Benha University
Faculty of Medicine

Program Specification

Bachelor of Medicine and Surgery

(M.B.B.Ch.)

(According to applied bylaw 2003)

(2013-2014)

Contents

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Program Specification
(2013-2014)

A- Basic Information

1- **Program title:** Bachelor of Medicine and Surgery **(M.B.B.Ch.)**

2- **Program type:** Multiple

3- **Departments: 29 Departments, according to the Faculty's bylaw 2003:**
   - Human Anatomy & Embryology, Medical Physiology, Histology & Cell Biology, Medical Biochemistry, Pathology, Clinical Pharmacology, Medical Parasitology, Medical Microbiology & Immunology, Forensic medicine & Clinical Toxicology, Community Medicine, Ophthalmology, Otorhinolaryngology, Pediatrics, General medicine & its subspecialties (Cardiology, Gastroenterology & Hepatology, Rheumatology & Rehabilitation, Neuropsychiatry diseases, Chest diseases, Clinical Pathology, Radio-diagnosis and Dermatology & Andrology), Obstetrics & Gynecology and General surgery & its subspecialties (Cardiothoracic surgery, Neurosurgery, Urosurgery, Orthopedics and Anesthesia & ICU).

4- **Program Coordinator:**
   - Professor: Mohammed Elshafey, vice dean of education & students affairs.
   - Assistant coordinator: Professor: Ola Gabber Haggag, Head of internal committee of reviewing programs & courses specifications).

5- **Internal evaluators:** Professor: Ibrahim Sadik Elgendy

6- **External evaluator:** Professor: Salma Fouad Dowara, Vice Director of Medical Education Development Center (MEDC), Faculty of Medicine, Cairo University.

7- **Date of program specifications approval:** Faculty Council: No. (356) date: 15-9-2013.

B- Professional Information

1- Program Aims:

The overall aims of the program are to provide the graduate with:

1.1. Basic scientific knowledge essential to practice medicine at the primary health care and different specialties of medicine, and to maintain normal health with proper awareness of the social and community prosperities.

1.2. Clinical, practical and administrative skills essential for proper evaluation and management of the common health problems.

1.3. Basic ethical, professional and communication skills essential for establishing & maintaining good doctor/ patient relationship, appropriate attitudes with colleagues and para-medicals.

1.4. Lifelong learning competencies necessary for continuous professional development including self-learning and principles of medical research.

2- Intended Learning Outcomes (ILOs):

2. a. Knowledge and Understanding:

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

2.a.1. ***Describe*** normal structure and function of human body at molecular, biochemical and cellular levels (including the principles of genetics), to maintain the body homeostasis.

2.a.2. ***Discuss*** normal growth and development and behavior of human body (at all stages, intrauterine, infancy, childhood, adolescence, adults & geriatrics) & their impact on individuals & families.

2.a.3. ***Recognize*** the altered development, growth, structure, behavior and function of the body that will be associated with common clinical conditions, likely to be seen by a new graduate.

2.a.4. ***Identify*** the risk factors (including the role of genetics, immunological and infectious factors in disease predisposition), pathogenesis, the clinical manifestations, necessary investigations and differential diagnosis of common diseases as well as complications of the life threatening conditions (at all stages of life).

2.a.5. ***Describe*** the indications, the relative advantages and disadvantages of various therapeutic modalities (Pharmacological and non-pharmacological) for common and life threatening illnesses.

2.a.6. ***Know*** the basics of pre- and post-operative care and methods of pain relief and palliative care.

2.a.7. ***Discuss*** proper methods of intervention for common and life threatening illnesses (whether noninvasive and/ or, invasive) including common toxicological cases.

2.a.8. ***Explain*** the basic determinants of health, principles of disease prevention of common community health problems and organization of the Egyptian health care system.

2.a.9. ***Understand*** the principles of the epidemiological methods (research methodology, demography) and morbidity (diseases) & mortality (deaths) biostatistics and the importance of Population-based approaches to health care services to improve medical practice.

2.a.10. ***Identify*** the principles of medical ethics, medical malpractice, the scope and impact of human rights law on persons and groups and the medico-legal aspect of the common problems in the field of forensic medicine that facing the new graduate.

2.a.11. ***Explain*** the basic issues for health & safety for the patients & themselves during undergraduate training and post-graduate practice.

2.a.12. ***Know*** the basic principles of formulating specific clinical sheets, the principles of clinical audit and the importance of using the results of clinical audit to improve medical practice.

2.a.13. ***Express*** English language as needed for learning.

2. b. Practical and Clinical Skills:

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

2.b. 1. ***Implement*** the basic sciences practical skills for further practice of medicine.

2.b.2. ***Assess*** the major health needs and problems of the community through conducting field studies.

2.b.3. ***Obtain*** a complete & a focused medical history.

2.b.4. ***Write*** specific clinical sheets suitable to record medical problems - met in clinical practice.

2.b.5. ***Perform*** complete physical examination of patients with common acute and chronic clinical conditions appropriate to the age, gender, while being culturally sensitive.

2.b.6. ***Apply*** rational management strategies for common conditions met with in clinical practice.

2.b.7. ***Write*** safe prescriptions of different types of drugs including different modalities for pain relief, based on patient's weight, age and health condition.

2.b.8. ***Manage*** life-threatening, injured and serious conditions with instituting appropriate initial therapy (first aid measures).

Procedures and technical skills under appropriate supervision during undergraduate and house officer training:

2.b.9. Insert intravenous line and a cannula into to peripheral veins to collect blood samples & give medications.

2.b.10. Administer compulsory childhood vaccines.

2.b.11. Give intramuscular, subcutaneous, intradermal and intravenous injections.

2.b.12. Suture superficial wounds.

2.b.13. Demonstrate competency in cardiopulmonary resuscitation and basic life-support.

2.b.14. Perform and interpret basic bedside laboratory tests.

2.b.15. Perform and interpret ECG.

2.b.16. Perform and interpret basic respiratory function tests.

2.b.17. Administer basic oxygen therapy.

2.b.18. Use a nebulizer for administration of inhalation therapy.

2.b.19. Insert a nasogastric tube.

2.b.20. Insert catheters into bladder

2.b.21. Carry-out the s Steps of normal labor (in the skill lab for under-graduate).

2.b.22. Apply the principles of sterile techniques and principles of infection control.

2. c. Professional Attitude and Behavioral skills:

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

2.c.1. ***Respect*** patients' rights and involve them and /or their caretakers in management decisions, irrespective of their socioeconomic levels, culture or religious beliefs using appropriate language to establish a good patient-physician relationship in an empathic and holistic approach.

2.c.2. ***Recognize*** the different cultural beliefs and values in the community they serve.

2.c.3. ***Respect*** the role and the contributions of other health care professionals regardless their degrees or rank (top management, subordinate or colleague).

2.c.4. ***Follow*** medical ethics and the national code of ethics issued by the Egyptian Medical Syndicate.

2.c.5. ***Reflect*** critically on their own performance and that of others, to recognize personal limitations regarding skills and knowledge to refer patients to appropriate health facility at the appropriate stage.

***House Officers should be able, under appropriate supervision, to*:**

2.c.6. **Respect** the patient's dignity, privacy and information confidentiality with delivering care after patient's consent.

2.c.7. Show non-prejudice in their approach to others to treat all patients equally regardless of believes, culture, and behaviors.

2.c.8. Demonstrate respect and Work effectively as a member or a leader of an interdisciplinary team.

2.c.9. Establish good relations with colleagues to share all types of inter-professional activities including shared learning.

2.c.10. Select the most appropriate and cost effective to & therapeutic procedures for each problem.

2.c.11. Notify/report about any physical or mental conditions related to himself, colleagues or any other person that might jeopardize patient's safety.

2. d. Communication skills:

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

2.d.1. ***Communicate*** clearly, sensitively and effectively with patients and their relatives, and colleagues from a variety of health and social care professions.

2.d.2. ***Explain*** to the patient or the patients' relatives the nature of illness, the diagnostic plan, the treatment options and the possible complications in such a way that is easily understood to provide appropriate basic health education.

2.d.3. ***Communicate*** effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.

2.d.4. ***Cope up*** with difficult situations as breaking news.

2.d.5. ***Show*** sympathy to the patients and their relatives in situations of stress and grief.

2.d.6. ***Respect*** patients and their relatives, superiors, colleagues and all members of the health profession.

2. e. Intellectual Skills:

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

2.e.1. ***Integrate*** the facts of the basic sciences with clinical data.

2.e.2. ***Interpret*** patient symptoms and physical findings in terms of their anatomic, pathologic and functional diagnostic significances.

2.e.3. ***Analyze*** the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

2.e.4. ***Construct*** appropriate management strategies for patients with common diseases, both acute and chronic, including medical, psychiatric, and surgical conditions.

2.e.5. ***Combine*** the clinical and investigational database to be proficient in clinical problem solving.

2.e.6. ***Prioritize*** the medical problems and their differential diagnoses.

2.e.7. Analyze, and evaluate relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem on evidence based medicine (EBM).

2.e.8. ***Generate*** a list of initial diagnostic hypotheses (differential diagnosis) for each problem.

2.e.9. ***Evaluate*** uncertain situation through proper counseling, consultation and referral.

2.e.10. ***Formulate*** research hypothesis & questions.

2.e.11. ***Select*** the suitable statistical method for collecting, presenting, analyzing and interpreting medical data precisely.

2.e.12. ***Classify*** factors that place individuals at risk for disease or injury, to determine strategies for appropriate response.

2.e.13. ***Design*** an initial course of management for stabilization of patients with serious illnesses.

2. f. General and Transferable Skills:

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

2.f.1. ***Establish*** life-long self-learning required for continuous professional development.

2.f.2. ***Use*** the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.

2.f.3. ***Retrieve***, manage, and manipulate information by all means, including electronic means.

2.f.4. ***Present*** information clearly in written, electronic and oral forms.

2.f.5. ***Work*** effectively as a member or a leader of an interdisciplinary team.

2.f.6. ***Apply*** the principles of statistical methods for collection, presentation & analysis of all types of data.

House Officers should be able to:

2.f.7. Establish Evidence Based Medicine in management decisions.

2.f.8. Set priorities, to manage time and resources effectively.

2.f.9. Work efficiently within the health care team and as an effective team leader.

2.f.10. Solve problems related to patients, work management, and among colleagues.

2.f.11. Respond to changes in work environment.

2.f.12. Apply infection control principals and safety measures during clinical practice.

2.f.13. Evaluate his performance and that of others through construction feedback.

3- Academic Standards:

a) The national academic reference standards (NARS) for medicine (January 2009): This program, adopts the National Academic Reference Standards (NARS) for Medicine, issued by the National Authority for Quality Assurance and Accreditation in Education (NAQAAE)**, Annex 2.**

b) Comparison of program aims and ILOs to the national academic reference standards (NARS) for medicine: The aims and **ILOs** of the program cover the national academic reference standards in

medicine (NARS), (January 2009). **Annex 3**

4- References standards (Benchmarks): no reference standers

5 - Program structure and contents:

5. a- Program duration: 6 Academic years followed by one year clinical training as house officers.

5. b- Program structure:

- **Total teaching hours in the program**: 4590 hours + 30 hours human rights = 4620 (added by university to the programs of all faculties)
  - Hours of Basic Sciences Courses: 2100 hours = 45.45%
  - Hours of Social Sciences and Humanities Courses (Behavioral Science, human rights, and English language): 90 hours = 1.95 %
  - Hours of Clinical Sciences Courses: 2400 hours = 52 %
  - Computer: 30 hours = 0.65
- **Field training:**
  - Hours of field training Courses (Community Medicine): **8 hours = 0.17 %**
  - clinical training as house officers**: one year**

5. c- Levels and courses of the program:

- **program levels: not applicable, the program years is 1st to 6th**
- **Program Courses:** All courses are compulsory, no elective or selective courses.

Subject	Lectures: h/week (total hours)	Practical: h/week (total hours)	Clinical: h/week (total hours)
Basic Sciences:			
Human Anatomy & Embryology 1st year 2nd year	4 h/w(120) 4 h/w(120)	6 h/w(120) 6 h/w(120)	
Medical Physiology 1st year 2nd year	5 h/w(150) 5 h/w(150)	3 h/w(60) 3 h/w(60)	
Histology & Cell Biology 1st year 2nd year	2 h/w(60) 2 h/w(60)	3 h/w(60) 3 h/w(60)	
Medical Biochemistry 1st year 2nd year	3 h/w(75) 3 h/w(75)	3 h/w(60) 3 h/w(60)	
Pathology	5 h/w(120)	6 h/w(120)	
Clinical Pharmacology	4 h/w(120)	3 h/w(60)	
Medical Parasitology	2 h/w(60)	3 h/w(60)	
Medical Microbiology & Immunology	3 h/w(90)	3 h/w(60)	
Total (Basic Sciences)	**42 h/w (1200)**	**45 h/w (900)**	
Social sciences & Humanities, Language, and computer			
Behavioral Science	1 h/w(30)		
Human Rights	1 h/w (30)		
English Language	1 h/w (30)		
computer	1 h/w (30)		
Total	**4 h/week (120)**		
Clinical sciences:			
Forensic medicine & Clinical Toxicology	2.5 h/w (80)	2h/w (64)	2 w/year (6 h)
Community Medicine	4 h/w(128)	2 h/w(64)	**2 w/year of field training(8 h for each student)**
Ophthalmology	2.5 h/w (80)		15 h/w For 8 weeks(120)
Otorhinolaryngology	2 h/w (64)		15 h/w

			For 1 month(60)
Pediatrics	3 h/w(108)		15 h/w for 12weeks(180)
General medicine & its subspecialties.	6h/w (216)		15h/w for 24 weeks(360)
Obstetrics & Gynecology	3 h/w(108)		15 h/w for 12weeks(180)
General surgery& its subspecialties.	6 h/w (216)		15h/w for 24weeks(360)
Total (clinical sciences)	**29h/week (1000 hs)**	**4 h/w (128hs)**	**129 h/w (1272 hs)**

First Year of Program: (1)

Code No.	Course title	Total No. of hours	No. of hours / week		Program ILOs Covered
			Lect.	Lab.	
Med 07 01 A	Human Anatomy & Embryology	240	120 h (4 h/week)	120 (6h/week)	2.a.1., 2.a.2., 2.b.1., 2.c.2, 2.c.3., 2.d.1., 2.d.3., 2.d.4., 2.e.1., 2.e.2., 2.e.7., 2.e.10., 2.f.1., 2.f.2., 2.f.3., 2.f.4., 2.f.5.
Med 07 02 A	Histology & Cell Biology	120	60 (2 h/week)	60 (3h/week)	2.a.1., 2,a,4., 2.b.1., 2.c.2, 2.c.3., 2.d.1., 2.d.3., 2.d.4.., 2.e.1., 2.e.7., 2.e.10,2.f.1., 2.f.2., 2.f.3., 2.f.4., 2.f.5.
Med 07 03 A	Medical Physiology	210	150▲ (5 h/week)	60 (3h/week)	2.a.1., 2.a.3., 2.b.1., 2.c.2, 2.c.3., 2.d.1. ,2.d.3. ,2.d.4., ,2.e.1., 2.e.2., 2.e.7., 2.e.10, 2.f.1., 2.f.2., 2.f.3., 2.f.4., 2.f.5.
Med 07 04 A	Medical Biochemistry	135	75 (3 h/week)	60 (3h/week)	2.a.1., 2.a.4., 2.b.1., 2.c.2, 2.c.3., 2.d.1.,2.d.3.,2.d.4., 2.e.1.,2.e.3.,2.e.5., 2.e.7.,2.e.10,2.f.1., 2.f.2., 2.f.3., 2.f.4., 2.f.5.
Med 07 72	English Language	30	30 (1 h/week)		2.a.13., 2.b.1.,2.c.2,2.d.1., 2.d.4., 2.e.1.,2.e.7.,2.e.10,2.f.1., 2.f.2., 2.f.3., 2.f.4., 2.f.5.
	Computer	30	30 (1 h/week)		2.f.2., 2.f.3., 2.f.4.
Total		**765 hs**	**465 hs**	**300 hs**	

Second Year of Program: (2)

Code No.	Course title	Total No. of hours	No. of hours / week		Program ILO Covered
			Lect.	Lab.	
Med 07 01B	Human Anatomy & Embryology	240	120 (4 h/week)	120 (6h/week)	2.a.1., 2.a.2., 2.b.1., 2.c.2, 2.c.3., 2.d.1., 2.d.3., 2.d.4.., 2.e.1., 2.e.2., 2.e.7., 2.e.10., 2.f.1., 2.f.2., 2.f.3., 2.f.4., 2.f.5.
Med 07 02 B	Histology & Cell Biology	120	60 (2 h/week)	60 (3h/week)	2.a.1., 2,a,4., 2.b.1., 2.c.2, 2.c.3., 2.d.1., 2.d.3., 2.d.4.., 2.e.7., 2.e.10, 2.f.1., 2.f.2., 2.f.3., 2.f.4., 2.f.5.
Med 07 03 B	Medical Physiology	210	150▲ (5 h/week)	60 (3h/week)	2.a.1., 2.a.3., 2.b.1., 2.c.2, 2.c.3., 2.d.1., 2.d.3., 2.d.4., 2.d.7., 2.e.2., 2.e.7., 2.e.10, 2.f.1., 2.f.2., 2.f.3., 2.f.4., 2.f.5.
Med 07 04 B	Medical Biochemistry	135	75 (3 h/week)	60 (3h/week)	2.a.1., 2.a.4., 2.b.1., 2.c.2, 2.c.3., 2.d.1., 2.d.3., 2.d.4.., 2.e.3., 2.e.5., 2.e.7., 2.e.10, 2.f.1., 2.f.2., 2.f.3., 2.f.4., 2.f.5.
Med 07 71	Behavioral Science	30	30 (1 h/week)		2.a.2., 2.c.2, 2.c.3., 2.d.1., 2.d.3., 2.d.4., 2.e.7., 2.e.10, 2.f.1., 2.f.2., 2.f.3., 2.f.4., 2.f.5.
Total		**735 hs**	**435 hs**	**300 hs**	

▲*This period includes 10 hours in Biophysics*

Third Year of Program: (3)

Code No.	Course title	Total no. of hours	No. of hours / week		Program ILO Covered
			Lect.	Lab.	
Med 07 05	Pathology	240	120 (4h/ week)	120 (6h/week)	2.a.3., 2.a.4., 2.b.1., 2.c.2, 2.c.3., 2.d.1., 2.d.2.,2.d.3., 2.d.4., 2.e.2., 2.e.3., 2.e.7., 2.e.10, 2.f.1., 2.f.2., 2.f.3., 2.f.4., 2.f.5.
Med 07 06	Clinical Pharmacology	180	120 (4h/week)	60 (3h/week)	2.a.5., 2.b.1., 2.b.7.,2.c.2, 2.c.3.,2.d.1.,2.d.3.,2.d.4.., 2.f.1., 2.f.2., 2.f.3., 2.f.4., 2.f.5.
Med 07 07	Medical Microbiology & Immunology	150	90 (3 h/week)	60 (3h/week)	2.a.4., 2.a.11., 2.b.1., 2.c.2, 2.c.3.,2.d.1.,2.d.3.,2.d.4.., 2.e.3.,2.e.5.,2.e.7.,2.e.10, 2.f.1., 2.f.2., 2.f.3., 2.f.4., 2.f.5.
Med 07 08	Medical Parasitology	120	60 (2 h/week)	60 (3h/week)	2.a.4., 2.b.1., 2.c.2, 2.c.3.,2.d.1.,2.d.3.,2.d.4.., 2.e.3.,2.e.5.,2.e.7.,2.f.1., 2.f.2., 2.f.3., 2.f.4., 2.f.5.
Med 07 77	Human rights	30	30 (1h/w)		2.a.10., 2.c.2, 2.c.3., 2.d.1.,2.d.2.,2.d.3.,2.d.4., 2.e.7.,2.e.10,2.f.1., 2.f.2., 2.f.3., 2.f.4., 2.f.5.
Total		**720 hs**	**420 hs**	**300 hs**	

Fourth Year of Program: (4)

Code No.	Course title	Total No. of hours	No. of hours / week		Field	Program ILO Covered
			Lect.	round		
Med 07 09	Community Medicine	192	128 h (24 h/week) for 6 weeks	64 h (12 h/week) for 6 weeks	2 weeks / year **(8 h)**	2.a.8., 2.a.9.,2.a.11, 2.b.2., 2.b.6., 2.c.1, 2.c.2., 2.c.3., 2.c.4., 2.c.5., 2.d.1.,2.d.2.,2.d.3.,2.d.4.,2.e.3.,2.e.7.,2.e.10, 2.e.11, 2.e.12, 2.f.1., 2.f.2., 2.f.3., 2.f.4., 2.f.5., 2.f.6.
Med 07 10	Forensic Medicine & Clinical Toxicology	144	80 h (12h/week) for 6 weeks	64 h (18 h/week) for 6 weeks + Clinical 2 weeks/y **(6 h)**		2.a.7., 2.a.10., 2.a.12., 2.b.3., 2.b.4., 2.b.5., 2.b.6., 2.b.7., 2.b.8., 2.c.1, 2.c.2., 2.c.3., 2.c.4., 2.c.5., 2.d.1., 2.d.2., 2.d.3., 2.d.4., 2.d.5., 2.d.6., ,2.e.3.,2.e.4., 2.e.5., 2.e.6., 2.e.7., 2.e.8., 2.e.9. 2.e.10, 2.e.13.,2.f.1., 2.f.2., 2.f.3., 2.f.4., 2.f.5.
Med 07 11	Ophthalmology	200	80 h (18h/week) for 6 weeks	120 h (18 h/wk) for 6 weeks		2.a.3., 2.a.4., 2.a.6., 2.a.11., 2.a.12., 2.b.3., 2.b.4., 2.b.5., 2.b.6.,2.b.7.,2.b.8.,2.c.1, 2.c.2., 2.c.3., 2.c.4., 2.c.5., 2.d.1., 2.d.2., 2.d.3., 2.d.4., 2.d.5., 2.d..6, 2.e.3., 2.e.4., 2.e.5.,2.e.6.,2.e.8., 2.e.9.. 2.e.10, 2.e.12,2.e.13.,2.f.1., 2.f.2., 2.f.3., 2.f.4., 2.f.5.
Med 07 12	Otorhinolaryngology.	124	64 h (12h/week) for 6 weeks	60 h (15h/wk) for 6 weeks		2.a.3., 2.a.4., 2.a.6., 2.a.11., 2.a.12. ,2.b.3., 2.b.4., 2.b.5.,2.b.6.,2.b.7., 2.b.8., 2.c.1, 2.c.2., 2.c.3., 2.c.4., 2.d.5., 2.d.6., 2.c.5., 2.d.1., 2.d.2., 2.d.3.,2.d.4.,2.d.5., 2.d.6., 2.e.3., 2.e.6., 2.e.7.,2.e.8., 2.e.9. 2.e.10, 2.e.12, 2.e.13.,2.f.1., 2.f.2., 2.f.3., 2.f.4., 2.f.5.
Total		**660 hs**	**352 hs**	**308 hs**	**+ 2 w /year of field training (8 h)**	

Fifth Year of Program: (5)

Code No.	Course title	Total No. of hours	No. of hours / week		Program ILO Covered
			Lect.	Pr.	
Med 07 13	General medicine	576	216h 6h/w	360h (15h/w) for 24 weeks)	2.a.3., 2.a.4., 2.a.5., 2.a.7., 2.a.8., 2.a.11., 2.a.12., 2.b.3., 2.b.4., 2.b.5., 2.b.6., 2.b.7., 2.b.8., 2.c.1, 2.c.2., 2.c.3., 2.c.4., 2.e.12, 2.c.5., 2.d.1., 2.d.2., 2.d.3., 2.d.4., 2.d.5., 2.d.6., 2.e.3., 2.e.4., 2.e.5., 2.e.6.,2.e.7.,2.e.8., 2.e.9. 2.e.10, 2.e.12, 2.e.13., 2.f.1., 2.f.2., 2.f.3., 2.f.4., 2.f.5.
Med 07 14	Pediatrics	288	108 3h/w	180 (15h/w) for 12 weeks	2.a.2., 2.a.3., 2.a.4., 2.a.5., 2.a.11., 2.a.12., 2.b.3., 2.b.4., 2.b.5., 2.b.6.,2.b.7.,2.b.8., 2.c.1, 2.c.2., 2.c.3., 2.c.4., 2.c.5., 2.d.1., 2.d.2., 2.d.3., 2.d.4., 2.d.5., 2.d.6.., 2.e.3., 2.e.4., 2.e.5., 2.e.6., 2.e.7., 2.e.8., 2.e.9. 2.e.10, 2.e.12, 2.e.13. ,2.f.1., 2.f.2., 2.f.3., 2.f.4., 2.f.5.
Total		**864 hs**	**324 hs**	**540 hs**	

- **Subspecialties of general medicine include the following departments:**

- Cardiology.
- Gastroenterology & Hepatology.
- Rheumatology.
- Neuropsychiatry.
- Chest.
- Clinical pathology.
- Radio-diagnosis.
- Dermatology & Andrology.

Sixth Year of Program: (6)

Code No.	Course title	Total No. of hours	No. of hours / week		Program ILO Covered
			Lect.	Pr.	
Med 07 15	General surgery	576	216h 6h/w	360h (15h/w) for 24 weeks)	2.a.6., 2.a.7, 2.a.11., 2.a.12., 2.b.3., 2.b.4.,2.b.5.,2.b.6.,2.b.7.,2.b.8., 2.c.1, 2.c.2., 2.c.3., 2.c.4., 2.c.5., 2.d.1., 2.d.2., 2.d.3., 2.d.4., 2.d.5., 2.d.6., 2.e.3., 2.e.4., 2.e.5., 2.e.6., 2.e.7., 2.e.8., 2.e.9. 2.e.10, 2.e.12, 2.e.13., 2.f.1., 2.f.2., 2.f.3., 2.f.4., 2.f.5.
Med 07 16	Gynecology& Obstetrics	288	108 3 h/w	180 (15h/w) for 12 weeks	2.a.4, 2.a.6., 2.a.7., 2.a.11., 2.a.12., 2.b.3.,2.b.4., 2.b.5., 2.b.6., 2.b.7., 2.b.8., 2.c.1, 2.c.2., 2.c.3., 2.c.4., 2.c.5.,2.d.1.,2.d.2., 2.d.3., 2.d.4., 2.d.5., 2.d.6., 2.e.3., 2.e.4., 2.e.5., 2.e.6., 2.e.7., 2.e.8., 2.e.9., 2.e.10, 2.e.12, 2.e.13., 2.f.1., 2.f.2., 2.f.3., 2.f.4., 2.f.5.
Total		**864 hs**	**324 hs**	**540 hs**	

- **Subspecialties of general surgery include the following departments:**
  - Cardiothoracic surgery.
  - Neurosurgery.
  - Urosurgery.
  - Orthopedics.
  - Anesthesia & ICU

٦ـ محتويات المقرات (راجع توصيف المقررات: (Annex 1 Program courses

- **كود أو رقم المقرر:**
- اسم المقرر:
- المحتويات:

7- 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.

8- Regulations for progression and program completion:

First Year/Level/Semester

- Duration: 30 weeks
- Two sets of exams: 1st in May — 2nd in September for students who failed to pass any course.
- Midyear exams are set according to internal regulations set by the Faculty. Midyear exams don't include English nor computer
- Criteria to progress to the next year are passing exams in at least 2 courses.
- Chances for registration after failure: 2 years
- Withdrawal or transferal of students to another faculty after 2 years failure

Second Year/Level/Semester

- Duration: 30 weeks
- Two sets of exams: 1st in May — 2nd in September for students who failed to pass any course.
- Midyear exams are set according to internal regulations set by the Faculty
- Midyear exams do not include psychology.
- Criteria to progress to the next year are passing exams in all medical courses of the 2nd year except psychology, English and ICDL.
- Chance for registration: 2 years and external registration for only one year.
- Withdrawal or transferal of students to another faculty after 3 years failure.

Third Year/Level/Semester

- Duration: 30 weeks
- Two sets of exams: 1st in May — 2nd in September for students who failed to pass any course.

- Midyear exams are set according to internal regulations set by the Faculty.
- Criteria to progress to the next year are passing exams in all medical courses as well as psychology, English & ICDl.
- Chance for registration: 2 years & the third year is an external registration.
- Withdrawal or transferal 0f students to anther faculty after 5 years failure.

Fourth Year/ Level/Semester

- Duration: 32 weeks
- Two sets of exams: 1st in June — 2nd in September for students who failed to pass any course.
- Midyear exams are set according to internal regulations set by the faculty.
- Criteria to progress to the next year are passing exams all medical courses studied.
- Chance for registration: 2 years &four years as an external registration.
- Withdrawal or transferal of students to anther faculty after 6 years failure.
- The registration is unlimited till success if any student had succeeded in only 2 courses (half the courses).

Fifth Year/Level/Semester

- Duration: 36 weeks
- Two sets of exams: 1st in September — 2nd in December for students who failed to pass any course.
- Midyear exams are set according to internal regulations put by the faculty.
- Criteria to progress to the next year are passing exams in all medical courses

- The registration is unlimited till success.

Sixth Year/Level/Semester: Duration: 36 weeks

- Two sets of exams: 1st in November 2nd in May for students who failed to pass any course.
- Midyear exams are set according to internal regulations put by the faculty.
- Criteria to progress to the next year are passing exams in all medical courses.
- The registration is unlimited till success.

9- Methods of Students Assessment:

Method	Measured (ILOs)
Written examination:	To assess: ▪ knowledge & understanding: (2.a.1 to 2.a. 13) ▪ intellectual skills: (2.e.1.to 2.e.13)
Oral examination:	To assess: ▪ knowledge & understanding: (2.a.1 to 2.a. 13) ▪ intellectual skills: (2.e.1.to 2.e.13) ▪ general & transferable skills: (2.f.1 to 2.f.6)
Practical & clinical examination	To assess: ▪ knowledge & understanding: (2.a.1 to 2.a. 13) ▪ intellectual skills: (2.e.1.to 2.e.13) ▪ Practical & clinical skills (2.b.1. to 2.b.8) ▪ Professional skills & attitude (2.c.1 to 2.c.5.) ▪ Communication skills (2.d.1 to 2.d.6) ▪ general & transferable skills (2.f. to 2.f.6)

10- methods of Program Evaluation:

Evaluator	Tool	Sample
1. Internal evaluator **(s)**	Reports	Reports1-2
2. External Evaluator(s)	Reports	Reports 1-2
3. Senior student	Questionnaires	Not less than 25%
4. Alumni	Questionnaires	Not less than 25%
5. Stakeholder (Employers)	Questionnaires , interview	Representative for all sectors
6. Other	none	none

11- Learning strategies:

1. Active learning
2. Outcome-based learning
3. Problem-based learning
4. Community-based learning
5. Evidence based learning

Program Coordinator: **المسئول عن البرنامج**

- **Name** Professor: Mohammed Elshafey, vice dean of education & students affairs.
- **Signature……..** **Date:** 15-9-2013

الملاحق:

- **ملحق ١: Program courses**
- **ملحق ٢: National Academic References Standards (NARS) Medicine January 2009 1st edition**
- **ملحق 3 : مصفوفة مقارنة أهداف و نوائج التعلم المستهدفة للبرنامج مع المعايير الأكاديمية القومية المرجعية (program- NARS matrix)**
- **ملحق 4: مصفوفة المقررات مع البرنامج** Program–Courses ILOs Matrix

Annex (1)

Program courses

Specifications

Benha University
Faculty of Medicine
Department of Human Anatomy & Embryology

Course Specification

Human anatomy and Embryology (MED 0701 A)

Academic Year (2011 – 2012)

A) Basic Information:

1. **Course title: Human anatomy and Embryology**
2. **Code: MED 0701 A**
3. **Specialty:** Bachelor of Medicine and Surgery **(M.B.B.Ch.)**
4. **Department teaching the course:** Human Anatomy and Embryology.
5. **Academic year: first Year**
6. **Date of specification approval by Department council:** 9/2011
7. **Allocated marks:** 250 marks.
8. **Teaching hours:**

Theoretical	**120 hrs**
Practical	**120 hrs**
Total	**240 hrs**

B) Professional Information:

1- Overall Aim of the Course:

1.1. Provide a scientific knowledge of the normal structure of the human body at the level of organ and organ system, with the study of the normal growth and development relevant to the anatomical topics

1.2. Provide appropriate ethical and professional education necessary for dealing with cadavers.

1.3. Correlate anatomical facts with their clinical applications.

2- Intended Learning Outcomes (ILOs):

2.a. Knowledge and understanding:

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

2.a.1. Define different general anatomical and embryological terminology.

2.a.2. Describe the structure of different tissues, organs and systems of the human body.

2.a.3. List the surface landmarks of the underlying bones, muscles, tendons and internal structures (nerves, vessels & viscera).

2.a.4 Discuss the different stages of the human :development and growth

2.a.5. Explain major clinical applications of anatomical facts.

2.a.6. Describe different parts of human body and regional development and growth of each part.

2.b. Practical and Clinical Skills

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

2.b.1. Identify different parts of human body by X ray.

2.b.2. Apply the anatomical facts while examining the living subject in order to reach a proper diagnosis

2.b.3. Determine the different surface markings and the position or course of the internal structures.

