium in smokers. B15 ✓ Abnormal growth of epithelium B16 ✓ Acne B16 ✓ Role of mesenchymal cells in regenerative medicine B17 ✓ Role of fibroblasts in wound healing B17 ✓ Medical application about macrophages & plasma cells B17 ✓ Clinical disorders related to collagen & elastic fibers B18	3rd	2 hours

1	Clinical correlates about chromosomes (B22-D1, 2, 3&4) * Chromosomal abnormalities(numerical or structural) * Down syndrome, klinefelter syndrome, turner syndrome)	4th	2 hours
2	* Abnormal Gametes (B24-D1, 2, 3&4). * Detection of time of Ovulation (B25-D1, 2, 3&4). * Infertility (male and female factors based on topics studied) and IVF (B21-D1, 2, 3&4).	4th	2 hours
7	Abnormal Implantation (B23-D1, 2, 3&4).	5th	2 hours
8	* Teratogenesis Associated With Gastrulation(B27-D1, 2, 3&4). * Neural tube defect (B27-D1, 2, 3&4).	5th	2 hours
9	* Placental barrier, Erythroblastosis fetalis, fetal hydrops (B28-D1, 2, 3&4). * Amniotic bands (B28-D1, 2, 3&4).	6th	2 hours
10	*Anomalies associated with twins (B22-D1, 2, 3&4). * Prevention of birth defects (B22-D1, 2, 3&4).	6th	2 hours
11	**Revisions and Exam**	7th	
TOTAL		**7Weeks**	**24 hours**

Seminars

number	title of lectures	week number	Contact hours
1	**Lectures of the** 1st week	1st	**2hours**
2	**Lectures of the** 2nd week	2nd	**1hour**
3	**Lectures of the** 3rd week	3rd	**1hour**
4	**Lectures of the** 4th week	4th	**2hours**
5	**Lectures of the** 5th week	5th	**2hours**
6	**Lectures of the** 6th week	6th	**2hours**
	……		

Formative assessment

number	Type	week number	hours
1	**Quiz of the** 1st week	1st	**2hours**
2	**Quiz of the** 2nd week	2nd	**1hour**
3	**Quiz of the** 3rd week	3rd	**1hour**
4	**Quiz of the** 4th week	4th	**2hours**
5	**Quiz of the** 5th week	5th	**2hours**
6	**Quiz of the** 6th week	6th	**2hours**
	……		

Assignments/ learning activities:

number	title of activities	week number	..% of points
1	**SDL & group discussion of the** 1st week	1st	
2	**SDL & group discussion of the** 2nd week	2nd	
3	**SDL & group discussion of the** 3rd week	3rd	
4	**SDL & group discussion of the** 4th week	4th	
5	**SDL & group discussion of the** 5th week	5th	
6	**SDL & group discussion of the** 6th week	6th	
	……		

Course components (total contact hours and credits per semester):							
	Lecture	Practical	SDL	Tutorial (Discussion)	Seminars	Quiz	Total
Contact Hours	**60**	**32**	**20**	**24**	**10**	**10**	**156**
Credit							

4- Teaching and learning Methods

1- Lectures for knowledge and intellectual skill outcomes.

2- Practical sessions to gain practical skills and using Practical book for drawing

3-Self directed learning (SDL) for the topics studied in lectures or related topics; including libraries, E learning (practical photographs and questions of different topics available online for student's assessments) and consulting professors for gathering of information.

4- Group discussion.

5- Seminars.

5- Student assessment:

Assessment task	Proportion of Total Assessment
Mid term examination (MCQs)	30%
Final written Exams (MCQs & SAQs)	45%
OSPE exam	25%

Student Assessment Plan:

6- End of block written exam: 20% of total
7- End of block practical exam: 5% of total
8- Evaluation of portfolio: 5%
9- Final written exam: 45%
10- Final OSPE exam: 25%

List of references (Recommended books)

1-Course Notes: Department undergraduate book of histology and Colored Atlas of Histology by staff members of histology Department

2- Essential Books: (Text Books):

Clinical Anatomy for Medical Students, Richard Snell., Williams & Wilkins.
Clinically Oriented Anatomy, By: Keith L. Moore
Human anatomy, Saladin.
Gray's anatomy for students.
Langman's Medical Embryology.
The developing human, Clinically oriented embryology by Keith Moore.
Junqueira's Basic Histology: Text and Atlas

3-Recommended Books:

Wheater's Functional Histology: A Text and Colour Atlas
Textbook of Histology: Gartner
Grant’s Atlas of Anatomy, Grant J.C.B., Williams & Wilkins.

4- Periodicals and Web Sites of histology.

Anatomical website on the Internet.
Web site of anatomy department

Facilities required for teaching and learning:

1- White boards.
2- Cadavers.
3- Microscopes.
4- Closed circuit Monitors in labs.
5- Data show for power point presentations.
6- Computer club in the faculty with net access.
7- Libraries with available textbooks for gathering of information.

Course Co-Coordinator	Prof.Dr. Eman Abo Daief
Head of Department Anatomy Histology	 Prof. Dr Mohamed Al Badry Prof. Dr/ Hekmat Osman

Date: 1/6/2017

BLOCK Specifications of Cell biology and functions for 1st year1 st semester. Undergraduates

Undergraduate Program & Courses Specifications

BLOCK Specifications of Cell biology and functions
for 1st year1 st semester. Undergraduates
Sohag University Faculty of medicine

Course Specifications

A-Basic Information:

Program on which the course is given: bachelor of medicine and surgery (M.B.,B.Ch.).
Elements (major or minor) of the program: (undergraduate):
Departments offering the course: IntegratedBiochemistry and physiology
Academic year/level: year 1 semester 1
Date of specification approval: 2018-2019
Θ Title: Cell biology, function and genetics
ΘCode: ……..
Θ Credit points: 12

Block	points	weeks	learning activities		
			contact hours/points	formative assessment/ feedback	assignment
Cell biology, functions, and genetic	12 points	7 weeks	147 hours; 74 hrs lecture 30 hrs practical	9 hrs	34 points

B- Professional Information

1- Course aims:

-Understand the cellular functions, transport through cell membrane, membrane potential, energy production and storage, basal metabolic rate, carbohydrate, protein and fat metabolism, maintain of body temperature and maintain and transmitting its genetic information.

2- Intended Learning Outcomes from the course:

Express the ILOs of the course in terms of:

A- Knowledge and understanding

Upon completion of the course students should be able to:

A1- Define and know the meaning of general human physiology and identify composition of different body fluid compartments.

A2- Define homeostasis, and homeostatic control systems. Describe briefly the different forces that control exchange of fluids between plasma and interstitial fluid

A3- Describe functions of various cell organelles and characteristics and functions of cell membrane, different mode of transport through cell membrane, osmosis and osmotic pressure. Describe membrane potential and action potential.

A4-Describe briefly energy balance and control of body temperature

A5- List the structure and functions of the different classes of dietary components and body biomolecules and their derivatives.

A6. Identifybasics of biochemical reactions.

A7- Describe the central pathways that provide living organisms with energy.

A8- List the terms of reactive oxygen species, and xenobiotics and their harm to the human body.

A9- Express detailed information regarding the flow of genetic information in human body.

A10- Define cell cycle events, terms of apoptosis, oncogene, tumour markers, monogenic and complex genetic disorders.

B- Intellectual skills

B1- Explain the effects of different physiological factors on the body fluids volume e.g. gender, age and bod mass index. Define isotonic, hypotonic, hypertonic solutions. Name the common intravenous fluids used in clinical practice and their composition. Edema; intracellular and extracellular edema.

B2- Explain the consequences of the failure to maintain homeostasis and give examples.

B3- Compare different mechanism of transport of ions and molecules through cell membrane: diffusion; simple and facilitated, osmosis. Primary active transport; characteristics and importance of active transport. Secondary active transport (co-transport and counter – transport) and give examples.

B4-Judge food intake and body temperature and explore abnormalities.

B5- Correlate the outcome of deficiency of dietary components, and abnormal biomolecules structure/ formation.

B6- Explain how enzyme activity is regulated.

B6- Explain regulation and integration of the major metabolic pathways.

B7- Illustrate examples where defects in biochemical processes result in disease, and predict potential outcomes of biochemical defects.

B8- Explain mechanisms that regulate expression of genetic information.

B9- Distinguish consequences of DNA mutation, and cell cycle disturbances.

C- Professional skills

C1- Measure osmotic fragility & haematocrit value.

C2- Measure nerve conduction velocity.

C3- Measure metabolic rate. Measurement of body temperature.

C4- Display safe laboratory practice.

C5- Work in laboratory tutorials, exercises, and biochemical case scenarios.

C6- Handle techniques and procedures commonly utilized in the field of medical biochemistry and understand its principles.

C7- Manipulate assay of commonly used diagnostic enzymes.

C8- Identify laboratory reports.

D- General and transferable skills

Skills of a general nature, which can be applied in any subject area, including: written and oral communication, the use of new technological tools, ICT, group working, problem solving, management …etc.

D1-Use information by all means, including electronically;

D2- Present information clearly in written, electronic and oral forms, and communicates ideas and arguments effectively

D3- Organize time and resources effectively and set priorities

D4- Discuss their work and that of others using constructive feed-back.

3- Course content:

Physiology schedules

1. Lectures Topics of Physiology

Number	Title of lectures	ILOs	Week number	Contact hours
1, 2	Introduction to human physiology & body fluid compartments.	A1.1; B1.1	1st	2
3, 4	Homeostasis and homeostatic control systems	A1.2; B1.2	1st	2
5, 6	Functions of various cell organelles and cell membrane Transport through cell membrane	A3.1; A3.1	2nd	2
7, 8	Transport through cell membrane	B3.1	2nd	2
9, 10	Transport through cell membrane	B3.2	3rd	2
11, 12	Membrane potential and action potentials	A3.2	3rd	2
13, 14	Membrane potential and action potentials	A3.1	4th	2
15, 16	Metabolic rate, energy input and output; Energy balance; Control of food intake.	A4.1; B4.1; B4.2	4th	2
17, 18	Obesity and anorexia nervosa, Mechanism of heat gain and heat loss.	B4.3; B4.4	5th	2
19, 20	Control of body temperature Abnormalities as hypothermia, fever, heat stroke	A4.2; B4.5	5th	2
	REVISION AND EXAM		7th	NA
	Total 5weeks			

2. Practical session topics of physiology

Number	Title of practical session	ILOs	Week number	Contact hours
1	Osmotic fragility & hematocrit value	C1.1	1st	2
3	Nerve conduction velocity	C2	3rd	2
5	Measurement of metabolic rate	C3	5th	2
6	Measurement of body temperature	C3	6th	2
7	Revision and Exam		7th week	
	Total 8 hours			

3. Case study of Physiology (during lectures time).

number	Title of case study	ILOs	week number	Contact hours
1	Case of water imbalance as dehydration	B1	1st	1
2	Case related to haemolysis	B3	3rd	1
3	Case of obesity & anorexia nervosa	B4	4th	1
4	Case of fever, heat stroke, hypothermia	B4	5th	1
	Total 4 hs			

4. Self-directed learning (SDL) of Physiology

Number	Title	ILOs	Week number	Contact hours
1	Functions of different electrolytes and effect of disturbance in their levels.	B3; D1-4	2nd	2
3	Hormones secreted by adipose tissues; Mechanism of fever and possible harmful effects of rising of body temperature	B4, D1-4	4th	2
	Total 4 hours			