2.b.4. Identify the different internal structures in cadavers and specimen

2.c. Professional Attitude and Behavioral kills:

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

2.c.1. Respect the dignity of cadavers, and respect colleagues

2.c.2. Involve himself in problems whether social or educational problems

2.c.3. Maintain honesty and integrity in all interactions with others in their professional lives

2.c.4. Value the ethics.

2.d. Communication skills:

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

2.d.1. Communicate clearly, sensitively and effectively with colleagues from a variety of health and social care professions.

2.d.2. Establish good relations with other health care professionals regardless their degrees or rank (top management, subordinate or colleague).

2.d.3. Communicate effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.

2.d.4.Respect superiors, colleagues and all members of the health profession.

2.e. Intellectual Skills:

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

2.e.1. Interpret clinical findings in relation to developmental basis

2.e.2.Interpret the normal anatomical structures on x ray

2.e.3Analyze the relation between the knowledge of internal structure and the reach to professional diagnosis

2.f. General and transferable Skills:

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

2.f.1. Present data in an organized and informative manner.

2.f.2.Demonstrate appropriate professional attitudes and behaviors in different practice situations.

2.f.3. Establish life-long self-learning required for continuous professional development.

2.f.4.Use the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.

2.f.5. Retrieve, manage, and manipulate information by all means, including electronic means.

2.f.6. Present information clearly in written, electronic and oral forms.

2.f.7. Establish effective interpersonal relationship to Communicate ideas and arguments.

3- Course contents:

Subject	Lectures (hrs)	Tutorial / Small group discussion (hrs)	Practical (hrs)	Total (hrs)	% of Total
1 - General anatomy (terms of positions & plans, movements, bone structure, function & classifications, cartilage features & types, types of joints, types of muscles, skin features, fascia form & features, parts of nervous system, cranial & spinal nerves, autonomic nervous system, arteries and veins, anastomoses, lymphatic system -etc.)	15	8	16	39	13%
2- upper limb (pectoral region, axilla, fascia & compartments of arm, anastomoses around elbow, fascia & compartments of front of forearm, fascia & compartments of palm, dorsum of hand, shoulder joint, elbow joint, radio-ulnar joint &wrist joint, fingers, nerve injuries, collateral circulation in upper limb etc.**)**	25	12	24	61	20%
3-general embryology (male & female reproductive system, oogenesis, ovulation, spermatogenesis, structure of mature sperm, fertilization, cleavage, implantation & deciduas, bilaminar disc, trilaminar disc, folding of embryo, derivatives of ectoderm & endoderm & mesoderm, fetal membranes, umbilical cord, twining, causes of congenital malformation **).**	14			14	5%
4- thorax(thoracic cage, thoracic wall, intercostals spaces, azygos system, division & content of	20	12	24	56	19%

mediastinum, pleura, lungs, broncho pulmonary system, pericardium, heart features & chambers & valves& coronary arteries, trachea, nerves vessels, ascending aorta , arch of aorta, esophagus, lymphatic elements)					
5- abdomen (anterior abdominal wall, rectus sheath, inguinal canal, peritoneum, spleen, stomach, classification of peritoneal folds, lesser sac, coeliac trunk, relation of duodenum, pancreas, portal vein, liver, suprarenal gland, kidneys, abdominal ureters, abdominal aorta , inferior vena cava, lymphatic elements, collateral circulation in abdomen)	30	16	32	78	26%
6- pelvis(peritoneum, ovary, uterine tubes, uterus, vagina , pelvic part of ureter, urinary bladder, prostate, urethra in male & female, anal canal, division of perineum, ischiorectal fossa, anal sphincter, perinial body & its attachment, urogenital triangle, urogenital diaphragm, pudental canal, pudental vessels& nerves)	16	8	16	40	13%
TOTAL	**120**	**60**	**60**	**240**	**100**%

4- Teaching and learning methods:

METHODS USED:

1. Modified lectures.
2. Small group discussions (Museum specimens, demonstration (x ray films and data show), models.
3. Practical classes.
4. Self-learning

Method	Evidence	ILOs
Modified Lectures	CDs of Lectures including (video films, brain storming, problem solving, etc……)	**2.a.1-----2.a.6** **2.c.1------2.c.4** **2.d.1------2.d.4** **2.f.1-------2.f.7**
Practical classes	practical Jars, specimens	**2.b.1-------2.b.4**
Small group discussions	Museum specimens, demonstration (x ray films and data show), models	**2.b.1------2.b.4** **2.c.1------2.c.4** **2.d.1------2.d.4** **2.f.1-------2.f.7** **2.e.1------2.e.3**
Self-learning	Samples of students researches, power point presentations	**2.a.1-----2.a.6** **2.c.1------2.c.4** **2.d.1------2.d.4** **2.f.1-------2.f.7**

TEACHING PLAN:

Lectures: 120 lectures

Tutorials: 60 tutorials

Practical classes: 60 practical classes

Time plan:

Item	**Time schedule**	**Teaching hours**	**Total hours**
Lectures	2 times/week; Two hour each/30weeks	**120 hours**	**50%**
Practical classes	2 times/week; one hour each/30 week	**60hours**	**25%**
Tutorials	2 times/week; one hour each/30weeks	**60 hours**	**25%**
Total		**240 hours**	**100%**

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA:

1. Practical attendance
2. Practical books

5-B) Assessment TOOLS:

Tool	Evidence	Purpose (ILOs)
Written examination • MCQs • Case study • Short essay • Complete • True or false with explanation	Attached module of examination	**2.a.1----2.a.6** **2.d.1----2.d.4** **2.e.1----2.e.3** **2.f.1----2.f.7**
Oral examination	Viva card system	**2.a.1----2.a.6** **2.c.1----2.c.4** **2.d.1----2.d.4** **2.e.1----2.e.3** **2.f.1----2.f.7**
Practical examination	Practical Reports	**2.a.1----2.a.6** **2.b.1----2.b.4** **2.c.1----2.c.4** **2.e.1----2.e.3**

5-C) TIME SCHEDULE:

Exam	Week
1- Assessment 1	Week 10
2- Assessment 2	Week 14
3- Assessment 3	Week 24
4- Final exam	At end of year (week 30)

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- First half of the academic year **(P.C.T in head and neck)**	15	6%
2- Mid-year exam **(P.C.T in Embryology**)	15	6%
3- Second half of the academic year **(P.C.T in Lower limb & neuroanatomy)**	10	4%
3- Final exam: a- Written b- Practical c- Oral	 125 60 15	 50% 24% 6%
4- Assignments & other activities	10	4%
Total	**250**	100%

5-E) Examination description:

Examination	Description
1- First half of the academic year	Quiz (MCQs),short questions
2- Mid-year	Objectively structured questions& practical exam
3- Second half	Objectively structured questions& practical exam
3- Final exam: a- Written b- Practical c- Oral	• select (MCQs) & Supply (Short essay) & cases • Do, identify • Two sessions
4- Assignments & other activities	. Assignments, projects, practical books

6- List of references:

6.1- Basic materials: Department books:

1-Anatomy of Upper Limb (2013): Anatomy Department, Benha Faculty of Medicine

2- ***Practical books (2013):*** (Log book- Museum book)Anatomy Department, Benha Faculty of Medicine

6.2- Essential books (text books):

Richard L.Dark,A.Wayne Vogol and Adam W.M.Michel (2012: Gray's Anatomy for Student ,2nd Edition .

6.3- Recommended books:

Chummy, S.S. (2012): ***Last's Anatomy*** Regional and applied. Pub. Churchill Livingstone, Edinburgh, London, New York. 10th ed.

6.4- Periodicals, Web sites, etc:

- http://www.anatomy.com
- http://www.medscape.com.
- http://www.pubmed.com.
- http://sciencedirect.com.

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Faculty lectures halls: 2
- Department lectures halls: 4
- Museum hall: 6TH floor
- dissecting room.
- Audio-visual teaching equipments (Computer, data show,)
- Models and mannequins
- Data show, scientific pictures archives.
- Radiology collections & archives.

Course coordinator: Prof. Saadia Ahmed Shalaby

Head of Department: Prof. Saadia Ahmed Shalaby

Date: 9/2011

Benha University
Faculty of Medicine
Department of Human Anatomy & Embryology

Course Specification

Human anatomy and Embryology (MED 0701 B)

Academic Year (2012 – 2013)

A) Basic Information:

1. **Course title: Human anatomy and Embryology**
2. **Code: MED 0701 B**
3. **Specialty:** Bachelor of Medicine and Surgery **(M.B.B.Ch.)**
4. **Department teaching the course:** Human Anatomy and Embryology.
5. **Academic year: second Year**
6. **Date of specification approval by Department council:** 9/2012
7. **Allocated marks:** 250 marks.
8. **Teaching hours:**

Theoretical	**120 hrs**
Practical	**120 hrs**
Total	**240 hrs**

B) Professional Information:

1- Overall Aim of the Course:

1.1. To Provide a scientific knowledge of the normal structure of the human body at the level of organ and organ system, with the study of the normal growth and development relevant to the anatomical topics

1.2. To provide appropriate ethical and professional education necessary for dealing with cadavers.

1.3. To correlate anatomical facts with their clinical applications.

2- Intended Learning Outcomes (ILOs):

2.a. Knowledge and understanding:

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

2.a.1. Define different general anatomical and embryological terminology.

2.a.2. Describe the basic principles of structure of different tissues, organs and systems of the human body.

2.a.3. Mention the surface landmarks of the underlying bones, muscles, tendons and internal structures (nerves, vessels & viscera).

2.a.4. Discuss the different stages of the human: development and growth

2.a.5. Explain major clinical applications of anatomical facts.

2.a.6. Describe different parts of human body and regional development and growth of each

2.b. Practical and Clinical Skills

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

2.b.1. Identify different parts of human body and the normal anatomical structures by X- ray.

2.b.2. Relate some clinical findings to developmental basis.

2.b.3. Determine the different surface markings and the position or course of the internal structures.

2.b.4. Apply the anatomical facts while examining the living subject in order to reach a proper diagnosis

2.b.5. Identify the different internal structures in cadavers and specimen

2.c. Professional Attitude and Behavioral kills:

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

2.c.1. Respect the dignity of cadavers

2.c.2. Respect the staff and involve them in any problems whether social or educational problems

2.c.3. Interact honestly and integrity with teachers, colleagues, and others

2.c.4. Value the ethical rules and law

2.d. Communication skills:

By the end of the program the graduate will be able to:

2.d.1. Communicate clearly, sensitively and effectively with colleagues from a variety of health and social care professions.

2.d.2. Establish good relations with other health care professionals regardless their degrees or rank (top management, subordinate or colleague).

2.d.3. Communicate effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.

2.e. Intellectual Skills:

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

2.e.1. Interpret some clinical findings in relation to developmental basis

2.e.2. Interpret the normal anatomical structures on x ray

2.e.3. Analyze the relation between the knowledge of internal structure and the reach to professional diagnosis

2.f. General and transferable Skills:

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

2.f.1. Present data in an organized and informative manner.

2.f.2. Demonstrate appropriate professional attitudes and behaviors in different practice situations.

2.f.3. Establish life-long self-learning required for continuous professional development.

2.f.4. Use the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.

2.f.5. Retrieve, manage, and manipulate information by all means, including electronic means.

2.f.6. Present information clearly in written, electronic and oral forms.

3- <u>Course contents</u>:

Subject	Lectures (hrs)	Tutorial / Small group discussion (hrs)	Practical (hrs)	Total (hrs)	% of Total
1-head: (landmarks, scalp, face, parotid gland, cavernus sinus, pituitary gland, lacrimal apparatus, orbit , mandibular region, styloid apparatus, tempero mandibular joint,.-etc.)	24	11	22	57	19%
2- neck (land marks, dermatomes, deep cervical fascia, neck triangle, suboccipital triangle, thyroid gland, suprahyoid region, sub	24	11	22	57	19%

mandibular and sublingual glands, root of neck, mouth cavity, pharynx, larynx, nose, ear. etc.**)**					
3-neuroanatomy (cranial meninges, csf circulation, base of brain, spinal cord, brain stem, forebrain, cerebellum, diencephalon, blood supply of brain, internal structure, pyramidal tract, extra-pyramidal tract, sensory pathway**).**	30	16	32	78	26%
4- lower limb(land marks, front of thigh, femoral triangle, adductor canal, gluteal region, piriformis and its relations, vessels and nerves, hip joint, leg, great saphenous vein, front of leg, back of leg, sole, arches of the foot, knee joint,ankle joint, tibiofibular joint and nerve injury)	42	8	17	67	32%
5- systematic embryology (foregut, midgut, hindgut, body cavities, diaphragm, mesenteries and abdominal cavity, kidney, urinary bladder, testis, ovary, genital ducts in male &female, extragenitalia in male & female and their anomalies, heart, arteries, veins, fetal circulation and its changes at birth, skeleton, nervous system, muscles, skin, sense organs, branchial apparatus, larynx, trachea, bronchi, lungs, and their anomalies, adrenal gland, pituitary gland,& pharyngeal part of endocrines)	24			24	8%
TOTAL	**120**	**60**	**60**	**240**	**100**%

4- <u>Teaching and learning methods</u>:

- Modified lectures.
- Small group discussions.
- Practical classes.
- Self-learning

Method	Evidence	ILOs
Modified Lectures	CDs of Lectures including (video films, brain storming, problem solving, etc……)	**2.a.1-----2.a.6** **2.c.1------2.c.4** **2.d.1------2.d.3** **2.f.1-------2.f.**6
Practical classes	practical Jars, specimens	**2.b.1-------2.b.6**
Small group discussions	Museum specimens, demonstration (x ray films and data show), models	**2.b.1------2.b.5** **2.c.1------2.c.4** **2.d.1------2.d.3** **2.f.1-------2.f.6** **2.e.1------2.e.3**
Self-learning	Samples of students researches, power point presentations	**2.a.1-----2.a.6** **2.c.1------2.c.4** **2.d.1------2.d.4** **2.f.1-------2.f.**6

<u>TEACHING PLAIN:</u>

Lectures: <u>120 lectures</u>

Tutorials: <u>60 tutorials</u>

Practical classes: <u>60 practical classes</u>

Time plain:

Item	Time schedule	Teaching hours	Total hours
Lectures	<u>2</u> times/week; Two hour each/30weeks	**120 hours**	**50%**
Practical classes	<u>2</u> times/week; one hour each/30 week	**60 hours**	**25%**
Tutorials	<u>2</u> times/week; one hour each/30weeks	**60 hours**	**25%**
Total		**240hours**	**100%**

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA:

1. Practical attendance
2. Practical books

5-B) Assessment TOOLS:

Tool	Evidence	Purpose (ILOs)
Written examination • MCQs • Case study • Short essay • Complete • True or false with explanation	Attached module of examination	**2.a.1----2.a.6** **2.c.1----2.c.4** **2.d.1----2.d.3** **2.e.1----2.e.3** **2.f.1----2.f.6**
Oral examination	Viva card system	**2.a.1----2.a.6** **2.c.1----2.c.4** **2.d.1----2.d.3** **2.e.1----2.e.3** **2.f.1----2.f.6**
Practical examination	Practical Reports	**2.a.1----2.a.6** **2.b.1----2.b.5** **2.c.1----2.c.4** **2.d.1----2.d.3** **2.e.1----2.e.3** **2.f.1----2.f.6**

5-C) TIME SCHEDULE:

Exam	Week
1- Assessment 1	Week 16
2- Assessment 2	Week 14
3- Assessment 3	Week 25
4- Final exam	At end of year (week 30)

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- First half of the academic year **(P.C.T in head and neck)**	15	6%
2- Mid-year exam **(P.C.T in Embryology**)	15	6%
3- Second half of the academic year **(P.C.T in Lower limb&neuroanatomy)**	10	4%
3- Final exam: a- Written b- Practical c- Oral	 125 60 15	 50% 24% 6%
4- Assignments & other activities	10	4%
Total	**250**	100%

FORMATIVE ASSESSMENT: Student knows his marks after the Formative exams.

5-E) Examination description:

Examination	Description
1- First half of the academic year	Quiz (MCQs),short questions
2- Mid-year	Objectively structured questions& practical exam
3- Second half	Objectively structured questions& practical exam
4- Final exam: a- Written b- Practical c- Oral	• select (MCQs) & Supply (Short essay) & cases • Do, identify • Two session
5- Assignments & other activities	Assignments, projects, practical books

6- List of references:

6.1- Basic materials: Department books:

- ***1-Anatomy of Upper Limb (2013):*** Anatomy Department, Benha Faculty of Medicine
- 2***- Practical books (2013):*** (Log book- Museum book) Anatomy Department, Benha Faculty of Medicine

6.2- Essential books (text books):

- ***Richard L.Dark,A.Wayne Vogol and Adam W.M.Michel (2012: Gray's Anatomy for Student*** ,2nd Edition .

6.3- Recommended books:

- ***Chummy, S.S. (2012)***: ***Last's Anatomy*** Regional and applied. Pub. Churchill Livingstone, Edinburgh, London, New York. 10th ed.

6.4- Periodicals, Web sites, etc:

- http://www.anatomy.com
- http://www.medscape.com.
- http://www.pubmed.com.
- http://sciencedirect.com.

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Faculty lectures halls: 2
- Department lectures halls: 4
- Museum hall: 6TH floor
- Dissecting room.
- Audio-visual teaching equipment (Computer, data show,)
- Models and mannequins
- Data show, scientific pictures archives.
- Radiology collections & archives.

Course coordinator: Prof. Saadia Ahmed Shalaby

Head of Department: Prof. Saadia Ahmed Shalaby

Date: 9/2012

Benha University
Faculty of Medicine
Department of Medical Biochemistry

Course Specification

MEDICAL BIOCHEMISTRY (MED 0704 A)

First Academic Year (2011 – 2012)

A) Basic Information:

1. **Course title: MEDICAL BIOCHEMISTRY**
2. **Code: MED 0704 A**
3. **Specialty:** Bachelor of Medicine and Surgery **(M.B.B.Ch.)**
4. **Department teaching the course: MEDICAL BIOCHEMISTRY**.
5. **Academic year: first Year**
6. **Date of specification approval by Department council:** 9/2011
7. **Allocated marks:** 150 marks.
8. **Teaching hours:**

1- Theoretical	**75**
2- Practical	**60**
Total	**135**

B) Professional Information:

1- Overall Aim of the Course:

1.1. To provide the basic knowledge of biochemistry including biomolecules of carbohydrates, lipids, proteins, nucleotides, nucleic acids and enzymes and some minerals
1.2. To provide the basic knowledge of physico-chemical basis of biological systems; and the related clinical problems.
1.3. Understanding the basic principles of Molecular biology and protein synthesis.
1.4. Identifying the biotechnology methods and their clinical implications.

2- Intended Learning Outcomes (ILOs):

2.a. Knowledge and understanding:

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

2.a.1. **Describe** the structure and properties of caribodydrates, lipids and proteins of biological importance.

2.a.2. **Explain** the structure of heme and proteins of the extra-cellular matrix.

2.a.3. **Demonstrate** the structure and importance of immunoglobulins

2.a.4. **Summarize** the chemistry of nucleotides and nucleic acids`

2.a.5. **Discuss** the processes of replication, transcription and translation

2.a.6. **Mention** components, regulation and abnormalities of cell cycle together with the causes and different types of DNA mutation and repair , telomere and telomerase enzyme

2.a.7.**Identify** recombinant DNA biotechniques and their clinical implications.

2.a.8. **State** the significance of human genome and proteome projects and the principles of gene therapy.

2.b. Practical and Clinical Skills

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

2.b.1. **Perform** basic chemical tests to identify different sugars.

2.b.2. **Perform** basic chemical tests to identify different proteins.

2.c. Professional Attitude and Behavioral skills:

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

2.c.1. Demonstrate respect and Work effectively as a member or a leader of an interdisciplinary team.

2.c.2. Establish good relations with colleagues to share all types of inter-professional activities including shared learning.

2.d. Communication skills:

By the end of the program the graduate will be able to:

2.d.1. Communicate clearly, sensitively and effectively with and their colleagues staff and co-staff.

2.d.2. Cope up with difficult situations

2.d.3. Respect superiors, colleagues and all members of the health profession.

2.e. Intellectual Skills:

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

2.e.1.**Relate** the biochemical basis of some physiological processes occurring in the body and some clinical problems

2.e.2. **Interpret** the results of chemical tests to identify unknown sugar or protein solutions.

2.e.3. **Interpret** the photographs of electrophoresis runs of Polymerase chain reaction (PCR) products.

2.f. General and transferable Skills:

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

2.f.1.Establish life-long self-learning required for continuous professional development.

2.f.2.Use the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.

2.f.3.Retrieve, manage, and manipulate information by all means, including electronic means.

2.f.4.Present information clearly in written, electronic and oral forms.

2.f.5.Establish effective interpersonal relationship to Communicate ideas and arguments .

2.f.6.Work effectively as a member or a leader of an interdisciplinary team

3- <u>Course contents</u>:

Subject	**Lectures (hrs)**	**Practical (hrs)**	**Total (hrs)**	**% of Total**
1- Physical chemistry	8	10	18	
2-Carbohydrate chemistry	12	12	24	
3-Lipid chemistry	12	12	24	
4-Protein chemistry	12	12	24	
5-Nucleotides and nucleic acid chemistry	2	_	2	
Cell cycle; regulatory factors, Apoptosis, Oncogens and Carcinogenesis	2	_	2	
DNA Replication and Repair	3	_	3	
Gene Expression and Transcription	3	_	3	

Protein Synthesis and Modifications	3	_	3	
Recombinant DNA Technology,Telomere, Gene Therapy and Human Genome and proteome projects	6	6	12	
Enzymes	8	8	16	
Minerals	4	-	4	
Total	75	60	135	100 %

4- Teaching and learning methods:

METHODS USED:

1. Modified lectures.
2. Problem solving.
3. Small group discussion.
4. Practical classes and Tutorials (small group teaching, practice of laboratory skills, AV aids):

TEACHING PLAN:

- ***Lectures:*** *75 Lectures divided into 3 lectures /week. Every lecture is of 1 hour duration. Time from 9 a.m. to 12 p.m. according to the current time table in general lecture halls.*
- ***Practical classes and tutorials:*** *The students are divided into 4 groups. Each group has a 3-hour practical and tutorial class once per week. Students of each group are divided into 2 subgroups. Both subgroups rotate between tutorial class and practical class.*

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	3 times/week; one hour each between 9 a.m. to 12 p.m.	75 hours	55.56%
Practical And tutorials	3 hours / week	60 hours	44.44%
Total	**6 hours/week**	**135 hours**	**100%**

5- Students Assessment methods:

5-A) attendance criteria: Faculty bylaws

5-B) Assessment tools:

Tool	Purpose (ILOs)
Written examination	To assess knowledge, understanding ,intellectual skills and presentation of information
Oral examination	To assess knowledge, understanding , intellectual skills, attitude and presentation
Practical examination	To assess knowledge, understanding ,intellectual skills, practical and professional skills

5-C) time schedule: Faculty bylaws

Exam	Week or month
1- First half of the academic year	7th week
2- Mid-year exam	17th week
3- Second half of the academic year	21st week
4- Practical exam	1st in April — 2nd in September for students who failed to pass any course.
5- Final exam	• 1st in May — 2nd in September for students who failed to pass any course.

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- Shock exams	--	
3- Mid-year	30	20%
5- Final exam: a- Written b- Practical c- Oral	 75 30 10 +5 log book	 50% 30%
Total	**150**	**100%**

5-E) Examinassions description:

Examination	Description
1- Shock exams	During lectures in the form of short question , clinical case, MCQ , right or wrong questions or choose questions
2- First half	One hour written paper composed of short essay questions and MCQ
3- Mid-year	two hour written paper composed of short essay questions and MCQ
4- Second half	One hour written paper composed of short essay questions and MCQ
5- Final exam: a- Written b- Practical c- Oral	Three hour written paper composed of short essay questions and MCQ. Identification of provided solutions and short questions on DNA or RNA extraction and further techniques used on the extracted DNA or RNA and the electrophoresis photograph of PCR run oral examination station with 2 staff members(10-15 min) or Cards
6- Assignments & other activities	Assignments on the biochemical &/or molecular basis of medical subjects or problems + practical books .

6- List of references:

6.1- Basic materials:

-Department book

-Practical notes

6.2- Essential books (text books):

- DM Vasudevan and Sreekumari S (2007): Text book of biochemistry for medical students. 5th edition. Jaypee Brothers Medical Publishers.
- Pamela C. Champe, Richard A. Harvey and Denise R. Ferrier (2010): Lippincott's Illustrated Biochemistry. 5th edition.

6.3- Recommended books:

- Robert K. Murray, David A Bender, Kathleen M. Botham, Peter J. Kennelly, Victor W. Rodwell, P. Anthony Weil (2009): Harper's Illustrated Biochemistry, 29th edition

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Lecture halls: Faculty lecture hall and department lecture hall
- Department equipped laboratories: 3
- Information technology / AV aids

Course coordinator: Prof. Dr, Amal abo el fadl

Head of Department: Prof. Dr, Amal abo el fadl

Date: 9/2011

Benha University
Faculty of Medicine
Department of Medical Biochemistry

Course specification
MEDICAL BIOCHEMISTRY (MED 0704 B)

Second Academic Year (2012 – 2013)

A) Basic Information:

1. **Course title: MEDICAL BIOCHEMISTRY**
2. **Code: MED 0704 B**
3. **Specialty:** Bachelor of Medicine and Surgery **(M.B.B.Ch.)**
4. **Department teaching the course: MEDICAL BIOCHEMISTRY**.
5. **Academic year: first Year**
6. **Date of specification approval by Department council:** 9/2012
7. **Allocated marks:** 150 marks.
8. **Teaching hours:**

1- Theoretical	**75**
2- Practical	**60**
Total	**135**

B) Professional Information:

1- Overall Aim of the Course:

1.1. Recognition of the biochemical importance of macro- and micronutrients as well as the structure and functions of enzymes.
1.2. To describe the metabolic pathways of macronutrients and nucleotides.
1.3. to point-out hereditary and acquired metabolic disturbances and their biochemical laboratory and clinical outcomes.
1.4. To point out the bioenergetics of the concerned metabolic pathways under different physiological circumstances and their integrator regulations with other working metabolic pathways.
1.5. To describe major body fluids composition and their clinical impact.

1.6. Interpretation of medical laboratory reports

2- Intended Learning Outcomes (ILOs):

2.a. Knowledge and understanding:

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

2.a.1. Explain the metabolic pathways of carbohydrates, lipids, proteins, nucleotidesand, their micro-molecules and the site of each.

2.a.2. Mention the steps and regulatory mechanisms of these pathways.

2.a.3. State the related metabolic disorders and their clinical prints on biochemical and molecular basis.

2.a.4. Describe micronutrients, their biochemical, clinical and laboratory importance and deficiency manifestations of each.

2.a.5. List the components of some body fluids; viz. blood, urine, milk, Semen,CSF and sweat.

2.a.6. Discuss how xenobiotics are metabolized inside the body

2.b. Practical and Clinical Skills

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

2.b.1. Identify the physical and chemical characters of normal urine under different physiological conditions.

2.b.2. Perform chemical tests to detect abnormal constituents of urine

2.b.3. Estimate serum levels of glucose, total proteins, albumin, cholesterol, creatinine and uric acid by colorimetric methods.

2.b.4. Assess glucose tolerance by glucose tolerance test.

2.c. Professional Attitude and Behavioral kills:

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

2.c.1. Demonstrate respect and Work effectively as a member or a leader of an interdisciplinary team.

2.c.2. Establish good relations with colleagues to share all types of inter-professional activities including shared learning.

2.d. Communication skills:

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

2.d.1. Communicate clearly, sensitively and effectively with and their colleagues, staff and co-staff.

2.d.2. Cope up with difficult situations

2.d.3. Respect superiors, colleagues and all members of the health profession.

2.e. Intellectual Skills:

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

2.e.1**.** Interpret symptoms, signs and biochemical laboratory findings of some metabolic disorders.

2.e.2.. Interpret urine report outcome.

2.e.3 determine the clinical significance of plasma levels of glucose, total proteins, albumin, cholesterol, creatinine and uric acid and some enzymes.

2.f. General and transferable Skills:

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

2.f.1.Establish life-long self-learning required for continuous professional development.

2.f.2.Use the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.

2.f.3.Retrieve, manage, and manipulate information by all means, including electronic means.

2.f.4.Present information clearly in written, electronic and oral forms.

2.f.5.Establish effective interpersonal relationship to Communicate ideas and arguments .

2.f.6.Work effectively as a member or a leader of an interdisciplinary team and

3- <u>Course contents</u>:

Subject	**Lectures (hrs)**	**Practical and Tutorial / Small group discussion (hrs)**	**Total (hrs)**
1- Bioenergetics	3	3	6
2- Carbohydrate Metabolism	18	15	33
3- Lipid Metabolism	16	15	31
4- General protein Metabolism	5	--	5
5- Amino acid Metabolism	10	10	20

6-Purine & Pyrimidine Metabolism	3	2	5
7- Hormones	3	2	5
8- Vitamins	8	8	16
9- Detoxif ication	3	--	3
10-Body fluids and heme metabolism	6	5	11
Total	75	60	135

4- Teaching and learning methods:

METHODS USED:

1. Modified lectures.
2. Problem solving.
3. Small group discussion.
4. Practical classes :
   - Urine report.
   - Colorimetric methods in clinical chemistry.
6. Tutorials and small group discussion with case study and problem solving:

TEACHING PLAN:

- ***Lectures:*** 75 *Lectures divided into 3 lectures /week. Every lecture is of 1 hour duration. Time from 12 to 3 p.m. according to the current time table in general lecture halls.*
- ***Practical classes and tutorials:*** *The students are divided into 4 groups. Each group has a 3-hour practical and tutorial class once per week. Students of each group are divided into 2 subgroups. Both subgroups rotate between tutorial class and practical class.*

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	3 times/week; one hour each	75 hours	55.56%
Practical And tutorials	3 hours / week	60 hours	44.44%
Total	**6 hours/week**	**135 hours**	**100%**

5- Students Assessment methods:

5-A) <u>attendance criteria</u>: Faculty bylaws

5-B) <u>Assessment tools:</u>

Tool	Purpose (ILOs)
Written examination	To assess knowledge, understanding ,intellectual skills and presentation of information
Oral examination	To assess knowledge, understanding , intellectual skills, attitude and presentation
Practical examination	To assess knowledge, understanding ,intellectual skills, practical and professional skills

5-C) <u>time schedule</u>: Faculty bylaws

Exam	Week or month
1- First half of the academic year	7^{th} week
2- Mid-year exam	13^{th} week
3- Second half of the academic year	19^{th} week
4- Practical exam	1^{st} in April — 2^{nd} in September for students who failed to pass any course.
5- Final exam	• 1^{st} in May — 2^{nd} in September for students who failed to pass any course.

5-D) <u>Weighting System:</u>

Examination	Marks allocated	% of Total Marks
1- Shock exams	--	
3- Mid-year	30	20%
5- Final exam: a- Written b- Practical c- Oral	 75 30 10 +5 log book	 50% 30%
Total	**150**	**100%**

5-E) Examinassions description:

Examination	Description
1- Shock exams	During lectures in the form of short question , clinical case, MCQ , right or wrong questions or choose questions
2- First half	One hour written paper composed of short essay questions and MCQ and case study
3- Mid-year	two hour written paper composed of short essay questions and MCQ and case study.
4- Second half	One hour written paper composed of short essay questions and MCQ and case study
5- Final exam: a- Written b- Practical c- Oral	Three hour written paper composed of short essay questions and MCQ and case study. Detection of physical properties and abnormal constituents of a urine sample and colorimetric measurement of previously studied blood constituents together with some short questions on them oral examination station with 2 staff members(10-15 min) or Cards
6- Assignments & other activities	Assignments on the biochemical basis of medical subjects or problems + practical books .

6- List of references:

6.1- Basic materials:

-Department book

-Practical notes

6.2- Essential books (text books):

- DM Vasudevan and Sreekumari S (2007): Text book of biochemistry for medical students. 5th edition. Jaypee Brothers Medical Publishers.
- Pamela C. Champe, Richard A. Harvey and Denise R. Ferrier (2010): Lippincott's Illustrated Biochemistry, 5th edition.

6.3- Recommended books:

- Robert K. Murray, David A Bender, Kathleen M. Botham, Peter J. Kennelly, Victor W. Rodwell, P. Anthony Weil (2009): Harper's Illustrated Biochemistry, 29th edition

6.4- Periodicals, Web sites.

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Lecture halls: Faculty lecture hall and department lecture hall
- Department equipped laboratories: 3
- Information technology / AV aids

Course coordinator: Prof. Dr, Amal abo el fadl

Head of Department: Prof. Dr, Amal abo el fadl

Date: 9/2012

Benha University
Faculty of Medicine
Department of Histology & Cell Biology

Course Specification

Histology & Cell Biology (MED 0702 A)

First Academic Year (2011 – 2012)

A) Basic Information:

1. **Course title: Histology & Cell Biology**
2. **Code: MED 0702 A**
3. **Specialty:** Bachelor of Medicine and Surgery **(M.B.B.Ch.)**
4. **Department teaching the course:** Histology &Cell Biology.
5. **Academic year: first Year**
6. **Date of specification approval by Department council:** 9/2011
7. **Allocated marks:** 150 marks.
8. **Teaching hours:**

1- Theoretical	**60**
2- Practical	**60**
Total	**120**

B) Professional Information:

1- Overall Aim of the Course:

1.1. To provide a scientific knowledge of the histological structure of normal organs of body systems & tissue cells at the molecular & cellular level and correlate this with their functions.

1.2. To provide appropriate knowledge for tissue processing for making histological slides.

1.3. To know basics of cytogenetic and cell biology.

2- Intended Learning Outcomes (ILOs):

2.a. Knowledge and understanding:

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

2.a.1. Define different general histological terminology.

2.a.2. Enumerate the basic principles of structure of different body cells.

2.a.3. Describe the basic principles of cell cycles and basics of cytogenetic.

2.a.4. Outline major clinical applications of cytogenetic diseases.

2.a.5 Describe the basic principles of histochemistry.

2.a.6. Mention basic principles of epithelium, C.T., blood, cartilage, bone, muscle, nervous tissue, lymphatic &circulatory systems.

2.a.7. List the clinical correlations with histological issues.

2.b. Practical and Clinical Skills:

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

2.b.1. Identify different histological micrographs especially for E/M.

2.b.2. Diagnose the type of histological tissues & related clinical correlations.

2. b.3.examin the slides to diagnose it properly depending on histological facts.

2.c. Professional Attitude and Behavioral skills:

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

2.c.1. Involve colleges in care takers and in management decisions irrespective of their socioeconomics level, culture

2.c.2. Respect college's right and researches' right.

2.c.3. Appreciate the role and the contributions of other health care professionals regardless their degrees or rank (top management, subordinate or colleague).

2.c.4. Evaluate his performance & that of others.

2.d. Communication skills:

By the end of the program the graduate will be able to:

2.d.1. Communicate clearly, sensitively and effectively with their colleagues.

2.d.2. Establish good relations with other health care professionals regardless their degrees or rank (top management, subordinate or colleague).

2.d.3. Communicate effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.

2.d.4. Respect superiors, colleagues and all members of the health profession.

2.e. Intellectual Skills:

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

2.e.1. Correlate between the studied histological tissue and relevant organs.

2.e.2. Analyze different histological data with its clinical correlations.

2.e.3. Interpret the normal histological facts with case scenario.

2.e.4. Interpret scientific histological data.

2.f. General and transferable Skills:

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

2.f.1. Present data in an organized and informative manner.

2.f.2. Establish life-long self-learning required for continuous professional development.

2.f.3. Use the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.

2.f.4. Retrieve, manage, and manipulate information by all means, including electronic means.

2.f.5.Present information clearly in written, electronic and oral forms.

2.f.6.Establish effective interpersonal relationship to Communicate ideas and arguments.

3- Course contents:

TOPIC	Total No of hours	Lecture	Practical
I-Microtechnique 1. Methods of preparation of microscopic sections 2. Steps of preparation and aim of each step 3. Advantage &disadvantage of each method 4. Principle of staining with H&E 5. Other staining methods	8	4	4
II-Microscopy 1-types of microscopes	4	2	2

2-préparation of sections for Light microscope &Electron microscope			
III- Cytology 1-LM&EM picture ,function and molecular biology of cytoplasmic organelles: -membranous(cell membrane, rough endoplasmic reticulum, smooth endoplasmic reticulum, Golgi apparatus, mitochondria, lysosomes, peroxisomes, proteosomes and annulate lamellae) -non membranous organelles(ribosomes, microtubules ,centrioles, cilia , flagella *and* microfilaments) **2-inclusions** 3-nucleus: structure by LM&EM ,function 4-DNA 5-types of RNA 6-physiological cell death	28	14	14
IV-Cytogenetics 1-cell cycle and cell division (mitosis meiosis) 2-Gametogenesis(oogenesis &spermatogenesis) 3-structure of chromosomes 4-chromosomal study& *karyotyping* *5-chromosomal bands: G banding,* fluorescence *in situ hybridization* 6-Sex chromatin (Barr body) 7-chromosomal aberrations: a-numerical abnormalities: i-aneuploidy (*monosomy,trisomy)* ii-polyploidy (*triploidy* , *tetraploidy,* endoreduplication) b-structural abnormalities: 1- translocation 2- deletion. 3- inversion. 4- insertion. 5- isochromosome6- dicentric chromosome. 7- ring chromosome. 8- duplication. 9- fragile x chromosome 10-clinical correlations	12	6	6
V-Epithelial tissue: 1-Properties of epithelium . 2-Types of epithelium:(covering -glandular -neuro epithelium & myoepithelium)	8	4	4

3-Examples and sites of each type. 4-Functional importance. 5-Modification of epithelial cell surfaces. 6--clinical correlations			
VI- Connective tissue 1-general character of connective tissue proper. 2-constituents of CT (ground substance, fibers, cells). 3-structure , types and staining properties of CT fibers. 4-types of connective tissue proper and site of each: 1. loose (areolar) connective tissue . 2. white fibrous or tendinous connective tissue 3. yellow elastic connective tissue 4. adipose connective tissue 5. reticular connective tissue 6. mucoid (myxomatous) connective tissue 7--**clinical correlations**	8	4	4
VI- Cartilage : 1-histological features of cartilage cells, fibers & matrix. 2-Types of cartilage and their specific histological features. a-hyaline cartilage. b. yellow elastic cartilage. c. white fibro-cartilage. 3--clinical correlations	4	2	2
VIII-Bone 1-General microscopic features of bone and how it can be studied histologically 2-Types (compact & spongy bone): structure, sites, and function. 3-Bone cells :structure (LM&EM) and functions . 4-Intercellular substance of bone . 5-The development and ossification 6--clinical correlations	8	4	4
IX-Blood 1-red blood corpuscles (histological structure &function).	8	4	4

2- histological structure &function of granular leucocytes(neutrophil ,eosinophil , basophils). 3- histological structure &function of non-granular leucocytes (lymphocytes& monocytes). 4-differential leucocytic count 5-blood platelets (histological structure &function). 6-haemopoiesis. 7-myeloid tissue(inactive yellow bone marrow& active red bone marrow). 8--clinical correlations			
X-Muscle tissue 1-General character and types . 2-skeletal muscle: -general features &types of skeletal muscle fibers . -organization of skeletal muscle. -functional ultrastructure of myofibrils& sarcomere. -molecular structure of actin and myosin -muscle contraction -innervation of skeletal muscle -cardiac muscle -general structure and functional relations. -Intercalated discs -Conducting system of the heart -moderator band 3-smooth muscle : general structure, muscle contraction& innervation. 4- Comparative study of three types of muscles. 5- Growth and regenerative ability of muscular tissue. 6--clinical correlations	8	4	4

XI-Nervous tissue 1-Structure of neuron (LM&EM) cell body, axon,dendrites 2- types of nerve cells 3-types and structure of nerve fibers 4-organization of nerve fibers mylination of CNS&PNS 6-nerve ganglia (types &structure) 7-synapses(structure and types) 8-degeneration and regeneration of neurons 9-stain used to study nervous tissue including those of degeneration 10-Neuroglia structure and their functions 11-Types and structure of nerve endings (receptors and effector) 12--clinical correlations	8	4	4
I-CARDIOVASCULAR SYSTEM 1-general structure of the wall of blood vessels 2-Arteries: Large , Medium-Sized& small (histological structure &function) 3-Veins ;Large , Medium-Sized& small(histological structure &function) 4-histological structure of specialized arteries &veins. 5-arteriovenous connections : a-Capillaries histological structure and function b- Sinusoids c-arteriovenous anastomosis 6-Heart; histological structure of icardium ,myocardium ,endocardium and valves 7--clinical correlations	8	4	4
II-THE IMMUNE SYSTEM AND LYMPHOID ORGANS 1-structure of lymph vessels 2-distribution and structure of lymphoid tissue . 3-lymphatic organs: a- Lymph Nodes (histological structure &function) b-Spleen(histological structure &function& microcirculation) c-Tonsils(histological structure &function) d-Thymus(histological structure &function) e-Mucosal immune system (histological	8	4	4

structure &function) 4-Mononuclear phagocytes 5-Cells involved in the immune system **6- Antigen presenting cells** 7--clinical correlations			
Total	120	60	60

4- Teaching and learning methods:

METHODS USED:

- Modified lectures: CDs of lectures including (video films, brain storming, problem solving, etc…….)
- Practical classes: Data show images of electron microscope, video films, slides under microscope, etc….
- Small group discussions

TEACHING PLAN:

Item	**Time schedule**	**Teaching hours**	**Total hours**
Lectures	2 times/week; One hour each/30weeks	**60 hours**	**50%**
Practical classes	2 times/week; 2 hour each/30 week	**60 hours**	**50%**
Total		**120 hours**	**100%**

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA:

1. Practical attendance: according to faculty by low as 75% of absence will be not allowed to enter the exam.
2. Practical books

5-B) Assessment tools:

Tool	(ILOs)
Written examination:	To assess knowledge, understanding ,intellectual skills and presentation of information
Oral examination: Viva card system	To assess knowledge, understanding , intellectual skills, attitude and presentation
Practical examination:	To assess knowledge, understanding ,intellectual skills, practical and professional skills

5-C) time schedule:

Exam	Week
1- Assessment 1	Week ------12
2- Assessment 2	Week ------18
3- Assessment 3	Week ------24
4- Final exam	At end of year (week 30)

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- First half of the academic year	10	6.6%
3- Second half of the academic year	10	6.6%
3- Final exam: a- Written b- Practical c- Oral	 75 30 15	 50% 20% 10%
4- Assignments & other activities	10	6.6%
Total	**150**	100%

5-E) Examination description:

Examination	Description
1- First half of the academic year	Quiz (MCQs), short questions
2- Second half	Quiz (MCQs), short questions & practical exam
3- Final exam: a- Written b- Practical c- Oral	• Select (MCQs) & Supply (Short questions) • Do, identify • How many sessions
4- Assignments & other activities	Assignments, practical books

6- List of references:

6.1- Basic materials: Department books:

1- Histology &cell Biology Department, Benha Faculty of Medicine
2- Practical books

6.2-Essential books (text books):

1- **Gartner L. P. and Hiatt J. L. (2007):** Color textbook of Histology (3rd) edition.
2- **Ross M. H. and Pawlina W., (2006):** Histology (A text and atlas with correlated cell and molecular biology (5th) edition.
3- **Mescher A. L. (2010):** Jonquiere basic Histology Text and atlas of Histology (12th) edition, Mc Grow Hill, Lange international edition .New York, Chicago, San Francisco, Lisbona, London

6.3- Recommended books:

1- Ovalle W. K., Nahirney P.C. and Netter A. (2009):
Essential Histology (1st) edition.

2- **Kierszenbaum A. L. (2007):**
Histology and Cell Biology: An introduction to Pathology, (2nd) edition.

3-**Byoung J.W., Heath H. and Wheater L (2008):**
Functional Histology, A text and color atlas (7th) edition.

6.4- Periodicals, Web sites, etc:

- http://www.medscape.com.
- http://www.pubmed.com.
- http://sciencedirect.com.

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Faculty lectures halls: 2
- Department lab (3 labs): In each lab there are 30 to 35 students. Every student has his own seat and microscope with a number.
- Audio-visual teaching equipment (Computer , data show)

Course coordinator: Prof. OMAYMA KAMEL HELAL

Head of Department: Prof. OMAYMA KAMEL HELAL

Date]: 9/2011

Benha University
Faculty of Medicine
Department of Histology & Cell Biology

Course Specification

Histology & Cell Biology (MED 0702 B)

Second Academic Year (2012 – 2013)

A) Basic Information:

1- Course title: Histology & Cell Biology

2- Code: MED 0702 B

3- **Specialty:** Bachelor of Medicine and Surgery **(M.B.B.Ch.)**

4- **Department teaching the course:** Histology &Cell Biology.

5- Academic year: second Year

6- **Date of specification approval by Department council:** 9/2012

7- **Allocated marks:** 150 marks.

8- **Teaching hours:**

1- Theoretical	**60**
2- Practical	**60**
Total	**120**

B) Professional Information:

1- Overall Aim of the Course:

1.1. To know the histological structures of normal organs of body systems and correlate this with their functions.

1.2. To apply histological data

1.3. To describe histological structures of various parts of CNS

2- Intended Learning Outcomes (ILOs):

2.a. Knowledge and understanding:

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

2.a.1. Describe the histological structure of various systems by light & electron microscopes

2.a.2. Mention the histological structure of various body organs & system.

2.a.3. Enumerate the histological structures with correlation to function of various system of the body.

2.a.4. Describe various levels of sections in spinal cord & brain stem.

2.a.5. State the histological structures with correlation to function of cerebrum and cerebellum.

2.a.6. Explain the pathways of ascending and descending tracts.

2.a.7Describe the cell signaling & altered cell behavior.

2.a.8. Summarize the altered development, growth, structure and function of the body and mind that will be associated with common clinical conditions.

2.a.9. List clinical correlations in various histological aspects.

2.b. Practical and Clinical Skills

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

2.b.1. Diagnose different histological slides for normal body tissues.

2.b.2.Identify different histological stains.

2.b.3. Diagnose different histological tissue & related clinical correlations.

2.b.4. Observe histological data.

2.b.5. Analyze case scenario of clinical correlations with histological issues.

2.c. Professional Attitude and Behavioral kills:

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

2.c.1. Involve colleges in care takers and in management decisions irrespective of their socioeconomics level, culture

2.c.2. Respect college's right and researches' right.

2.c.4. Appreciate the role and the contributions of other health care professionals regardless their degrees or rank (top management, subordinate or colleague).

2.d. Communication skills:

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

2.d.1. Communicate clearly, sensitively and effectively with their colleagues from a variety of health and social care professions.

2.d.2. Establish good relations with other health care professionals regardless their degrees or rank (top management, subordinate or colleague).

2.d.3. Communicate effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.

2.e. Intellectual Skills:

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

2.e.1. Correlate between histological tissues and relevant organs.

2.e.2. Interpret the normal histological facts with case scenario.

2.e.3. Analyze different histological data.

2.f.General and transferable Skills:

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

2.f.1. Present data in an organized and informative manner.

2.f.2. Establish life-long self-learning required for continuous professional development.

2.f.3. Use the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.

2.f.4. Retrieve, manage, and manipulate information by all means, including electronic means.

2.f.5. Present information clearly in written, electronic and oral forms.

2.f.6. Establish effective interpersonal relationship to Communicate ideas and arguments.

3- Course contents:

TOPIC	Total No of hours	Lecture	Practical
I-THE INTEGUMENTARY SYSTEM 1-structure and function of the skin 2-histological structure &function of epidermis, dermis (papillary and reticular layer) 3-Different types of cells present in the epidermis (keratinocytes, melanocytes, langerhan's cells, Merkel's cells) 4-Types of skin and their sites :Thick Skin& Thin Skin. 5-pigmentation of skin 6-Immune response in skin 7-Sweat glands 8-Hair &hair follicles 9-Sebaceous glands and erector pili muscles 10-Sensory receptors of skin 11-clinical correlations with skin	8	4	4
1- conducting portion of **V-THE RESPIRATORY SYSTEM** respiratory system (histological structure and function) nasal cavity, nasal conchae, olfactory area, paranasal sinuses, nasopharynx, pharyngeal tonsils, larynx, epiglottis, trachea, bronchial tree, bronchioles) 2- respiratory portion respiratory (histological structure and function) bronhioles, alveolar ducts, alveolar sacs, alveoli ,interalveolar wall) 3-structure of pleura 4-structure of foetal lung 5-Non respiratory function of lung 6-Bronchus associated lymphoid tissue 7- Clinical correlations of respiratory system	10	5	5

VI-THE DIGESTIVE SYSTEM 1-Oral cavity(Lip, cheeks, Tongue) salivary glands(classification, types of acini ,parotid ,sublingual& submandibular) 2-Digestive tube : General features (structure and function of four layers) 3-Oesophagus 4-Gastro-Oesophageal Junction 5-Stomach (cardiac ,Fundus , Pylorus) 6-Gastroduodenal Junction, 7-Small Intestine **8-Large Intestine, 9-Appendix, 10-rectum and anal Canal, 11-Pancreas, 12- Liver &-Gall Bladder, 13- Clinical correlations**	24	12	12
VII-THE URINARY SYSTEM 1-Kidneys, 2-The Ureter, 3-Urinary Bladder 4-male urethra,5-female urethra 6- **Clinical correlations**	8	4	4
VIII- THE ENDOCRINE SYSTEM 1-Pituitary Gland 2-Thyroid Gland 3-Parathyroid Glands, **4-Adrenal (Suprarenal) Glands, 5- pineal body, 6-islet's of pancreas** 7-difuse neuroendocrine system 8- Clinical correlations	12	6	6
IX-THE MALE REPRODUCTIVE SYSTEM 1-The Testis 2-Male genital ducts (histological structure &function)of tubuli recti, rete testis ,epididymis, Ductus Deferens (Vas Deferens) & spermatic Cord 3-sccessory male genital tracts (histological structure &function) seminal vesicles ,Prostate. bulbourethral glands of Cowper 4-The Penis 5- **Clinical correlations**	10	5	5
X- THE FEMALE REPRODUCTIVE SYSTEM 1-Ovaries(histological structure &function) 2-The Uterine Tubes 3-The Uterus (histological structure &function) 4-cyclic changes of endometrium 5-cervix(histological structure &function) 6-Placenta	12	6	6

7-vagina(histological structure &function) 8-external genitalia 9- Mammary Glands (Resting & Lactating Mammary Gland) Clinical correlations			
XI-THE EYE 1-wall of the eye 2-external fibrous coat : histological structure &function of(sclera, Cornea, corneoscleral junction) 3-middle vascular coat histological structure &function of (choroids,ciliary body ,iris) 4- Retina (inner nervous coat)histological structure &function. 5 refractive media of the eye , lens ((histological structure &function chambers of the eye 7-vitreous body 8-accessory structure of the eye (conjunctiva ,eye lid, lacrimal glands) **9-Clinical correlations**	8	4	4
XII- THE EAR 1-external ear (Auricle ,external auditory meatus ,tympanic membrane) 2-middle ear (tympanic cavity, auditory ossicles, windows ,auditory tube) 3-inner ear :Bony Labyrinth &membranous Labyrinth -Clinical correlations	8	4	4
XIII-CNS 1- Anatomical consideration of CNS, 2- Meninges, spinal cord , medulla oblongata, pons, mid brain, cerebellum, diencephalon, cerebral cortex	20	10	10
Total	120	60	60

4- Teaching and learning methods:

METHODS USED:

- Modified lectures: CDs of lectures including (video films, brain storming, problem solving, etc…….)
- Small group discussions:

- Practical classes: Data show images of electron microscope, video films, slides under microscope, etc….

TEACHING PLAN:

Item	Time schedule	Teaching hours	Total hours
Lectures	**2** Times/week (each time **1** hour)	**60 hours**	**50%**
Practical classes	**2** Hours/ week	**60 hours**	**50%**
Total		**120 hours**	**100%**

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA:

1. Practical attendance according to faculty by lows as 75% of absence will be not allowed to enter the exam.
2. Practical books

5-B) Assessment TOOLS:

Tool	(ILOs)
Written examination:	To assess knowledge, understanding ,intellectual skills and presentation of information
Oral examination: Viva card system	To assess knowledge, understanding , intellectual skills, attitude and presentation
Practical examination:	To assess knowledge, understanding ,intellectual skills, practical and professional skills

5-C) TIME SCHEDULE:

Exam	Week
1- Assessment 1	Week ------14
2- Assessment 2	Week ------18
3- Assessment 3	Week ------24
4- Final exam	At end of year (week 30)

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- First half of the academic year	10	6.6%
3- Second half of the academic year	10	6.6%
3- Final exam: a- Written b- Practical c- Oral	 75 30 15	 50% 20% 10%
4- Assignments & other activities	10	6.6%
Total	**150**	100%

5-E) Examination description:

Examination	Description
1- Mid-term exam	Quiz (MCQs)
2- End-term exam	MCQs and complete
3- Final exam: a- Written b- Practical c- Oral	e.g. select (MCQs) & Supply (Short essay) e.g. Do, identify e.g. How many sessions
4- Assignments & other activities	e.g. Assignments, projects, practical books etc

6- List of references:

6.1- Basic materials:

Department books:

1- Histology &cell Biology Department, Benha Faculty of Medicine

2- Practical books

6.2-Essential books (text books):

1- Gartner L. P. and Hiatt J. L. (2007): Color textbook of Histology (3rd) edition.

2- **Ross M. H. and Pawlina W., (2006):** Histology (A text and atlas with correlated cell and molecular biology (5th) edition.

3- **Mescher A. L. (2010):** Jonquiere basic Histology

Text and atlas of Histology (12th) edition, Mc Grow Hill, Lange international edition .New York, Chicago, San Francisco, Lisbona, London etc.

6.3- Recommended books:

1- Ovalle W. K., Nahirney P.C. and Netter A. (2009): Essential Histology (1^{st}) edition.

2- **Kierszenbaum A. L. (2007):** Histology and Cell Biology: An introduction to Pathology, (2^{nd}) edition.

3-**Byoung J.W., Heath H. and Wheater L (2008):** Functional Histology, A text and color atlas (7^{th}) edition.

6.4- Periodicals, Web sites, etc:

- http://www.medscape.com.
- http://www.pubmed.com.
- http://sciencedirect.com.

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Faculty lectures halls: 2
- Department lab (3 labs):In each lab there are 30 to 35 students. Every student has his own seat and microscope with a number.
- Audio-visual teaching equipments (Computer, data show)

Course coordinator: Prof. OMAYMA KAMEL HELAL

Head of Department: Prof. OMAYMA KAMEL HELAL

Date: 9/2012

Benha University.
Faculty of Medicine.
Department of medical Physiology.

Course Specification

Medical Physiology (MED 0703 A)

First Academic Year (2011 – 2012)

A) Basic Information:

1- Course title: Medical Physiology

2- Code: MED 0703 A

3- **Specialty:** Bachelor of Medicine and Surgery **(M.B.B.Ch.)**

4- **Department teaching the course: Medical Physiology**.

5- Academic year: first Year

6- **Date of specification approval by Department council:** 9/2011

7- **Allocated marks:** 250 marks.

8- **Teaching hours:**

1- Theoretical	**150**
2- Practical	**60**
Total	**210**

B) Professional Information:

1- Overall Aim of the Course:

1.1. Enabling the student to know the functions of the different body systems and its underlying mechanisms.

1.2. Enabling the student to correlate between the basic physiological functions of the body systems and its applications clinically.

1.3. Developing of several practical capacities in the students related to experimental work.

2- Intended Learning Outcomes (ILOs):

2.a. Knowledge and understanding:

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

2.a.1. Describe the functional organization of various body systems and its relation to function.

2.a.2. Mention the functional structure of different body systems and its relation to function.

2.a.3. List the General functions of the body systems.

2.a.4. Describe specific functions of the body organs.

2.a.5. Explain Mechanisms aiming at maintenance of homeostatic functions as: pH, osmolarity, body temperature, etc.....

2.a.6. State the integration between different body systems to maintain homeostasis.

2.a.7. Summarize the adaptations that occur to maintain life and explaining them on physiological bases.

2.b. Practical and Clinical Skills

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

2.b.1. Perform some laboratory tests (blood group, hemoglobin and E.S.R)

2.b.2. Use the basic medical devices as sphygmomanometer, stethoscope and thermometer.

2.b.3. Perform of some physiological records (ECG).

2.b.4. Identify different types of cardiac arrhythmia.

2.b.5. Identify heart sounds.

2.c. Professional Attitude and Behavioral kills:

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

2.c.1. Establish a good behavior when facing stressful condition example: oral exams and this is done by continuous discussion throughout the year in the practical lessons and also the written exams and this is done by continuous assessment throughout the year.

2.c.2. Demonstrate good relations with colleague: Through dividing the students into small groups sharing the same experiment in practical lessons

2.c.3. Demonstrate respect and work effectively as a member or a leader of a team and reflect effective interpersonal relationship to communicate ideas and arguments.

2.c.4. Demonstrate respect to superiors and establish a good student- teacher relationship.

2.d. Communication skills:

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

2.d.1. Communicate clearly and effectively with colleagues.

2.d.2. Establish trial for a good presentation in front of his colleagues during scientific discussions.

2.d.3. Communicate effectively with individuals regardless of their social, cultural, ethnic backgrounds or their disabilities.

2.d.4. Cope up with difficult situations as oral exams and this is done by continuous assessment through practical lessons.

2.d.5. Respect all his colleagues and supervisors.

2.e. Intellectual Skills:

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

2.e.1**.** Integrate facts about function of different organs subserving the homeostasis

2.e.2. analyze medical problems related to diagnosis & treatment of physiological problems as: pH, osmolarily, etc....

2.f. General and transferable Skills:

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

2.f.1. Establish life-long self-learning required for continuous professional development.

2.f.2. Use the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.

2.f.3. Retrieve, manage, and manipulate information by all means, including electronic means.

2.f.4. Present information clearly in written, electronic and oral forms.

3- Course contents:

Subject	Lectures (hrs)	Tutorial / Small group discussion (hrs)	Practical (hrs)	Total (hrs)	% of Total
1- Introduction: 1-Cell membrane and transport across it. 2- *Types of ion channels.* 3-Total body water. 4- Composition of ECF& ICF. 5-homeostasis.	10			10	5%
2- Autonomic nervous system :Basic knowledge: 1-*Divisions of nervous system.* *2-Autonomic ganglia.* *3- Sympathetic nervous system, Parasympathetic nervous system,* *4-sympathetic and parasympathetic tone.* *5-functions of automonic nervous systemunder different situations.* **Applied:** 1- *Mechanism of action of sympathectomy and its use in treatment of hyperhydrosis.* 2- *Mass discharge and its relation to shock and hemorrhage.* *3-Chemical transmission, cholinergic transmission, Adrenergic transmission)*	20			20	9.5%
3-Physiology of nerve and muscle: **Nerve**: 1-*Structure of neurons in co-operation with histology department.* *2-Excitability, Resting membrane potential.* *3-Action potential.* *4-Excitability changes during an*	20			20	9.5%

action potential. **Muscle:** **Skeletal muscle:** *1-Mechanism of neuro-muscular transmission, properties of neuro-muscular transmission.* *2-Excitation-contraction coupling.* *3-Molecular mechanism of muscle contraction, EMG.* *4-effects of stimulation of skeletal by:single. 2 successive stimuli, several successive stimuli.)* **Smooth muscle:** *Types of Smooth muscles, control of its contraction.*					
3- Blood: **basic knowledge:** **Blood and plasma proteins:** 1-*General functions of the blood.* *2-Composition of the blood, Plasma proteins(functions and sites of its formation).* ***RBCs:*** *Erythropoiesis, Anemias,* **White Blood Cell:** *Immunity,* **Blood typing & Blood transfusion** **Platlets:** *1-Hemostasis.* *2- Anticoagulants.* *3- Hemostatic function tests.* **Applied:** *1- Effects of anemia.* *2- Relation between anemia and hypoxia.* 3- *Plasmin system.*	20		30	50	23.8%

5- Circulation: **Basic knowledge:** *1-Physiological anatomy of the heart.* *2-Properties of the cardiac muscle. 3-Cardiac Cycle.* *4- Electrocardiogram.* *5- The Cardiac Output.* *6- Heart Rate.* *7- Hemodynamics* *8- Arterial blood pressure, and its Regulation of ABP.* *9- Microcirculation.* *10- Venous Circulation.* *11- Lymphatic Circulation.* *12- Edema* ***Special circulation**:* - *The Coronary Circulation, The Pulmonary Circulation, The Cerebral Circulation.* - ***Shock, Effect of exercise on the circulation, physiology of Hypertension and heart failure).*** **Applied:** -Venous oxygen reserve. -arrhythmia. -physiology of hypertention - physiology of heart failure.	50		22	72	34.2%
6- Respiratory: **Basic knowledge:** 1-*Physiological anatomy of the respiratory system.* *2- Mechanics of respiration & respiratory cycle.* *3- Lung volumes and capacities.* *4- Oxygen transport by blood and Carbon dioxide transport by the blood.* *5- Regulation of respiration (Localization of respiratory centers, generation of rhythmic respiration.* *6- Hypoxia.*	20			20	9.5%

Applied: *1-Cyanosis and Asphyxia* *2-Effect of muscular exercise on respiration.* *3-Artificial respiration.* *4- Effect of exposure to increased barometric pressure.*					
7- Revision	10		8	18	8.5%
TOTAL	**150**		**60**	**210**	**100**%

4- Teaching and learning methods:

- Modified Lectures
- Practical classes
- Problem solving.
- Self-learning

TEACHING PLAN: **Lectures:** 150 lectures**, Practical classes:** 60 practical classes**.**

Time plane:

Item	Time schedule	Teaching hours	Total hours
Lectures	5 Hours/week	**150hours**	**71.4%**
Practical classes	2Hours/ week	**60hours**	**28.6%**
Tutorials			
Total		**210 hours**	**100%**

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA: according to faculty by laws.

1. Practical attendance
2. Log book

5-B) Assessment TOOLS:

Tool	Evidence	Purpose (ILOs)
Written examination: • MCQs, Case study • Short essay • Complete,True or false with explanation	Attached module of examination	**2.a.1-----2.a.7** **2.c.1.----2.c.4** **2.d.1.----2.d.5** **2.e.1.----2.e.2** **2.f.1. ----2.f.4**
Oral examination	Viva card system	**2.a.1-----2.a.7** **2.c.1.----2.c.4** **2.d.1.----2.d.5** **2.e.1.----2.e.2** **2.f.1. ----2.f.4**
Practical examination	Practical Reports	**2.b.1.----2.b.6**

5-C) TIME SCHEDULE:

Exam	Week
1- Assessment 1	Week ------12
2- Assessment 2	Week ------22
3- Final exam	At end of year (week 30)

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- Mid-term exam	50	20%
2- Final exam: a- Written b- Practical c- Oral	 125 25 50	 48% 12% 20%
3- Assignments & other activities	----------	------
Total	**250**	100%

5-E) Examination description:

Examination	Description
1- Mid-term exam	Quiz (MCQs)
2- Final exam: a- Written b- Practical c- Oral	short ac question Determination of blood group, Hb content, osmotic fragility, calculation of blood indices, determination of Bl. Pressure.

	2 sessions
3- Assignments & other activities	practical books

6- List of references:

6.a- Basic materials: Department books:

1- Medical physiology part I (introduction of physiology and physiology of blood) by staff members of physiology department 2014-2015.

2- Practical book by staff members of physiology department prepared by Prof. Dr.Alaa EL- talees 2014- 2015.

6.b- Essential books (text books):

a) John E Hall and Arthur C Guytonn; Textbook of Medical Physiology, twelfth edition :2012.

b) Kim E Barrett and Scott Boitano; Review of Medical Physiology, twenty fourth edition :2012.

6.c- Periodicals, Web sites, etc:

- http://www.medscape.com., http://www.pubmed.com.
- http://sciencedirect.com.

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Faculty lectures halls: 3
- Department lectures halls: 1
- Department laboratories: 2

Course coordinator: **Dr. mona maher**

Head of Department: **Prof Dr. Alaa Abd- Elaziz Al-teles**

Date : 9/2011

Benha University.
Faculty of Medicine.
Department of medical Physiology.

Course Specification

Medical Physiology (MED 0703 B)

Second Academic Year (2012 – 2013)

A)Basic Information:

1. **Course title: Medical Physiology**
2. **Code: MED 0703 B**
3. **Specialty:** Bachelor of Medicine and Surgery **(M.B.B.Ch.)**
4. **Department teaching the course: Medical Physiology**.
5. **Academic year: second Year**
6. **Date of specification approval by Department council:** 9/2012
7. **Allocated marks:** 250 marks.
8. **Teaching hours:**

1- Theoretical	**150**
2- Practical	**60**
Total	**210**

B) Professional Information:

1- Overall Aim of the Course:

1.1. to know the functions of the different body systems and its underlying mechanisms.

1.2. to correlate between the basic physiological functions of the body systems and its applications clinically.

1.3. Developing of several practical capacities in the students related to experimental work.

2- Intended Learning Outcomes (ILOs):

2.a. Knowledge and understanding:

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

2.a.1.Describe the functional organization of various body systems and its relation to function.

2.a.2. list the functional structure of different body systems and its relation to function.

2.a.3. Describe General functions of the body systems.

2.a.4. enumerate specific functions of the body organs.

2.a.5. Explain Mechanisms aiming at maintenance of homeostatic functions as: pH, osmolarity, body temperature, etc.....

2.a.6. mention the integration between different body systems to maintain homeostasis.

2.a.7. Describe the adaptations that occur to maintain life and explaining them on physiological bases.

2.b. Practical and Clinical Skills

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

2.b.1. Use basic medical devices as thermometer, hammer and tuning fork.

2.b.2. Perform neurological examination of the sensory system as regard superficial and deep sensations.

2.b.3. Perform neurological examination of the motor system as regard tone, power, reflexes and co-ordination.

2.b.4. Diagnose conductive and perceptive deafness.

2.b.4. Perform visual acuity examination, corneal and light reflexes.

2.c. Professional Attitude and Behavioral kills:

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

2.c.1. Establish a good behavior when facing stressful condition example: oral exams and this is done by continuous discussion throughout the year in the practical lessons and also the written exams and this is done by continuous assessment throughout the year.

2.c.2. Demonstrate good relations with colleague:

Through dividing the students into small groups sharing the same experiment in practical lessons

2.c.3. Demonstrate respect and work effectively as a member or a leader of a team and reflect effective interpersonal relationship to communicate ideas and arguments.

2.c.4. Demonstrate respect to superiors and establish a good student- teacher relationship.