Medical Biochemistry- Topics

1- Lectures of Biochemistry

Number	Title of lectures	ILOs	Week-number	Contact hours
	I. **Metabolic Fuels, Dietary Components and major body compounds**			
1,2	Biochemistry of amino acids and proteins structure function relation	A5,B5	1st	2
3,4	Biochemistry of dietary, functional and structural carbohydrates	A5, B5	1st	2
5,6	Biochemistry of dietary, functional and structural lipids	A5, B5	1st	2
7,8,9	Overview of Vitamins and minerals	A5, B5	1st	3
	II. **Concepts of Biomedical Reactions and Enzymology**			
10-15	Biochemistry and clinical enzymology	A6, B6	2nd	6
	III. **Cellular Metabolism & Bioenergetics**			
16	ATP as energy currency of the cell, oxidative phosphorylation and respiratory chain	A7, B7	2nd	1
17	Glucose as a source of ATP; glycolysis	A7, B7	2nd	1
18	Role of pyruvate in integration of metabolism of different foodstuffs	A7, B7	2rd	1
19	Tricarboxylic aid cycle	A7, B7	3rd	1
20	Assimilation of dietary fat (B-oxidation of fatty acids)	A7, B7	3rd	1
21	Ketogenesis & ketolysis	A7, B7	3rd	1
22	Storage of glucose: glycogen breakdown and synthesis	A7, B7	3rd	1
23	HMP shunt	A7, B7	3rd	1
24	Use of other monosaccharides	A7, B5, B8	3rd	1
25	Gluconeogenesis and Maintenance of Blood Glucose Levels	A7, B7	3rd	1
26	Synthesis of Fatty Acids, and Triacylglycerols	A7, B7	3rd	1
27	Lipoproteins	A7, B8	3rd	1
28	Amino acid metabolism: Transamination, and amino acid integration in energy production Fate of Amino Acid Nitrogen	A7,B5, B7, B8	4th	1
29	Amino acids as source of energy	A7, B7	4th	1
30	Amino acid derived biomolecules I	A7, B7	4th	1
	IV. **Integration, regulation and disturbances of metabolism**			

31,32	Integration and regulation of metabolism	A7,B7	4th	2
33,34	Perturbations of Energy Metabolism: Obesity and Diabetes Mellitus	A7, B8	4th	2
35	Inborn errors of lipid and carbohydrate metabolism	A7,B8	4th	1
36	Inborn errors of protein metabolism	A7, B8	4th	1
	V. **Metabolism of Oxygen free radicals and xenobiotics**			
37	Oxygen Toxicity and Free Radical Injury	A8, B8	5th	1
38	Metabolism of xenobiotics	A8, B8	5th	1
	VI. **Molecular and medical genetics**			
39,40	Purine and Pyrimidine Metabolism	A9, B8	5th	2
41	DNA structure and organization	A9,B9	5th	1
42	Define replication, list its requirements and describe its main steps	A9,B9	5th	1
43	Describe the general structure of RNA & name its different types with the function of each type	A9,B9	5th	1
44	Gene expression I: transcription	A9,B9	5th	1
45	Posttranscriptional modification of RNA	A9,B9	5th	1
46	Gene expression II: protein synthesis (translation)	A9,B9	6th	1
47	Posttranslational modifications; protein folding and protein targeting	A9,B9	6th	1
48	Regulation of gene expression	A9,B9	6th	1
49	DNA damage and repair	A10, B10	6th	1
50,51	DNA mutation & genetic diseases	A9, B10	6th	2
52-54	Cell cycle, apoptosis and cancer biology	A10, B10	6th	3
	REVISION AND EXAM		7th	NA
	Total 7weeks			

2. Medical Biochemistry-Practical Sessions

Number	Title of practical session	ILOs	Week-number	Contact hours
1	Basic practices in medical biochemistry laboratories.	C4, C5	1st	2
2	Measuring units in clinical chemistry & Principles of Photometry and spectrophotometry	C5, C6	1st	2
3	Blood, plasma and serum Estimation of protein concentration in different body fluids	C5,C6, C8	2nd	2
4	Clinical enzymology	C5,C7,C8	2nd	2
5	Estimation of glucose concentration in the blood and urine and its diagnostic importance.	C5,C6,C8	3rd	2
6	Oral glucose tolerance test	C5,C6,C8	3rd	2
7	Detection of ketones in the urine and explain its diagnostic importance	C5,C6,C8	4th	2
8	Lipid profile	C5,C6,C8	4th	2
9	Uric acid estimation	C5,C6,C8	5th	2
10	Plasma protein electrophoresis,	C5,C6,C8	5th	2
11	DNA Extraction/Gel Electrophoresis	C5, C6	6th	2
12	Polymerase-chain reaction (PCR)	C5,C6	6th	2
13	Revision and exams		7th	NA
	Total 24h			

3. Medical Biochemistry -Case Study

Number	Title of case study	ILOs	Week-number	Contact hours
1	1.1 Case Vegetarian diet	A5, B5 D1,2,3,4	1st	1
	1.2 Old Male with Slowly Progressive Memory Impairment (protein precipitation in Alzheimer disease)	A5, B5 D1,2,3,4	1st	1
2	Case of megaloblastic anaemia	A5, B5 D1,2,3,4	2nd	2
3	Case of type II diabetes	A7, B7,8 D1,2,3,4	3rd	2
4	Case Anaerobic metabolism	A7, B7,8 D1,2,3,4	4th	2
5	5.1 Case of Ornithine Carbamoyl Transferase Deficiency	A6,7, B7,8 D1,2,3,4	5th	1
	5.2 Case of phenylketonuria	A6,7, B7,8 D1,2,3,4	5th	1
6	Case Sickle cell anaemia	A5,9,B9,10 D1,2,3,4	6th	2
	Total 12 hrs			

4. Medical Biochemistry-self-directed learning (SDL)

Number	Title	ILOs	Week-number	Contact hours
1	Methods of protein separation, and structure function assessment	A5 D1,2,3,4	1st	2
2	Methotrexate and folate metabolism (folic acid deficiency)	A5, B5,6 D1,2,3,4	2nd	2
3	3.1 Metabolism of ethanol and its toxicity	A7,B7 D1,2,3,4	4rd	1
	3.2 Alternative fatty acid oxidation pathways			1
4	Lactose and fructose intolerance	A7,B5,B8 D1,2,3,4	4th	2
5	5.1 Glycolysis in cancer	A9,10,B9,B10 D1,2,3,4	5th	1
	5.2 Genetics of breast cancer, role of tumor suppressor genes (BRCA) genes			1
6	Nutrigenomics & nutrigenetics	A9,10,B9,B10 D1,2,3,4	6th	2
	Total 12 hs			

4- Teaching and learning methods:

1- Lectures for knowledge and intellectual skill outcomes.

2- Practical sessions to gain practical skills and using Practical book for drawing

3-Self-directed learning (SDL) for the topics studied in lectures or related topics; including libraries, E learning (practical photographs and questions of different topics available online for student's assessments)and consulting professors for gathering of information.

4- Tutorials and group discussion.

5- Student assessment:

Assessment task	Proportion of Total Assessment
Mid term examination (MCQs)	30%
Final written Exams (MCQs & SAQs)	45%
Practical exam	25%

6- List of text books and references:

a- Lectures notes: When notes are available, specify whether they are prepared in the form of a book authorized by the department or are handed out to the students part by part.

b- Essential books (Text books):

Reference books for physiology:

1. William F Ganong. Review of Medical Physiology. 24th edition. Mc Graw Hill, 2015.

2. Guyton & Hall. Textbook of Medical Physiology. 12th edition, Saunders, 2016.

3. Lauralee Sherwood. Human physiology from cells to systems. Eighth edition, Thomson brooks / Cole, 2016.

4. Vander, Sherman, Lucianos, Eric P Widmaier, Hershl Raff, Kevin T Strang. Human physiology (the mechanisms of body function). Mc Graw hill, 2013.

Reference books for biochemistry:

A: Lectures and case studies

1. Marks' Basic Medical Biochemistry: A Clinical Approach, 2nd Edition
2. Lippincott's Illustrated Reviews Biochemistry, 6 E
3. Essentials of Medical Biochemistry, With Clinical Cases Second edition Bhagavan and Chung-Eun Ha

B: **Practical and case study**

1. Principles and techniques of biochemistry and molecular biology, seventh edition.
2. Clinical biochemistry, fifth edition
3. Biochemistry laboratory , second edition
4. Electrophoresis in practice, fifth edition
5. Case File, Biochemistry
6. Core Clinical Cases In Basic Biomedical Science

c- General references, journals, periodicals, newspapers, web sites, which enrich the learning process should also be listed.

Medical physiology Journals

1. Physiological review.
2. American journal of physiology

7- Facilities required for teaching and learning:

The facilities include: appropriate teaching accommodation, including teaching aids, laboratories, laboratory equipment, computers etc., facilities for field work, site visits etc.,which are necessary for teaching the course.

Course Coordinator: Dr / Hoda Mostafa.

Head of Department:

Biochemistry: Dr / Nagwa Ahmed

Physiology :Dr/ Hoda Mostafa

Date: 1/6/2017

BLOCK Specifications of Patient, Physician & Society for 1st year1st semester. Undergraduates

Block specification

A-Basic Information:

Program on which the course is given: bachelor of medicine and surgery (M.B., B.Ch.).

Elements (major or minor) of the program: (undergraduate):

Departments offering the course: vertical block.

Academic year/level: 1st year, 1st semester,

Date of specification approval:

Θ Title: Introduction to patient care

Θ Code: ……..

Θ Lecture: 65 hours

1-Block Map of: vertical, "Patient, Physician & Society (PPS)"themes) first year first semester

Block	points	days/week	learning activities		
			contact hours/points	formative assessment/feedback	assignment
Patient, Physician & Society: Introduction to Being a Physician Ethics, Law &Professionalism Behavioral Medicine	5points	Vertical	65 2.5 points	0.5 Points	2 points

B- Professional Information

I- Block aims:

Θ Overall aim of the block:

By the end of the block, the student will be able to take informative history, perform physical examination and do some clinical procedures.

II- Intended Learning Outcomes:

1. Summary of the main learning outcomes for students enrolled in the block:

By the end of this block, the students are expected to be able to:

1) Take and record a structured, patient centered history.
2) Adopt an empathic and holistic approach to the patients and their problems.
3) Assess the mental state of the patient.
4) Perform appropriately timed full physical examination of patients appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive**.**
5) Prioritize issues to be addressed in a patient encounter.
6) Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice**.**
7) Adopt strategies and apply measures that promote patient safety.
8) Perform diagnostic and intervention procedures2 in a skillful and safe manner, adapting to unanticipated findings or changing clinical circumstances.
9) Respect patients' rights and involve them and /or their families/careers in management decisions**.**
10) Adopt suitable measures for infection control.
11) Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.
12) Adhere to the professional standards and laws governing the practice, and abide by the national code of ethics issued by the Egyptian Medical Syndicate.
13) . Respect the different cultural beliefs and values in the community they serve.
14) Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural, ethnic backgrounds, or their disabilities**.**
15) Ensure confidentiality and privacy of patients' information.
16) . Recognize basics of medico-legal aspects of practice, malpractice and avoid common medical error**.**
17) Recognize and manage conflicts of interest**.**
18) 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.

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

20) Recognize the important role played by other health care professions in patients' management.

21) 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**.**

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

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

24) Communicate effectively using a written health record, electronic medical record, or other digital technology.

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

26) Recognize own personal and professional limits and seek help from colleagues and supervisors when necessary.

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

28) Demonstrate accountability to patients, society, and the profession.

29) Regularly reflect on and assess his/her performance using various performance indicators and information source**.**

30) Develop, implement, monitor, and revise a personal learning plan to enhance professional practice**.**

31) Identify opportunities and use various resources for learning.

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

2. Plans for developing and improving the course:

4) Continuous updating of the information, knowledge and skills included in the course through the continuous search for new knowledge and skills available in recent publications (books, researches, internet and others).
5) Continuous improvements in teaching methods to encourage the students to participate effectively in the various clinical activities.
6) Continuous evaluation of the course content, students performance and establish plans accordingly.

3. ILOs of the block:

A- Knowledge

By the end of the course, students should be able to:

A1- Recognize basics of medico-legal aspects of practice, malpractice and avoid common medical errors.

A2- Recognize basics of medico-legal aspects of practice, malpractice and avoid common medical errors.

A3- 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

A4- Explain normal human behavior and apply theoretical frameworks of psychology to interpret the varied responses of individuals, groups and societies to disease.

B-Cognitive Skills

By the end of the course, students should be able to:

B1- Taking informative history.

B2- Measuring body temperature
B3- Measuring pulse rate, respiratory rate and blood pressure
B4- Anthropometric Measurements and assessment of nutritional status.

B5- Chest examination**.**

B6- Heart examination**.**

B7- Abdominal examination**.**

B8- Locomotor system examination

B9- Nervous system examination**.**

B10- Examination of the jugular veins**.**

B11- Ear examination
B12- Throat examination**.**

B13- External Eye and fundus examination.
B14- Breast examination.
B15- Examination of the thyroid gland.
B16- Lymph nodes examination.
B17- PV examination.
B18- Assessment of uterine fundus level in pregnancy.

C- Psychomotor Skills

By the end of the course, students should be able to:

C1- venipuncture and collect blood samples.

C2- Inserting a cannula into peripheral veins.

C3- Establishing peripheral intravenous access and setting up an infusion; use of infusion devices.

C4- Giving intramuscular, subcutaneous, intradermal and intravenous injections.

C5- Suturing of superficial wounds.

C6- Performing cardiopulmonary resuscitation and basic life-support.

C7- Performing and interpreting basic bedside laboratory tests.

C8- Performing and interpreting ECG.

C9- Managing an electrocardiograph (ECG) monitor.

C10- Taking swabs for different diagnostic purposes.

C11- Using a nebulizer for administration of inhalation therapy.

C12- Performing male and female bladder catheterization.

C13- Administering basic oxygen therapy.

C14- Wound care and basic wound dressing.

C15- Managing Blood transfusion.

C16- Inserting a nasogastric tube..

C17- Administering local anesthetics.

C18- Performing the procedure of normal labor

D- Interpersonal Skills &Responsibility

By the end of the course, students should be able to:

D1- Acquire the skill of self learning.

D2- Build up personal responsibility.

D3- Acquire the skill of respect colleagues.

D4- Appraise the value of team work by acting in small group.

D5- Show adequate cooperation with his/her colleagues.

D6- Judge the efforts required to accomplish the tasks in specified time.

D7- Verify the use of sources of biomedical information to remain current with advances in knowledge and practice.

D8- Display freely, keeping an ethical behavior

D9- Share in the work efficiently with the instruments and equipments of the department in a responsible manner keeping them intact and clean.

D10- Improve his capability to describe, discuss and solve problems.

4. Contents

1. Lectures Topics of Medical Ethics

Number	Title of lectures	ILOs	Week number	Contact hours
1.	Introduction on medical ethics and	A1.1; B1.1	Vertical	2h

	medical laws regulate medical practice			
2.	Obligations of Physicians towards patients, colleagues and community	A1		2h
3.	Legitimacy of medical work, consent its types and requirements	A3.1; A3.1		2h
4.	Malpractice and Medical responsibility	A3,B1, C1		2h
5.	Professional secrecy (Confidentiality)	A2,B2		2h
6.	Ethics and law of organ transplantation, intersex and euthanasia	A4,C1		2h
7.	Ethics in internal medicine, pediatric, Surgery and women health	A4,C2		2h
8.	Disclosing medical errors to patients.	A3,C1,C3		2h
9.	Safety procedures during clinical examination	A6		2h
10.	Ethics in Medical research on human and animals.	A5		2h
11.	Patients' rights in making decision with doctors	A7		2h
12.	Ethics and professionalism. Beneficence and non – maleficence for patients and doctors	A7		2h
	Total			24h

1. Lectures Topics of PSYCHIATRY

Number	Title of lectures	ILOs	Week number	Contact hours
1.	Life-span development Mental development, the life cycle, Geneenvironment interaction	A1, C2	Vertical block every Thursday from 10am-	3h

2.	Learning Classical conditioning, Operant conditioning, Cognitive learning, Social learning (observation and imitation) ,Brain neurotransmitters	A1,2		1h
3.	Individual differences Personality , Theories of personality, The Big Five , Intelligence , Assessment of personality and intelligence	A2, A3,B3		3h
4.	Theories of behavior modification Motivation, Self-efficacy, Multiple-theory integration model	A1, A2, A6, B1		2h
5.	Emotions Definition of emotion and its components , Disorders of emotions	A2,A7		1h
6.	Perception Definition of perception and its disorders	A7,C1		1h
7.	Perception Definition of perception and its disorders	A7,C1		1h
8.	Thinking Definition and types of thinking and its disorders	A7,C2		1h
9.	Memory Definition of types of memory and its Disorders	A7, C1,C3		2h
10.	Health communication The spread of public health and medical information Doctor-patient communication, communication	A 5,A4, B1		3h

	between medical practitioners			
11.	Stress (psychological) Stressors	A 5,A2, A6,C1		2h
12.	Stress (environmental) and health Workplace stress, Other kinds of stress (childhood stress, parenting stress, etc.)	A1,A2,A6,C1		2h
13.	Interpersonal relationships Needs and conflict, Social adjustment, Interpersonal communication	A4,A5,A7		3h
	Total			24h

4- Teaching and learning Methods

1- Lectures for knowledge and intellectual skill outcomes.

2- Practical sessions to gain practical skills and using Practical book for drawing

3-Self directed learning (SDL) for the topics studied in lectures or related topics; including libraries, E learning (practical photographs and questions of different topics available online for student's assessments) and consulting professors for gathering of information.

5- Student assessment:

Assessment task	Proportion of Total Assessment
Mid term examination (MCQs)	30%
Final written Exams (MCQs & SAQs)	45%
OSPE exam	25%

Student Assessment Plan:

1- End of block written exam: 20% of total
2- End of block practical exam: 5% of total
3- Evaluation of portfolio: 5%
4- Final written exam: 45%
5- Final OSPE exam: 25%

List of references (Recommended books)

BLOCK Specifications of Medical Microbiology and Medical Parasitology for 1st year2nd semester. Undergraduates

Undergraduate Program & Courses Specifications

BLOCK Specifications of Medical Microbiology and Medical Parasitology for 1st year2nd semester semester. Undergraduates

Sohag University **Faculty of Medicine**

Course title: Infection and immunity

Code:

Program on which the course is given: bachelor of medicine and surgery (MBBS).

Departments offering the course: Medical Microbiology and Immunology , Medical Parasitology departments

Academic year/level:1st year – 2nd semester

Date of specification approval:

Credit points: 12.5

Block	points	days/week	learning activities		
			contact hours/points	formative assessment/feedback	assignment and other home and self learning (portfolio based evidence)t
Infection and immunity	12.5	8 weeks	162 6.5 points	0.5point	5.5 points

OVERALL AIM OF THE BLOCK

This block aims to provide students with foundations of bacteriology, virology, mycology, immunity and parasitology.

Course Learning Outcomes

A. Knowledge:

A1- State the principle of basic microbiology

A2- Memorize the microorganism morphology

A3- Recall bacteria growth requirements and replication.

A4- List genotypic variations and recombinant DNA technology

A5- Recall bacterial pathogenesis

A6- Describe different methods of sterilization

A7- Recognize proper selection of antimicrobials.

A8- Recall general knowledge in the field of viral and fungal diseases.

A9- Define various contributors in the immune system, innate and acquired immunity.

A10- Identify the role of the immune system against microbial infection.

A11- State the principles of immunization.

A12- Recall the principals of immunopathology

A13- Define the different terms of medical parasitology

A14- State parasitism and host-parasite relationship.

A15- List the different types of hosts.

A16- List the sources of parasitic infections.

A17- Memorize the methods of infection of common parasites.

A18- Recall the infective and diagnostic stages of common parasites.

A19- Discuss principles of immunoparasitology.

B. Intellectual Skills

B1- Differentiate the microorganism morphology

B2- Explain genotypic variations and recombinant DNA technology

B3- Compare between the different sterilization methods.

B4- Select the proper antimicrobials.

B5- Explain the laboratory diagnosis of viral diseases

B6- Demonstrate the laboratory diagnosis of fungal diseases

B7- Explain the role of immune system in health and disease

B8- Demonstrate different types of parasitic infections.

B9- Explain host-parasite relationships.

B10- Differentiate between the infective and diagnostic stages of different parasites

B11- Interpret the immune response to the parasitic infection

C. Psychomotor skills

C1- Handle the microscope in microbiology and parasitology

C2- Identify different bacteria and fungi under the microscope

C3- Manipulate the bacterial isolates into pure colonies with identification.

C4. Identify antigen-antibody reaction in blood grouping , compatibility testing and disease diagnosis.

C6- Identify the infective and diagnostic stages of common parasites under microscope

C7- Operateroutine techniques used in medical parasitology.

D General Skills

D1-Practice the value of teamwork by acting in small group.

D2- Develop adequate cooperation with his/her colleagues.

D3- Arrange the efforts required to accomplish the tasks in specified time.

D4- Practice effectively using a written health record, electronic medical record, or other digital technology.

D5- Describe his/her work and that of others using constructive feedback.

D6- Present regular reflection on and assess his/her performance using various performance indicators and information sources.

D7- Initiate a personal learning plan to enhance professional practice

D8- Identify opportunities and use various resources for learning.

D9- Integratein inter-professional activities and collaborative learning to continuously improve personal practice and contribute to collective improvements in practice.

D10- Organize learning time and resources and set priorities

4. Contents

	ILOs	List Lectures	No. of Weeks	Contact Hours
1.	A.1	Introduction to microbiology	1st	1hr
2.	A.2, B2	Bacterial structure	1st	1hr
3.				1hr
4.	A.3	Bacterial growth	1st	1hrs
5.	A.4, B2	Bacterial genetics	1st	1 hr
6.				1 hr

7.	A.3	Bacterial replication	1st	1 hr
8.	A.5	Bacterial pathogenesis- part I	1st	1 hr
9.	A13.1,A 14.1, A 15.1, B 9.1	Introduction to parasitology I(definitions and terminology)-part I	1st	1hr
10.	A13.1,A 14.1, A 15.1, B 9.1	Introduction to parasitology I(definitions and terminology)-part II	1st	1 hr
11.	A.5	Bacterial pathogenesis- part II	2nd	1hrs
12.	A.7	Antimicrobial chemotherapy	2nd	1hr
13.				1hr
14.	A.8	Viral structure and classification	2nd	1 hr
15.				1 hr
16.	A.8	Viral genetics	2nd	1 hr
17.	A.8	Interactions between viruses	2nd	1 hr
18.	A.8	Viral life cycle	2nd	1hrs
19.	A 16.1, B 8.1, B 9.1	Introduction to parasitology II (methods of infection and stages)	2nd	1hr
20.	A 17.1, A 18.1, B8.1,B9. 1	Introduction to Platyhelminthes	2nd	1 hr
21.	A.8	Viral life cycle	3rd	1hr
22.	A.8	Viral pathogenesis	3rd	1 hr
23.				1 hr
24.	A.8	Viral therapy	3rd	1 hr
25.				1 hr
26.	A.8	Fungal structure	3rd	1 hr
27.	A.8	Fungal reproduction	3rd	1hrs
28.	A.8	Fungal diseases	3rd	1 hr
29.	A14.2, A18.2, A17.2 B8.2, B9.2	Introduction to Platyhelminthes	3rd	1hr
30.			3rd	1hr

31.	A.8	Antifungal agents	4th	1 hr
32.	A9, A10, B7	Introduction and Innate immunity	4th	1hr
33.				1hr
34.				1hr
35.	A.9 A.10, B7	Complement	4th	1hr
36.				1 hr
37.	A.9, A.10, B7	Introduction to Adaptive immunity	4th	1hr
38.				1 hr
39.	A14.3, A17.3, A18.3 B8.3, B9.3	Introduction to Nematodes	4th	1 hr
40.			4th	1 hr
41.	A.9 A.10, B7	Antigens	5th	1 hr
42.	A.9 A.10, B7	Major histocompatibility complex	5 th	1hr
43.	A.9, A.10, B7	Antigen presenting cells	5th	1 hr
44.				1 hr
45.	A.9, A.10, B7	B cells	5th	1hr
46.				1hr
47.				1 hr
48.				1 hr
49.	A14.4, A17.4, A18.4 B8.4, B9.4	Introduction to Protozoa	5th	1 hr
50.			5th	1 hr
51.	A.9, A.10, B7	T-cells	6th	1hr
52.				1hr
53.				1hr
54.	A.11, B7	Immunization	6th	1hrs
55.	A9 A10, B7	Cytokines	6th	1hr
56.	A.9 A.12	Immune tolerance	6th	1 hr
57.	A15.2, A15.3, A16.2,A 18.5, B9.5	Introduction to Medically important arthropods I	6th	1 hr
58.			6th	1 hr
59.	A.12, B7	Hypersensitivity	6th	1 hr