2.d. Communication skills:

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

2.d.1. Communicate clearly and effectively with colleagues.
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2.d.4. Cope up with difficult situations as oral exams and this is done by continuous assessment through practical lessons.
2.d.5. Respect all his colleagues and supervisors.

2.e. Intellectual Skills:

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

2.e.1**.** Integrate facts about function of different organs sub serving the homeostasis

2.e.2. Analyze medical problems related to diagnosis & treatment of physiological problems as: pH, osmolarily, etc....

2.f. General and transferable Skills:

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

2.f.1. Establish life-long self-learning required for continuous professional development.

2.f.2. Use the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.

2.f.3. Retrieve, manage, and manipulate information by all means, including electronic means.

2.f.4. Present information clearly in written, electronic and oral forms.

3- Course contents:

Subject	Lectures (hrs)	Tutorial / Small group discussion (hrs)	Practical (hrs)	Total (hrs)	% of Total
1- Central Nervous System: **Basic knowledge:** 1-Basic organization and functions of the central nervous system. **The sensory system:** *1- the sensory receptors.* *2-Sensations:* *thermal and tactile.* *3 -pain sensation and Pain Control System.* *4-Synapses of the CNS.* *The Motor systems:* *1-the spinal cord.* *2- The vestibular apparatus,* *3- Postural reflexes.* *4- The thalamus.* *5- The basal ganglia.* *6- The cerebellum.* *7- The Hypothalamus.* *8- The cerebral cortex).* **Applied:** 1-Headache **2-** spinal cord injury. 3-sleep, Reticular formation**,** 4-memory and d learning.	50		30	80	38.3%
2-ENDOCRINE&Reproduction **Basic knowledge:** 1-Introduction of endocrinology. 2- The pituitary gland.	30			30	14.2%

3-The thyroid gland. 4- The parathyroid glands and Endocrine regulation of Ca++. 5- suprarenal gland and Hormones regulating blood glucose level. 6- The reproductive system. **Applied:** Related to hypofunction and hyperfunction of the gland.					
3- Kidney: **Basic knowledge:** 1-The overall kidney functions. 2- Nephron and Renal blood flow. 3-Glomerular filtration rate. 4- Tubular function. 5- Renal handing of water, water balance, 6-Regulation of sodium excretion & extracellular fluid volume. 7- Renal handling of K+, Ca+2, and phosphate. 8-Role of the kidney in acid - base balance. **Applied:** 1-pH 2-micturition 3- Diuretics.	20			20	9.5%
4- Physiology of Gastro-Intestinal Tract :**Basic knowledge**: 1-motility of the G.I.T 2-G.I.T secretions. 3-absorption in G.I.T) **Applied:** Vomiting, diarrhea and constipation.	20			20	9.5%
5- Special senses: **Basic knowledge**: 1-Physiology of vision. 2-Physiology of hearing. 3- Taste sensation. 4-Olfactory sensation.	15		18	33	15.7%

Applied: Related to practical lessons					
6- Metabolism: **Basic knowledge:** 1-Metabolic Rate. 2- Thermogenesis . 3-Respiratory quotient. 4- Control of food intake. 5- Regulation of Body Temperature. 6-Physiology of Exercise.. **Applied:** Fever, heat stroke, obesity and starvation.	15			15	7.1%
7- Revision			12	12	5.7%
TOTAL	**150**		**60**	**210**	**100**%

4- Teaching and learning methods:

- Modified Lectures
- Small group discussions
- Problem solving.
- Self-learning

TEACHING PLAN: **Lectures:** 150 lectures**, Practical classes:** 60 practical classes**.**

Time plain:

Item	**Time schedule**	**Teaching hours**	**Total hours**
Lectures	5 hours/week	**150hours**	**71.4%**
Practical classes	2 hours/ week	**60hours**	**28.6%**
Tutorials			
Total		**210 hours**	**100%**

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA: according to faculty by laws

1. Practical attendance.
2. Log book.

5-B) Assessment TOOLS:

Tool	Evidence	Purpose (ILOs)
Written examination: • MCQs • Case study • Short essay • Complete • True or false with explanation	Attached module of examination	**2.a.1-----2.a.7** **2.c.1.----2.c.4** **2.d.1.----2.d.5** **2.e.1.----2.e.2** **2.f.1. ----2.f.4**
Oral examination	Viva card system	**2.a.1-----2.a.7** **2.c.1.----2.c.4** **2.d.1.----2.d.5** **2.e.1.----2.e.2** **2.f.1. ----2.f.4**
Practical examination	Practical Reports	**2.b.1.----2.b.4**

5-C) TIME SCHEDULE:

Exam	Week
1- Assessment 1	Week ------12
2- Assessment 2	Week ------22
3- Final exam	At end of year (week 30)

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- Mid-term exam	50	20%
2- Final exam: a- Written b- Practical c- Oral	 125 25 50	 48% 12% 20%
3- Assignments & other activities	----------	----
Total	**250**	100%

5-E) Examination description:

Examination	Description
1- Mid-term exam	Quiz (MCQs)
2- Final exam: a- Written b- Practical c- Oral	short ac question Perform neurological examination and identify some neurological lesions, perform hearing tests and differentiate types of deafness. 2 sessions
3- Assignments & other activities	Practical books.

6- List of references:

6.a- Basic materials:

Department books:

1- Medical physiology part I (introduction of physiology and physiology of blood) by staff members of physiology department 2014-2015.

2- Practical book by staff members of physiology department prepared by Prof. Dr.Alaa EL- talees 2014- 2015.

6.b- Essential books (text books):

a) John E Hall and Arthur C Guytonn; Textbook of Medical Physiology, twelfth edition :2012.

b) Kim E Barrett and Scott Boitano; Review of Medical Physiology, twenty fourth edition :2012.

6.c- Periodicals, Web sites, etc:

- http://www.medscape.com.
- http://www.pubmed.com.
- http://sciencedirect.com.

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Faculty lectures halls: 3
- Department lectures halls: 1
- Department laboratories: 2

Course coordinator: **Dr. mona maher**
Head of Department: **Prof Dr. Alaa Abd- Elaziz Al-teles**
Date **9/2012**

Benha University.
Faculty of Medicine.
Department of Medical Microbiology & Immunology.

Course Specification

MEDICAL MICROBIOLOGY AND IMMUNOLOGY (MED 0707)

Third Academic Year (2013 – 2014)

A) Basic Information:

1. **Course title: medical microbiology and immunology**
2. **Code: MED 0707**
3. **Specialty:** Bachelor of Medicine and Surgery **(M.B.B.Ch.)**
4. **Department teaching the course: medical microbiology and immunology**.
5. **Academic year: first Year**
6. **Date of specification approval by Department council:** 9/2013
7. **Allocated marks:** 200 marks.
8. **Teaching hours:**

1- Theoretical	**90**
2- Practical	**60**
Total	**150**

B) Professional Information:

1- Overall Aim of the Course:

1.1. To educate students about the basic features of general bacteriology, virology, mycology and microbial genetics and helping the students know and understand the action and resistance of different antimicrobial agents.

1.2. To familiarize students with the common infectious diseases, their microbial causes, as well as laboratory diagnosis, treatment, prevention

and control of such diseases and make students aware of the different nosocomial infections and the different principles and measures of infection control.

1.3. Provide students with the essential knowledge of the structure and function of the immune system, mechanisms of immunity, its role in the pathophysiology of infectious and non-infectious diseases and immune mediated diseases as well as the different methods used to diagnose and manage such diseases.

2- Intended Learning Outcomes (ILOs):

2.a. Knowledge and understanding:

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

2.a.1. Describe general bacterial morphology, physiology and genetics.

2.a.2. list the microbial physiology, genetics and the basis of molecular biology.

2.a.3 mention the principles of growing and cultivating microorganisms and the scientific basis of using antimicrobial agents, their mode of action, application and complications in vivo and in vitro.

2.a.4. summarize the host parasite relationship and microbial pathogenesis.

2.a.5. state the basics of antimicrobial chemotherapy and resistance, mode of action, application and complications in vivo .

2.a.6. list microorganisms of medical importance with emphasis on: morphology, culture، antigenic structure, virulence, pathogenesis, clinical diseases they caused، diagnosis, treatment, prevention and control.

2.a.7. Explain the physiology of the immune system, its beneficial role, its interaction with tumors, its deficiency conditions, as well as its detrimental role in hypersensitivity, autoimmunity and transplant rejection

2.a.8. identify the Nosocomial infections, principles and methods of decontamination, sterilization and infection prevention and control.

2.b. Practical Skills

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

2.b.1. Order the appropriate specimen for diagnosis and how to collect them.

2.b.2. Perform and distinguish the results of Gram staining and Ziehl-Neelsen staining and microscopic examination of stained preparations
2.b.3. Identify different microbial culture media (cultured & non cultured)
2.b.4. Apply the biochemical and serological tests commonly used for bacterial identification and distinguish positive and negative results.
2.b.5. Apply basic infection control measures as hand wash, use of different methods of sterilization and disinfection.

2.c. Professional Attitude and Behavioral kills:

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

2.c.1. collaborate with his colleagues in a team work inside the lab, as well as solving problems.

2.c.2. behave ethically with his teachers, colleagues as well as other personnel in the field.

2.d. Intellectual Skills:

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

2.d.1. Set up a policy for using the different laboratory procedures necessary to approach diagnosis of the common infectious clinical conditions with prioritization of the most appropriate and most cost effective tests to be used.

2.d.2. Interpret microbiological, serological reports and be able to determine the appropriate antimicrobial used in treatment different infections.

2.d.3. Integrate the results obtained from history, clinical examination and investigational data into meaningful diagnostic formulation, focusing on interpretation of laboratory diagnostic tests and reports.

2.d.4. Categorize a microorganism as a bacterium, virus or fungus according to standard taxonomy.

2.d.5. Appreciate the danger of handling and use of infectious agents on community and environment and those with dangerous infectious diseases as a part of their ethical heritage.

2.e. General and transferable Skills:

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

2.e.1. Aware and capable of evaluating the risk of disseminating infections in the hospital and community through other cases, carriers or even healthcare workers during manipulating and handling infectious material.

2.e.2. Establish life-long self-learning required for continuous professional development through using the sources of medical information and communication technology to remain in current with advances in knowledge and practice.

2.e.3. Present information clearly in written, electronic and oral forms.

2.e.4. By the end of the course the graduate will be have interpersonal skills and capacity to carry responsibility by Discussion of the lecture topics with the other students in the class and with lecturer after the lecture

2.f. Communication skills:

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

2.f.1. Communicate clearly, sensitively and effectively with colleagues from a variety of health and social care professions.
2.f.2. Establish good relations with other health care professionals regardless their degrees or rank (top management, subordinate or colleague).
2.f.3. Communicate effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.
2.f.4. Respect superiors, colleagues and all members of the health profession.

3- Course contents:

Subject	Lectures (hrs)	Practical (hrs)	Total (hrs)	% of Total
Introduction to Microbiology	1	-	1	0.7%
Bacterial Cell Structure	1	-	1	0.7%
Bacterial Physiology, Metabolism, Reproduction And Growth Curve	1	-	1	0.7%
Host parasite relationship	1	-	1	0.7%
Bacterial genetics & Genetic engineering	2	-	2	1.3%
Antimicrobial chemotherapy	2	-	2	1.3%

Safety procedure & Microscope	-	2	2	1.3%
Film preparation and different stains	-	6	6	4%
Disinfection and Sterilization	2	4	6	4%
Culture media	-	4	4	2.7%
Basic Immunology	7	-	7	4.7%
Special immunology	5	-	5	3.3%
Serological tests	---	4	4	2.7%
Staphylococci , streptococci, and Neisseria	5	6	11	7.3%
Corynebacteria	1	2	3	2.0%
Bacillus Group	1	2	3	2.0%
Clostridium	2	2	4	2.7%
Mycobacteria	2	2	4	2.7%
Gram negative bacilli	5	8	13	8.7%
Spirochaetes	2	2	4	2.7%
Rickettsia	2	-	2	1.3%
Chlamydia	1	-	1	0.7%
Miscellaneous organisms	2	-	2	1.3%
Brucella Haemophilus Yersinia & Bordetella	3	2	5	3.3%
Mycoplasma & Actinomycetes	1	-	1	0.7%
General virology	5	-	5	3.3%
Laboratory diagnosis of viral infections	-	2	2	1.3%
DNA viruses	3	-	3	2%
RNA viruses	5	-	5	3.3%
HIV infection	1	-	1	0.7%
Hepatitis viruses	2	-	2	1.3%
Oncogenic viruses	1	-	1	0.7%
Mycology	5	2	7	4.7%
Nosocomial infections and Infection control	3	2	5	3.3%
Applied microbiology	4	4	8	5.3%
Revisions	12	4	16	10.6%
	90	60	150	100%

4- Teaching and learning methods:

METHODS USED:

Lectures: modified lectures

Practical classes: practical classes

TEACHING PLAN:

Item	Time schedule	Teaching hours	Total hours
Lectures	3Times/week (each time **1**hour)	**90 hours**	**60%**
Practical classes	**2** Hours/ week	**60 hours**	**40%**
Total	**5** hrs/week	**150 hours**	**100%**

5- Students Assessment methods:

5-A) <u>ATTENDANCE CRITERIA</u>: to assess degree of commitment

1. Practical attendance.
2. Log book.
3. Quiz.
4. Seminars.

Students should attend no less than 75 % of practical classes and seminar sessions as an essential prerequisite to be legible for the final exams.

5-B) <u>Assessment TOOLS:</u>

Tool	Purpose (ILOs)	evidence
Written examination • Short essay • Complete • True or false • Case study • MCQ	2.1, 2.2.1 2.2.4, 2.4.1 2.4.2, 2.4.3 2.4.4, 2.5.1	Exam model
Oral examination • Viva cards	2.1, 2.2.1 2.2.4, 2.3.2 2.4.1, 2.4.2 2.4.3, 2.4.4	Viva cards

	2.5.1	
Practical examination • Identify the specimen • Short complete questions upon the given specimen	2.2 2.4.1	Ppt slides & practical exam model
Quiz • Short essay • True or false • Complete • MCQ • Case study	2.1, 2.2.1 2.2.4, 2.4.1 2.4.2, 2.4.3 2.4.4, 2.5.1	Quiz model
Seminars • Prepared by a group and presented by a selected student	2.3.1, 2.3.2 2.5.2, 2.5.3 2.5.4	Seminar Ppt and research
Practical drawing • Draw the practical slides in the practical class book	2.2.2	Practical book

5-C) <u>TIME SCHEDULE</u>:

Exam	Week
quiz	At the last week of every month, given in the practical class time.
seminars	According to student grouping and seminar subject, presented at the end of the practical class.
Mid-term exams	Near the end of first & second terms (January& April)
Final exam	At the end of second term (May-June)

5-D) <u>Weighting System:</u>

Examination	Marks allocated	% of Total Marks
• First Midterm exam	15	
• Second Midterm exam	10	
• Quiz	5	
• attendance	5	
• Seminars	3	
• Practical book drawing	2	
Total	**40**	**20%**

2- Final exam: a- Written b- Practical c- Oral **Total**	 100 40 20 **160**	 **50%** **20%** **10%** **80%**
Total	**200**	**100%**

- The minimum passing score is **120 marks** provided at least **30 marks** are obtained in the final written examination.
- Passing grades are: EXCELLENT >85%, VERY GOOD 75- <85%, GOOD 65- <75% and FAIR 60-<65%.

FORMATIVE ASSESSMENT:

- Student knows his marks after the Formative exams.

5-E) Examination description:

Examination	Type	Description		Time allowed
Midterm exams	Written	• One hour written paper composed of short essay-type questions • Complete • Case study • MCQs • True/False questions		• 1 hr.
Final Examination	1. Written	• A two-hour written paper composed of short essay-type questions • complete • MCQs • True/False questions • A case study		• 3 hrs
	2. Practical	Spots	• 10 spots including slides, culture media, biochemical reactions, serological tests and instruments.On each specimen, small complete questions should be answered.	• 2 min.for each spot • 15 min.
	3. Oral	One oral examination station with 2 staff members (10-15 minutes: 4-5 questions)		

6- List of references:

6.1- Basic materials:

1. Medical Microbiology: Department book and practical manual.(2014-2015)
2. Lectures on Medical Virology: Department book.(2014-2015)

3. Basic Immunology: Department book.(2014-2015)

6.2- Essential books (text books):

1. Jawetz, Melnick and Adelberg's *Medical Microbiology 26th Edition* . 2013 by The McGraw-Hill Companies, Inc
2. *Mackie & McCartney Practical Medical Microbiology. 14th Edition 2008by* Elsevier Private Limited India. ISBN:9788131203934
3. Abul K. Abbas, Andrew H. Lichtman, Cellular and molecular immunology shiv pillai.Updated 8th ed. 2014.ISBN 9780323222754

6.3- Recommended books:

1. Richard A Harvey, Pamela C Champe, Bruce D Fisher (2007):Lippincott,s illustrated review microbiology and parasitology ,by Lippincott Williams & Wilkins ISBN: 0781782155
2. Bonnie A. B, Lauritz A. J (2009): Lippincott's Illustrated Q&A Review of Microbiology and Immunology by Lippincott Williams & Wilkins , 1st ed. SBN-13: 978-1582558578

6.4- Periodicals, Web sites, etc:

1. asmnews@asmusa.org
2. http://www.phage.org/black09.htm
3. http://www.microbe.org/microbes/virus_or_bacterium.asp
4. http://www.bact.wisc.edu/Bact330/330Lecturetopics
5. http://whyfiles.org/012mad_cow/7.html
6. http://www.microbelibrary.org
7. http://www.hepnet.com/hepb.htm
8. http://www.tulane.edu/~dmsander/Big_Virology/BVHomePage.html
9. http://www.mic.ki.se/Diseases/c2.html
10. http://www.med.sc.edu:85/book/welcome.htm
11. http://www.bioiogy.arizona.edu/immunology/microbiology_immunology.html

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Faculty lectures halls: 2
- Department lectures halls: 2
- Department Equipped Laboratories: 2

Course coordinator: Prof. Amal Mounir Matta

Head of Department: Prof. Amal Mounir Matta

Date: 9/2013

Benha University
Faculty of Medicine
Department of Medical Parasitology

Course Specification

Medical parasitology (MED 0708)

Third Academic Year (2013 – 2014)

A) Basic Information:

1. **Course title: Medical Parasitology**
2. **Code: MED 0708**
3. **Specialty:** Bachelor of Medicine and Surgery **(M.B.B.Ch.)**
4. **Department teaching the course: Medical Parasitology**.
5. **Academic year: third Year**
6. **Internal evaluator**: Prof. Dr. Hassan Hammadto
7. **Date of specification approval by Department council:** 9/2013
8. **Allocated marks:** 150 marks.
9. **Teaching hours:**

1- Theoretical	**60**
2- Practical	**60**
Total	**120**

B) Professional Information:

1- Overall Aim of the Course:

1.1. To achieve national and international standing in education in the field of Medical Parasitology.

1.2. To focus on: applied clinical Parasitology, diagnosis, prevention and control of the different parasitic infections.

1.3. To be aware of basic epidemiological and environmental factors in relation to parasitic infections with special emphasis on local endemicity.

1.4. To provide diagnostic educational laboratory to the student.

2- Intended Learning Outcomes (ILOs):

2.a. Knowledge and understanding:

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

2.a.1. Define parasite nomenclature, geographical distribution, different hosts, and parasitic zoonosis.

2.a.2. Identify the basic concepts and principle of parasitism.

2.a.3. List pathogenesis, clinical picture and host parasite relationship of different parasite.

2.a.4: Explain morphology, life cycle of different parasite.

2.a.5: Classify different parasitic infections.

2.a.6: Explain diagnostic methods (direct and indirect) treatment, prevention and control of parasitic diseases.

2.b. Practical skills:

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

2.b.1. *Perform different methods of urine and stool examination, thin and thick* blood films, some staining procedures.

2.b.2. Operate laboratory equipments safely and carefully.

2.b.3. Illustrate identification of different parasitic stages, preserve fresh specimens, identify infected snails and apply safety precautions

2.c. Professional attitude and behavioral skills:

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

2.c.1. collaborate with his colleagues in a team work inside the lab, as well as solving problems.

2.c.2. behave ethically with his teachers, colleagues as well as other personnel in the field.

2.d. General and transferable skills:

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

2.d.1. Communicate in group working and problem solving

2.d.2. Respect the role of the staff and co-staff members regardless of degree or occupation.

2.d.3. Computing skills for research work.

2.e. Communication skills:

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

2.e.1. Communicate clearly, sensitively and effectively with colleagues from a variety of health and social care professions.

2.e.2. Establish good relations with other health care professionals regardless their degrees or rank (top management, subordinate or colleague).

2.e.3. Communicate effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.

2.e.4. Respect superiors, colleagues and all members of the health profession.

2.f. Intellectual Skills:

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

2.f.1. Analyze any given data in a laboratory report or case study and relate it to causative parasite.

2.f.2. Interpret the most important signs and symptoms of important parasitic infections of endemic character.

2.f.3. Solve problem

3- Course contents:

Subject	Lecture In hours	Tutorial / Small group discussion (hrs)	Practical (hrs)	Total (hrs)	%Total (hrs)
1-General Introduction	**1 h r**			**1**	**0.83**
2-Helminthology **2a-Trematodes:** **· General characters** **· Fasciola species** **· Fasciolopsis buski** **· Heterophyes & Metag** **· Paragonimus** **· Schistosoma species** **· Molluscs** **· Urine examination**	**10 hrs** **1 hr** **1 hr** **1 hr** **1 hr** **1 hr** **4 hr** **1 hr** **----------**	**4 hrs**	**8 hrs** **2 hrs** **2 hrs** **2 hrs** **2 hrs**	**22**	**18.3**

2b-Cestodes: **· General characters,** **Diphyllobothrium sp. & sparganosis** **· Taenia saginata** **· Taenia solium & cysticercosis** **· Echinococcus sp. & hydatid disease** **· Hymenolepis sp. & Dipylidium**	**-** **5 hrs** **1 hr** **1 hr** **1 hr** **1 hr**	**2hrs**	**6hrs** **2 hrs** **2 hrs** **2 hrs**	**13**	**10.3**
2c-Nematodes: **· General characters** **· Ascaris lumbricoides** **· Toxocara sp. & visceral larva migrans** **· Hook worm sp.& cut. larva migrans** **· Strongyloides stercoralis** **· Enterobius & Trichuris** **· Trichinella spiralis** **· Wuchereria species** **· Loa loa & Onchocerca** **· Dracunculus medinensis** **· Stool examination**	**1hr** **10 hrs** **1 hr** **1 hr** **1 hr** **1 hr** **1 hr** **1 hr** **1 hr** **1 hr** **1 hr** **1 hr**	**4 hrs**	**8hrs** **2 hrs** **2 hrs** **2 hrs** **2 hrs**	**22**	**18.3**
3-Protozoology **· Amoebae species** **· Free-living amoebae** **· Balantidium coli** **· Giardia**	**15** **2 hrs** **1 hrs** **1hr** **1hr**	**4 hrs**	**8 hrs** **2 hrs**	**27**	22.7

lamblia &Trichomonas vaginalis					
· Leishmania species	**2hr**		**2 hrs**		
· Trypanosoma species.	**2hr**				
· Plasmodium species & Babesia species	**3 hrs**			22	18.3
· Toxoplasma gondii			**2 hrs**		
· Cryptosporidium parvum	**2 hrs**				
· Blood exam	**1 hr**				
4-Entomology	**----------**		**2 hrs**		
· General characters	**--**				
· Mosquito species	**12 hrs**			6	5
· Phlebotomus, Simulium & Culicoides	**1 hr**	**4 hrs**	**6 hrs**	3	2.5
	2 hrs			3	2.5
· Musca, Stomoxys & Glossina	**1 hr**			1	0.83
· Metallic, Flesh flies & myiasis			**2 hrs**		
· Bugs	**1 hr**				
· Lice					
· Fleas			**2 hrs**		
· Ticks, Mites & Cyclops	**1 hr**		**2 hrs**		
5- Revisions	**1 hr**				
6- Immunity to parasitic infections	**1 hr**				
	1 hr				
7- Clinical presentations of parasitic diseases.	**3 hrs**				
	------				
	3 hrs		**4 hrs**		
8- Diagnosis of parasitic infections	**3 hrs**		**---------**		
		2 hrs	**---------**		
	1 hr		**---------**		
Total				**120**	**(100%)**

4- Teaching and learning methods:

METHODS USED:

- Modified lectures.
- Small group discussions.
- Practical classes.
- Self-learning (student researches & self-presentations).

TEACHING PLAN: ***Lectures: 60, Tutorials:20, Practical classes:40***

Item	Time schedule	Teaching hours	Total hours
Lectures	2 times/week; one hour each between to	60	60
Practical	2 hours / 20 week	40	40
Tutorial	1 hours / 20 week	20	20
Total	**5/week**	**120**	**120**

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA: Faculty bylaws

1. Practical attendance
2. Small group attendance
3. Log book

5-B) Assessment TOOLS:

Tool	Purpose (ILOs)
Written examination	To assess knowledge , understanding and intellectual skills
Oral examination	To assess knowledge, intellectual skills and attitude.
Practical examination	To assess knowledge , understanding and intellectual skills, professional skills and attitude.

5-C) TIME SCHEDULE: Faculty bylaws

Exam	Week
1- First half of the academic year	7th
2- Mid-year exam	15th
3- Second half of the academic year	22
4- Practical exam	25

5- Final exam	30

5-D) <u>Weighting System:</u>

Examination	Marks allocated	% of Total Marks
1- Shock exams	----------	0
2- First half	5	3.33%
3- Mid-year	20	13%
4- Second half	5	3.33%
5- Final exam: a- Written b- Practical c- Oral	 60 30 15	 40% 20% 10%
6- Assignments & other activities	15	10%
Total	**150**	

5-E) <u>Examinassions description:</u>

Examination	Description
1- Shock exams	Quizzes
2- First half	Objectively structured questions
3- Mid-year	Case study and MCQs
4- Second half	Objectively structured questions
5- Final exam: a- Written b- Practical c- Oral	 (MCQs) ,Short essay questions, case report, drawings. Identify microscopic slides, boxes, snails, give reasons. two sessions.
6- Assignments & other activities	Assignments, projects, practical books etc
Total	**150**

6- <u>List of references</u>:

6.1- **Basic Materials**:

-Medical Parasitology-Lecture Notes, authorized by the Department.

-Parasitology Atlas, -CD for practical course.

6.2- **Essential books**:

- Gerald (2007): Parasites and infectious diseases.
- Barbra D.(2008): Molecular mechanism of parasite invasion.
- David M.(2008): Advances in parasitology control of human parasitic diseases.

6.3- **Recommended books:**

- Manson's Tropical Diseases, Cook GC (ed), 21st edition. London: WB Saunders, 2003.

6.4- **Websites:**

- http://www.epu-eg.com/ , - http://www.parasitesonline.net/
- http://pathmicro.med.sc.edu/book/parasit-sta.htm
- http://www.dpd.cdc.gov/dpdx/HTML/Para_Health.htm
- http://www.malaria.org/

7- Facilities required for teaching and learning

- Proper lecture rooms.
- Computers and data show.
- Electronic White Board and its requirements. Laser points.
- Well equipped laboratories.
- Sixty binocular microscopes with planachromate lenses 6x, 10x, 40x and 100x.
- Four sets of microscopic slides for demonstration.
- Refrigerator and deep Freezer., Four centrifuges.
- Well equipped Video rooms and Video films, slide projector and projector slide sets.
- All laboratory requirements for performing the practical work (including chemicals, stains, disposable materials, glass wares, gloves and disinfectants) in sufficient amounts for the use of the huge number of students (500 students).
- In addition to, providing **ample time** and **more grades** to be allocated for the new activities (e.g. research assignment and additional practical work) for the execution of all the goals.

Course coordinator: Prof.Dr /Mohammed Saad Younis

Head of the Department: Prof.Dr /Mohammed Saad Younis

Date 9/2013.

Benha University
Faculty of Medicine
Department of Pathology

Course Specification

Course title: Pathology
(Code): MED 0705
Academic Year (2013 – 2014)

- **Department offering the course:** Pathology Department
- **Academic year of M.B.& B.Ch. program:** third year/ undergraduate level
- **Date of specification approval: department council , date** 9/2013**,**
- **Internal evaluator: Dr. Hala A. Agina**

A) Basic Information:

- **Allocated marks:** 300 marks
- **Course duration:** 24 weeks of teaching
- **Teaching hours:**

1- Theoretical	120
2- Practical	120
Total	240

B) Professional Information:

1- Overall Aim of the Course:

1.1. To **familiarize** students with fundamental bases of disease processes.

1.2. To **provide** the students with knowledge concerning definition, causes, mechanisms of disease development, associated alteration of structure "morphological changes", functional changes, and complications of diseases in different body systems.

1.3. To **prepare** the students for clinical rounds and their future as practitioners, able to promote life long competencies necessary for continuous professional development.

2- Intended Learning Outcomes (ILOs):

2.a.Knowledge and understanding

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

2.a.1. **mention** the basic facts, concepts, theories and define terms in the field of pathology.

2.a.2 **Discuss** the main disease categories that may affect the body (general pathology) as well as the basic mechanisms underlying these disorders (etiology, pathogenesis & natural history).

2.a.3 **summarize** the basis of molecular pathology and its contributions in various disease processes.

2.a.4. **Describe** the morphologic (gross & microscopic) changes occurring as a result of such disease processes in various organ & system.

2.a.5. **Determine** the fate & complications of each particular disease and outline the general management procedures.

2.a.6. **Mention** the role of the pathologist in making the proper diagnosis and help the proper management of the patient.

2.b. Practical skills:

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

2.b.1- **Perform** proper handling of tissue specimens sent for pathological examination.

2.b.2.- **Describe** the gross features of surgically removed specimen.

2.b.3- **Use** the light microscope to examine and identify microscopic findings of some selected examples of studied diseases.

2.b.4- **Correlate** the gross and microscopic features with the pathogenesis, clinical picture and complications of the disease.

2.b.5- **Write** adequate pathological request concerning clinical data and main features of gross appearance of the specimen.

2.b.6- **Write** a pathological report.

2.c. Professional Attitude and Behavioral skills:

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

2.c.1. **Apply** the rules of laboratory ethics and safety measures while in the lab or in the museum.

2.c.2**. Maintain** a professional image in manner, dress, speech and interpersonal relationships that is consistent with the medical profession's accepted contemporary standards in the community.

2.c.3. **Express** themselves freely and adequately.

2.c.4. **Respect** superiors, colleagues and all members of the health professions.

2.d.Communication Skills

By the end of the program the graduate will be able to

2.d.1.**Communicate** clearly, sensitively and effectively with their colleagues from a variety of heath and social care professions.
2.d.2.**Establish** good relations with other health care professionals regardless their degrees or rank.
2.d.3. **Communicate** effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.

2.e. Intellectual skills

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

2.e.1. Categorize and compose a pathology report.
2.e.2- **Correlate** the pathological finding with clinical, laboratory and x-rays findings to reach the most accurate pathological diagnosis.
2.e.3- **Choose** the most appropriate and cost effective further pathologic diagnostic procedures if necessary.
2.e.4- **Collect, analyze, and utilize** the obtained information to solve a particular clinical problem according to the principles of evidence-based medicine.

2.f. General and transferable skills:

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

2.f.1- **Use** the sources of biomedical information to remain current with the advances in knowledge & practice.
2.f.2- **Gather** and organize material from various sources (including library, electronic and online resources).

3- Course contents:

Subject	Lectures (hrs)	Practical (hrs)	Total (hrs)	% of Total
General pathology	**56**	**36**	**116**	**48.33**
Introduction	1			
Cell response to injury	9	3	12	
Acute and chronic Inflammation	4	3	7	
Stem cells &Tissue repair and healing	3			
Immunology and graft rejection	3			
Granulomas	6	6	12	
Viral infections	2			
Bacterial infections	1			
Haemodynamic disturbances	7	3	10	
Disorders of cellular	1			

growth, differentiation and maturation				
Genetics	2			
Irradiation	1			
Vitamin deficiency	1			
Molecular carcinogenesis	1			
Tumors	8	12	21	
Tutorial: 2 hours/week (2 x12)		24		
Revision	1	9	10	
Systemic pathology	**64**	**36**	**124**	**51.67**
Cardiovascular system	10	3	13	
Respiratory system	7	6	13	
Kidney	8	3	11	
Lower urinary tract and male genital system	3	3	6	
Female genital system	6	3	9	
Breast	2	3	5	
Gastrointestinal tract	8	3	11	
Liver and gall bladder	5	3	8	
Pancreas	2			
Bone and joints	2	1	3	
Central nervous system	2	1	3	
Endocrine system	3	2	5	
Lymphatic system and spleen	3	2	5	
Blood	2			
Tutorial: 2 hours/ week (2 x12)		24		
Revision	1	6	7	
Total	**120**	**72**	**240**	**100**

4- Teaching and learning methods:

Methods used:

Method	Evidence	ILOs
1- **Modified lectures**	white board, electronic, ppt. presentation.	**2.1.1, 2.1.2., 2.1.3,2.1.5, 2.5.2**

2- Small group discussions	case studies	**2.1.1., 2.1.6, 2.3.3., 2.3.4, 2.4.1, 2.5.3, 2.5.4**
3- Practical sessions	Museum specimens and slides covering most subjects of the content	**2.1.4., 2.2.1,2.2.2,2.2.3, 3.2.4,2.2.5, 2.2.6, 2.3.1, 2.5.1,2.5.2**
4- self learning	Researches done by small groups with ppt. Presentation by each group	**2.1.5, 2.3.3., 2.4.1, 2.4.3, 2.4.4, 2.5.3, 2.6.1, 2.6.2**
5- Tutorials	For revisions, case studies open discussions related to defined topics.	**2.1.3, 2.3.3.,2.3.4,2.4.1, 2.5.2 , 2.5.3, 2.5.4**

TEACHING PLAN:

Lectures: Division of students into___one____ group
5hours /week, Time from _____ to _____.