60.				1 hr
61.	A.12, B7	Autoimmunity	7th	1hr
62.				1hr
63.	A.12, B7	Tumor immunology	7th	1 hr
64.				1 hr
65.	A.12, B7	Transplantation	7th	1hr
66.				1 hr
67.	A.12, B7	Immunodeficiency disorders	7th	1hr
68.				1 hr
69.	A16.3, A19.1 B8.4, B9.6, B11	Introduction to Medically important arthropods II and Immunoparasitology.	7th	1 hr
70.			7th	1 hr
			7 wks	**70 hrs**
		Revisions and Exams	**8thwk**	**10 hrs**
		Total		**80 hrs**

Student assessment

Assessment task	Proportion of Total Assessment
Mid term examination (MCQs)	30%
Final written Exams (MCQs & SAQs)	45%
Practical exam	25%

Student Assessment Plan:

1- End of block written exam: 20% of total
2- End of block practical exam: 5% of total
3- Evaluation of portfolio: 5%
4- Final written exam: 45%
5- Final OSPE exam: 25%

Course Coordinator:

Microbiology and Immunology: Mamdouh Essmat

Medical Parasitology: Aml Mostafa

Head of Department:

Microbiology and Immunology: Prof/ Abeer Sheniaf

Medical Parasitology:Prof/ Hanna El-Hady

Date: 1 / 6 /2017

BLOCK Specifications of PRINCIPLES OF DISEASES AND THE PHARMACOLOGICAL BASIS OF THERAPEUTICS for 1st year2nd semester. Undergraduates

Undergraduate Program & Courses Specifications

BLOCK Specifications of PRINCIPLES OF DISEASES AND THE PHARMACOLOGICAL BASIS OF THERAPEUTICS for 1st year2nd semester semester. Undergraduates

Sohag University **Faculty of Medicine**

Course title: PRINCIPLES OF DISEASES AND THE PHARMACOLOGICAL

Code:

Program on which the course is given: bachelor of medicine and surgery (MBBS).

Departments offering the course: PHARMACOLOGy & Pathology departments

Academic year/level:1st year – 2nd semester

Date of specification approval:

Credit points: 12.5

Block	points	days/week	learning activities		Assessment				
			contact hours	formative assessment/feedback	assign ment	total	Midte rm	Final wrritt en	final practi cal /clinic al
Principles of Diseases and the Pharmacological Basis of Therapeutics	12	8 weeks	160	32	128	180			

Lecture: 2h /day daily for 4 days
Practical: 8 h/ week
Tutorial: 8 h/ week
Total: 24h/week

Intended Learning Outcomes (ILOS) of the Block

I. Summary of the main learning outcomes for students enrolled in the block:

By the end of this block, the students are expected to be able to:

1) understand of how drugs work and how their actions may be modified. An understanding of the clinical application of this knowledge
2) explain the concept of drug action with respect to: receptor theory, enzyme interactions, physico-chemical interactions
3) explain receptor activity with regard to: ionic fluxes, second messengers and G proteins, nucleic acid synthesis evidence for the presence of receptors regulation of receptor number and activity
4) define and explain dose-response relationships of drugs with reference to: graded and quantal response, therapeutic index, potency and efficacy, competitive and non-competitive antagonists, partial agonists, mixed agonist-antagonists and inverse agonists
5) describe the mechanisms of adverse drug effects
6) understand the fate of drugs in the body and how this may be affected by physiological and pathological disturbance
7) describe absorption and factors that will influence it with reference to clinically utilized sites of administration
8) describe factors influencing the distribution of drugs (e.g. protein binding, lipid solubility, pH) and their alteration in physiological and pathological disturbance
9) describe the mechanisms of non-hepatic and hepatic metabolism of drugs. To describe Phase 1 and Phase 2 reactions, hepatic extraction ratio and its significance, first pass effect, enzyme induction and inhibition
10) describe the mechanisms of drug clearance and how physiological and pathological disturbance may affect these
11) explain the concept of pharmacokinetic variables
12) understand the clinical application of this knowledge
13) explain clinical drug monitoring with regard to peak and trough concentrations, minimum therapeutic concentration and toxicity
14) understand the factors that may alter inter- and intra-individual drug responses and the significance of this as applied in anaesthetic practice
15) define tachyphylaxis, tolerance, addiction, dependence and idiosyncrasy
16) describe alterations to drug response due to physiological change with special reference to neonates, the elderly and pregnancy
17) classify and describe adverse drug effects

18) classify and describe mechanisms of drug interaction
19) explain the mechanisms and significance of pharmacogenetic disorders such as malignant hyperpyrexia, porphyria, atypical cholinesterase and disturbance of cytochrome function
20) describe the synthesis, release and fate of adrenergic and cholinergic transmitters
21) compare and contrast the mechanism of action and effects of sympathomimetic and cholinomimetic agents used clinically
22) describe pharmacology of cholinergic agonists and antagonists and their clinical applications
23) describe pharmacology of adrenergic agonists and antagonists and their clinical applications
24) describe Adverse effects of antimicrobial therapy including antibacterial, Antiviral, antihelmentics, antiprotozoal agents
25) Study the pharmacology of Anticancer and immunomodulator agents

II. ILOs of the block:

A- Knowledge

By the end of the course, students should be able to:

A1- Define pharmacological terms such as:

- Pharmacology branches,
- Drug, poison,
- Pharmacodynamics
- Pharmacokinetics.

A2- List the Sources of drug,
A3- Mention how to apply basic principles in selected examples of drug use,
A4- State the Importance of Pharmacopeias
A5- List types of drug-receptor interactions
A6- Identify receptor-effector coupling & spare receptors
A7- Describe signaling mechanisms & drug action
A8- List types of antagonism
A9- List types of receptor regulation and its clinical significance
A10-Describe mechanisms contribute greatly to variation in responses
A11-Define adverse drug reaction
A12-Differentiate between side/ untoward & toxic effects
A13-List the different types of adverse effects
A14-Define tolerance & describe its types
A15-Define hypersensitivity and explain its types
A16-Describe the various systemic adverse effects

A17- Explain what is meant by the terms drug absorption & distribution.
A18- Explain the drug properties facilitate absorption.
A19- Describe factors affecting the absorption of drugs
A20- Mention protein binding and the effect of concomitant administration of two protein-binding drugs on drug effect.
A21- Mention the impact of drug distribution and redistribution on drug action
A22- Explain what is meant by the term drug metabolism.
A23- List the major mechanisms responsible for drug metabolism.
A24- Describe the major enzyme systems in the body that are responsible for oxidation, reduction and/or hydrolysis of selective pharmacological agents.
A25- Describe the basic principles of how drug metabolism alters drug action.
A26- Explain how drugs are chemically altered by cytochrome p-450. .
A27- State the difference between acute and chronic drug treatment with respect to drug metabolism by the liver.
A28- Explain how drug-induced enzyme induction and inhibition can alter responses to drugs with examples.
A29- Explain the basic principles by which drugs are excreted from the body
A30- Describe different routes of drug elimination with drugexamples
A31- Define Pharmacokinetics variables
A32- Define absorption, clearance, volume of distribution, half-life
A33- State the drug prescribedfor special population(pediatric)
A34- State the drug prescribedfor special population (geriatric)
A35- State the drug prescribedfor special population (pregnant female)
A36- Explain Clinical applications for these special populations
A37- Define cholinergic and adrenergic transmission
A38- Mention types of cholinergic and adrenergic receptors
A39- Define cholinergic agents
A40- Study pharmacological effects of cholinergic agents
A41- Mention classification of cholinergic agents
A42- List therapeutic uses and identify side effects and contraindications of cholinergic agents
A43- Define anticholinergic agents
A44- List pharmacological effects of anticholinergic agents
A45- Mention classification of anticholinergic agents
A46 List therapeutic uses and identify side effects and contraindications of anticholinergic agents
A47- Define sympathomimetics
A48- List pharmacological effects of sympathomimetics agents
A49- Mention classification of sympathomimetics agents

A50- List therapeutic uses and identify side effects and contraindications of sympathomimetics agents
A51- Define sympatholytics
A52- List pharmacological effects of sympatholytics agents
A53- Mention classification of sympatholytics agents
A54- List therapeutic uses and identify side effects and contraindications of sympatholytics agents
A55- Describe the mechanisms of action and combination of anti-microbial agents
A56- Mention causes of failure of the use of anti-microbial agents
A57- Outline the adverse effects of antimicrobial therapy
A58- Outline the adverse effects of antiviral – antihelmentics – antiprotozoal
A59- List anticancer chemotherapy- immunomodulator and describe their mechanism of action
A60- Mention examples of different anticancer groups
A61- Outline items of prescription
A62- Discribe examples of prescription

B- Intellectual skills

By the end of the course, students should be able to:

B1- Utilize pharmacological basis of therapeutics in the proper selection and use of drugs in various populations.
B2- Assess drug interactions and adverse drug reactions.
B3- Comprehends reliably published literature and collaborates with others in the pharmacology practice.
B4- Apply the information needed in pharmacology practice giving clear advice and critical decisions about patient therapy

C- **Practical skills**

By the end of the course, students should be able to:

C1- Use properly the pharmaceutical and medical terms, abbreviations and symbols in pharmacological practice.

C2-Select the appropriate medication therapy for a given diseases based on its etiology, pathophysiology, patient medical history, possible interactions and age related factors.

D- General and transferable skills

By the end of the course, students should be able to:

D1- Work effectively in a team
D2-Acquire problem-solving skills in groups for continuing professional development needs.
D3-Provide good advice to promote the efficiency of medication and give a hand in poisoning cases.
D4-Acquire the skill of self learning.
D5-Build up personal responsibility.
D6-Acquire the skill of respecting colleagues.
D7-Show adequate cooperation with his/her colleagues.
D8-Judge the efforts required to accomplish the tasks in specified time.
D9-Display freely, keeping an ethical behavior
D10-Share in the work efficiently with the instruments and equipments of the department in a responsible manner keeping them intact and clean.
D11-Improve his capability to describe, discuss and solve problems.

Course Contents

NO.	Lectures	week	Contact hours
1	**Introduction to Pharmacology(A1-A4)**	1	1
2	**Drug receptors and signaling mechanisms & drug action(A5-A7)**	1	1
3	**Receptor Regulation and Variation in Drug Responsiveness(A8-A10)**	1	1
4	**Adverse drug reactions(A11-A16)**	1	1
5	**Pharmacokinetics (Absorption & distribution)(A17-A21)**	2	1
6	**Pharmacokinetics (Metabolism & excretion)(A22-A29)**	2	1
7	**Pharmacokinetics variables(A31-A32)**	2	1
8	**Pharmacokinetics variables (cont.)(A31-A32)**	2	1
9	**Special Aspects of Pediatric Pharmacology(A33)**	3	1
10	**Special Aspects of Geriatric Pharmacology(A34)**	3	1
11	**Drug therapy in pregnancy(A35)**	3	1
12	**Clinical applications for these special populations(A36)**	3	1
13	**Introduction to Autonomic Nervous System (ANS)(A37-A38)**	4	1
14	**Parasympathetic nervous system (Agonists)(A39-A42)**	4	1
15	**Parasympathetic nervous system (Antagonists)(A43-A46)**	4	1

16	**Parasympathetic nervous system (Antagonists-cont.)(A43-A46)**	**4**	**1**
17	**Formative assessment**	**5**	
18	**Sympathetic nervous system (agonists)(A47-A50)**	**5**	**1**
19	**Sympathetic nervous system (antagonists)(A51-A54)**	**5**	**1**
20	**Sympathetic nervous system (antagonists-cont.)(A51-A54)**	**5**	**1**
21	**Introduction to Antimicrobial therapy(A55-A56)**	**6**	**1**
22	**Adverse effects of antimicrobial therapy(A57)**	**6**	**1**
23	**Adverse effects of antimicrobial therapy (continue)(A57)**	**6**	**1**
24	**Adverse effects of commonly used Antiviral – antihelmentics – antiprotozoal(A58)**	**6**	**1**
25	**Adverse effects of commonly used Antiviral – antihelmentics – antiprotozoal (cont.)(A58)**	**7**	**1**
26	**Anticancer &Immunomodulator(A59-A60)**	**7**	**1**
27	**Anticancer &Immunomodulator (cont.)(A59-A60)**	**7**	**1**
28	**Prescription writing(A61- A62)**	**7**	**1**
NO.	**Practical**	**week**	**Contact hours**
1	***Drug dosage forms*(C1-C2)**	**1**	**2**
2	***Routes of drug administration* (C1-C2)**	**1**	**2**
3	***Dose-response curve*(C1-C2)**	**2**	**2**
4	***Liver* microsomal enzyme system(C1-C2)**	**2**	**2**
5	**Effect of autonomic drugs on eye+ glaucoma case(C1-C2)**	**3**	**2**
6	**Agonist-antagonist (computer)Part I(C1)**	**3**	**2**
7	**Agonist-antagonist (computer) Part II(C1)**	**4**	**2**
8	**Cardiolab (computer) Part I(C1)**	**4**	**2**
9	**Cardiolab (computer) Part II(C1)**	**5**	**2**
10	**Organophosphorous poisoning(case)(C1-C2)**	**5**	**2**
11	**Myasthenia gravis (case)(C1-C2)**	**6**	**2**
12	**Effect of drugs on isolated rabbitintestine(C1-C2)**	**6**	**2**
13	**Effect of drugs on isolated rabbit heart(C1-C2)**	**7**	**2**
14	**Prescription writing(B1 &C1-C2)**	**7**	**2**
NO.	**Tutorial**	**week**	**Contact hours**
1	**Drug dosage forms & Routes of drug (B3&D1-D11).administration**	**1**	**2**

2	**Drug receptors(B3&D1-D11)**	**1**	**2**
3	**Variations in drug response((B3&D1-D11)**	**2**	**2**
4	**Drugs Affecting Renal Excretory Function((B3&D1-D11)**	**2**	**2**
5	**Drug Drug interaction(B1&D1-D11)**	**3**	**2**
6	**Drug food interaction(B3&D1-D11)**	**3**	**2**
7	**Drug Toxicity and Poisoning(B3&D1-D11)**	**4**	**2**
8	**Membrane Transporters (B3&D1-D11)**	**4**	**2**
9	**Pharmacogenomics(B1&D1-D11)**	**5**	**2**
10	**Autacoids(B3&D1-D11)**	**5**	**2**
11	**Geriatric Pharmacology(B1&D1-D11)**	**6**	**2**
12	**Pediatric Pharmacology(B1&D1-D11)**	**6**	**2**
13	**Drug prescription(B1-4&D1-D11)**	**7**	**2**
14	**Pharmacology of traditional and natural Medicine(B3&D1-D11)**	**7**	**2**
FORMATIVE ASSESSMENT, REVISION AND EXAM		**8**	
Total weeks		**8**	

Teaching schedule and teaching methods

Teaching and learning Methods

1- Lectures for knowledge and intellectual skill outcomes.

2- Practical sessions to gain practical skills and using Practical book for drawing

3-Self directed learning (SDL) for the topics studied in lectures or related topics; including libraries, E learning (practical photographs and questions of different topics available online for student's assessments)and consulting professors for gathering of information.

4- Tutorials and group discussion.

5- Seminars.

Week 1					
Sun	Lecture (1) 8-9 **Name of**	Lecture (2) 9-10 **Name of**	Practical/SDL 10-12 a.m. (Group A/B) (Around 100 students	Break 12-12.30	Practical/SDL 12.30-2.30 p.m. (Group B/A) (Around 100 students

	lecturer and topic	**lecturer and topic**	if the total number of students is 400 Tutorial group (C/D)		if the total number of students is 400 Tutorial group (D/C)
Mon	Lecture (1) 8-9 **Name of lecturer and topic**	Lecture (2) 9-10 **Name of lecturer and topic**	Practical/SDL 10-12 a.m. (Group C/D) (Around 100 students if the total number of students is 400 Tutorial group (A/B)	Break 12-12.30	Practical/SDL 12.30-2.30 p.m. (Group D/C) (Around 100 students if the total number of students is 400 Tutorial (group B/A)
Tues	Lecture (1) 8-9 **Name of lecturer and topic**	Lecture (2) 9-10 **Name of lecturer and topic**	Practical/SDL 10-12 a.m. (Group A/B) (Around 100 students if the total number of students is 400 Tutorial group (C/D)	Break 12-12.30	Practical/SDL 12.30-2.30 p.m. (Group B/A) (Around 100 students if the total number of students is 400 Tutorial (group D/C)
Wed	Lecture (1) 8-9 **Name of lecturer and topic**	Lecture (2) 9-10 **Name of lecturer and topic**	Practical/SDL 10-12 a.m. (GroupC/D) (Around 100 students if the total number of students is 400) Tutorial group (A/B)	Break 12-12.30	Practical/SDL 12.30-2.30 p.m. (Group D/C) (Around 100 students if the total number of students is 400 Tutorial (B/A)
Total	8hs lectures / week		8 hs practical/SDL+ 8 h tutorial/week = 24 h /week		

Week 2					
Sun	Lecture (1) 8-9 **Name of lecturer and topic**	Lecture (2) 9-10 **Name of lecturer and topic**	Practical/SDL 10-12 a.m. (Group A/B) (Around 100 students if the total number of students is 400 Tutorial group (C/D)	Break 12-12.30	Practical/SDL 12.30-2.30 p.m. (Group B/A) (Around 100 students if the total number of students is 400 Tutorial group (D/C)
Mon	Lecture (1) 8-9 **Name of lecturer and topic**	Lecture (2) 9-10 **Name of lecturer and topic**	Practical/SDL 10-12 a.m. (Group C/D) (Around 100 students if the total number of students is 400 Tutorial group (A/B)	Break 12-12.30	Practical/SDL 12.30-2.30 p.m. (Group D/C) (Around 100 students if the total number of students is 400 Tutorial (group B/A)

Tues	Lecture (1)  8-9 **Name of lecturer and topic**	Lecture (2)  9-10 **Name of lecturer and topic**	Practical/SDL 10-12 a.m. (Group A/B) (Around 100 students if the total number of students is 400 Tutorial group (C/D)	Break 12-12.30	Practical/SDL 12.30-2.30 p.m. (Group B/A) (Around 100 students if the total number of students is 400 Tutorial (group D/C)
Wed	Lecture (1)  8-9 **Name of lecturer and topic**	Lecture (2)  9-10 **Name of lecturer and topic**	Practical/SDL 10-12 a.m. (GroupC/D) (Around 100 students if the total number of students is 400) Tutorial group (A/B)	Break 12-12.30	Practical/SDL 12.30-2.30 p.m. (Group D/C) (Around 100 students if the total number of students is 400 Tutorial (B/A)
Total	8hs lectures / week		8 hs practical/SDL+ 8 h tutorial/week = 24 h /week		

			Week 3		
Sun	Lecture (1)  8-9 **Name of lecturer and topic**	Lecture (2)  9-10 **Name of lecturer and topic**	Practical/SDL 10-12 a.m. (Group A/B) (Around 100 students if the total number of students is 400 Tutorial group (C/D)	Break 12-12.30	Practical/SDL 12.30-2.30 p.m. (Group B/A) (Around 100 students if the total number of students is 400 Tutorial group (D/C)
Mon	Lecture (1)  8-9 **Name of lecturer and topic**	Lecture (2)  9-10 **Name of lecturer and topic**	Practical/SDL 10-12 a.m. (Group C/D) (Around 100 students if the total number of students is 400 Tutorial group (A/B)	Break 12-12.30	Practical/SDL 12.30-2.30 p.m. (Group D/C) (Around 100 students if the total number of students is 400 Tutorial (group B/A)
Tues	Lecture (1)  8-9 **Name of lecturer and topic**	Lecture (2)  9-10 **Name of lecturer and topic**	Practical/SDL 10-12 a.m. (Group A/B) (Around 100 students if the total number of students is 400 Tutorial group (C/D)	Break 12-12.30	Practical/SDL 12.30-2.30 p.m. (Group B/A) (Around 100 students if the total number of students is 400 Tutorial (group D/C)
Wed	Lecture (1)	Lecture (2)	Practical/SDL 10-12 a.m.	Break 12-	Practical/SDL 12.30-2.30 p.m.

	8-9 **Name of lecturer and topic**	9-10 **Name of lecturer and topic**	(GroupC/D) (Around 100 students if the total number of students is 400) Tutorial group (A/B)	12.30	(Group D/C) (Around 100 students if the total number of students is 400 Tutorial (B/A)
Total	8hs lectures / week		8 hs practical/SDL+ 8 h tutorial/week = 24 h /week		

Week 4					
Sun	Lecture (1) 8-9 **Name of lecturer and topic**	Lecture (2) 9-10 **Name of lecturer and topic**	Practical/SDL 10-12 a.m. (Group A/B) (Around 100 students if the total number of students is 400 Tutorial group (C/D)	Break 12-12.30	Practical/SDL 12.30-2.30 p.m. (Group B/A) (Around 100 students if the total number of students is 400 Tutorial group (D/C)
Mon	Lecture (1) 8-9 **Name of lecturer and topic**	Lecture (2) 9-10 **Name of lecturer and topic**	Practical/SDL 10-12 a.m. (Group C/D) (Around 100 students if the total number of students is 400 Tutorial group (A/B)	Break 12-12.30	Practical/SDL 12.30-2.30 p.m. (Group D/C) (Around 100 students if the total number of students is 400 Tutorial (group B/A)
Tues	Lecture (1) 8-9 **Name of lecturer and topic**	Lecture (2) 9-10 **Name of lecturer and topic**	Practical/SDL 10-12 a.m. (Group A/B) (Around 100 students if the total number of students is 400 Tutorial group (C/D)	Break 12-12.30	Practical/SDL 12.30-2.30 p.m. (Group B/A) (Around 100 students if the total number of students is 400 Tutorial (group D/C)
Wed	Lecture (1) 8-9 **Name of lecturer and topic**	Lecture (2) 9-10 **Name of lecturer and topic**	Practical/SDL 10-12 a.m. (GroupC/D) (Around 100 students if the total number of students is 400) Tutorial group (A/B)	Break 12-12.30	Practical/SDL 12.30-2.30 p.m. (Group D/C) (Around 100 students if the total number of students is 400 Tutorial (B/A)
Total	8hs lectures / week		8 hs practical/SDL+ 8 h tutorial/week = 24 h /week		

Week 5					
Sun	Lecture (1)  8-9 **Name of lecturer and topic**	Lecture (2)  9-10 **Name of lecturer and topic**	Practical/SDL 10-12 a.m. (Group A/B) (Around 100 students if the total number of students is 400 Tutorial group (C/D)	Break 12-12.30	Practical/SDL 12.30-2.30 p.m. (Group B/A) (Around 100 students if the total number of students is 400 Tutorial group (D/C)
Mon	Lecture (1)  8-9 **Name of lecturer and topic**	Lecture (2)  9-10 **Name of lecturer and topic**	Practical/SDL 10-12 a.m. (Group C/D) (Around 100 students if the total number of students is 400 Tutorial group (A/B)	Break 12-12.30	Practical/SDL 12.30-2.30 p.m. (Group D/C) (Around 100 students if the total number of students is 400 Tutorial (group B/A)
Tues	Lecture (1)  8-9 **Name of lecturer and topic**	Lecture (2)  9-10 **Name of lecturer and topic**	Practical/SDL 10-12 a.m. (Group A/B) (Around 100 students if the total number of students is 400 Tutorial group (C/D)	Break 12-12.30	Practical/SDL 12.30-2.30 p.m. (Group B/A) (Around 100 students if the total number of students is 400 Tutorial (group D/C)
Wed	Lecture (1)  8-9 **Name of lecturer and topic**	Lecture (2)  9-10 **Name of lecturer and topic**	Practical/SDL 10-12 a.m. (GroupC/D) (Around 100 students if the total number of students is 400) Tutorial group (A/B)	Break 12-12.30	Practical/SDL 12.30-2.30 p.m. (Group D/C) (Around 100 students if the total number of students is 400 Tutorial (B/A)
Total	8hs lectures / week		8 hs practical/SDL+ 8 h tutorial/week = 24 h /week		

Week 6					
Sun	Lecture (1)	Lecture (2)	Practical/SDL 10-12 a.m.	Break 12-	Practical/SDL 12.30-2.30 p.m.