Tutorials:

Practical classes

Time plan:

Item	Time shedule	Teaching hours	Total hours
lectures	5 times/week	5x24	120
Practical	3hours / week	3x24	72
Tutorial	2 hours /week	2x24	48
Total	10hours/week	10X24	240

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA:

Lecture : at least % of all lectures

Practical : at least 75% of practical lessons (recorded in the log book)

5-B) Assessment TOOLS:

Tool	Purpose (ILOs)	Evidence
Written examination • Short essay	2.1 2.1.1., 2.1.2, 2.1.3,	Exam model

• Compare • True & false • MCQ • Case study	2.1.4, 2.1.5, 2.1.6	
Oral examination Viva cards	2.1, 2.3.2, 2.3.3., 2.3.4, 2.4.4	Viva cards
Practical examinations • Identify specimens • Write a report • Short questions upon the given specimen	2.1.4, 2.2.1, 2.2.2, 2.2.3, 2.2.4, 2.2.5, 2.2.6, 2.3.1, 2.5.1, 3.5.2	Slides, jars, photos (practical exam model)
Quizes • True & false • MCQ • Case study	2.5.2, 2.5.3, 2.5.4, 2.2.4	Quiz model
Simple researches prepared by a group and presented by selected students	2.4.1,2.4.2, 2.4.3, 2.4.4, 2.6.1, 2.6.2	presentations and researches

5-C) <u>TIME SCHEDULE</u>:

Exam	Week
Quiz	At the end of each lecture
Researches	According to student grouping , presented in March and April
Mid-term exams	2 exams in the first term and 2 exams in the second term
5- Final exam	At the end of second term (May)

5-D) <u>Weighting System:</u>

Examination	**% of Total Marks**	**Marks allocated**
- Semester work "Quizzes, MCQ & Tutorial activity	20%	60 30 mark in 1st term and 30 marks in 2nd term
- Final exam:		

a- Written	50%	150
b- Practical	20% "including practical activity"	60
c- Oral	10% "including oral presentation"	30 30 marks; 10 marks for oral presentation & 20 marks for oral exam (10 for knowledge, 6 marks for skills & 4 marks for attitude)
Total	100%	300

- The minimum passing & Passing grades (Faculty bylaws).

FORMATIVE ASSESSMENT:
Student knows his marks after the Formative exams.

5-E) <u>Examinations description:</u>

Examination	Description
- First half a) **Short questions and MCQ**	Objectively structured questions
	Supply (Short essay) questions, define, enumerate, compare. MCQ and problem solving questions
- Second half a) **Short questions and MCQ** b) Practical exam	Supply (Short essay) questions, define, enumerate, compare. MCQ and problem solving questions Identify specimens including jars, slides, photos, write a report and short questions related to the specimens
- Final exam: a- Written b- Practical c- Oral	e.g. select (MCQs) ,and problem solving questions & Supply (Short essay) questions, define, enumerate, compare . e.g. Do, identify e.g. How many sessions
- Assignments & other activities	Search done by small groups (self learning)

6- <u>List of references</u>:

6.1- <u>Basic materials:</u>

- General Pathology books prepared by staff members of the Department, 2010
- -Museum notebook (Department book), 2010.
- Slide notebook (Department book), 2010.
- Short questions & MCQ; notes on general pathology prepared by staff members of the Department (on Benhapathology page- facebook)

NB: All books prepared by Pathology department are revised and updated every year.

6.2- Essential books (text books):

- Cotran RS, Kumar V and Robbins SL: Robbins Pathologic Basis, 2010.
- Stevens A, Lowes J et al.,: Core Pathology, 3rd ed. Mosby, 2009.

6.3- Recommended books:

- El Bolkainy MN, Nouh MA, El Bolkainy TN: General Pathology of Cancer, 2nd ed. NCI, Cairo University, 2013.
- Mills SE, et al, Sternberg's Diagnostic Surgical Pathology, Lippincott Williams& Wilkins, 2010

6.4- Periodicals, Web sites, … etc:

http://www.pathmax.com/
http://www.medib.med.utah.edu/WebPath/LABMENU
http://www.med.uiuc.edu/PathAtlasf/titlePage.html
http://www.medscape.com/pathologyhome
http://umc.edu/dept/path/2umc.edu/dept/path/2F

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Lecture halls : 1
- Small group classes: 2, Laboratory: 2
- Data show: 3, Smart board:1
- Museum specimens
- Power point presentations covering all *slides* presented during the course (prepared by stuff members)
- Power point presentations covering all *subjects* presented during the course (prepared by stuff members)

Course coordinator: Prof. Dr. Abd Ellatif El-Balshy

Assistant : Dr. Ghada Ahmed (Quality Coordinator)

Head of Department: Prof. Dr. Abd Ellatif El-Balshy

Date: 9 **/2013**

Benha University.
Faculty of Medicine.
Department of Clinical Pharmacology

COURSE SPECIFICATION

Course title: Clinical Pharmacology

Code: MED 0706

Academic Year (2013-2014)

- **Department offering the course: Clinical Pharmacology Department**
- **Academic year of M.B. & B.Ch. program: 3rd year.**
- **Date of specification approval:**
- **Dep. Council /9/2013**
- **Internal evaluator : Proffessor Dr/El-sayed Ahmed Abd El-latif**

A) Basic information:

- **Allocated marks: 300 marks**
- **Course duration: 30 weeks of teaching.**
- **Teaching hours:**

1- Theoretical	120 hrs
2- Practical	60 hrs
Total	180 hrs

B- Professional Information

1- Overall aims of course

1.1. To **provide** the basic knowledge about commonly used groups of drugs affecting different body systems.

1.2. To **provide** drugs implications in therapy of diseases and health promotion.

1.3. To **enable** students to understand the safe use of drugs as regards adverse effects, contraindications and drug interactions.

2- Intended learning outcomes of course (ILOs)

2.a- Knowledge and understanding:

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

2.a.1.**Describe** the indications, the relative advantages and disadvantages of various therapeutic modalities (Pharmacological and non pharmacological) for common and life threatening illnesses.

2.a.2. Identify proper methods intervention for common and life threatening illnesses (whether non invasive and or, invasive).

2.a.3. **list** the precautions, limitations of drugs with narrow safety margin..

2.a.4. Mention methods for ameliorating sufferings of critically ill patients and emergency conditions

2.b. Practical skills

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

2.b.1.**Perform** with precision different technique of drug administration.

2.b.2. Design rational therapeutic strategies for both acute and chronic conditions that take into account the various variables that influence these strategies. Choose the proper drug(s) for the proper clinical situation in proper dosage.

2.b.3. Write a prescription for selected important diseases.

2.b.4. Audit prescriptions citing multiple drugs.

2.b.5. Demonstrate the macroscopic and microscopic criteria of the altered structures and functions of the body and its major organ systems that are seen in various diseases and conditions.

2.c. Professional Attitude and Behavioral skills:

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

2.c.1. Demonstrate respect and work effectively as a member or a leader of an interdisciplinary team.

2.c.2. **Establish** good relations with colleagues to share all types of inter-professional activities including shared learning.

2.d. Communication skills:

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

2.d.1. Communicate clearly, sensitively and effectively with colleagues from a variety of health and social care professions.

2.d.2. Establish good relations with other health care professionals regardless their degrees or rank (top management, subordinate or colleague).

2.d.3. Communicate effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.

2.d.4. Respect superiors, colleagues and all members of the health profession.

2.e. Intellectual skills

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

2.e.1. Calculate accurately drug's dosage, bioavailability, plasma half life and volume of distribution in different patient populations.

2.e.2. Obtain and record a comprehensive drug history of the patient.

2.e.3. interpret drug adverse reactions.

2.e.4. **Adopt** the questioning approach to own work & that of others to solve clinical problems.

2.f. General and transferable skills

2.f.1. Establish life- long self- learning required for continuous professional development.

2.f.2. Use the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.

2.f.3. Retrieve, manage, and manipulate information by all means, including electronic means.

2.f.4. Present information clearly in written, electronic and oral forms.

2.f.5. Establish effective interpersonal relationship to communicate ideas and arguments.

2.f.6. Work effectively as a member or a leader of an interdisciplinary team.

3- Course contents

Topics	Lectures (Hrs)	practical Tutorial/ small group(Hrs)	Total (Hrs)	% of total
1-General pharmacology	8	6	14	7.7
2-Autonomic nervous system	16	10	26	14.4
3-Ocular pharmacology	2	2	4	2.2
4-Skeletal muscle relaxants	2	2	4	2.2
5-Autacoids	4	-	4	2.2
6-Respiration	3	2	5	2.7
7-Renal pharmacology	4	-	4	2.2
8-Cardio-vascular pharmacology	16	2	18	10
9-Blood and blood forming organs	4	-	4	2.2

10-Psycho-neuro-pharmacology	**16**	**6**	**22**	**12.2**
11-Hormones and their antagonists	**6**	**2**	**8**	**4.4**
12-Gastro-intenstial tract	**6**	**2**	**8**	**4.4**
13-Chemotherapy oral antiseptics	**6**	**2**	**8**	**4.4**
14-Drug abuse	**2**	**-**	**2**	**1.1**
15-Drug interactions	**2**	**-**	**2**	**1.1**
16-Chelating agent	**2**	**2**	**4**	**2.2**
17-Vitamins and food supplements	**2**	**-**	**2**	**1.1**
18- Immunopharmacology	**2**	**-**	**2**	**1.1**
19- Pharmaco-economics	**2**	**2**	**4**	**2.2**
20- Pharmacogenetics	**1**	**-**	**1**	**0.5**
21- Cancer chemotherapy	**6**	**-**	**6**	**3.3**
22- Gene therapy	**4**	**-**	**4**	**2.2**
23- Iatrogenic disease	**4**	**-**	**4**	**2.2**
24 -Prescription writing	**-**	**4**	**4**	**2.2**
25- Choice of proper drug	**-**	**4**	**4**	**2.2**
26- Problem based solving	**-**	**12**	**12**	**6.7**
Total	**120**	**60**	**180**	**100**

4- Teaching and learning methods

METHODS USED:

4.1-Modified Lectures

4.2- Practical classes

4.3-Problem based pharmacotherapy.

4.4-Small group discussion

Method	Evidence	ILOs
Modified lectures	-A schedule for undergraduate Lectures -CDs of lectures including (Power point files ,video films, problem solving, etc…….) -Papers of lectures	**2.a.1----2.a.4** **2.b.2----2.b.5** **2.d.3----2.d.5** **2.e.1----2.e.3** **2.f.3**
Practical classes	-A schedule for undergraduate practical course. -CDs of practical classes including (power point files and videos ,etc….) -Different drug formulations -Note books including curves for in vitro and in vivo drug studies	**2.a.2----2.a.4** **2.b.1----2.b.5** **2.c.1----2.c.2** **2.d.1----2.d.5** **2.e.1----2.e.4** **2.f.4-----2.f.6**
Problem based pharmacotherapy.	Cases (papers and video films)	**2.a.2----2.a.4** **2.b.1----2.b.5** **2.c.1----2.c.2** **2.d.1----2.d.5** **2.e.1----2.e.4** **2.f.4-----2.f.6**
Small group discussions	Curves for in vitro and in vivo drug studies , Cases ,drug formulations etc…..	**2.a.2----2.a.4** **2.b.2----2.b.4** **2.c.1----2.c.2** **2.d.1----2.d.5** **2.e.1----2.e.4** **2.f.1-----2.f.6**

TEACHING PLAN:

Modified Lectures: 120 lectures.

Discussion, brain storming

Practical classes: 60 practical classes.

TIME PLAN:

Item	Time schedule	Teaching hours	% of Total hours
Lectures	4 times / week /30weeks (one hour each)	120	67
Practical classes	2 hours/ week/30	60	33
Total	6 hours /week/30 weeks	180	100

5- Student Assessment Methods

5.A) Attendance Criteria:

1. Lectures (at least 50% attendance).
2. Practical (at least 75% attendance).
3. Log book

5.B) Assessment Tools:

Tool	Evidence	Purpose (ILOs)
1-Written examination: • **MCQs** • **Short essay** • **Compare** • **explain**	Attached module of examination	**2.a.1----2.a.3** **2.b.1----2.b.2** **2.c.3----2.c.5** **2.d.3----2.d.4** **2.e.1----2.e.3** **2.f.2-----2.f.4**

2-Oral examination	Oral exam. Reports	**2.a.1----2.a.2** **2.b.1----2.b.2** **2.c.1----2.c.3** **2.e.1----2.e.3** **2.f.4-----2.f.5**
3-Practical examination(includes case study)	Practical Reports	**2.a.2** **2.b.1----2.b.2** **2.c.2----2.c.5** **2.d.1----2.d.5** **2.e.1----2.e.4** **2.f.3-----2.f.4**
4-Assignment		**2.b.1----2.b.2** **2.c.1----2.c.2** **2.d.1----2.d.5** **2.e.3----2.e.4** **2.f.1-----2.f.6**

5.C) TIME SCHEDULE:

Exam	Week
1- Assessment 1	Week ……. 7
2- Assessment 2	Week ……. 22
3-Assessment 3(Final exam)	Week ……. 32

5-D) Weighting system:

Examination	Marks allocated	% of total Marks
1-Mild- year exam	**60**	**20%**
a-Written(MCQ ,compare ,explain ,short essay questions)	45	15%

b- Assignments & Other activities (log book)	15	5%
2- Final Examination	**240**	**80%**
a- Written	150	50%
b- Practical	60	20%
c- Oral	30	10%
Total	**300**	**100%**

-The minimum passing score is 180 marks provided that at least 45 marks are obtained in the final written examination

-Passing grades are:

Excellent	85%
Very good	75-85%
Good	65-75%
Fair	60-65%
Failed	<60%

5-E) Examination description:

Examination	Description
1- Mid -year exam	Quiz (MCQ)- short essay
2- Final exam **a- Written** **b- Practical** **c- Oral**	 (MCQs) –short & long essay problem solving cases & Experimental models 2 sessions
3- Assignments & other activities	Assignments & practical books

6- List of References

6.1 **Handouts** updated administered by staff members

6.2 **Essential Books** (Text Books):

Principles of pharmacology (2012): the pathophysiologic basis of drug [et al.], Philadelphia : Lippincott Williams & Wilkins.

6.3- **Recommended Books**:

GOODMAN AND GILMAN (2011): THE PHARMACOLOGICAL BASIS OF THERAPEUTICS 12th edition.

6.4- **web Sites**:

www.micromediex.com

7- Facilities Required for Teaching and Learning

- Lecture rooms:1
- Laboratories:3
- Section rooms:1
- Audio-visual teaching equipments (Computer, Projector, Video,smart board .....etc)
- Models ,video tapes, scientific pictures archives.

Course Coordinator: Dr. Mohanad Shehab

Head of Department: Prof. Dr. Ahmed Selim Mohamed

Date : 9/2013

Benha University.
Faculty of Medicine.
Department of Public Health & Community Medicine

Course Specification

Course title: Community Medicine
Code: Med 0710
Academic Year (2013 – 2014)

- **Department offering the course:** Public Health & Community Medicine **Academic year of M.B. & B.Ch. program:** 4th year.
- **Date of specification approval:**
  - Department council /9/2013.

A) Basic Information:

- **Allocated marks:** 300 marks
- **Course duration:** 32 weeks of teaching
- **Teaching hours:**

1- Theoretical	**128**
2- Practical	**64**
3- Field visits (field training)	**6**
Total	**198**

B) Professional Information:

1- objective of the Course:

The aim of the program is to provide the undergraduate educational experience necessary for further practice in field of public health through providing:

1.1. Basic scientific knowledge essential to practice medicine at the primary level of health, dealing with health problems commonly met- with- in clinical practice with proper awareness of the social and community contexts of health care.

1.2. Basic scientific knowledge essential for establishing & maintaining good doctor/ patient relationship.

1.3. Basic scientific knowledge essential for following the rules of medical ethics .

1.4. Diagnostic, problem solving and decision making as well as communication skills necessary for proper evaluation and management of Public health problems.

1.5. Appropriate ethical and professional education necessary for demonstrating appropriate attitudes with patients and colleagues.

2- Intended Learning Outcomes (ILOs):

2.a. Knowledge and understanding:

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

2.a.1**. *Define*** different Public health terminology.

2.a.2***.List*** the basic determinants of health, principles of disease prevention and the scientific basis and interpretation of various diagnostic modalities for early detection & establishing diagnosis of common community health problems.

2.a.3. ***Identify*** the Principle & the organization of the Egyptian health care system, the importance of responsiveness to changes in healthcare policy

2.a.4. ***Describe*** the principles of epidemiology and the epidemiological methods (research methodology),the basic principals governing population studies (demography) and biostatistics used for assessment of morbidity (diseases)& mortality (deaths), as well as the efficacy of prevention and control strategies.

2.a.5***. Explain*** the principles of disease surveillance and screening

2.a.6. ***Describe*** the basic issues for promoting health , preventing & controlling disease and disability

2.a.7. ***state*** the importance of Population-based approaches to health care services to improve medical practice.

2.a.8. ***Describe*** the basic issues for health & safety for the patients & themselves during undergraduate training and post-graduate practice.

2.b. Practical and Clinical Skills

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

2.b.1. Diagnose any pattern of spread of infectious diseases.

2.b.2. Write a report about any epidemic investigation.

2.b.3. Identify the ecological factors of any disease.

2.b.4.Examine the environment for any health hazards.

2.b.5.Write a report about any field visit.

2.b.6.Perform simple statistical procedures.

2.b.7.Establish a strategy for prevention and control of any health problem.

2.b.8. ***Conduct*** *counseling sessions for prevention & control of different conditions for healthy individuals, for patients as well as their families .*

2.b.9. ***Apply*** *infection control principals and safety measures during clinical practice.*

2.b.10. Apply the evidence Based Medicine in management decisions.

2.c. Professional Attitude and Behavioral skills:

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

2.c.1. ***Demonstrate*** Respect for patients' rights and involve them and /or their caretakers in management decisions.

2.c.2. ***Demonstrate*** respect to all patients irrespective of their socioeconomic levels, culture or religious beliefs using appropriate language to establish a good patient-physician relationship.

2.c.3. ***Respect*** the role and the contributions of other health care professionals regardless their degrees or rank (top management, subordinate or colleague).

2.c.4. ***Reflect*** critically on their own performance and that of others, to to refer patients to appropriate health facility at the appropriate stage.

2.d. Communication skills:

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

2.d.1. ***Communicate*** clearly, sensitively and effectively with patients and their relatives, and colleagues from a variety of health and social care professions.

2.d.2. ***Establish*** good relations with other health care professionals regardless their degrees or rank.

2.d.3. ***Communicate*** effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.

2.d.4. ***Cope up*** with difficult situations as breaking news.

2.d.5. ***Respect*** patients and their relatives, superiors, colleagues and all members of the health profession.

2.d.6. ***Respond*** to changes in work environment.

2.e. Intellectual Skills:

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

2.e.1. Combine the clinical and investigational database to be efficient in clinical problem solving.
2.e.2. Analyze all sources of information in addition to the patient interview to Interpret and evaluate the medical history. Such sources include family or friends, medical records and other health care professionals, to overcome limitations regarding information.
2.e.3. Formulate the questioning approach to own work & that of others to solve clinical problems.
2.e.4. ***Formulate*** a research hypothesis & questions.
2.e.5. ***Analyze*** and ***interpret*** medical data precisely.

2.f. General and transferable Skills:

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

2.f.1. Establish life-long self-learning required for continuous professional development.

2.f.2. Use the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.

2.f.3. Retrieve, manage, and manipulate information by all means, including electronic means.

2.f.4. Present information clearly in written, electronic and oral forms.

2.f.5. Establish effective interpersonal relationship to Communicate ideas and arguments.

3- Course contents:

Subject	Lectures (hrs)+ revision	rounds (hrs)	Total (hrs)	% of Total
1- administration	8+2	-	10	4.7
2-nutrition	8+3	-	11	45.1
3-medical statistics	10+2	30	42	19.6
4-mental health	2+1	-	3	1.4
5-environmental health	8+2	6	16	7.5
6-general epidemiology	10+2	12	24	11.2
7-communicable diseases	34+4	6	44	20.6
8-non communicable dis.	10+2	-	12	5.6
9- occupational	8+2	4	14	6.5
10- demography	4+1	-	5	2.3
11-health services	18+4	8	30	14.0

12- introduction to safety	2+1	-	3	1.4
Total	128	70	**198**	100.0

4- Teaching and learning methods:

METHODS USED:

- Modified lectures.
- Small group discussions:
- Problem solving.
- Self-learning (students' researches & self power point presentations).
- Field visits (field training).

TEACHING PLAN:

Item	**Time schedule**	**Total hours**
Lectures	4 hs/week;	128 hours
Rounds (practical) **+** Field visits (field training)	2 hours / week + **6hs / 2 weeks**	64 hours + 6 hours
Total	**148**	**198 hours**

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA:

4. Lectures (at least 50% attendance).
5. Practical (at least 75% attendance).
3. Small group attendance
4. Log book

5-B) Assessment TOOLS:

Tool	Purpose (ILOs)
Written examination	To assess knowledge acquisition, intellectual skills including MCQs and problem solving
Oral examination	To assess understanding and stability of knowledge given, attitude and presentation.
Log book (including Field visits (field training)	To assess practical & clinical skills.

5-C) <u>TIME SCHEDULE</u>:

Exam	Week
1- Assessment 1 (***Quiz***)	Each Week
2- Assessment 2 (***end-module***)	Week ------7
3- Assessment 3 ***(20%)***	Week ---------8
4- Assessment 4(***Final exam***)	At end of year (week ---------30)

5-D) <u>Weighting System:</u>

Examination	**Marks allocated**	**% of Total Marks**
End-module exam.	**<u>10</u>**	**<u>3.3%</u>**
Mid-year exam (written) a- Short questions b- MCQ	**<u>60</u>** 40 20	**<u>20%</u>**
Final exam: a- Written Short questions MCQ b- Oral	**<u>210</u>** (150) 120 30 (60)	**<u>70%</u>** (50)% (20)%
Log book (Field visits (field training**<u>)</u>** & other activities	**<u>15 (10 + 5)</u>**	**<u>5 %</u>**
Attendance	**<u>5</u>**	**<u>1.7%</u>**
Total	**<u>300</u>**	**<u>100.0</u>**

- **The minimum passing score is <u>180</u> marks, provided that at least 30 marks are obtained in the final written examination.**
- **Passing grades are:**
    1. Excellent: > 85%
    2. Very good: 75-85%
    3. Good: 65-75%
    4. Fair: 60-65%

FORMATIVE ASSESSMENT:

- Student knows his marks after the Formative exams.

5-E) <u>Examination description:</u>

Examination	**Description**
1- ***Quiz***	(case study, complete, true & false , short questions, problem solving…….)
2-End-module exam	Short questions.

3-20% exam	Short questions and MCQs.
4- ***Final exam:*** a- Written b- Oral	Short questions, select (MCQs). Two sessions (Epidemiology, nutrition & administration, services, statistics)
5- ***Assignments & other activities***	Round assignments, log book including Field visits (field training), posters,….. etc

6- LIST OF REFERENCES:

6.1- Basic materials:
Department book: Handouts of the staff member in the department

6.2- Essential books (text books):
Khalil IF, 1999: Community Medicine. Cairo University

6.3- Recommended books:
Maxcy RL,2008: Public health and preventive medicine

6.4- Periodicals, Web sites, … etc:
http://www.WHO.int.com
http://www.pubmed.com.
http://sciencedirect.com.
International journal of epidemiology

7- FACILITIES USED FOR TEACHING AND LEARNING:

Facilities which will be used for teaching this course include:

- Lecture hall
- Data show
- Smart board
- Educational videos
- Posters

Course coordinator: Assistant Prof. Rania Hamdy Affify

Assistant coordinator: Dr. Eman Mohammed Araby

Head of Department: Prof. Dr. Abd El moniem Younis Dawah.

Date: 9-2013

Benha University
Faculty of Medicine
Department of Forensic Medicine and Clinical Toxicology

Course Specification

Course title: Forensic Medicine and Clinical Toxicology
Code: MED 0710
Academic Year (2013 – 2014)

- **Department offering the course:** Forensic Medicine and Clinical Toxicology
- **Academic year of M.B. & B.Ch. program:** 4th year.
- **Date of specification approval:** Department council: 9 /2013.
- **Internal evaluator: Prof. Ola Gaber Haggag**

A) Basic Information:

- **Allocated marks:** 200 marks.
- **Teaching hours:**

1- Theoretical	**80 hrs**
2- Practical/clinical	**70 hrs**
Total	**150 hrs**

B) Professional Information:

1- Overall Aim of the Course:

- Understanding basic scientific knowledge of common medicolegal conditions (either in living or dead cases), and the common toxic cases, either acute or chronic poisoning and drug dependence.
- To provide essential practical and clinical skills necessary for proper dealing with common medicolegal conditions, and the common toxic cases, that will face him during practicing medicine.

- Applying basic ethical rules, professional and communication skills essential for establishing & maintaining good doctor/ patient relationship, appropriate attitudes with colleagues and para-medicals.

2- Intended Learning Outcomes (ILOs):

2.a. Knowledge and understanding:

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

2.a.1. ***Define*** general forensic terms, death and its signs & phases, sudden unexpected death, brain death criteria, and its medicolegal implications.

2.a.2. ***State*** the differences between the cause, mechanism, mode and manner of death, medicolegal deaths and their handling and their investigations.

2.a.3. ***Identify*** the postmortem changes and their medicolegal importance in determining the time & cause of death.

2.a.4. ***Describe*** points of unknown body identification whether living or dead, stains, hairs, teeth, scientific basis of DNA typing, and ages of medicolegal importance in Egypt.

2.a.5. ***Explain*** different types of wounds, including head, neck, chest and abdominal injuries, and their medicolegal importance and mechanisms of death from wounds.

2.a.6. ***List*** characteristics of firearm injuries and the doctor duty in case of living and death firearm injuries.

2.a.7. ***Mention*** different types of asphyxia and common physical injuries, their post mortem diagnosis and mechanisms of death.

2.a.8. ***Define*** different types of sexual offenses and medicolegal aspects of pregnancy, delivery and abortion.

2.a.9. ***Explain*** causes, post-mortem diagnosis and medicolegal aspects of death in infancy and child abuse (battered child syndrome).

2.a.10. ***Enumerate*** common ethical dilemmas met in medical practice, including (ethics of biochemical research, medical care, physician duties, medical consent, and medical confidentiality. Etc,…….).

2.a.11. ***Summarize*** the circumstances of intoxication, classifications of poisons, role of doctor in suspected intoxicated case, and general management of intoxicated case.

2.a.12. ***Explain*** mechanism of toxicity, clinical picture and management of different types of drug and poisons including (common therapeutics, heavy metals, household products, toxic gases, food, plant and animal poisonings).

2.a.13. ***Mention*** the mechanism of dependence and tolerance, clinical picture, diagnosis and treatment of common drug of dependence including (opioids, cocaine, hallucinogens, alcohols and tobacco preparations).

2.b. Practical and Clinical Skills

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

2.b. 1 ***Write*** death certificate according to the international form of medical certificate of the cause of death.

2.b. 2 ***Identify*** different microscopic slides related to the studied forensic topics and human sex and ages from bones and by using the X-rays films.

2.b. 3 ***Write*** medicolegal reports about different museum jars related to body identification, PM changes, different types of injuries and violent deaths.

2.b. 4 ***Write*** a proper primary wound report on wound photographs.

2.b. 5 ***Write*** a primary toxicological report.

2.b. 6 ***Manage*** the most common studied cases of intoxications (common therapeutics, household products and food poisoning, etc...).

2.b. 7 ***Identify*** the studied toxicological specimen including plant samples.

2.c. Professional Attitude and Behavioral skills:

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

2.c.1. Demonstrate respect for patients' rights and involve them and /or their caretakers in management decisions.

2.c.2. Demonstrate respect to all patients irrespective of their socioeconomic levels, culture or religious beliefs using appropriate language to establish a good patient-physician relationship.

2.c.3. Respect the role and the contributions of other health care professionals regardless their degrees or rank (top management, subordinate or colleague).

2.c.4. Reflect critically on their own performance and that of others, to refer patients to appropriate health facility at the appropriate stage.

2.d. Communication skills:

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

2.d.1. ***Communicate*** clearly, sensitively and effectively with patients and their relatives, and colleagues from a variety of health and social care professions.

2.d.2. ***Establish*** good relations with other health care professionals regardless their degrees or rank.

2.d.3. ***Communicate*** effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.

2.d.4. ***Cope up*** with difficult situations as breaking news.

2.d.5. ***Respect*** patients and their relatives, superiors, colleagues and all members of the health profession.

2.e. Intellectual Skills:

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

2.e.1. Differentiate between signs of somatic death, cellular death, brain death and death like states.

2.e.2. Analyze common medical ethical dilemmas, common problems of medical malpractices and suggest a proper solution.

2.e.3. Interpret different case scenarios related to forensic pathology and clinical forensic medicine and their medicolegal aspects.

2.e.4. Classify different types of wounds, violent asphyxia, physical injuries and firearm injuries.

2.e.5. Analyze common case scenarios of intoxicated patients and construct a treatment plan.

2.e.6. ***Differentiate*** between the different studied toxidromes.

2.f. General and transferable Skills:

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

2.6.1. ***Establish*** life-long self-learning required for continuous professional development.

2.6.2. ***Use*** the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.

2.6.3. ***Retrieve***, manage, and manipulate information by all means, including electronic means.

2.6.4. ***Present*** information clearly in written, electronic and oral forms.

2.6.5. ***Establish*** effective interpersonal relationship to Communicate ideas and arguments.

3- Course contents:

Subject	Lectures (hrs)	Clinical (hrs)	Practical (hrs)	Total (hrs)	% of Total
I- FORENSIC MEDICINE					
1- Death & PM Changes (Definition, Diagnosis, brain	6	-	6 (9.3%)	12	8 %

death, mechanism, mode and manner of death, Death Certificate, Medicolegal deaths and their handling, time of death and postmortem changes**)**	(7.5%)				
2-Identification (identification of living and dead, bones, physical evidence**).**	2 (2.5%)	-	12 (18.75%)	14	9.3 %
3- Wounds (definition, doctor' duty in wounding cases classification mechanisms of death from wounds.	5 (6.25%)	-	5 (7.8%)	10	6.6%
4- Regional injuries: (head, neck, chest and abdominal**)**	6 (7.5%)	-	6 (9.3%)	12	8 %
5- Unexpected and sudden natural death	1 (1.25)		-	1	0.6%
6- Firearm Injuries: (types of firearms and ammunition, characters, mechanisms and manner death, doctor' duty in firearm injuries**)**	4 (5%)	-	4 (6.25%)	8	5.3 %
7- Thermal Injuries: (heat, cold and electricity**)**	3 (3.٧%)	-	2 (3.3%)	5	4%
8- Violent Asphyxia: (classical signs, types, immersion and drowning)	5 (6.25%)	-	2 (3.3%)	7	4.6 %
9- Sexual Offences: (rape, indecent assault and homosexual offences).	2 (2.5%)		1 (1.5%)	3	2 %
10- Pregnancy, delivery and Abortion	2 (2.5%)	-	2 (3%)	4	2.7%
11- Death and injury in infancy	4 (5%)		2 (3%)	5	3.3 %
12- Medical Ethics & Malpractice	3 (3.5%)	-	-	3	3 %
II- TOXICOLOGY					
1- General toxicology (classification of poisons, fatal and toxic dose, factors modifying poison action, doctor' duty in	2	-	1	3	2 %

poisoning, diagnosis of poisoning).					
2- General management of poisoned patient.	3	1	3	6	4 %
3- Medicinal poisons (analgesics, sedative-hypnotic**,** anticholinergics, antidepressants, cardiac glycosides, B-Mockers **and others.**	8	1	3	12	8 %
4- Corrosives: (acids and alkalies)	2	1	1	3	2%
5- Heavy metals: lead, arsenic, mercury, iron **and others.**	3	-	1	5	3.3 %
6- Pesticides: (insecticides**,** rodenticides and others).	3	1	1	4	2.7%
7- Gaseous poisoning: (suffocating gases**,** irritant gases, & asphyxiant**).**	3	-	1	5	3.3%
8- Food poisoning	2	1	1	3	2 %
9- Animal poisoning	1	-	1	2	1.3 %
10- Alcohols and drugs of dependence and abuse: (Medicolegal aspects of dependence, ethanol, methanol, ethylene glycole, opioids, cocaine and amphetamine, hallucinogens, nicotine).	8	-	4	12	8 %
11- Hydrocarbons toxicity	1	1	-	1	0.6 %
12- Revisions		-	6	7	4.6 %
TOTAL	**80**	**6**	**64**	**150**	**100%**

4- Teaching and learning methods:

METHODS USED:

- Modified lectures.
- Practical classes**.**
- Small group discussions.
- Case study.