	8-9 **Name of lecturer and topic**	9-10 **Name of lecturer and topic**	(Group A/B) (Around 100 students if the total number of students is 400 Tutorial group (C/D)	12.30	(Group B/A) (Around 100 students if the total number of students is 400 Tutorial group (D/C)
Mon	Lecture (1) 8-9 **Name of lecturer and topic**	Lecture (2) 9-10 **Name of lecturer and topic**	Practical/SDL 10-12 a.m. (Group C/D) (Around 100 students if the total number of students is 400 Tutorial group (A/B)	Break 12-12.30	Practical/SDL 12.30-2.30 p.m. (Group D/C) (Around 100 students if the total number of students is 400 Tutorial (group B/A)
Tues	Lecture (1) 8-9 **Name of lecturer and topic**	Lecture (2) 9-10 **Name of lecturer and topic**	Practical/SDL 10-12 a.m. (Group A/B) (Around 100 students if the total number of students is 400 Tutorial group (C/D)	Break 12-12.30	Practical/SDL 12.30-2.30 p.m. (Group B/A) (Around 100 students if the total number of students is 400 Tutorial (group D/C)
Wed	Lecture (1) 8-9 **Name of lecturer and topic**	Lecture (2) 9-10 **Name of lecturer and topic**	Practical/SDL 10-12 a.m. (GroupC/D) (Around 100 students if the total number of students is 400) Tutorial group (A/B)	Break 12-12.30	Practical/SDL 12.30-2.30 p.m. (Group D/C) (Around 100 students if the total number of students is 400 Tutorial (B/A)
Total	8hs lectures / week		8 hs practical/SDL+ 8 h tutorial/week = 24 h /week		

Week 7					
Sun	Lecture (1) 8-9 **Name of lecturer and topic**	Lecture (2) 9-10 **Name of lecturer and topic**	Practical/SDL 10-12 a.m. (Group A/B) (Around 100 students if the total number of students is 400 Tutorial group (C/D)	Break 12-12.30	Practical/SDL 12.30-2.30 p.m. (Group B/A) (Around 100 students if the total number of students is 400 Tutorial group (D/C)
Mon	Lecture	Lecture	Practical/SDL 10-12	Break	Practical/SDL 12.30-

	(1) 8-9 **Name of lecturer and topic**	(2) 9-10 **Name of lecturer and topic**	a.m. (Group C/D) (Around 100 students if the total number of students is 400 Tutorial group (A/B)	12-12.30	2.30 p.m. (Group D/C) (Around 100 students if the total number of students is 400 Tutorial (group B/A)
Tues	Lecture (1) 8-9 **Name of lecturer and topic**	Lecture (2) 9-10 **Name of lecturer and topic**	Practical/SDL 10-12 a.m. (Group A/B) (Around 100 students if the total number of students is 400 Tutorial group (C/D)	Break 12-12.30	Practical/SDL 12.30-2.30 p.m. (Group B/A) (Around 100 students if the total number of students is 400 Tutorial (group D/C)
Wed	Lecture (1) 8-9 **Name of lecturer and topic**	Lecture (2) 9-10 **Name of lecturer and topic**	Practical/SDL 10-12 a.m. (GroupC/D) (Around 100 students if the total number of students is 400) Tutorial group (A/B)	Break 12-12.30	Practical/SDL 12.30-2.30 p.m. (Group D/C) (Around 100 students if the total number of students is 400 Tutorial (B/A)
Total	8hs lectures / week		8 hs practical/SDL+ 8 h tutorial/week = 24 h /week		

Student assessment

Assessment task	Proportion of Total Assessment
Mid term examination (MCQs)	30%
Final written Exams (MCQs & SAQs)	45%
Practical exam	25%

Student Assessment Plan:

6- End of block written exam: 20% of total
7- End of block practical exam: 5% of total
8- Evaluation of portfolio: 5%
9- Final written exam: 45%
10- Final OSPE exam: 25%

Formative assessment schedule

Short formative assessment by the end of each week. A longer formative assessment at week 5 and at week 8.

Recommended Resources

List of text books and references:

a- Lectures notes: When notes are available, specify whether they are prepared in the form of a book authorized by the department or are handed out to the students part by part.

b- Essential books (Text books): **Basic and Clinical Pharmacology edited by. Bertram G. Katzung**

c- General references, journals, periodicals, newspapers, web sites, which enrich the learning process as:

Alta Vista Search http://www.altavista.com/

Google http://www.google.com/

Medline - Free from National Library of Medicine (US)

http://www.ncbi.nlm.nih.gov/Pubmed

The references that should be identified in the above items should be written in a

standard way (publisher, edition, year, author(s)…etc).

Facilities required for teaching and learning:

8- White boards.

9- Computer lab in the department with net access.

10- Computer programs

11- Data show for power point presentations.

12- Libraries with available textbooks for gathering of information.

Course Coordinator:

Pharmacology: Dr/ Hala Ibramem

Pathology: Prof / Fatma Al-Zaharaa

Head o f Department:

Pharmacology: Dr/ Sanaa Abd El-Aal

Pathology: Prof / Afaf El Nashar

Date: 1/6/2017

BLOCK Specifications of Patient, Physician & Society for 1st year1st semester. Undergraduates

Block specification

A-Basic Information:

Program on which the course is given: bachelor of medicine and surgery (M.B., B.Ch.).

Elements (major or minor) of the program: (undergraduate):

Departments offering the course: vertical block.

Academic year/level: 1st year,2nd semester,

Date of specification approval:

Θ Title: Introduction to patient care

Θ Code: ……..

Θ Lecture: 65 hours

1-Block Map of: vertical, Introduction to Patient Care Medical Interviewing, Introduction to Physical, Examination 1 Clinical Experiences 1, first year second semester

Block	Points	days/week	learning activities		
			contact hours/points	formative assessment/feedback	assignment
Introduction to Patient Care Medical Interviewing, Introduction to Physical, Examination 1 Clinical Experiences 1e	5points	Vertical	65 2.5 points	0.5 Points	2 points

B- Professional Information

I- Block aims:

Θ Overall aim of the block:

By the end of the block, the student will be able to take informative history, perform physical examination and do some clinical procedures.

II- Intended Learning Outcomes:

1. Summary of the main learning outcomes for students enrolled in the block:

By the end of this block, the students are expected to be able to:

33) Take and record a structured, patient centered history.
34) Adopt an empathic and holistic approach to the patients and their problems.
35) Assess the mental state of the patient.
36) Perform appropriately timed full physical examination of patients appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive**.**
37) Prioritize issues to be addressed in a patient encounter.
38) Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice**.**
39) Adopt strategies and apply measures that promote patient safety.
40) Perform diagnostic and intervention procedures2 in a skillful and safe manner, adapting to unanticipated findings or changing clinical circumstances.
41) Respect patients' rights and involve them and /or their families/careers in management decisions**.**
42) Adopt suitable measures for infection control.
43) Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.
44) Adhere to the professional standards and laws governing the practice, and abide by the national code of ethics issued by the Egyptian Medical Syndicate.
45) . Respect the different cultural beliefs and values in the community they serve.
46) Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural, ethnic backgrounds, or their disabilities**.**
47) Ensure confidentiality and privacy of patients' information.
48) . Recognize basics of medico-legal aspects of practice, malpractice and avoid common medical error**.**
49) Recognize and manage conflicts of interest**.**
50) 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.

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

52) Recognize the important role played by other health care professions in patients' management.

53) 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**.**

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

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

56) Communicate effectively using a written health record, electronic medical record, or other digital technology.

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

58) Recognize own personal and professional limits and seek help from colleagues and supervisors when necessary.

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

60) Demonstrate accountability to patients, society, and the profession.

61) Regularly reflect on and assess his/her performance using various performance indicators and information source**.**

62) Develop, implement, monitor, and revise a personal learning plan to enhance professional practice**.**

63) Identify opportunities and use various resources for learning.

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

2. Plans for developing and improving the course:

7) Continuous updating of the information, knowledge and skills included in the course through the continuous search for new knowledge and skills available in recent publications (books, researches, internet and others).
8) Continuous improvements in teaching methods to encourage the students to participate effectively in the various clinical activities.
9) Continuous evaluation of the course content, students performance and establish plans accordingly.

3. ILOs of the block:

A- Knowledge

By the end of the course, students should be able to:

A1- Recognize basics of medico-legal aspects of practice, malpractice and avoid common medical errors.

A2- Recognize basics of medico-legal aspects of practice, malpractice and avoid common medical errors.

A3- 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

A4- Explain normal human behavior and apply theoretical frameworks of psychology to interpret the varied responses of individuals, groups and societies to disease.

B-Cognitive Skills

By the end of the course, students should be able to:

B1- Taking informative history.

B2- Measuring body temperature
B3- Measuring pulse rate, respiratory rate and blood pressure
B4- Anthropometric Measurements and assessment of nutritional status.

B5- Chest examination**.**

B6- Heart examination**.**

B7- Abdominal examination**.**

B8- Locomotor system examination

B9- Nervous system examination**.**

B10- Examination of the jugular veins**.**

B11- Ear examination
B12- Throat examination**.**

B13- External Eye and fundus examination.
B14- Breast examination.
B15- Examination of the thyroid gland.
B16- Lymph nodes examination.
B17- PV examination.
B18- Assessment of uterine fundus level in pregnancy.

C- Psychomotor Skills

By the end of the course, students should be able to:

C1- venipuncture and collect blood samples.

C2- Inserting a cannula into peripheral veins.

C3- Establishing peripheral intravenous access and setting up an infusion; use of infusion devices.

C4- Giving intramuscular, subcutaneous, intradermal and intravenous injections.

C5- Suturing of superficial wounds.

C6- Performing cardiopulmonary resuscitation and basic life-support.

C7- Performing and interpreting basic bedside laboratory tests.

C8- Performing and interpreting ECG.

C9- Managing an electrocardiograph (ECG) monitor.

C10- Taking swabs for different diagnostic purposes.

C11- Using a nebulizer for administration of inhalation therapy.

C12- Performing male and female bladder catheterization.

C13- Administering basic oxygen therapy.

C14- Wound care and basic wound dressing.

C15- Managing Blood transfusion.

C16- Inserting a nasogastric tube..

C17- Administering local anesthetics.

C18- Performing the procedure of normal labor

D- Interpersonal Skills &Responsibility

By the end of the course, students should be able to:

D1- Acquire the skill of self learning.

D2- Build up personal responsibility.

D3- Acquire the skill of respect colleagues.

D4- Appraise the value of team work by acting in small group.

D5- Show adequate cooperation with his/her colleagues.

D6- Judge the efforts required to accomplish the tasks in specified time.

D7- Verify the use of sources of biomedical information to remain current with advances in knowledge and practice.

D8- Display freely, keeping an ethical behavior

D9- Share in the work efficiently with the instruments and equipments of the department in a responsible manner keeping them intact and clean.

D10- Improve his capability to describe, discuss and solve problems.

5. Contents

1. Lectures Topics

NO.	Lectures	Contact hours
Internal medicine		
1	**Personal history**	**1**

2	**Complaint**	**1**
3	**Therapeutic history, past medical history and familyhistory**	**1**
4	**Performing appropriately general physical examination of the patients**	**1**
General surgery		
5	**Measuring pulse rate**	**1**
	Personal history	**1**
	Complaint	**1**
	History of Persent illness	**1**
	Measuring blood Presure	**1**

4- Teaching and learning Methods

1- Lectures for knowledge and intellectual skill outcomes.

2- Practical sessions to gain practical skills and using Practical book for drawing

3-Self directed learning (SDL) for the topics studied in lectures or related topics; including libraries, E learning (practical photographs and questions of different topics available online for student's assessments) and consulting professors for gathering of information.