- Self learning
- Clinical visit to poison control center.

Method	Evidence	ILOs
Modified lectures	CDs of lectures including (video films, brain storming, problem solving, etc…….)	**2.a.1-----2.a.8** **2.c.1.----2.c.4** **2.d.1.----2.d.5** **2.f.1. ----2.f.5**
Practical classes	Museum jar reports, wound reports, x-ray reports, death certificate reports, etc….	**2.b.1.----2.b.10**
Small group discussions	Museum specimens, demonstration (slides photographs and Video films).	**2.b.1.----2.b.10** **2.c.1.----2.c.4** **2.d.1.----2.d.5** **2.f.1. ----2.f.5** **2.e.1.----2.e.4**
Case study	Case scenarios	**2.b.1.----2.b.10** **2.e.1.----2.e.4**
Self learning	samples of students researches, case studies and power point self presentations	**2.a.1-----2.a.8** **2.c.1.----2.c.4** **2.d.1.----2.d.5** **2.f.1. ----2.f.5**
Clinical visits to poison control center.	Toxicological reports	**2.b.1.----2.b.10** **2.e.1.----2.e.4**

TEACHING PLAIN:

Lectures: 80 lectures

Clinical : 6 hours

Practical classes: 64 practical classes

Time plain:

Item	Time schedule	Teaching hours	Total hours
Lectures	5times/week/8 weeks (each 2 hours) (**10** hour/week)	**80 hours**	**52.0%**
Practical	5times/week/8 weeks	**64 hours**	**43.5%**

classes	(each 1.5 hours) (**8** hour/week)		
Clinical rounds	**2** Hours/ week for 3 weeks/ year Visits to poison control unit	**6 hours**	**4.5%**
Total		**150 hours**	**100%**

5- <u>Students Assessment methods</u>:

5-A) <u>ATTENDANCE CRITERIA</u>:

6. Lectures (at least 50% attendance).
7. Practical (at least 75% attendance).

3. Log book

5-B) <u>Assessment TOOLS:</u>

Tool	Evidence	Purpose (ILOs)
Written examination: • MCQs • Case study • Short essay • Complete • True or false with explanation	Attached module of examination	**2.a.1-----2.a.8** **2.c.1.----2.c.4** **2.d.1.----2.d.5** **2.e.1.----2.e.4** **2.f.1. ----2.f.5**
Oral examination	Viva card system	**2.a.1-----2.a.8** **2.c.1.----2.c.4** **2.d.1.----2.d.5** **2.e.1.----2.e.4** **2.f.1. ----2.f.5**
Practical examination	Practical Reports	**2.b.1.----2.b.10**

5-C) <u>TIME SCHEDULE</u>:

Exam	Week
1- Assessment 1 (***end-round***)	Week ------8
2- Assessment 2 (***Final exam***)	At end of year (week ---------32)

5-D) <u>Weighting System:</u>

Examination	Marks allocated	% of Total Marks
1- ***End-round exam***: a- Written b- Practical c- Assignments & other activities (log book)	80 30 30 20	40 % 15 % 15 % 10 %
2- ***Final exam:*** a- Written c- Oral	 100 20	 50% 10%
Total	**200**	100%

- **The minimum passing score is <u>120</u> marks, provided that at least 30 marks are obtained in the final written examination.**
- **Passing grades are:**
    1. Excellent: > 85%
    2. Very good: 75-85%
    3. Good: 65-75%
    4. Fair: 60-65%

5-E) <u>Examination description:</u>

Examination	Description
1- ***End-round exam***: a- Written b- Practical	Short assay, select (MCQs), complete & case study, true or false with explanations. Spots identification & write a report (death certificate, wound report and x-ray report).
2- ***Final exam:*** a- Written	 Short assay, select (MCQs), complete & case study, true or false with explanations.
3- ***Assignments & other activities***	Round assignments, projects, log book….. etc

6- List of references:

6.1- Basic materials:

- Department books:

6.2- Essential books (textbooks):

- Simpson's Forensic Medicine: Shepherd, R. (ed.), Arnold press, London, 12th ed. (2003).

6.3- Recommended books:

1. Forensic pathology: Bernard Knight, 2004.
2. Forensic pathology: Vincent J DiMaio, 2002.

6.4- Periodicals, Web sites, etc:

- http://www.pubmed.com.
- http://sciencedirect.com.

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Faculty lecture hall
- Department lectures halls: two
- Museum hall: SIXTH floor
- Department lab.

Course coordinator: Dr. Abdelmonem G. Madboly

Head of Department: Prof. Dr. Marcelle Ramsis Haroun

Date: 9/2013.

Benha University
Faculty of Medicine
Department of Oto-RhinoLaryngology

Course Specification

Course title: Oto-rhinoLaryngology
Code: MED 0712
Academic Year (2013 – 2014)

- **Department offering the course: Oto-rhinoLaryngology**
- **Academic year of M.B. & B.Ch. program:** 4th year
- **Date of specification approval:** Department council **9 /2014**

A) Basic Information:

- **Allocated marks:** **200..** marks.
- **Course duration:** **7 weeks.** weeks of teaching.
- **Teaching hours:**

Theoretical	64 hours
Practical	60 hours
Total	124 hours

B- Professional Information

1. **Overall aims of course:**
   - To provide students with appropriate background covering the common and important Oto-rhino-Laryngology emergencies and diseases as well related head and neck diseases in children and adults
   - To enable students to obtain a detailed history from patients and experience clinical ORL and head and neck examination and be familiar with recent methods of diagnosis and proper management and indications of specialist referral

2. **Intended learning outcomes of course (ILOs)**

2.a. Knowledge and Understanding:

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

2.a.1. Describe the causes of common ORL emergencies and disorders and the method of transmission of common ORL infections
2.a.2. Describe clinical symptoms and signs of the most important ORL disorders
2.a.3. Determine the appropriate diagnostic tools and therapeutic lines for the most important ORL disorders including applicable recent modalities
2.a.4. discuss the management priorities for the different ORL emergencies.
2.a.5. Mention different rehabilitation for the most common permanent handicapping problems in ORL
2.a.6. Explain the relationship between some general symptoms of illness and ORL and other specialties.

2.b. practical and clinical Skills:

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

2.b.1. Take proper history from patients with ORL and related head and neck problems

2.b.2. Perform adequate clinical examination for ORL and head and neck patients, identify diversions from normal and use equipments available to the primary care practitioner

2.b.3. Present patient data in an organized and informative manner

2.b.4. Suspect complications of major diseases beyond the capacities of general practitioner and to determine when to refer to the specialist

2.c. professional attitude and behavioral skills:

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

2.c.1. Demonstrate respect for patients' rights and involve them and /or their caretakers in management decisions.

2.c.2. Demonstrate respect to all patients irrespective of their socioeconomic levels, culture or religious beliefs using appropriate language to establish a good patient-physician relationship.

2.c.3. Respect the role and the contributions of other health care professionals regardless their degrees or rank (top management, subordinate or colleague).

2.c.4. Reflect critically on their own performance and that of others, to refer patients to appropriate health facility at the appropriate stage.

2.d. communication skills:

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

2.d.1. Communicate clearly, sensitively and effectively with patients and their relatives, colleagues from a variety of health and social care professions.

2.d.2. Establish good relations with other health care professionals regardless their degrees or rank.

2.d.3. Communicates effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.

2.d.4. Cope up with difficult situations as breaking news.

2.d.5. Respect patients and their relatives, superiors, colleagues and all members of the health profession.

2.e. Intellectual skills:

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

2.e.1. Interpret the most important symptoms and signs of diseases in ORL and head and neck patients

2.e.2. Formulate appropriate management plans for individual patient presenting with the most common ORL and related head and neck disorders

2.f. General and transferable skills:

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

2.f.1. Establish life-long self-learning required for continuous professional development.

2.f.2. Use the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.

2.f.3. Retrieve, manage, and manipulate information by all means, including electronic means.

2.f.4. Present information clearly in written, electronic and oral forms.

2.f.5. Establish effective interpersonal relationship to communicate ideas and arguments.

3. Contents:

Topics	% total hours	No of hours		
		Total	Lectures	Practical small groups
Ear - **Anatomy of the ear** - **Physiology of the ear** - **Diseases of the external canal** - **Diseases of the tympanic membrane** - **Diseases of the middle ear** - **Complications of suppurative otitis media** - **Diseases of the inner ear** - **Diseases of the vestibule-cochlear nerve** - **Diseases of the facial nerve** - **Clinical, Radiology, MCQ, commentary &instruments**	**30.64%**	**38**	**20**	**18**
Nose - **anatomy of the nose & sinuses** - **physiology the nose & sinuses** - **diseases the nose & sinuses** - **Clinical, Radiology, MCQ, commentary &instruments Miscellaneous conditions of the nose & sinuses** - **Operations of the nose & sinuses**	**20.96%**	**26**	**14**	**12**
Pharynx - **Anatomy & physiology of the pharynx** - **Diseases of the pharynx** **Operations of the pharynx**	**16.12%**	**20**	**10**	**10**
Esophagus - **Anatomy & physiology of the esophagus** - **Diseases & miscellaneous conditions of the esophagus**	**11.29%**	**14**	**8**	**6**

Larynx - **Anatomy of the larynx** - **Physiology of the larynx** - **Diseases of the Larynx** - **Miscellaneous conditions of the larynx** **Operations of the larynx**	**14.51%**	**18**	**8**	**10**
Neck - **Anatomy of the cervical trachea** **Tracheostomy**	**6.45%**	**8**	**4**	**4**
Total	100%	124 hours	64 hours	60 hours

Clinical Cases Include:

External Ear	Wax F.B in the ear Acute diffuse otitis externa Frunculosis Otomycosis
Middle Ear	Acute suppurative otitis media Chronic suppurative otitis media Chronic suppurative otitis media complications Otosclerosis Facial nerve paralysis
Inner Ear	Vertigo Hearing loss
Nose	Trauma, foreign body and epistaxis Nasal allergy Nasal obstruction Nasal polypi, antrochoanal polyp Atrophic rhinitis and rhinoscleroma Snoring and sleep apnea
Pharynx	Acute and chronic pharyngitis Dysphagia
Larynx	Hoarsness, stridor, tracheostomy

4- Teaching and learning methods:

A. **Methods used**:

- Modified lectures
- Small group discussion
- Problem solving
- Self learning (student researches & case presentation)

B. **Teaching plan:**

- Lectures: 64 hours
- Tutorials & practical classes: 60 hours

C. **Time plan;**

Item	Time schedule	Teaching hours	Total hours
Lectures	2 hours for 3 days $1^1/_2$ hours for 2 days	9 hours / week	64 hours
Small group discussion	$1^1/_2$ hours daily for 3 days 2 hours for one day	$6\ ^1/_2$ hours / week	46 Hours
Practical	$^1/_2$ hour for 4 days	2 hour / week	14 hours
Total		17.7 / week	124 hours

5- Student assessment methods:

5.a. Assessment tools:

a) Written examination to assess knowledge acquisition
b) MCQ & problem solving to assess intellectual skills
c) Practical examination to assess practical skills
d) Objective structural oral questions to assess (knowledge, General & transferrable skills, attitude and presentation)

5.b. Assessment schedule:

Assessment 1 (Post round clinical examination) held one/year at the end of the clinical rounds for all students

Assessment 2 Term examination (MCQ)

Assessment 3 (written, clinical & oral) Final examinations at the end of the academic year for all students

5.c. Weighting of assessment:

Examination	Marks allocated	
Post round clinical examination		10
Term examination	MCQ	40
Final Examination	Written	100
	Practical	30
	oral	20
Total		200

- 5 marks will be discounted from those who will attend less than 75% of lectures and clinical rounds
- Post round examination (practical) case study instruments, radiological films and clinical cases on data show : 10 marks (5%) for each group
- MCQ examination for the whole course: 40 marks (20%)
- Practical examination including case study, instruments, radiological films and clinical cases on data show: for all groups 30 marks (15%).
- Written examination in the form of 2 commentary questions, short and long questions: 100 marks (50%)
- Oral examination 20 mark (10%)

6- List of references:

6.1- Basic materials: the book of Benha ORl department illustrated otolaryngology by prof. dr Mohamed Farid

6.2- Essential books : MCQ book by prof. dr Mossad EL SiSi & Essential otorhinolaryngology.

6.3- **Recommended books** (text books): e.g. OTOLARYNGOLOGY HEAD & NECK SURGERY. **Charles W. Cummings**

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Lecture halls:
- Small group classes.
- Outpatient clinics.

Course coordinator: Prof. Dr. Mossad Elsisi

Head of the department: Prof. Dr. Hossam Abdelhay Gad

Date : 9/2013

Benha University
Faculty of Medicine
Department of Ophthalmology

Course Specification

Course title: Ophthalmology
(Code): Med 0711
Academic Year (2013 – 2014)

- **Department offering the course:** Ophthalmology Department
- **Academic year of M.B.&B.Ch program:4th year.**
- **Academic level:** under graduate level.
- **Date of specification approval: Department council: 9/2013**

A) Basic Information:

- **Allocated marks:** 250 marks
- **Teaching hours:**

Theoretical	**80**
Practical	**120**
Total	**200**

B) Professional Information:

1- Overall Aim of the Course:

To enable students to:

- Be familiar with normal structure of the eye
- Give basic health care and preventive measures to limit endemic diseases affecting the eye.
- Able to deal with common emergency ophthalmic cases.

2- Intended Learning Outcomes (ILOs)

2.a. Knowledge and understanding:

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

2.a.1. - Describe the clinical symptoms and signs of common ocular diseases.

2.a.2. describe the clinical symptoms and signs of ocular manifestation associated with systemic diseases.

2.a.3. discuss the causes and pathogenesis of the most common

ophthalmic problems.

2.a.4. list the tools to aid in the diagnosis of common ophthalmic problems.

2.a.5. explain the management steps of ocular diseases.

2.a.6. Describe appropriate management for common diseases affecting the eye.

2.a.7. summarize therapeutic lines for important and basic ophthalmic health care.

2.b. Intellectual Skills:

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

2.b.1**.** Interpret the most important symptoms and signs of diseases in ophthalmic patients.

2.b.2. Interpret basic investigations related to important ocular diseases.

2.c. Practical and Clinical Skills:

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

2.c.1. Take a proper history for the patient .

2.c.2. Present patient data in an organized and informative manner.

2.c.3. Perform adequate basic ophthalmic examination to identify deviations from normal.

2.c.4. Perform a proper clinical assessment of the ophthalmic problems

2.c.5. Manage the common ophthalmic emergencies.

2.c.6. Determine the appropriate tools to aid in the diagnosis of common ophthalmic problems.

2.d. General and transferable Skills:

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

2.d.1. Use the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.

2.d.2. Communicate effectively with patients using appropriate communication skills

2.d.3. Demonstrate appropriate professional attitudes and behaviors in different practice situations.

3- <u>Course contents</u>:

Subject	Lectures (hrs)	Tutorial / Small group discussion (hrs)	Practical (hrs)	Total (hrs)	% of Total
1- Lid	4	4	3	11	5.71
2- Conjunctiva	4	4	3	11	5.71
3- Lacrimal	4	4	3	11	5.71

System & Orbit					
4- Cornea	4	5	4	13	6.75
5- Lens	5	5	3	13	6.75
6- Uvea & Pupil	4	5	3	12	6.23
7- Errors of refraction	5	4	3	12	6.23
8- Glaucoma	5	5	4	14	7.27
9- Trauma	4	4	4	12	6.23
10- Strabismus	5	5	4	14	7.27
11- Optic nerve & Visual Pathway	4	4	3	11	5.71
12- Retina & Vitreous	5	5	4	14	7.27
13- Systemic diseases	4	4	3	11	5.71
14- Ocular symptoms	4	4	3	11	5.71
15- Clinical problems	5	4	2.5	11.5	5.97
16- Drugs & Lasers	4	4	3	11	5.71
Total	**63**	**17**	**120**	**200**	100

4- Teaching and learning methods:

METHODS USED:

- Modified Lectures
- Small group discussions
- Problem solving.
- Self learning (student researches)

TEACHING PLAN:

Lectures: Division of students into___4____ groups
7 weeks each, Time from _____ to _____.

Tutorials: division of students into___4____ groups

7 weeks each

Practical classes 70 students in two classes

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	5 times/week; two hour each between to	70	70
Practical	10 hours / week	70	70
Tutorial	1.5 hours / week	52.5	52.5
Total		**192.5**	**192.5**

5- Students Assessment methods:

5-A) <u>ATTENDANCE CRITERIA</u>: Faculty bylaws

5-B) <u>Assessment Tools:</u>

Tool	Evidence	Purpose (ILOs)
Written examination: • MCQs • Case study • Short essay • Complete • True or false with explanation	Attached module of examination	**2.a.1-----2.a.7** **2.c.1.----2.c.5** **2.d.1.----2.d.3**
Oral examination	Viva card system	**2.a.1-----2.a.7** **2.b.1.----2.b.2** **2.c.1.----2.c.5**
Practical examination	Practical Reports	**2.c.1.----2.c.5**

5-C) <u>TIME SCHEDULE</u>: Faculty bylaws

Exam	Week
1- Rsearch	End of 7th wk of each group
2- End round exam	End of 7th wk of each group
3- MCQ & Problem solving	End of the academic year

4- Final exam: a- Written b- Ora	End of the academic year

5-D) <u>Weighting System:</u>

Examination	Marks allocated	% of Total Marks
1- Rsearch	10	4%
2- End round exam	30	12%
3- MCQ & Problem solving	40	16%
4 Final exam: c- Written d- Oral	 120 50	 48% 20%
Total	**250**	**100**

- The minimum passing & Passing grades (Faculty bylaws).

FORMATIVE ASSESSMENT:
Student knows his marks after the Formative exams.

5-E) <u>Examinations description:</u>

Examination	Description
1- <u>Activities</u>	Research
2- <u>End round</u>	Short assay, complete, slides, clinical cases
3- <u>MCQ & Problem solving</u>	MCQ & Problem solving
<u>4- Final exam:</u> **e- <u>Written</u>** **f- <u>Oral</u>**	e.g. supply (short assay) questions, case study e.g. how many sessions

6- <u>List of references</u>:

6.1- Basic materials
Course Notes:
- Recommended by the department
- Cairo University Ophthalmology Book, Latest edition

6.2- Essential Books (Text Books)
- Kanski clinical ophthalmology, 7th edition 2011

6.3- Recommended Books
- American academy of ophthalmology, 2013-214

6.4- M.C.Q notes prepared by the department

6.5- Department website ophthalmic materials

6.6- C.Ds given free of charge from the department

7- Facilities Required for Teaching and Learning

- Lecture rooms
- Round rooms
- Accessibility to hospital wards, clinics and emergency department
- Audio-visual teaching equipments (Computer, Projector, Video…etc)
- Video tapes, scientific pictures archives.

Course Coordinator: Prof. Dr. Ashraf Alshayeb

Head of Department: Prof. Dr. Essam Elmatbouly

Date: 9/ 2013

Benha University
Faculty of Medicine
Department of Internal Medicine

Course Specification

Course title: General medicine
Code: **Med 0713**
Academic Year (2013 – 2014)

- **Department offering the course:** Internal Medicine
- **Academic year of M.B. & B.Ch. program:** **Fifth** year.
- **Date of specification approval:** Department council **9 /2013**

A) Basic Information:

- **Allocated marks:** 900 marks.
- **Course duration:** **36** weeks of teaching.
- **Teaching hours:**

1- Theoretical	216h
2- clinical/practical	360h

B) Professional Information:

1-Overall aims of the course:

1. To provide good basic scientific knowledge about common medical diseases in studied medical branches (cardiovascular-respiratory-gastrointestinal-renal-endocrine-CNS….etc)
2. applying basic skills necessary for proper clinical diagnosis of common health problems in the society
3. Provide a good primary health care based on adequate history taking, physical examinations and interpretation of relevant supportive investigations.

4. To be able to establish and maintain a good doctor / patient relationship.

5. Managing common medical diseases, especially acute medical conditions and emergencies safely and efficiently.

2-Intended learning outcomes of course (ILOS):

2.a-Knowledge and understanding :

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

2.a.1. **Explain the** genetic bases and its association with medical diseases, its discover and possible prevention or therapy by gene therapy

2.a.2 **discuss** the helpful terms and details of anatomy, physiology, and pathophysiology of different medical diseases

2.a.3 **summarize** incidence ,prevalence ,racial, environmental effect on the medical disease

2.a.4. **Discuss the** relation between age and medical diseases (diseases common in each age/how age may effect progression of certain diseases

2.a.5 . **Explain** causes; clinical picture of different medical diseases in different medical branches

Cardiovascular, Respiratory, Gastrointestinal, Rheumatology., Endocrine, infection, Neurological ,chest.

2.a.6 **Identify** the microbiological bases for medical diseases especially infectious diseases routes of infection methods of transfer

2.a.7 **state the** general and special methods of prevention and control

2.a.8 **describe** different investigation that can be done for each symptom to reach the cause

2.a.9 **Identify** the approach schedule of possible symptoms and how to make differential diagnosis.

2.a.10 **Explain** the different line s of treatment for each disease the sequence of treatment /doses to begin with /determine the time to add other drugs

2.a.11 **enumerate the** pharmacological bases for different drugs

2.a.12 **Explain** side effects and drugs interaction which may harm the patient more than the disease its self

2.a.13. **List** the principles of oncology medicine how to stabilize the patient and refer him to appropriate site to start treatment **.**

2.a.14 **Explain** common drugs which have narrow therapeutic range and explain how to deal if the toxicity occur and their anti dotes.

2.b.- practical and clinical skills : .

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

2.b.1 ***perform*** *methods ,technique to assess vital signs how get benefit in diagnosis* .

2.b.2 **Demonestrate** the steps of clinical assestment to the patient (history taking – general examination – regional examination).

2.b.3 Take a proper clinical history in the studied diseases.

2.b.4 **Perform** appropriate sterile technique,

2.b.5 **Demonestrate** samples taking technique and its useful in diagnosis

2.b.6 Detect the clinical signs in different studied medical diseases.

2.b.7 ***perform*** *inspection –palpation –percution-ascultation to different system in the body (cardiovascular system –respiratory- gastroenterology – hepatic- endocrine- kidney –rheumatology-neurology).*

2.b.8 Deal with urgent life threatening diseases & conditions rapidly & effectivly.

2.b.9 Use the body vital signs as essential indicators in diagnosis of studied medical diseases.

2.c.Professional Attitude and Behavioral skills

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

2.c.1 **Respects** to all patients irrespective of their socioeconomic levels, culture or religious believes.

2.c.2 **Respects** appropriate language to establish good patient-physician relationship.

2.c.3 **Reflect** critically on their own performance, to refer patients to appropriate health facility at the appropriate stage.

2.c.4 **Demonstrate** respects for the rights of patients and their families to full understanding, and involve them in management decision.

2.d. Communication skills:

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

2.d.1. ***Communicate*** clearly, sensitively and effectively with patients and their relatives.

2.d.2. ***Establish*** good relations with other health care professionals regardless their degrees or rank.

2.d.3. ***Communicate*** effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.

2.d.4. ***Cope up*** with difficult situations as breaking news.

2.e -Intellictual skills:

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

2.e.1.-**Analyze** symptoms &signs and construct adifferential diagnosis for common presenting complaints.

2.e.2.- **Construct** an appropriate diagnostic plan for evaluation of common presenting complaints

2e.3 **Interpret** the results of commonly used diagnostic procedures.

2.e.4. **Analyze** risk factors for disease processes and injury the appropriate diagnostic, preventive, and therapeutic interventions

2.e.5 **Analyze** the indications and logestics of referring patients to higher levels of experience or specialization as a principle for the family doctor(GP)

2.e.6. **Interpret** scenario of treatment plan, incorporating his knowledge , best available evidence , and patient's preferences in a cost effective manner

2.f - General and transferable skills

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

2.f.1. Communicate effectively with the patients and their relatives.

2.f.2- Explain to the patients and their relative the nature of illness , the diagnostic and therapeutic options.

2.f.3– Retrieve, and manipulate information by all means, including electronic means.

2.f.4 - **Use** the sources of information and communication technology to remain current with advances in knowledge and practice.

3- Contents:

TOPICS	LECTURE. HOURSR	CLINICAL HR.	Small group discussion	TOTAL HOURS

1-Diseases of the cardiovascular system,critical care medicine -cardiac symptoms Rheumatic heart disease Congenital heart disease -rheumatic fever -Endocarditis -heart failure -disturbance in cardiac ryhsm -pericarditis -pericardial effusion -coronary heart disease cardiomyopathy- hypertension -pulmonary ypertension -pulmonary embolism -aortic aneurysm-	30 3 3 3 2 2 3 3 1 1 3 1 2 1 1 1	44 5 5 5 3 1 5 8 1 1 3 2 5	16	90
2-disease of the nervous system Neurological sheet Introduction,cerebral cortex the motor system the sensorysystem the cranial nerve speech hemiplegia cerebrovasculer insufficiency paraplegia. Peripheral nerve diseases Motor neuron disease Myopatheis Spondylosis Sciatica Wasting muscles of the hand Nystagmus Brain tumors Headache-migraine Meninigitis Encephalitis Epilepsy Coma Demylinating diseases	30 2 1 1 1 1 1 2 2 2 2 1 1 1 1 3 1 1 1 3 1 1	54 5 3 3 3 1 3 4 3 3 2 2 1 1 1 2 3 1 3 3 5 1	6	90

3-disease of the GIT,liver, system	30	50	10	90
Anatomyof GIT	1	4		
GITsymptoms	1	3		
Liver function test	1	2		
Chronic liver cell failure	1	1		
Fulminant liver cell failure	1	1		
Hepatitis	2	4		
Liver cirrhosis	2			
Hepatocelluler carcinoma		2		
Hepatoma	1	1		
Fatty Liver.	1	1		
Hepatic transplantation	1	1		
Liver absses	1	1		
Hepatomegaly	1	3		
;spleenomegaly	1	3		
GITbleeding	2	3		
Diarrhea	2	4		
Intestinal amboebiasis	1	1		
Intestinal bilharizial	1	1		
Bacillary desentry	1	1		
Intestinal tuberculosis	1	2		
Inflammatory bowel disease	2	1		
Irritable bowel syndrome	2	2		
jaundice	3	5		
malabsorption disease		3		
4-disease of the respiratory system	20	32	8	60
-respiratory symptoms	1	5		
respiratory function tests	1	4		
-pleural disease	2	3		
-pneumonia	2	3		
-suppurative lung disease	2	4		
-broncial asthma	2	4		
-choronic obstructive heart disease	2	4		
-broncoginic carcinoma	2	2		
-lung collapse	1	1		
-Interstial lung fibrosis	2	4		
-cor pulmonale		1		
-Pulmonary tuberculosis		2		

5-endocrine, metabolic and nutritional diseases	20	24	16	60
-suprarenal diseases		4		
*hyperfunctin of different	2			
zone	2			
*Addison disease –				
*addissonian crisis –				
corticosteriod pharmacology	1	4		
-parathyroid disease	1			
*hyperparathyroidism				
*hypercalcemia-hypocalcemia		4		
-Thyroid diseases	2			
*Thyrotoxicosis-	2			
*hypothyroidism				
*mxoedema	2	4		
-pitutary disease				
*diabetes mellitus	2	4		
*diabetes insipdious	2			
*growth hormone				
abnormalities	2	2		
*pituitary tumors				
panhypopitutarism	2	2		
-Pancreatic endocrinal diseases				
-obesity-gynecomastia-hirsutism				

6-diseases of the kidney, urinary system,water, electrolyte and base imbalance Renal physiology-urinary mainefistation Glomerulonephritis Acute renal failure Choronic renal failure Kidney transplantation-dialysis Acute chronic pyelonepheritis Acute –chronic interstitial disease Cystic disease of thekidney Renal tubuler defects Hypokalemia-hyperkalemia Hypovolemia-hypervolemia Acid-base defects Drugs and kidney	20 2 2 2 1 1 2 3 3 2	19 3 2 3 3 1 1 1 2 2	6	45
7-diseases of the blood Hematological indices Anemia Iron difficiency anemia Sideroblastic anemia Anemia of chronic illness Hemorrhagic anemia Megaloblastic anemia Folic acid difficiency anemia Bone marrow failure Aplastic anemia Hemolytic anemia Drud induced anemia Polycycemia Homeostasis Anticoagulant system its abnormalities Coagulation system its abnormalities White blood cells Reticuloindothelial system Spleenomegaly Hypersplenism	25 1 1 1 1 1 1 1 1 1 1 1 2 2 4 2 4	19 3 3 2 3 2 2 2 2	5	50

Lymphnode –lymphoma				
8-diseases of the C.T, joints and immunological disorders Systemic mainfestationof rheumatological disease Rheumatoid arthritis Systemic lupus Antiphshpolipid disease Systemicscelerosis Vasculitis Osteoarthritis arthritis polymyositis – dermatomyositis gout	15 2 2 2 1 3 1 1 1 2	19 3 3 3 2 2 2 2 2	5	39
9- diseases of the infection Salmonella Brucella Cholera Strept infection Staph inf Malaria,giardia,leishmania Herpes,cytomegalo virus;eptien ber virus—infectious mononeucluosis AIDS INFLUENZA VIRUS Poliomyelitis Parasitic infection Fever with rash-rigors-relative bradycardia-jaundice Fever of unknown original Anti microbial Anti fungal,Antiviral Selection of antibiotics	20 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2	10 1 1 1 1 1 1 2 2 2 2 2 1 2	3	30
10-geriateric oncology medecine	3	2	3	5
11-evidence based medecine	1			3
12-common poisoning, principles of drug therapy and antibiotics	2	4	7	11
Total	216			360

4- Teaching and learning methods:

METHODS USED:

- Modified lectures.
- Small group discussions: models, case study.
- Clinical rounds.
- Self learning

Method	Evidence	ILOs
Modified lectures	CDs of lectures including (video films)	**2.a.1-----2.a14..---- 2.c.1 2.c.4 2.d.1 2.d.4 2.e. 1 2.e.6 2.f.1 2.f.4**
Clinical rounds	Sheats of history of patient	**2.b.1.----2.b.2 2.b 3……2.b.4**
Small group discussions	, teaching hours with the stuff	**2.a.1-----2.a14..---- 2.c.1 2.c.4 2.d.1 2.d.4 2.e. 1 2.e.6 2.f.1 2.f.4**
Problem solving	Case scenarios	**2.b.1.----2.b.2 2.b 3……2.b.4 2.e. 1 2.e.2 2.e.3 2.e.4 2.e.5 2.e.6**
Self learning	Samples of: **1-** Student researches **2-** Student power point presentations **3-** Students case studies	**2.a.1-----2.a14..---- 2.c.1 2.c.4 2.d.1 2.d.4 2.e. 1 2.e.6 2.f.1 2.f.4**

TEACHING PLAN:

- **Modified Lectures: 6hs/week**

- Discussion, brain storming

- **Problem solving**

- **Practical and clinical classes: 15hs/week .**

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	5 Times/ week (each time **1.25** hour)	**6 hours**	**216**
Clinical classes	5 Times/ week (each time 3 hour)	**15 hours**	**360**
Total		**21 hours**	**576**

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA:

1. Practical attendance
2. Small group attendance
3. Lectures

5-B) Assessment TOOLS:

Tool	Purpose (ILOs)	Evidence
1.Written examination	To assess knowledge acquisition including MCQs case solving. True or false Short assays **2.a.1-----2.a2..----** **2.a.3.---- 2.a4. ----** **2.a.5 2.a.6** **2.a.7 2.a.8** **2.a.9 2.a.10** **2.a.11 2.a.12** **2.a.13 2.a.14** **2.e. 1 2.e.2** **2.e.3 2.e.4** **2.e.5 2.e.6**	Attached module of examination

2. Oral examination	To assess understanding and stability of knowledge given, attitude , presentation and how to express his knowledge. **2.a.1-----2.a2..----** **2.a.3.---- 2.a4. ----** **2.a.5 2.a.6** **2.a.7 2.a.8** **2.a.9 2.a.10** **2.a.11 2.a.12** **2.a.13 2.a.14** **2.e. 1 2.e.2** **2.e.3 2.e.4** **2.e.5 2.e.6** 2.f.1 2.f.2 2.f 3 2.f.4	Viva cards
3.practical examination	To assess clinical skills , how to examine the patient and how to reach the diagnosis as easy and accurate as **2.b.1.----2.b.2** **2.b 3……2.b.4** **2.c.1 2.c.2** **2.c.3 2.c.4** **2.d.1 2.d.2** **2.d.3 2.d.4** **2.e. 1 2.e.2** **2.e.3 2.e.4** **2.e.5 2.e.6** 2.f.1 2.f.2 2.f 3 2.f.4	Practical report

5-C) Assessment schedule

Assessment 1 20% examination …Hold on December 2012
Assessment 2 …….hold on march 2013
Assessment 3……...hold on June 2013
Assessment 4……hold on December 2013

D) Weighting System:

Examination	% of Total Marks	Marks allocated
1- *End-round exam*: clinicall history taking	20%	180
2- *Final exam:* a- Written b- Oral c,clinical	 40% 9% 20%	 360 81 180
Other veneral diseases and skin diseases	11%	99
Total	**900**	100%

- **The minimum passing score is 540 marks, provided that at least 30%%marks are obtained in the final written examination.**
- **Passing grades are:**
    1. Excellent: > 85%
    2. Very good: 75-85%
    3. Good: 65-75%
    4. Fair: 60-65%

5-E) Examination description:

Examination	Description
1- *End-round exam*: a. Written: including MCQs, case solving.True or false Short assays	To assess knowledge , understanding, intellectual skills
b. Practical and clinical	To assess knowledge , understanding, intellectual skills, clinical skills , Professional Attitude and Behavioral skills ,general skills, communication skills

2- *Final exam:*	
Written	To assess knowledge , understanding, intellectual skills
Clinical	To assess knowledge , understanding, intellectual skills, clinical skills , Professional Attitude and Behavioral skills ,general skills, communication skills
oral	To assess knowledge , understanding, intellectual skills, Professional Attitude and Behavioral skills ,general skills, communication skills

6- List of references:

6.1- Basic materials:

Hand out of lectures prepared by stuff which given to the students after each lectures

6.2- Essential books (text books):

1-Nicki R . Colledge ; B rian R . walker ; Stuart H . Ralston (2007): Davidson ,s principles &practice of medicine 21 st Edition volume1,2 page1356.

2-Dan L.Longo,MD ; Anthony S.fauci ,MD and Dennis L. Kasper , MD (2012):
Harrison s principles of internal medicine
Volume1 ISBN 978-7-07-163244-7;MHID 0-07-163244-x
Volume2 ISBN978-7-07-174288-7; MHID0-07-174889-x

6.3 - Periodicals, Web sites, etc:

- http://www.pubmed.com.,- http://sciencedirect.com.

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

Department lectures halls: 5
skill lab room 1
black and white boards, liberary, in patient rooms, data show

Course coordinator: Prof, Fawzi Megahed .
Head of department: prof Mohammed shawky
Date: 9/2013

Benha University
Faculty of Medicine
Paediatric Department

Course Specification

Course title: Pediatric
Code: MED 0714
Academic Year: 2013 / 2014

- **Department offering the course:** Pediatric Department.
- **Academic year of M.B.B.Ch. program: Fifth year.**
- **Date of specification approval: Department council 9/ 2013.**

A) Basic Information:

- **Allocated marks:** **500** marks
- **Course duration**: **24** weeks of teaching.
- Students are divided to 2 groups, each group studies in Pediatric department for 3 successive months (12 weeks).
- **Teaching hours:**

Theoretical	**108**
Practical / clinical	**180**
Total	**288**

B) Professional Information:

1- Overall Aim of the Course:

1.1. Recognition of the basic knowledge of common pediatric health diseases & pediatric health problems commonly met within medical practice.

1.2. Applying diagnostic, problem solving and decision marking skills as well as communication skills necessary for proper evaluation and management of pediatric health problems.

1.3. To provide skills essential for establishing and maintaining good doctor/patient relationship.

2- Intended Learning Outcomes (ILOs):

2.a. Knowledge and understanding:

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

2.a.1- Describe the normal growth and development of the human body and mind at all stages; intrauterine, infancy and childhood.

2.a.2- Define the etiology, risk factors, pathogenesis and the clinical manifestations of cardiac, respiratory, neurological, renal, blood and endocrinal diseases in pediatric .

2.a.3- Classify the differential diagnosis of common pediatric diseases, as well as complications of diseases met with in common practice.

2.a.4- mention the basic principles of infectious diseases and its prevention.

2.a.5- explain the role of genetics in predisposition of diseases.

2.a.6- Describe the indications, the relative advantages and disadvantages of various therapeutic modalities for common and life threatening illness.

2.a.7-Define the normal neonatal features and etiology, risk factors, pathogenesis and the clinical manifestations of the neonatal diseases.

2.a.8- enumerate the basic principles of formulating specific clinical sheets and art of utilizing sources of information.

2.a.9- Outline the basic issues for promoting health, preventing and controlling diseases and disabilities.

2.a.10- state the basic principles of normal nutrition and malnutrition in infancy and childhood.

2.a.11- summarize the basic determinants of health, principles of disease prevention and the scientific basis and interpretation of various diagnostic modalities for; early detection and establishing diagnosis of common community health problems.

2.b. Practical and Clinical Skills

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

2. b.1- Write a complete and a focused medical history.

2.b.2- Write specific clinical sheets to record medical problems to deal with in clinical practice

2.b.3- Perform full clinical examination for a newborn, neonate, child and adolescent.

2.b.4- Perform mental status assessment for child patient.

2.b.5- Write and design rational management strategies for both acute and chronic conditions commonly met in clinical practice.

2.b.6- Diagnose different pediatric problems and how to deal with.

2.b.7- Manage the common pediatric diseases and ask for essential investigations for it.

2.c. Professional Attitude and Behavioral kills:

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

2.c.1. Demonstrate respects for the rights of patients and their families to full understanding, and involve them in management decision.

2.c.2. Respects to all patients irrespective of their socioeconomic levels, culture or religious believes.

2.c.3. Using appropriate language to establish good patient-physician relationship.

2.c.4. Reflect critically on their own performance and that of others, to refer patients to appropriate health facility at the appropriate stage.

2.d. Communication skills:

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

2.d.1. Communicate clearly and effectively with patients and their family members with respect to them, colleagues and all members of the health profession.

2.d.2. Explain to the patients and their families the nature of illness, and the management plan to understand treatment options in easy way.

2.d.3. Establish good relations with the patients and their relatives.

2.d.4. Cope up with difficult situations as breaking news.

2.e. Intellectual Skills:

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

2.e.1. Analyze the clinical and investigational data to be used in clinical problem solving in pediatric.

2.e.2- Generate a list of initial diagnostic hypotheses (differential diagnosis) for each problem.

2.e.3. Analyze all sources of information in addition to the patient interview to interpret and evaluate the medical history.

2.e.4. Construct appropriate management strategies with common diseases in children.

2.e.5. Interpret different laboratory reports to reach to the professional diagnosis.

2.e.6. Interpret patient symptoms and signs in terms of their pathologic and functional diagnostic significances.

2.e.7. classify the risk factors of pediatric diseases to design prophylactic measures including vaccination.

2.f. General and transferable Skills:

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

2.f.1-Establish life long self-learning required for continuous professional development.

2.f.2- Use the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.

2.f.3– Retrieve, manage and manipulate information by all means, including electronic means.

2.f.4- Present information clearly in written, electronic and oral forms.

2.f.5-Establish effective interpersonal relationship to communicate ideas and arguments

3- Course contents :

TOPIC	Total (hrs)	Lecture (hrs)	Tutorial/ Practical(hrs)	% of Total
1 Social and Preventive Pediatrics	10	5	5	3.4
2 Growth and Development	10	4	6	3.4
3 Nutrition	25	9	16	8.6
4 Neonatology	30	10	20	10.4
5 Genetics	15	6	9	5.2
6 Nephrology	20	9	11	6.9
7 Cardiology	25	8	17	8.6
8 Respiratory system	26	10	16	9
9 Hematology/Oncology	25	8	17	8.6
10 Infectious & parasitic diseases	20	8	12	6.9
11 Endocrinology	15	7	8	5.2
12 Neurology	22	8	14	7.6

13 Gastroenterology and Hepatology	28	8	20	9.7
14 Pediatric Emergencies	11	4	7	3.8
15 Behavioral Pediatrics	6	4	2	2
TOTAL	288	108	180	100

Curriculum:

Topic	No of lectures
Growth & development • Normal growth &Growth assessment • Milestones of development • Factors affecting G&D and Puberty	3
Nutrition: • Breast feeding, artificial feeding & weaning • Nutritional requirements, • PEM & Obesity • Rickets & Vitamin deficiency	4
Neonatology: • Normal newborn criteria & Neonatal reflexes • LBW (Prematurity & SGA) • Neonatal jaundice, Sepsis • Neonatal respiratory distress, • Birth injuries & Neonatal anemia • Neonatal convulsions & Infant of diabetic mother	6
Genetics: • Basic genetics • Modes of inheritance • Chromosomal abnormalities	3
Infections: • Bacterial infections (Pertussis, Diphtheria, Salmonella, Tetanus, streptococcal, ..) • Viral infections (Polio, Mumps, EB, Measles, Rubella, Chicken pox,..) • TB - CNS infections • Parasitic infestations	4
Respiratory: • Croup • Bronchiolitis, Pneumonia • Pleural diseases • Bronchial asthma & Wheezy chest • Bronchiactasis & Respiratory failure	5
Cardiology: • Manifestations of cardiac diseases • Congenital heart diseases **(**Fallot, ASD, VSD & PDA)	5

• Rheumatic fever & RHD • Infective endocarditis & Heart failure • Hypertension & Arrhythmias	
Hematology / Oncology: • Deficiency anemia • Hemolytic anemia • Bleeding disorders • Leukemia - Lymphomas • Lymphadenopathy & Splenomegaly	**5**
CNS: • CP & Mental retardation • Floppy infant & Inability to walk • Seizure disorders • Hydrocephalus & Microcephaly	**4**
GIT & Hepatology:: • Gastroenteritis & Dehydration • GERD, GIT obstruction & bleeding • Hepatitis • Portal hypertention & Liver cell failure	**4**
Endocrinology: • Cretinism • Short stature ,Tall stature • Diabetes mellitus & Diabetes insipidus	**3**
Nephrology: • Glomerulonephritis & Hematuria • Nephrotic syndrome & proteinuria • Renal failure • UT infections & Eneuresis	**4**
Social, preventive & primary care: • Vaccinations, Screening programs • Child abuse, Care of chronically ill and handicapped children	**2**
Pediatric emergencies: • First aid management, Shock, Coma • Poisoning & accidents	**2**
Behavioral Pediatrics: • Mood & pervasive disorders • Hyperkinetic & conduct disorders	**2**
Radiology & **Revisions.**	**4**

4- Teaching and learning methods:

METHODS USED:

4.1- Modified Lectures, discussion and brain storming
4.2- Clinical rounds on patients, discussion and brain storming

4.3- Problem solving and case study.
4.4- Self learning
4.5- Skill lab

Method	Evidence	ILOs
-Modified Lectures	**annex CD**	**2.1.2-2.1.3-2.1.4-2.1.5-2.1.6-2.1.7-2.1.8-2.1.9.**
-Clinical rounds on patients -Skill lab	Tables of teaching {CD}	**From 2.2.1 to 2.2.8.**
-Problem solving and Case study	EXAMPLE IN CD	**2.2.6-2.2.7-2.2.8—2.5.1-2.5.2-2.5.3-2.5.5-2.5.6.**
- Self learning	Researches	**From 2.1.1 to 2.1.9.** **2.5.1- 2.5.7.** **From 2.6.1 to 2.6.4**

TEACHING PLAN:

- ***Lectures:*** *9 hours /week.*

From 12:10 to 2:0 pm, 5 times/week from Sunday to Thursday.

- ***Tutorials:*** *2½ hours/week.*

From 9 to 9:30 am, 5 times/week from Sunday to Thursday.

- ***Practical classes:*** *12½ hours/week.*

From 9:30 am to 12 pm, 5 times/week from Sunday to Thursday.

Time plan:

Students have to attend daily from Sunday to Thursday (5 times/ week), from 9 am till 2 pm for 12 weeks.

Item	Time schedule	Teaching hours	% of total hours
Lectures	5 times/week; (9 hrs / week)	9×12= 108	37.5%

Practical classes	5 times/week (12½ hrs /week)	12½ × 12=150	62.5%
Tutorial (small groups)	5 times/ week (2½ hrs / week)	2½ ×12= 30	
Total	24 hours /week	24 ×12= 288	100%

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA:

1- Practical attendance.

2- Small group attendance.

3- Log book.

5-B) Assessment TOOLS:

Tool	Evidence	Purpose (ILOs)
Written Exams: • MCQs	In CD	2.1.2 to 2.1.9 Knowledge, understanding, intellectual skills
• Case study	CD	2.2.6-2.2.7-2.2.8—2.5.1-2.5.2-2.5.3-2.5.5-2.5.6. Knowledge, understanding, intellectual , professional skills
• Short essay	CD	2.1.1 to 2.1.9 Knowledge, understanding, intellectual skills
Oral Exam.	VIVA CARDS	2.2.1-2.2.3-2.2.4-2.2.5-2.2.6 2.6.3-2.6.4-2.6.5 Knowledge, understanding, intellectual skills, general skills
Practical Exams; Clinical cases & OSCE		To assess Knowledge, understanding, intellectual , professional skills and practical skills. 2.2.1-2.2.3-2.2.4 to 2.2.8

5-C) Time schedules:

Exam	Week
Assessment 1	At end of the round.
Assessment 2 (final exam)	At end of the academic year.

5-D) Weighing System:

Examination	Marks allocated	% of Total Marks
1- End round exam: a. OSCE(10 stations) + b. log book + activities	 50 50	20 %
2- Final exam: a- Written (2 papers) b- Practical(2 cases) c- Oral(2 sessions) d- OSCE(14 stations)	 250 40 40 70	 50 % 30%
Total	**500**	**100%**

- **The minimum passing score is 300 marks provided that at least 150 marks obtained in the final written exam.**
- **Passing grades are:** 1-Excellent :≥ 85%.

  2-Very good: 75 - <85%.

  3- Good: 65 - <75%.

  4- Fair: 60 - <65%.

5-E) Exam Description:

Examination	Description
End round	OSCE (10 stations).
Final exam: a- Written b- Practical c- Oral d- OSCE	 2 papers Paper I: Short essay questions (3 hours) Paper II: Case study & MCQs (2 hours) 2 clinical cases 2 sessions 14 stations

Assignments & other activities	self learning researches, clinical sheets , log book … etc

6- List of references:

6.1- Basic materials: -

-Nelson Essentials of Pediatrics, 6th edition. Robert and Kliegman,2012

6.2- Essential Books (Text Books)

- Nelson Textbook of Pediatrics; Behrman RE, Kliegman RM, Jenon, HB; Elsevier Science; 19h edition, 2011

6.3- Recommended Books

- Current Pediatric Diagnosis and Treatment; Hay WW, Hayward AR, Levin MJ, Sondheimer JM; McGraw Hill; 18th edition, 2012

6.4- Periodicals, Web Sites, … etc

- http://www.learnpediatrics.com
- http://www.vh.org/pediatric/provider/pediatrics/
- http://www.generalpediatrics.com/
- http://www.pediatriceducation.org/

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

-Department Lectures halls: 3

- Accessibility to hospital wards, clinics and emergency department.

-Skill Lab.

- Audio-visual teaching equipments (Computer, projector, Video …etc)

- Video tapes, scientific pictures archives.

- Radiology collections & archives.

Course Coordinators: Prof. Iman AbdEl-Rehim. **&** Dr. Ghada Abd-Elmotaleb

Head of Department: Prof. Mohamed El Bakry**.**

Date: 9 / 2013.

Benha University
Faculty of Medicine
Department of Obstetrics and Gynecology

Course Specifications

Course title: *Obstetrics and Gynecology*
(Code) : MED 0716
Academic Year (2014– 2015)

- **Department offering the course :** *Obstetrics and Gynecology*
- **academic year of M.B.& B.Ch. program 6th year**
- **Date of specification approval:** Department council, date: 9/2013.

A) Basic Information:

- **Allocated marks:** 500 marks
- **Course duration:** 36 weeks of teaching
- **Teaching hours:**

1- Theoretical	**108**
2- clinical/practical	**180**
Total	**288**

B) Professional Information:

1- Overall Aim of the Course:

- To provide basic knowledge about normal and abnormal growth and development of the female genital tract and to provide knowledge about basic health care for females in different age groups (prepubertal, pubertal, childbearing, perimenopasal, and menopausal).
- To provide skills essential for management obstetrics and gynecological emergencies and diseases (causes, diagnosis and management).
- To provide appropriate ethical and professional education necessary for sound medical practice of different Obstetrics and Gynecology medical conditions.

2- INTENDED LEARNING OUTCOMES (ILOS):

2.a- Knowledge and understanding:

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

2.a.1. Describe the anatomical features and development of the female genital tract and their clinical application.

2.a.2. Explain the physiology of menstruation, puberty (its abnormalities and their management)and menopause (abnormalities and their management).

2.a.3. Discuss the magnitude of the infertility problem, management of AUB conditions, management of STDs and different contraceptive methods.

2.a.4. Outline the pathology of cervical uterine, ovarian, vaginal and vulval cancers, with emphasis on screening methods and early recognition and broad lines of management of these conditions.

2.a.5. Illustrate the basic physiological changes of pregnancy and the basic principles of antenatal care (A.N.C).

2.a.6.mention high-risk pregnancies and their management; as medical disorders which may occur during pregnancies (e.g.: hypertension, pyelitis, hyperemesis, diabetes, anemia…), bleeding in early pregnancy (i.e. Abortion, ectopic, vesicular mole) and bleeding in late pregnancies (placenta praevia, accidental hemorrhage).

2.a.7. Illustrate the physiology, mechanism, management of normal labor and different abnormal presentations or positions as well as neonatal resuscitation and different methods of assessment of fetal well-being.

2.a.8. Describe complications which may occur during labour (1^{st}, 2^{nd} and 3^{rd} stage) or puerpurium (sepsis or hemorrhage) and their management with special emphasis on the indices, causes and prevention of maternal and perinatal morbidity and mortality.

2.b. Practical and clinical skills:

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

2.b.1. Formulate the diagnose and the gestational age of a pregnant lady through history taking, focused clinical examination, beta-HCG level, and ultrasound assessment.

2.b.2. Manage different causes of bleeding in early pregnancies with judgment of life threatening conditions point out the warning signs of late pregnancy and early referral to specialized centers.

2.b.3. Demonstrate the normal labor appropriately and identify abnormal cases requiring referral, through clinical symptoms and signs and programs.

2.b.4. Examine the female model (skill lab)to be oriented with different changes during labour.

2.b.5. Diagnose normal and abnormal neonate, through Apgar score and participate in the initial management of those in need of resuscitation.

2.c. Professional Attitude and Behavioral kills:

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

2.c.1. Demonstrate the respect for patients' rights and involve them and /or their caretakers in management decisions.

2.c.2. Demonstrate respect to all patients irrespective of their socioeconomic levels, culture or religious beliefs using appropriate language to establish a good patient-physician relationship.

2.c.3. Respect the role and the contributions of other health care professionals regardless their degrees or rank (top management, subordinate or colleague).

2.c.4. Adopte an emphathic and holistic approach to patients and their problems.

2.d. Communication skills:

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

2.d.1. Cope up with difficult situations; as breaking news.

2.d.2. Show sympathy to the patients and their relatives in situation.

2.d.3. Respect patients and their relatives, superiors, colleagues and all members of the health profession.

2.e. Intellectual skills:

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

2.e.1. Interpret different problems occurring in menopause with emphasis on postmenopausal bleeding, (any case of postmenopausal bleeding should be considered malignant until proved otherwise) and methods of contraception suitable for each patient and how to use or apply it.

2.e.2. Differentiate between normal pregnancies and high risk pregnancies and early referral to specialized centers with emphasis on bleeding in late pregnancy and how to start management.

2.e.3. Analyze different methods of assessment of fetal well being with proper use of Pinard, Sonicaide, US to evaluate fetal well being, and distressed fetuses which need immediate intervention.

2.e.4. Differentiate between normal labour and abnormal labour with emphasis on complication of the third stage of labor and apply first aid management of each till a senior obstetrician is involved.

2.f. General and transferable skills:

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

2.f.1. **Work** effectively as a member or a leader of an interdisciplinary team.

2.f.2. **Use** the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.

2.f.3. **Establish** life-long self-learning required for continuous professional development.

2.f.4. **Present** information clearly in written, electronic and oral forms.

2.f.5. **Apply** the principles of statistical methods for collection, presentation and analysis of all types of data.

3- <u>COURSE CONTENTS</u>:

Subject	Lectures (3h/w)- 36w 108h	clinical (15h/w)- 12w 188h	Total (288 h)	100% of Total
Gynecological history& exam.	2	2	4	**1.3%**
<u>Gynecological Anatomy</u> (vulva, vagina, uterus, tubes, ovary) Pelvic floor, perineum, anal canal, ureter mutilation	2		2	**0.69%**
Development & maleformation of the genital tract	2		2	**0.69%**
<u>Disorder of sex development</u> congenital adrenal hyperplasia& androgen insensitivity syndrome	2		2	**0.69%**
Disorder of growth and puberty	2		2	**0.69%**
<u>Menstrual cycle and its disorders</u> physiology &Amenorrhoea & dysmenorrhea & DUB &Premenstrual syndrome	6	4	10	**3.4%**
<u>Genital infections</u> vaginal discharge & Sexually transmitted disease & PID& T.B& Pyometra& Pelvic pain acute chronic	6	4	10	**3.4%**
<u>Subfertility and reproductive medicine</u> PCO & Hirsutism &Endometriosis Female Subfertility&Male Subfertility Assisted reproduction &Ovarian hyperstimulation syndrome &Female sexual dysfunction Male sexual dysfunction	6	4	10	**3.4%**
Menopause	2	2	4	**1.3%**
<u>Urogynecology</u> urinary symptom &Incontinence of urine& Genito-urinary fistulas, Recto-vaginal fistula	2	2	4	**1.3%**
<u>Genital displacement</u> Genital prolapse &Retroversion and retroflexion, & inversion of uterus	4	4	4	**1.3%**
<u>Benin Neoplasms of genital tract</u> vulva,vulval dermatosis vagina &cervix &uterine	4	4	8	**2.7%**

myoma &Adenomyosis & uterine polyps &ovary neoplasm				
Cancer screening in gynecology **Malignant Neoplasms of genital tract** vulva, vagina cervix uterus ovary Choriocarinoma **pregnancy with Fibroid ,** **ovarian tumour, cancer cervix**	6		6	**2.08%**
Postmenopausal bleeding		2		
	2		2	**0.69%**
Contraception physiological, mechnical, and chemical) Hormonal contraception IUD emergency contraception, female sterilization	6	2	8	**2.7%**
OPERATIVE uretric injury bladder urethral injury Old perineal tear Hysterectomy (abdominal), vaginal Myomectomy, D&C Laparosopy, hysteroscopy		4	4	**1.3%**
US in gyn HSG		2	2	**0.69%**
Obstetric history& exam.	2	2	4	**1.3%**
obstet Anatomy bony pelvis & fetal head Engagement of fetal head	2		2	**0.69%**
placenta Liquor amini development &circulation& Function	2		2	**0.69%**
Physiology of pregnancy endocrine hemodynamic cardiorespiratory genital tract breast	2		2	**0.69%**
Preparing for pregnancy supplement advise general health advise	2		2	**0.69%**
Diagnosis of pregnancy **dating of pregnancy -U/ S assessment of fetal growth**	2	2	4	**1.3%**
Booking visit **antenatal care**	2		2	**0.69%**
Minor symptom of pregnancy	2		2	**0.69%**

Hyperemsis gravidarum	2		6	**2.08%**
Bleeding in early preg Abortion Ectopic preg. V . Mole	6	2	10	**3.4%**
◌ **antepartum Hge** **P . Previa Accidental haemorrhage**	4	2	6	**2.08%**
Medical disorders with pregnancy **Hypertensive disorder with preg** preeclampsia eclampsia Anemia renal tract infection cystitis Pyelitis DM	8	4	12	**4.16%**
Intrauterine fetal death		2	4	**1.3%**
Fetal medicine Screening for chromosomal anomalies -diagnosis of structural anomalies- Hydropes non immune immune -Poly, oligo hydramnios- Fetal growth disorders IUGR Macrosomia- Antenatal fetal surveillance	8	2	10	**3.4%**
Infections disease in pregnancy	4		4	**1.3%**
labor Physiology & Mechanism & Management of normal labor fetal -surveillance in labor	6		6	**2.08%**
Multiple preg .	2	2	4	**1.3%**
Abnormal presentation &position O . P - Shoulder presentation -Face presentation & brow presentation- - Breech **presentation**	6	2	8	**2.7%**
Obstructed . labor . CPD Soft tissue obst .	2		2	**0.69%**
Preterm labor				
Prelabor rupture of membrane				
Post term				

Obstetric emergency **PPH-** Rupture uterus- Inversion of uterus Retained placenta- abnormal placental adhesion Shoulder dystocia Cord presentation	6		6	**2.08%**
Postnatal care Normal. puerperium .puerperal pyrexia	2	2	4	**1.3%**
Fetal birth injuries	2		2	**0.69%**
Neonatal asphyxia		2	4	**1.3%**
Analegesia& anaesthesia in obstet	2		2	**0.69%**
. abdominal pain in pregnancy	2			
. Uterus not corresponding to date of amaen		2		
Maternal & perinatal mortality	2		4	**1.3%**
Operative obstetrics Induction of lab Instrumental delivaries episiotomy perineal tear C . S		**4**	**2**	**0.69%**
Total	108	188	208	100%

4- TEACHING AND LEARNING METHODS:

methods used:

1. Modified lectures.
2. Clinical rounds on patients.
3. Small group discussion.
4. Practical rounds (skill lab,jars,video sessions,instruments and x-rays).
5. Outpatient & emergency visits.
6. Self learning

Method	Evidence	ILOs
Modified lectures	CDs of lectures including (video films, brain storming, problem solving, etc…….)	**2.a.1-----2.a.8** **2.b.1.----2.b.4** **2.e.1.----2.e.3**
Clinical classes	Clinical rounds on patients.	**2.b.1.----2.b.4** **2.e.1.----2.e.3**
Small group discussions	Demonstration (photographs and Video films).	**2.a.1.----2.a.8** **2.b.3 ----2.b.5**
Out patient & emergency attendance visits.	Attendance criteria	**2.b.2.----2.b.5** **2.c.1.----2.e.4** **2.d.1----2.d.3** **2.f.1-----2.f.5**
Practical classes	Jars,instruments and x-rays.	**2.b.4**
Self learning	Samples of: **4-** Student researchs **5-** Student power point presentations **6-** Students case studies	**2.a.1-----2.a.8** **2.b.1.----2.b.4** **2.e.1.----2.e.3**

TEACHING PLAN:

***Lectures* : 108**

I-B PRACTICAL CLASSES Time plan:

	Hours / week	Total hours
1- Lectures	**3 hrs /week for 36 weeks**	**108**
2- clinical	**15 hrs/week for 12 weeks**	**180**
Total	**3hrs/w for 36 w** **15hrs/w for 12 w**	**288**

5- STUDENTS ASSESSMENT METHODS:

5-A) Attendance criteria:

1. Lectures (at least 50% attendance).
2. Practical (at least 75% attendance).
3. Small group attendance.

5-B) <u>TIME SCHEDULE</u>:

Exam	Week
1- Assessment 1 (***end-round*** formative exam)	Every 6 wks.
2- Assessment 2 (***end round*** summative exam)	Every 6 wks.
3- Power point presentation	Once/round
4- Research.	Once/round
5-Final exam.	

<u>Assessment tools</u>

Tool	Purpose (ILOs)
Written examination	To assess knowledge , understanding, intellectual skills
Oral examination	To assess knowledge , understanding, intellectual skills , attitude and presentation.
Practical examination	To assess knowledge , understanding, intellectual skills, practical and professional skills, general skills

5-c) <u>Weighting System:</u>

Examination	Marks allocated	% of Total Marks	Description
1- Assessment 1 (***end-round*** formative exam)	0	0	MCQs, complete, true & false, spots identification
2- Assessment 2 (***end round*** summative exam) a- MCQ b- SKILL LAB c- X Ray, US, ENDOSCOPY IMAGES	90	18	MCQs, complete, true & false, spots identification
3-Power point presentation and Research.	10	2	Media for the power point and how to present and how to write?

4-Final exam: a. Short assay b. MCQs c. Oral d. Clinical e. OSCE	 150 100 50 50 50	 30 20 5 5 10	Questions which demands short answers Select 1 session 1 session Spot identification and its related questions
Total	**500**	**100**	

- **The minimum passing score is 300 marks, provided that at least 75 marks are obtained in the final written examination.**
- **Passing grades are:**
    1. Excellent: > 85%
    2. Very good: 75-85%
    3. Good: 65-75%
    4. Fair: 60-65%

6- LIST OF REFERENCES:

6.1- Basic materials:

Department books:

Basic:

1. Obstetrics & Gynecology for medical students by staff members of Obstetrics and Gynecology department ,Benha faculty of medicine.Chief editor :Prof Dr. Kamal Fahmy.

Essential:

2. Spotlights in Obstetrics and Gynecology by Prof Dr.Mohammed abdel salam.

3.Obstetrics & Gynecology simplified by Prof Dr. Diaa El mowafi.

4.Operative Gynecology & obstetrics by Prof. Dr. Kamal Fahmy.

Recommended books:

1. Oxford Handbook of obstetrics and gynecology. By, Collins et al., 3rd edition,2013 : available at bookshops at the faculty.

2.Manual of Jhon Hopkins, 2nd edition, 2010: available at bookshops at the faculty.

3.100 cases. By, Cecilia and Janice, 2008.: available at bookshops at the faculty.

4.Pre test of obstetric & gynecology. By, Karen and Stephen, 12th edition, 2008 : available at bookshops at the faculty

5.Novak's gynecology 13th edition, 2002: available from bookshops at the faculty.

6.Williams obstetrics, 21st edition, 2001: available at bookshops at the faculty.

7.Speroff clinical gynecologic endocrinology and infertility, 6th edition, 1999: available at bookshops at the faculty.

8.Fernando-Arias high-rsk pregnancy, 2nd edition, 1993: available at bookshops at the faculty.

6.4- Periodicals, Web sites, etc:

- http://www.medscape.com.
- http://www.pubmed.com.
- http://sciencedirect.com.
- http:// Up To date. com

7- FACILITIES REQUIRED FOR TEACHING AND LEARNING:

Facilities used for teaching this course include:

- Department lectures : 2 halls
- Skill lab.
- Lab for jars and instruments.
- Emergency department
- US unit.
- Outpatient clinic.
- Clinical wards : 2
- 2 halls with 2 data shows and an electrical screen.

Course coordinator: Prof. Dr. Mahmoud Rezq Fayed.

Head of Department: Prof. Dr.Mohamed Kamel Aloush.

Date: 9/2013

Benha University
Faculty of Medicine
Department of General Surgery

Course Specification

Course title: General surgery. 2014/2015
Code: MED 0715
Academic Year (2013 – 2014)

- **Department offering the course:** General surgery department.
- **Academic year of M.B. & B.Ch. program:** 6th year (2013 – 2014)
- **Date of specification approval:** Department council by date 9/2013.

A- Basic Information

- **Allocated marks: 900** marks.
- **Course duration: 36** weeks of teaching.
- **Teaching hours:**

1- Theoretical	**216 hrs**
2- Practical (clinical)	**360 hrs**
Total	**576 hrs**

Course coordinator: **Prof Dr Hassan El-Sweny**

B- Professional Information

1 – Overall Aims of Course:

- To **know** the basic practice in the field of the general surgery.
- To **Familiarize** students with the ***patients and how to ask for medical history***.
- To understand the ***physical signs and how to detect these signs***.
- To reach the diagnosis and choose the best treatment.

- To **do** the operative techniques and follow up after surgery.
- To diagnose genitourinary disorders and their management.
- To **explain** the basic principal of fractures and how to manage simple and complicated fractures.
- To diagnose fracture base of skull.
- To diagnose chest trauma and treatment and how to insert chest tube.

2 – Intended Learning Outcomes of Course (ILOs)

2.a. Knowledge and Understanding :

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

2.a.1. Describe the normal surgical anatomy of the human body.

2.a.2. state the surgical developmental disorders associated with common clinical conditions.

2.a3. Classify the surgical problems as congenital, traumatic, inflammatory and neoplastic.

2.a.4. Identify the risk factors, clinical picture, differential diagnosis, complications and investigations of each surgical disease which may be met within common practice and the life threatening conditions.

2.a.5. Point out the indications, contraindications, the relative advantages and disadvantages of various therapeutic modalities (operative and non operative) for common and life threatening surgical illnesses.

2.a.6. Identify proper methods of surgical intervention for common and life threatening illnesses (whether non invasive or invasive).

2.a.7. Discuss the basics of pre- and postoperative care.

2.a.8. Outline the steps, complications and the expected outcomes of every surgical procedure and how to manage these complications.

2.b.practical and clinical skills:

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

2.b.1. Formulate specific clinical sheets (complete and focused surgical history)

2.b.2. Perform surgical assessment (examination & evaluation) for a patient to reach the provisional diagnosis.

2.b.3. Demonstrate the routine and specific investigations of each surgical disease to reach the final diagnosis.

2.b.4. Employe the patient in the pre-operative period (general and specific).

2.b.5. Manage life-threatening, injured and serious conditions with instituting appropriate initial therapy (first aid measures).

2.b.6. Perform routine technical procedures, diagnostic and therapeutic (including life support).

2.b.7. Observe the patient in the post operative period.

2.b.8. Write safe prescriptions of different types of drugs for the surgical patients based on weight, age and health conditions.

2.c. Professional attitude and behavioral skills:

2.c.1. Demonstrate respect for patients rights and involve them and/or their caretakers in management decisions.

2.c.2. Complies with the requirements of the national code of ethics issued by the Egyptian Medical Syndicate.

2.c.3. Conduct counseling sessions for prevention& control of different conditions for healthy individuals, for patients as well as their families.

2.c.4. Select the most appropriate and cost effective therapeutic procedures for each problem.

2.d. Communication skills:

2.d.1. Establish good relations with other health care professionals regardless their degrees or rank.

2.d.2. Cope up with difficult situations as breaking news.

2.d.3. Show sympathy to the patients and their relatives in situations of stress and grief.