5- Student assessment:

Assessment task	Proportion of Total Assessment
Mid term examination (MCQs)	30%
Final written Exams (MCQs & SAQs)	45%
OSPE exam	25%

Student Assessment Plan:

11- End of block written exam: 20% of total
12- End of block practical exam: 5% of total
13- Evaluation of portfolio: 5%
14- Final written exam: 45%
15- Final OSPE exam: 25%

List of references (Recommended books)

Course Coordinator:

Dr. Osama Arafa

Head o f Department:

Internal Medicine:Prof/Dr. Osama Arafa
General Surgary: Prof/Dr/ Nabil Abo Al-Dahab

Date: 1/6/2017

House- officer Training

Taining program Specifications

- **Program(s) on which the course is given:** MBBCh
- **Major element of Programs**
- **Department offering the program**: the whole faculty
- **Department offering the course:** the whole faculty
- **Academic year / Level** House-officer year
- **Date of specification approval:** 17/11/2008, 27/9/2010, 16/1/2012.
- **Last date of specification approval:** 19/6/2019

• Two programs of primary health care services and health administration are included within the training program of the House-officers, and the adoption of that by the faculty Council decree No. (6260) in its meeting No. (168) on 15 / 9 / 2008, has been the implementation of these two programs in two consecutive batches of graduates.

Graduate attributes

To verify the conformity of graduate attributes at the end of House-officer training contained in the national academic reference standards (NARS) put by the National Authority for Quality Assurance and Accreditation in Education (NAQAAE), rules were proposed by the committees of educational program / courses of undergraduates study and Education and Student Affairs, and approved by the Faculty decree No. (7976) in its meeting No. (200) on 10.18.2010. These rules include the following actions:
• fill in the forms of the level of verification questionnaire "graduate attributes" in House-officer training in the middle of the period of training by each department (by the faculty member responsible for House-officer training) and approved by the department head; these graduate attributes include:

1.1. Work to maintain normal health, provide primary health care and deal with common health problems in the society.
1.2. Be aware of the importance of a good doctor/patient relationship, and work to establish and maintain it.
1.3. Follow rules of medical ethics.
1.4. Demonstrate appropriate communication, clinical and practical skills.
1.5. Show appropriate attitudes and professionalism.
1.6. Be prepared for lifelong learning.
1.7. Be able to engage in post- graduate and research studies.
1.8. Acquire basic administrative capabilities.

• By the beginning of the new graduate batch - which will begin training in early March 2012, the national program for House-officers training will be applicd, which is implemented based on a booklet of activities which have been developed by the Committee on the medical studies sector (Annex: 1), and on finishing this training program, they will access all to (Exit Exam) to verify the " graduate attributes" to these doctors, this has been adopted by the committee of educational program / courses of undergraduates held on Tuesday, 10 / 1 / 2012, and the Board of Management and Quality Assurance Unit in its session held on Saturday, 14.01.2012, and the Faculty decree No. (8169) in its meeting No. (220) and held on 16.01.2012.

Egyptian Medical Council

House Officer Logbook

December 2011

Personal data of the house officer (trainee)

Name …….

E-mail…….

Phone……

University & year of graduation……

Training center

Name ……..

Address……..

Program Director…….

Introduction

The training of house officers is an essential component of medical programs. During this year, medical graduates are expected to use the knowledge and skills, which they learned in their 6-year curriculum, in real clinical situations, under guidance of their supervisors. Because of the pivotal role of this year in shaping the medical career, the Egyptian Medical Board is releasing this House Officer Logbook which includes the 4 essential rounds: Internal Medicine, General Surgery, Pediatrics, and Obstetrics& Gynecology. In each round, the minimumtraining requirementsare specified.
In this logbook, the training requirements are divided into 3 categories which differ as regards methods of training and evaluation:

1. Clinical competencies: refer to thesequential tasks of the clinical encounter; namely: history taking, clinical examination, discussing the diagnosis, formulating the plan of management, and follow-up.

2. Practical, or manual procedures: refer to the manual skills which are necessary to the practicing physician; such as, venipuncture, wound dressing, stitching wounds.

3. Communication skills: are general skills which should be consciously and relentlessly developed in the medical graduate in order to improve their professional performance.

Obviously, there are requirements that are practiced in almost all the rotations, which are the general manual procedures and the communication skills. To avoid unnecessary repetition, those common requirements are listed separately before detailing each rotation.

Each trainee is expected to use this Logbook, on a daily basis, for recording his/her clinical experience during each round. Each activity should be evaluated and endorsed by the attending supervisor.

In the near future, submitting the completed Logbook will be one of the requirements for licensing medical graduates. Until then, this logbook will serve as a guide to medical schools to implement structured training programs in the house officer's year, and to establish the managerial and administrative support for carrying out those programs.

It is noteworthy that this first version of the Logbook will be reviewed again during its actual implementation in view of the feedback of trainees, trainers, and programs directors. Therefore, medical schools are requested to collect such feedback and send it to the Board.

The main goal of this Logbook is to ensure a minimum level of standardized training and continuous in-service formative evaluation to all medical graduates in Egypt during the house officer training year. To achieve that, the Logbook includes the following:

1. A list of the clinical competencies and practical skills which are related to each one of the 4 main rotations.
2. A list of general manual skills, and the communication skills which are commonly practicedin all rotations.
3. A list of the communication skills which should be acquired by the trainees throughout the training year.
4. Standard forms for documenting the performance of required training activities, as well as the evaluation of the supervisors.

Instructions to the trainees (House Officers):

Trainees are instructed to:

1- Maintain the logbook throughout the training period.

2- Make the required entries and seek evaluation andsignature of the supervisor in the same day of the event.

3- Follow the classical paradigm of the stepwise progression along the competency scale in acquiring the manual skills: observing (1), assisting (2), doing under supervision (3), doing independently (4).

4- Identify the required level of competence for each manual procedure,listed in each section, by carefully reading the related statements. Those which start by a verb that describes a real like “perform”, “do” or “insert”; should be repeatedly practiced to reach mastery level. Statements which start by verbs like “observe”, “witness”, or “assist” refer to procedures that the trainee is required to achieve only level 1 or level 2 respectively .

5- Make use of the given feedback to improve their clinical competencies, manual procedures, and communication skills.

Instructions to the trainers (supervisors)

Trainers are requested to:

1- Carefully observe the performance of the trainees and point out the deficiencies; if any, in order to be corrected.

2- Sign the activities done or attended by the trainees in the same day of performance.

3- Give constructive feedback to each trainee and document improvements in his/her performance with repeated practice.

4- Observe their progression along the competency scale in acquiring the manual skills:observing (1), assisting (2), doing under supervision (3), doing independently (4).

The common training requirements

These requirements are not limited to a certain discipline, and can be performed in all rotations. Each trainee is responsible for distributing those skills throughoutthe whole training year, and is encouraged to repeatedly practice them in all rotations in order to ensure mastery invarious contexts, with different age groups, and in both sexes.

Practical skills:

By the end of the training year, each graduate should be able to

1. Perform CPR for cases of cardio-pulmonary arrest, either in real situations or using the CPR model.(**5 times)**
2. Give different medications by IV, IM or SC routes.(**5 times each)**
3. Insert IV cannula and give IV fluids **(5 times)**.
4. Give oxygen therapy. (**5 times)**
5. Insert uretheral catheter. (**4 times)**
6. Insert a Ryle tube for oral feeding.(**3 times)**
7. Witness the insertion of a central venous catheter **(1 time)**
8. Witness the insertion of an endotracheal tube **(1 time)**

Communication skills

By the end of the training year, each graduate should be able to:

1. Counsel patients suffering from complicated illness
2. Obtain informed consent
3. Respond patiently to the patient's queries and alleviate his concerns
4. Deliver bad news
5. Respond appropriately to requests of colleagues.

House officer is required to provide evidence of **5 situations**, attended by the supervisor, for each communication skill.

Common procedures

The trainee is to fill-in the following form and get the evaluation and signature of the supervisor in the last 2 columns

Skill/Procedure	Date	Venue (OP, Ward, ER, skills lab)	Hospital record #	Age & gender	Competence level	Supervisor's signature
CPR (5 times)	- - - - -					
Venipuncture (5 times)	- - - - -					
IVcannulation (5 times)	- - - - -					
IM injections (5 times)	- - - - -					
SC injections (5times)	- - - - -					
Oxygen therapy (5 times)	- - - - -					
Insertion of a urethral catheter (4 times)	- - - -					
Insertion of a Ryle tube (3 times)	- -					
Insertion of a central venous catheter	-					
Insertion of an endotracheal tube	-					

* Level of competence: 1-Observation., 2-Practice with direct supervision, 3-Practice with indirect supervision, 4-Independent practice.

Communication skills

The trainee is to fill-in the following form and to get the evaluation and signature of the supervisor in the last 2 columns

Skill	Date	Venue (OP, Ward, ER, skill lab)	Hospital record #	Age & gender	Level of competence	Supervisor's signature
Counsel patients of complicated illness (5 times)	- - - - -					
Obtain informed consent (5 times)	- - - - -					
Respond to the patient's queries (5 queries)	- - - - -					
Deliver bad news (5 times)	- - - - -					
Respond to requests from colleagues (5 times)	- - - - -					

- Level of competence: 1-Observation., 2-Practice with direct supervision, 3-Practice with indirect supervision, 4-Independent practice.

Internal Medicine Rotation

Startingdate of the rotation:

Ending date of the rotation:

Name & Title of the Supervisor:

Hospital/ Medical center:

I. Clinical competencies

I.i. Expected clinical competencies

By the end of the Internal Medicine Rotation, H.O. should be able to:

1. Carry out a focused history taking, perform physical examination, justify the diagnosis, discuss management plans, and perform relevant follow-up of the progress of the following clinical conditions (at least one patient in each clinical condition)

    - **Cardiology**: Hypertension - Ischemic Heart Disease - Rheumatic heart disease - Heart failure - Arrhythmias
    - **GIT/Hepatology :**Diarrhea - Vomiting - Abdominal pain - Hematemesis - Hepatitis - Hepatic encephalopathy
    - **Nephrology :**Nephrotic syndrome - Acid-Base balance and electrolytes - Acute renal failure - Chronic renal failure
    - **Hematology :** Bleeding tendency-Anaemia-Generalized lymphadenopathy
    - **Diabetes/Metabolism:** Diabetes Mellitus
    - **Endocrinology :**Thyrotoxicosis - Hypothyroidism
    - **Rheumatology:**Arthritis - Systemic Lupus Erythematosis - Rheumatoid arthritis
    - **Emergency/ RR :**Coma – Shock - Respiratory distress - Acute abdomen - GIT Bleeding - Diabetic Emergencies - Hypertensive emergencies - Food poisoning & drug intoxication

2. Prescribe the appropriate diet for patients with diabetes, advanced liver cell failure, hypercholesterolemia and hypertension.
3. Prescribe, prepare and monitor parenteral fluid therapy.
4. Perform first aid measures for cases with poisoning or intoxication.
5. Write medical reports for referral and requests for investigations.

I.ii. Documenting the achievement of the expected clinical competencies

Please fill-in the following data for each patient seen. Total number of endorsed case records in the round should be at least 30. Estimated time required to complete each record is about 10 minutes.

Part I: To be filled by the trainee				
Patient serial # (in the logbook):				
Hospital Record #:				
Seen at:	Outpatient	Inpatient	ER	Other (specify)
Date:				
Age & gender:				
Main theme of the case				
Case summary				
Role of the trainee (tick the appropriate boxes)	History taking & Examination	Discussing the differential diagnosis	Proposing plan of management	Providing first aid/minor procedure
	Writing case report	Writing referral / request for investigation	Prescribing appropriate diet/parenteral fluid therapy	Follow-up
Signature of the trainee				
Part 2: To be filled by the supervisor				
Supervisor's Evaluation of the performance of the trainee	Excellent	Very good	Satisfactory	Unsatisfactory
Suggested areas of improvement (must be written if the evaluation is unsatisfactory)**:**				
Supervisor's name				
Supervisor's signature				

II. Practical Skills and manual procedures:

II.i. Expected practical skills and manual procedures

By the end of the Internal Medicine rotation, the H.O. should be able to:

1. Perform first aid measures for the comatose patients.(**3 times)**
2. Perform and interpret an ECG.(**5 times)**
3. Witness pleural aspirationand abdominal paracentesis.(**one time each)**

In case a skill is not available in the training department, the training supervisor has to arrange performing such skill(s) elsewhere and informing the committee responsible for HO training.

II.ii. Documenting the performance of practical skills and manual procedures

The trainee is to fill-in the following form &to get the evaluation & signature of the supervisor in the last 2 columns

Skill/Procedure	Date	Venue (OP, Ward, ER, Model)	Hospital record #	Age & gender	Level of competence	Supervisor's signature
First aid to comatose patient	- - -					
Electrocardiogram (3 cases witnessed)	- - -					
Pleural fluid aspiration (One case witnessed)	-					
Abdominal paracentesis (One case witnessed)	-					

* Level of competence: 1-Observation., 2-Practice with direct supervision, 3-Practice with indirect supervision, 4-Independent practice.

Pediatrics Rotation

Start date of the rotation:

End date of the rotation:

Name & Title of the Supervisor:

Hospital/ Medical center:

I. Clinical competencies

I.i. Expected clinical competencies

By the end of the Pediatrics Rotation, H.O. should be able to:

1. Carry out a focused history taking, do physical examination, justify the diagnosis, discuss management plans, and perform relevant follow-up of the progress of the following clinical conditions (At least one patient for each clinical condition)

   - **General:**malnutrition, febrile illness in different pediatric age groups, skin rash, mental retardation
   - **Chest:**respiratory tract infection, asthma
   - **Cardiology**: hypertension
   - **GIT:**Gastroenteritis
   - **Hematology :** neonatal jaundice,bleeding tendency-anemia–
   - **Diabetes/Metabolism:**IDDM,
   - **Endocrinology:**- Hypothyroidism
   - **Rheumatology:**musculoskeletal disorders
   - **Emergency/ RR :**Gastroenteritis and dehydration, disturbed level of consciousness – Shock - Respiratory distress - Acute abdomen - Bleeding - Diabetic Emergencies - Food poisoning & drug intoxication

2. Prescribe the appropriate feeding advice for different pediatric age group (breast, artificial, and weaning)
3. Prescribe, prepare and calculate oral rehydration therapy.
4. Perform first aid measures for cases of poisoning or intoxication.
5. Identify cases that need hospital admission.
6. Write medical reports for referral and requests for investigations.

I.ii. Documenting the achievement of the expected clinical competencies

Please fill-in the following data for each patient seen. Total number of endorsed case records in the round should be at least 30. Estimated time required to complete each record is 10 minutes.

Part I: To be filled by the trainee				
Patient serial # (in the logbook):				
				Hospital Record #:
Age & gender:				
Seen at:	Outpatient	Inpatient	ER	Other (specify)
Date:				

Age & gender				
Main theme of the case				
Case summary				
Role of the trainee (tick the appropriate boxes)	History taking & Examination	Discussing the differential diagnosis	Proposing plan of management	Providing first aid/minor procedure
	Writing case report/ referral notes	Writing referral / request for investigation	Prescribe appropriate diet/parenteral fluid therapy	Follow-up
Signature of the trainee				
Part 2: To be filled by the supervisor				
Supervisor's Evaluation of the performance of the trainee	Excellent	Very good	Satisfactory	Unsatisfactory
Suggested areas of improvement (must be written if the evaluation is unsatisfactory)**:**				
Supervisor's name		**Supervisor's signature**		

II. Practical skills and manual procedures:

II.i. Expected practical skills and manual procedures

By the end of the Pediatrics rotation, the H.O. should be able to:

1. Measure weight, length /height and skull circumference and plot the data on respective growth curves. (**5 times)**
2. Measure the blood pressure in different Pediatric age groups. (**5 times)**
3. Give all the compulsory vaccines.(**one time each)**
4. Give inhalation therapy using a nebulizer.(**3 times)**

5. Witness pleural aspiration, insertion of endotracheal tube, lumbar puncture and bone marrow aspiration.(**one time each)**

In case a skill is not available in the training department, the training supervisor has to arrange performing such skill(s) elsewhere and informing the committee responsible for HO training.

II.ii. Documenting the performance of practical skills and manual procedures

The trainee is to fill-in the following form & to get the evaluation & signature of the supervisor in the last 2 columns

Skill/Procedure	Date	Venue (OP, Ward, ER, Skills lab)	Hospital record #	Age & gender	Competence Level	Supervisor's signature
Measuring weight, length /height and skull circumference and plot the data on respective growth curves(5 males & 5 females)	- - - - -					
Measuring the blood pressure in different Pediatric age groups (5 times)	- - - - -					
Give all the compulsory vaccines (one time each)	- - - - -					
Give inhalation therapy using a nebulizer (5 times)	- - -					
Pleural fluid aspiration (One case witnessed)	-					
Insertion of endotracheal tube	-					
Lumbar puncture (One case witnessed)	-					
Bone marrow aspiration (one case witnessed)	-					

* Level of competence: 1-Observation., 2-Practice with direct supervision, 3-Practice with indirect supervision, 4-Independent practice.

General Surgery Rotation

Start date of the rotation:

End date of the rotation:

Name & Title of the Supervisor:

Hospital/ Medical center:

I. Clinical competencies

I.i. Expected clinical competencies

By the end of the General Surgery rotation, H.O. will be able to:

1. Carry out a focused history taking, do physical examination, justify the diagnosis, discuss management plans, and perform relevant follow-up of the progress of the following clinical conditions (At least one patient for each clinical condition)
   - Wounds and ulcers
   - Swellings
   - Common infections (e.g. Hand infections, face infections, erysipelas)
   - Anal disorders – Hernias – Breast masses – Jaundice - Acute abdomen
   - Inguino-scrotal swellings
   - Common neck swellings (thyroid, Lymph nodes)
   - Varicose veins
   - Foot problems in diabetics
   - Dyspepsia
2. Provide 1st aid measures for acute abdomen.
3. Identify common surgical instruments and describe their use.
4. Prepare patients for different operative intervention
5. Provide the appropriate postoperative care
6. Identify cases that need hospital admission.
7. Write medical reports for referral and requests for investigations.

I.ii. Documenting the achievement of the expected clinical competencies

Please fill-in the following data for each patient seen. Total number of endorsed case records in the round should be at least 30. Estimated time required to complete each record is 10 minutes.

Part I: To be filled by the trainee				
Patient serial # (in the logbook):				
				Hospital Record #:
Seen at:	Outpatient	Inpatient	ER	Other (specify)
Date:				
Age & gender:				
Main theme of the case				
Case summary				
Role of the trainee (tick the appropriate boxes)	History taking & Examination	Discussing the differential diagnosis	Proposing plan of management	Providing first aid/minor procedure
	Writing case report/ referral notes	Writing referral / request for investigation	Prescribing appropriate diet/parenteral fluid therapy	Follow-up
Signature of the trainee				
Part 2: To be filled by the supervisor				
Supervisor's Evaluation of the performance of the trainee	Excellent	Very good	Satisfactory	Unsatisfactory
Suggested areas of improvement (must be written if the evaluation is unsatisfactory)**:**				
Supervisor's name		**Supervisor's signature**		

II. Practical skills and manual procedures:

II.i. Expected practical skills and manual procedures

By the end of the General Surgery rotation, the H.O. should be able to:

1. Manage different wounds and diagnose any complications. **(5 times)**
2. Perform wound dressing and bandaging to different wounds encountered in the ward and outpatient clinic including dressing of clean and infected wounds. (**5 times)**
3. Remove surgical drains in the proper timing. (**5 times)**
4. Remove stitches and tubes.(**5 times)**
5. Practice scrubbing, gowning, gloving and proper safety procedures in the O.R.(**5 times)**
6. Perform and interpret PR examination.**(3 times)**
7. Perform suturing uncomplicated wounds. (**5 times)**
8. Do abscess drainage. **(2 times)**
9. Assist in circumcision. **(2 times)**
10. Observe at least 2 of the otherminor surgical procedures such as lipoma excision, and ingrown toe nail extraction.(**one time each)**

II.ii. Documenting the performance of practical skills and manual procedures

The trainee is to fill-in the following form, get the evaluation and signature of the supervisor in the last 2 columns

Skill/Procedure	Date	Venue (OP, Ward, ER, Model)	Hospital record #	Age & gender	Competence level	Supervisor's signature
Managing wounds & diagnosing complications (5 times)	- - - - -					
Wound dressing (5 times)	- - - - -					
Removal of surgical drains (5 times)	- - - - -					
Removal of stitches and tubes (5 times)	- - - - -					
Practice aseptic procedures in the O.R.	- - - -					
PR examination	- - -					
Suturing uncomplicated wounds	- - -					
Abscess drainage (2 times)	- -					
Circumcision (one case witnessed)	- -					
Minor procedure (one case witnessed)	-					
Minor procedure (one case witnessed	-					

* Level of competence: 1-Observation., 2-Practice with direct supervision, 3-Practice with indirect supervision, 4-Independent practice.

Gynecology & Obstetrics Rotation

Start date of the rotation:

End date of the rotation:

Name & Title of the Supervisor:

Hospital/ Medical center:

I.i. Expected clinical competencies

By the end of the Gynecology & Obstetrics rotation, H.O. will be able to:

1. Carry out a focused history taking, do physical examination, justify the diagnosis, discuss management plans, and perform relevant follow-up of the progress of the following clinical conditions (At least one patient for each clinical condition)
   - Vaginal discharge
   - Vaginal bleeding
   - Amenorrhea
   - Dysmenorrhea
2. Perform antenatal care.
3. Identify high risk pregnancy and write referral reports.
4. Diagnose and provide 1st aid management of postpartum complications
5. Educate the patient of the appropriate means of family planning

I.ii. Documenting the achievement of the expected clinical competencies

Please fill-in the following data for each patient seen. Total number of endorsed case records in the round should be at least 30. Estimated time required to complete each record is 10 minutes.

Part I: To be filled by the trainee				
Patient serial # (in the logbook):				
				Hospital Record #:
Seen at:	Outpatient	Inpatient	ER	Other (specify)
Date:				
Age:				
Main theme of the case				
Case summary				
Role of the trainee (tick the appropriate boxes)	History taking & Examination	Discussing the differential diagnosis	Proposing plan of management	Providing first aid/minor procedure
	Writing case report/ referral notes	Writing referral / request for investigation	Prescribe appropriate diet/parenteral fluid therapy	Follow-up
Signature of the trainee				
Part 2: To be filled by the supervisor				
Supervisor's Evaluation of the performance of the trainee	Excellent	Very good	Satisfactory	Unsatisfactory
Suggested areas of improvement (must be written if the evaluation is unsatisfactory)**:**				
Supervisor's name		**Supervisor's signature**		

Practical skills and manual procedures:

II.i. Expected practical skills and manual procedures

By the end of the Obstetrics & Gynecology rotation, the H.O. should be able to:

1. Perform vaginal examination.(**5 times)**
2. Insert vaginal speculum.(**5 times)**
3. Insert and remove commonly used IUDs.(**5 times)**
4. Manage the process of normal labor. (**3 times)**

II.ii. Documenting the performance of practical skills and manual procedures

The trainee is to fill-in the following form, get the evaluation and signature of the supervisor in the last 2 columns

Skill/Procedure	Date	Venue (OP, Ward, ER, Model)	Hospital record #	Age	Highest Level of competence attained*	Supervisor's signature
Perform vaginal examination (5 times)	- - - - -					
Insert vaginal speculum (5 times)	- - - - -					
Insert and remove IUDs (5 times)	- - - - -					
Manage normal labor (3 times)	- - -					

Revised in 1/6/2017

مرفقات

مرفق (1):

قرارات مجلس الكلية خاصة ببرنامج طلاب المرحلة الجامعية الأولى (5+2)

م	تاريخ الجلسة	رقم الجلسة	رقم القرار	الموضوع
.1	2017/6/13	296	549	إعتماد توصيف البرنامج ومقرراتة

أمين مجلس الكلية :
د/ سامر أحمد الصاوى

عميد الكلية:
أ.د./ حسان حمدى عبد الرحمن النعمان