2.d.4. *Explain* to the patient or the patients' relatives the nature of illness, the diagnostic plan, the treatment options and the possible complications in

such a way that is easily understood to provide appropriate basic health education.

2.e. Intellectual skills:

2.e.1. Combine the clinical and investigational database to be proficient in clinical problem solving.

2.e.2. Generate a list of initial diagnostic hypotheses for each problem.

2.e.3. Design an initial course of management for stabilization of patients with serious illnesses.

2.e.4. Classify factors that place individuals at risk for disease or injury to determine strategies for appropriate response.

2.e.5. *Prioritize* the medical problems that need surgical interventions and their differential diagnoses

2.f. General and transferable skills:

2.f.1. Establish life long self learning required for continuous professional development.

2.f.2. Retrieve, manage and manipulate information by all means including electronic means.

2.f.3. Present information clearly in written, electronic and oral forms.

2.f.4. Work effectively as a member or a leader of an interdisciplinary team.

3. Course contents:

Topic		No. of hours		
		Total	Lectures	Practical (clinical & toutorial)
1	Fractures& orthopedics	45	15	30
2	genitourinary surgery	40	10	30
3	Cardiothoracic surgery	26	6	20

4	Neuro surgery	35	10	25
5	Anaesthesia	20	5	15
6	Pediatric surgery	35	10	25
7	Plastic surgery &burns	25	10	15
8	General surgery & Skin and soft tissue Vascular surgery Faciomaxillary and oral cavity Endocrine &breast Abdominal wall peritoneum Gastro intestinal tract Hepatopancreatico-biliary Spleen	350	150	200
	Total	576	216	360

4. Teaching and Learning Methods

4.1. Methods used:

1 Modified lectures and demonstrations.

2 Clinical rounds.

3 Small group discussion.

4 Out patient clinics.

5 Problem solving.

.

Method	Evidence	ILOs
Modified lectures	CDs of lectures including (video films, brain storming, problem solving, etc…….)	**2.1.1-----2.1.8**
Clinical classes	Clinical rounds on patients & x- rays Basic surgical skills	**2.2.1.----2.2.8**
Small group discussions	Demonstration (photographs and Video films).	**2.1.1.----2.1.8**

Problem solving	Case scenarios	**2.5.1.----2.5.5**
Out patient & emergency attendance	Attendance criteria	**2.2.1.----2.2.8** **2.3.1----2.3.4** **2.4.1----2.4.4** **2.6.1-----2.6.4**

4.2. Teaching plan:

Lectures: One group of students. 5 times /week, time from 1 p.m. to3 p.m.

Tutorials: Division of the students into 3 groups.

5 times /week, time from 8 a.m. to 10 a.m.

Clinical classes: Division of the students into 3 groups.

5 times /week, time from 10 a.m. to 12 p.m.

Time plan:

	Hours / week	**Total hours**
1- Lectures	**6hrs/week for 36 weeks**	**216 hrs**
2- Small group teaching / tutorials	**3 hrs/week for 24 weeks**	**72 hrs**
3- clinical rounds	**12 hrs/day for 24 weeks**	**288 hrs**
Total	**6hrs/week for 36 weeks** **15hrs/week for 24 weeks**	**576 hrs**

5. Student Assessment Methods:

5.A. Attendance criteria: the student should attends at least 75% of the course.

5.B. Assessment tools:

Tool	**Purpose (ILOs)**
Written examination: Short essay, complete, true or false with explanation, case studies and multiple choice questions	To assess knowledge (2.a.1--------- 2.a. 13) & intellectual skills (2.e.1.---------2.e.13)

Oral examination: • Oral cards system	To assess knowledge (2.a.1--------- 2.a. 13) , intellectual skills (2.e.1.---------2.e.13) & general & transferable skills (2.f.1 -----2.f.6)
Practical & clinical examination OPSE & OSCE systems.	To assess Practical & clinical skills (2.b.1.----2.b.8) **Professional skills & attitude (2.c.1…2.c.5.)** **& Communication skills (2.d.1 ----2.d.6)**

5.C. Time schedule:

Exam	**Week**
1- Mid-year exam	24
2- Practical exam	At end of the course
3- Final exam	At end of the course

5.D. Weighting of Assessments:

Examination	**Marks allocated**	**% of total marks**
1- Mid-year	135	15%
2- Final exam: a- Written: b- Practical: c- Oral:	 450 180 90	 50% 20% 10%
3- Assignment and other activities:	45	5%
Total	900	100%

The minimum passing & passing grades: Faculty bylaws: 60%

Formative assessment:

Student knows his marks after the formative exams.

5.E. Examinations description:

Examination	**Description**
1- Mid-year	MCQs & true and false
2- Final exam: a- Written: b- Practical: c- Oral:	 MCQs, short essay questions & problem solving Case study (1 long case & 2 short cases) 2 sessions (oral and operative)
6- Assignment and other activities:	Student logbook.

6- List of References:

6.1- Basic materials:

- Course notes prepared by some of the professors in the department.
- MCQ TRICKS in General surgery (edited by prof. dr. Mohammed Moustafa Abdel Wahab and prof. dr. Mohammed Mokhtar Elshahawy).
- Bailey &Love (short practice of surgery): edited by Russell.,R.C.G.,Williams,N.S &Bulstrode,C.J.K.,2004,Arnold-London.

6.2 Essential Books (Text Books)

- Clinical surgery , edited by Michael M. Henry & Jeremy N. Thompson, 2nd edition ,2005 ,Elsevier , London & Sydny & Toronto.

6.3. Recommended books:

- Kasr El aini (Introduction to surgery): Galal.S., Barsoum M., Mohsen, A., Fawzy T. and Abdel halim S., 2005, Cairo university book center, Cairo – Egypt.

6.4. Periodicals and Web sites:

6.4.a. Periodicals:

- British journal of surgery.
- American journal of surgery.

6.4.b. Web sites:

- www.emedicine.com.
- www.midline.com.
- www.facebook.com/groups/350531924972942/

7- Facilities Required for Teaching and Learning:

Facilities used for teaching this course include:

- Lecture halls.
- Surgical Skills Laboratory.
- Data shows & computer assistance.
- Endoscopes.
- Small group classes.
- Instruments.
- Operating rooms.

Coordinator:

Head of Department **Prof Dr Hassan Elsweny**

Date: 9/2013

Benha University
Faculty of Medicine
Department of Neuropsychiatry

Course Specification

Course title: Psychology
(Code) MED 0771
Academic Year (2013 - 2014)

- **Department offering the course: Neuropsychiatry**
- **Academic year of M.B.& B.Ch. program: 2nd year**
- **Date of specification approval:**
  - Department council: 9-2013,

A) Basic Information:

- **Allocated marks:** 50 marks
- **Course duration:** 1 hour weekly.
- **Teaching hours:**

1- Theoretical	**30**
2- Practical	**----------**
Total	**30**

B) Professional Information:

1- Overall Aim of the Course:

1.1 To highlight the beginning of psychology.
1.2 To have a background on the basics of psychology.

1.3. To highlight the relationship between psychology and psychiatry.

2- Intended Learning Outcomes (ILOs):

2.a. Knowledge and understanding:

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

2.a.1. Discuss social Psychological topics
2.a.2. Explain Personality characters.
2.a.3. describe Sensory Deprivation, Emotions and Perception
2.a.3. mention Defense mechanisms

2.b. Practical and Clinical Skills

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

2.b.1. Adopt basic and new skills in Psychology field.
2.b.2. Write professional reports about Psychological topics.
2.b.3. Innovate in Psychology practices.

2.c. Professional Attitude and Behavioral kills:

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

2.c.1. Perform round discussions with each other.

2.c.2. behave in the expected manner of a future physician.

2.c.3. Do proper assessments

2.d. Communication skills:

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

2.d.1. Use the knowledge to communicate better with colleagues, the professors and the patients.
2.d.2.. conduct learnt information in a simple way

2.e. Intellectual Skills:

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

2.e.1. Analyze and evaluate scientific basic knowledge and to do conclusions from it.
2.e.2. Solve problems in psychology and related branches making use of the available data.
2.e.3. Plan for developing performance in the field of psychology.
2.e.4. Differentiate between non patients and psychiatric patients.

2.f. General and transferable Skills:

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

2.f.1. Communicate effectively.
2.f.2. Use the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.
2.f.3. Use different sources of data and knowledge.
2.f.4. Work effectively as a member of an interdisciplinary team.
2.f..5. Evaluate self performance and continue to learn.
2.f..6. Use different sources of data and knowledge.
2.f..7. Work effectively as a leader of an interdisciplinary team .
2.f..8. Manage scientific meetings and manage time.
2.f.9. Establish effective interpersonal relationship to communicate ideas and arguments

3- Course contents:

1. Subject	Lectures (hrs)	Practical (hrs)	Total (hrs)	% of Total
1. Doctor patient relationship	1			
2. Personality	2			
3. Learning	1			
4. Sensory Deprivation	2			
5. Social Psychology	2			
6. **Perception**	2			
1. Emotions	3			
2. Aggression	3			
3. **Intelligence**	2			

4. Frustration	2			
5. Defense mechanisms	2			
6. Thinking	2			
7. Coping with stress	2			
Total			30	

4- Teaching and learning methods:

METHODS USED:

1. modified lectures
2. discussion and brain storming
3. self learning

TEACHING PLAN:

Lectures: Given to all students.

Once weekly, occurring from 12 pm to 1 pm .

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	once weekly;	1	4
Total			**30**

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA: Faculty Attendance sheets

5-B) Assessment TOOLS:

Written examination: MCQs , Short question Forms

5-Examinations description:

Examination	Description
Mid Term exam	Short essay questions
Final exam: a- Written	select (MCQs) & Supply (Short essay) questions
Total	**50 marks**

6- List of references:

6.1- Basic materials:

- 101 course books of Psychology

6.2- Essential books (text books):

6.3- Recommended books: The uptodate books of Psychology

6.4- Periodicals, Web sites, … etc:

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Lecture halls:
- Information technology / AV aids

Course coordinator: Prof. Dr. Shewikar El Bakry
Date: 9/ 2013

جامعة: **بنها**
كلية: طب بنها
قسم: الطب الشرعي والسموم الإكلينيكية

توصيف المقرر

أ- بيانات المقرر

الرمز الكودي:	**MED 0777**
اسم المقرر:	حقوق الإنسان
الفرقة:	الثالثة
البرنامج الذي يدرس به المقرر:	بكالوريوس الطب والجراحة
عدد الساعات الدراسية :	ساعة محاضرة نظري/أسبوع لمدة ٢٤ أسبوع ساعة مناقشة وتكليفات/اسبوع لمدة ٦ اسابيع خلال عام دراسي
المجموع:	٣٠ ساعة
الدرجة	١٠٠
القسم :	الطب الشرعى والسموم الاكلينيكية
عدد الوحدات الدراسية :	ساعة نظري/أسبوع لمدة ٢٤ أسبوع خلال عام دراسي ساعة/اسبوع لمدة ٦ اسبوع المجموع: ٣٠ ساعة
اسم المنسق	أ. د. م. نيرمين عدلى محمود
المراجع الداخلي	أ.د. ابراهيم صادق الجندى

البيانات المهنية:

١- اهداف المقرر:	١. *الالمام بأهمية حقوق الإنسان والنشأة التاريخية لتلك الحقوق وأحكام الاتفاقيات الدولية لحقوق الإنسان.* ٢. *التعرف علي القواعد والتنظيمات-الدولية والوطنية- القانونية والعدالة الاجتماعية والمسؤوليات التي تعتبر جزءا من العمل في المنظمات*

	المجتمعية ٣. فهم حقوق الانسان في الاسلام ٤. التعرف علي موقف الدستور المصري من حقوق الانسان ٥. مناقشة حقيقة القضايا التي تثار في عالمنا المعاصر باسم قضايا حقوق الإنسان. ٦. تطبيق حقوق الملكية الفكرية والنشر ٧. التعرف علي أنواع وأساليب انتهاك حقوق الإنسان. ٨. دور الطب في قضايا انتهاك حقوق الإنسان.
نواتج التعلم المستهدفة:	
أ- المعرفة والفهم	أ ١- يذكر المقصود بقانون حقوق الانسان أ ٢- يتعرف نشأة الاجيال المختلفة لحقوق الإنسان أ ٣- يعدد اهم الحقوق التي يطلق عليها حقوق الشعوب أ ٤- يشرح المصادر الوطنية والدولية لحقوق الانسان أ ٥ – يشرح مفهوم الدستور وأبوابه أ ٦- يذكر أنواع حقوق الإنسان أ ٧- يصف القيود المفروضة على حقوق الانسان أ ٨-يشرح كيف حافظت الشريعة الاسلامية علي حقوق الانسان أ ٩- يصف ضمانات واليات حماية حقوق الانسان على المستوى الوطنى أ ١٠- يتعرف حقوق المرأة والطفل وذوى الاحتياجات الخاصة أ ١١- يذكر مفهوم المصطلحات الاساسية المرتبطة بحقوق الملكية الفكرية والنشر. أ ١٢- يشرح الواجبات والمسئوليات الفئوية والمهنية أ ١٣- يعدد اساليب انتهاك حقوق الانسان
ب-المهارات الذهنية	ب١- يناقش قضايا حقوق الإنسان المختلفة ب ٢- يربط بين التشريعات والدستور ب ٣- يستنتج دوره في المجتمع لحماية حقوق الانسان ب ٤- يقيم التشريعات والقوانين طبقا لحقوق الإنسان ب ٥- يفرق بين حقوق المؤلف والناشر

	ب ٦- يربط بين مواثيق حقوق الانسان ومهنة الطب ب ٧- يستنتج دوره كطبيب في قضايا انتهاك حقوق الانسان
ج-المهارات المهنية والعملية	ج ١- يحلل قضايا حقوق المرضي اثناء مزاولته مهنة الطب ويقترح حلول لها ج ٢- يطبق مبادئ حقوق الإنسان فى مجال مهنة الطب بالمجتمع ج ٣ – يشخص حالات انتهاك حقوق الانسان والتعذيب
د- المهارات العامة والمنقولة	د ١- يدير النقاش مع المنظمات الوطنية والدولية الخاصة بحقوق الانسان د ٢- يستخدم التكنولوجيا الحديثة في الحصول علي المعلومات المتعلقة بحقوق الانسان د ٣- يعمل في فرق مرتبطة بمجال حقوق الانسان د ٤- يشارك في العمل التطوعي لحماية حقوق الانسان د ٥- يساعد زملاؤه في اكتساب الخبرة في مجال حقوق الإنسان
٣- محتوى المقرر:	٣-١ قانون حقوق الإنسان ومصادره ٣-٢ صور حقوق الانسان ٣-٣ حقوق الانسان في الاسلام ٣-٤ حقوق المرأة والطفل ٣-٥ حقوق الملكية الفكرية والنشر ٣-٦ مواثيق حقوق الانسان والطب ٣-٧ انتهاك حقوق الانسان
٤ طرق التعليم والتعلم:	٤-١ محاضرات ٤-٢ جلسات المناقشة والعصف الذهني ٤-٣ الفروض البحثية والعروض التقديمية (تعلم ذاتي والبحث عن المعلومات وجمعها من مصادر مختلفة: حقوق الانسان في الاسلام وحقوق المرأة والطفل
٥- تقويم الطـلاب :	
أ-الأساليب المستخدمة	امتحان تحريري تكليفات (اعداد تقارير ٢٠% من الدرجات)
ب- التوقيت	امتحان تحريري: نهاية العام الدراسي

	تكليفات: طوال العام الدراسي
جـ- توزيع الدرجات	١٠٠ درجة امتحان نظري (لا تضاف إلي الدرجات الكلية للبرنامج)
٦ـ قائمة الكتب الدراسية والمراجع :	
أ- كتب ومذكرات	ابراهيم الجندي، نيرمين عدلي ٢٠١٣ / ٢٠١٤
ب- كتب ملزمة	مجموعة من أساتذة الحقوق والطب (٢٠٠٥): كتاب حقوق الإنسان، الناشر جامعة الزقازيق (فرع بنها)
ج - كتب مقترحة	Welsh J. and Van A. (2002): Forensic Medicine and Human Rights.
د- دوريات علمية أو نشرات ... الخ	----------

أستاذ المادة: أ.د. إبراهيم صادق الجندي أ.د. نيرمين عدلي

٢٠١٣/٩

Benha University
Faculty of medicine

Course specifications
Course title: English
(Code): MED 0772
Academic year (2013-2014)

- **Department offering the course: English department, faculty of arts**
- **Academic year of program: 2013-2014**
- **Date of specification approval: 9/2013**

a)basic information

- **Allocated marks: 50 marks**
- **Course duration : 30 weeks of teaching**
- **Teaching hours :**

Theoretical	**30 hours**
Practical	**----------**

B)professional information:

1-overall aim of the course

- The purpose of this compilation of extracts from medical writings is to provide students who are learning English as an aid to their medical studies with examples of the kinds of English prose style that they will meet in their medical textbooks ,journals lectures and case stories. The book doesn't attempt to teach medicine . it is concerned only with presenting the English of medicine

b- intellectual skills

by the end of the course the students should be able to:

b1-develop the skills of precise, paraphrase and note taking so necessary to students if they are to obtain the maximum benefit from their lectures and reading

c-professional and practical skills:

by the end of the course the students should be able to:

c1-have agood enough grounding to go on and read medical textbooks and journals with much more enjoyment and appreciation

d-general and transferable skills

by the end of the course the students should be able to

d1- be able to express himself appropriately and effectively to his / her colleges, workers and patients in agood way

3- contents

topic	No of hours	lectures	Tutorial/practical
1. Medical history	3	3	
2. The profession of medicine	3	3	
3. 3-doctor-patient relationships	3	3	
4. Preventive medicine	2	2	
5. Anatomy of the skull	2	2	
6. The common cold	2	2	
7. Heat exhaustion	2	2	
8. Verbs and tenses	8	2	
9. Special terms	2	2	
10. Health care systems	3	3	
total	30	30	

4-teaching and learning methods

4.1-lectures

5- student assessment methods

5.1 written exam to assess knowledge &understanding

Assessment schedule

Assessments 1	**Final written exam**	**Week 35**
Assessments 2	---------- --	**Week**---------- **--**
Assessments 3	---------- --	**Week**---------- **-----**
Assessments 4	---------- ----	**Week**---------- **-----**

Weighting of assessments

Mid-term examination	%	
Final –term examination	%	100%
Oral examination	%	

Practical examination	%
Semester work	%
Other types of assessment	%
Total	100%

Any formative only assessments

6-list of references

6.1 course notes

- handouts available at the collage bookshop

6.2- essential books (text books)

-ally van gelderen (2006) : ahistory of English language

6.3- recommended books

-ally van gendered (2006) : ahistory of English language

6.4- periodicals , web sites

www.britishcouncil.org/russia-english-teaching-projects-textbook

www.ece.ucsb.edu

www.eric.ed.gov/ericwebpotal/

7-facilities required for teaching and learning

- **Lecture hall at the 1st floor of main lectures building**
- **Audio –visual teaching equipments (computer ,projector,video.data show)**

Course coordinator: prof dr: sawsan m.mostafa el-belbesy

Head of department: prof dr:

Date: 2014-2015

Annexe,"2"

National Academic Reference Standards (NARS) Medicine

January 2009 1st Edition

Table of Contents

Preface

Based on the Presidential Decree number (82) for the year 2006, the National Authority for Quality Assurance and Accreditation of Education (NAQAAE) was founded to enhance the quality of education in Egypt.

In the light of NAQAAE's mandates, developing National Academic Reference Standards (NARS) for higher education comes on the top of its priorities. NARS are intended to set out clearly the graduate attributes and academic characteristics expected to be achieved in the academic programs of different disciplines.

The natural resources are no longer the backbone for development and prosperity; instead knowledge economy has become the main base for inducing tremendous and progressive breakthroughs in the resources of nations. In this regard, knowledge economy requires high quality education based on well defined reference standards.

The international changes and the concomitant alterations in the socio-economic conceptions obliged quality education as the main gate for human resources development. The latter, in turn, is counted as one of the most important determinants of national sustainable development.

Good practice in education should encourage students to improve their innovative and creative capabilities, employ appropriate technologies and pursue independent and life-long learning. This would necessitate setting out plans to develop the institutional capabilities and educational efficiency.

Accordingly, educational institutions have to reform their programs and courses to meet the demands of the labor market.

In addition, graduates should acquire the flexibility that enables them to adapt to the future needs of the labor market.

In alignment with its functions, NAQAAE, in collaboration with the stakeholders, has developed an integrated system to assure education quality. One of the system's outcomes is a series of guides for NARS in different academic disciplines to help higher education institutions in designing their programs to meet the accreditation requirements.

National Authority for Quality Assurance and Accreditation of Education (NAQAAE)

Acknowledgements

The National Authority for Quality Assurance in Education, (NAQAAE) would like to thank all the stakeholders involved in this work. The stakeholders included are representatives from the Ministry of Higher Education, National Syndicates, the Academic university staff members and the Private Sector. All of them were committed to make this work possible through their knowledge and experience.

The President of the National Authority for Quality Assurance in Education, Professor Magdy Kassem and Board members would like to acknowledge the efforts done by the task force group assigned to prepare this guideline for their hard work to ensure high quality graduates and to be comparable to the international standards.

Professor Magdy Kassem
NAQAAE, President

Methodology

NAQAAE has invited a group of education experts, in different academic disciplines, from state, private and Al-Azhar Universities to develop a general framework of the guide for the national academic reference standards (NARS) in the different sectors of higher education. The steps proceeded as follows:

1. **Brain Storming**

The authority held several workshops for expert groups to discuss the general framework and elements/contents of the NARS guide and Standardization of concepts and terms used in the NARS within a definite time table.

2. **Reviewing of the International Academic Standard**

Experts groups have reviewed the academic standards of some World accreditation institutions and standard applied in the corresponding faculties at universities from different countries in the world to have access to the
global level, taking into account the need to preserve the Egyptian identity.

3. **Reviewing the Available Academic Standards in Egypt**

The working groups have reviewed the academic standards which have been developed by the sectors of the Supreme Council of Universities - Ministry of Higher Education and Scientific Research. In accordance with the required amendments to NAQAAE, groups developed the guidelines to meet the needs of higher education institutions.

4. **Reviewing by Technical Committee**

Standard first drafts were reviewed by technical committees formed by NAQAAE board, to insure that standards meet the agreed essential elements as well as the technical editing of the draft.

5. Stakeholders Approval

After the completion of the draft of national academic reference standards, it was presented to representatives from stakeholders, faculty members from different universities and Al-Azhar institutions and representatives
from the Ministry of Higher Education and the State for Scientific Research, to take appropriate action.

6. Dissemination

The Authority posted academic standards on its website (naqaae.org.eg), to receive feedback from students, faculty members and stakeholders.

7. **Endorsement of Standards**
The draft was revised according to the feedback received and introduced to NAQAAE's Board for approval.

Introduction to Medical Education

1. The National Academic Standards have been developed in order to serve as an external reference for designing and upgrading the undergraduate educational program of faculties of medicine. They also represent general
expectations about the standards for the award of Bachelor Degree in Medicine **(**MBBCh) and articulate the attributes and capabilities that those possessing such qualification should be able to demonstrate.
2. The National Academic Reference Standards of the MBBCh degree include expressions of the professional/employment related abilities that graduates in medicine would be expected to have developed during their
higher education including associated practice based experiences.
3. These standards represent the minimum academic quality requirements which the government regards as appropriate and reasonable in order to protect the interests of the students, the reputation of individual faculties, and the community.
4. These standards have been developed by a group of medical academics representing a wide variety of Egyptian Universities, Medical Sector Committee of the Supreme Council of Universities, a representative of the Medical Syndicate, Ministry of Health and Population, Army Hospitals, private hospitals and students.
5. The standards are not a curriculum or a syllabus.
6. The role of NAQAAE is to develop, review and modify the national academic reference standards when required.
7. The role of the Medical Sector Committee of the Supreme Council of Universities is to, participate in the development, dissemination, and facilitate the implementation of the NARS

Role of Faculties of Medicine

8. The role of Faculties is to develop their own standards based on the relevant external reference points, guarantee the approval of NAQAAE if their standards are not equal or exceed the threshold of National Academic Reference Standards and ensure that their own standards and their program design follow the regulatory frameworks and bylaws of the Supreme Council of Universities
9. If any faculty of medicine develops program Intended Learning Outcomes that are different from the National Academic Reference Standards, it should be stated in its mission. For example, it may have a distinctive mission or
unusual student intake, or it might be using alternative external reference points that are regarded as more relevant to the needs of its graduates and other stakeholders.
10. Every faculty of medicine should make available all evidences they may wish to present under each of the standards and make this clear in their self-evaluation reports and during external audit.

11. Every faculty of medicine should ensure that their academic standards are in compliance with their mission, the faculty members approve the academic reference standards, and their students achieve the academic
standards and outcomes.
12. Every faculty of medicine should clearly define the program and course specifications including aims and Intended Learning Outcomes.
13. Every faculty of medicine should have a plan to implement successfully the academic reference standards and should have a means to secure and sustain the use of these standards.

Requirements to achieve NARS

1. **Curriculum Management**: Every Faculty of Medicine must establish a system for curriculum management which inclusively but not exclusively comprise authoritative committees for curriculum development , implementation, students assessment and program evaluation
2. Curriculum Integration. Traditionally the medical program was divided into a pre-clinical phase covering the sciences basic to medicine and the clinical phase covering clinical instruction with some of the more applied medical sciences. Educational research has proved that students learn best when basic sciences are weaved into clinical contexts, and the curriculum is integrated horizontally and vertically.
It is essential that all faculties of medicine must imply some degree of integration according to their capabilities
3. **Educational Strategies**: There are also different approaches to education across the medical schools. The curricula in most of the medical schools are predominantly subject based, whereas in few medical schools is problem based. The NAQAAE & the Sector Committee confirm that all faculties of medicine must adopt new educational strategies which enhance students' participation in the learning process and help the development of students' self learning abilities within the next two years. The Faculty must ensure enough clinical training opportunities and time for the students throughout their study program which reflect the variety of health care environments including hospitals, ambulatory care, primary and family health centers, general practice, and other available community health care services. This must also be supported by training in skills laboratories.
4. **Medical Education Center /Department:** In recent years there has been an increasing professionalism of medical education with most medical schools now having medical education center /departments. The NAQAAE and the sector committee request all faculties of medicine to establish medical education departments or strengthen their medical education centers.
5. **Elective Courses**: Most of the medical schools use a compulsory core curriculum to all the students. The core curriculum provides the essential knowledge, understanding, clinical skills and professional attitudes which are required by any medical graduate in order that s/he may practice as a house officer and commence postgraduate training. The elective courses became one of the essential international standards all over the world. The NAQAAE and the Sector Committee support medical schools to include elective studies within their undergraduate courses. The aim of the elective studies is stimulation of critical thinking; it should

allow students to acquire research abilities and enhance their skills in collection, evaluation, synthesis and presentation of evidence. Elective studies also provide opportunity for study in depth and may extend beyond the traditional medical disciplines.

6. **Student Assessment** is an essential component in the educational process, as it drives learning and allows the institution to ensure that the students has achieved the desired intended learning outcomes to the degree determined by the academic standards . This NARS emphasizes that the Faculty should make all the efforts to establish an assessment system that utilizes a variety of methods and techniques to ensure that all the curricular outcomes have been adequately met. This requires the use of objective questions (MCQs, matching etc.) in addition to modified essay and problem solving and case studies in written exams. Similarly, the Faculty must ensure that assessment of clinical and practical skills encompasses tools that allow the coverage of a wide variety of required competencies. This should inclusively but not exclusively include the wider implementation of Objective Structured practical and Clinical Exams (OSCE/SP), extended direct observation of students interviewing and examining patients throughout their clinical clerkships, as well as the assessment of procedural skills in skills labs. Assessment of attitudes and ethics though relatively difficult, yet must be sought through the reflection of the attitudes on the students' behaviors by extended direct observation from their teachers. All Faculties must make necessary arrangements to monitor the assessment process through students and staff feedback.

I. National Academic Reference Standards (NARS)

Students should be prepared to approach their medical practice acquiring sufficient knowledge of the basic and clinical sciences in an integrated manner, and an understanding of the underlying principles of scientific method. They must be prepared for lifelong learning to remain current in their understanding of the scientific basis of medicine. On graduation, the graduates must possess all the competencies that enable them to carry out the duties of the house officers during the house officer year; after which they must possess the competencies essential for working as primary health care providers. Professional skills are acquired during the undergraduate education, and continue throughout the house officer year.

The medical school must ensure that before graduation the student will have demonstrated, to the satisfaction of the faculty, the knowledge and understanding, the intellectual, practical, professional attitude and behaviors, communication, general and transferable skills of the following

1. Attributes of the Graduates of Medical Medicine

The Medical Graduate must:

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.

2. Knowledge and Understanding

2.1. Normal Human Body:
a. Normal structure and function of the body (as an intact organism) and of each of its major systems.
b. Molecular, biochemical, and cellular mechanisms which are important in maintaining the body homeostasis.
c. Main developmental changes in humans and the effect of growth, development and aging on the individual and his family.
d. Basics of normal and abnormal human behaviors.

2.2. Altered structure and function of the body and its major systems that are seen in various diseases and integrate it in clinical conditions.

2.3. Etiology, pathogenesis, clinical features, diagnoses and complications of common and life threatening illnesses affecting the body and each of its major organ systems, presenting throughout the age spectrum.

2.4. Principles of management of common and life threatening illnesses including:
a. Pharmacological and non pharmacological basics of therapy.
b. Non invasive and invasive intervention.
c. Basic pre- and post operative care.
d. Pain relief and palliative care.

2.5. Population Health and Health Systems:
a. The determinants of health, principles of disease prevention and early detection of common community health problems.
b. Principle and organization of National Health Care System.
c. Epidemiological principles of demography and biological variability.
d. Principles of disease surveillance and screening.
e. Communicable disease control and health promotion.
f. Population-based approaches to health care services and their role in improving medical practice.

2.6. Basics of ethics, medico legal aspects of health problems, malpractice and common medical errors.

2.7. Basics of health and patient's safety and safety procedures during practical and clinical years.

2.8. Principles of clinical audit.

3. Practical and Clinical Skills

Graduate should acquire the following practical as well as Clinical skills and competencies during the undergraduate years

3.1. Demonstrate basic sciences practical skills relevant to future practice.
3.2. Take and record a structured, patient centered history.
3.3. Perform full physical examination of patients with acute and chronic clinical conditions appropriate to the age, gender, acute and chronic clinical conditions while being culturally sensitive.
3.4. Assess the mental state of the patient
3.5. Record patients ' data appropriately.

3.6. Formulate a management plan for common diseases and acute emergencies.
3.7. Write safe prescriptions of different types of drugs based on patient's weight, age and health condition
3.8. Provide first aid measures for injured and critically ill patients.

Procedures and technical skills acquired under appropriate supervision during undergraduate and house officer training:

3.9. Perform venepuncture and collect blood samples.
3.10. Insert a cannula into peripheral veins.
3.11. Give intramuscular, subcutaneous, intradermal and intravenous injections.
3.12. Perform suturing of superficial wounds.
3.13. Demonstrate competency in cardiopulmonary resuscitation and basic life-support.
3.14. Administer compulsory childhood vaccines.
3.15. Perform and interpret basic bedside laboratory tests.
3.16. Perform and interpret ECG.
3.17. Administer basic oxygen therapy.
3.18. Perform and interpret basic respiratory function tests.
3.19. Use a nebulizer for administration of inhalation therapy.
3.20. Insert a nasogastric tube.
3.21. Perform bladder catheterization.
3.22. Perform procedure of normal labor.
3.23. Adopt suitable measures for infection control.

4. Professional Attitude and Behavioral Skills:

Graduate should be able to:

4.1. Adopt an empathic and holistic approach to the patients and their problems.
4.2. Respect patients' rights and involve them and /or their caretakers in management decisions.
4.3. Understand and respect the different cultural beliefs and values in the community they serve.
4.4. Recognize the important role played by other health care professions in patients' management.
4.5. Be aware of and understand the national code of ethics issued by the Egyptian Medical Syndicate.
(لائحة آداب المهنة الصادرة من نقابة الأطباء)
4.6. Counsel patients and families suffering from different conditions.
4.7. Recognize one's own limitations of knowledge and skills and refer patients to appropriate health facility at the appropriate stage.

Graduate should be able to: House Officers should be able, under appropriate supervision, to:

4.8. Ensure confidentiality and privacy of patients' information.
4.9. Treat all patients equally, and avoid stigmatizing any category regardless of believes, culture, and behaviors.
4.10. Demonstrate respect and work cooperatively with other health care professions for effective patient management.

4.11. Be willing to share in all types of inter-professional activities including collaborative and shared learning
4.12. Ensure the cost effectiveness of health care management.
4.13. Notify/report about any physical or mental conditions related to himself, colleagues or any other person that might jeopardize patients safety.

5. Communication skills:

5.1. Communicate clearly, sensitively and effectively with patients and their relatives, and colleagues from a variety of health and social care professions.
5.2. Communicate effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.
5.3. Cope with situations where communication is difficult including breaking bad news.
5.4. Show compassion to the patients and their relatives in situations of stress and grief.
5.5. Honor and respect patients and their relatives, superiors, colleagues and any other member of the health profession.

6. Intellectual Skills:

6.1. Integrate basic biomedical science with clinical care
6.2. Reason deductively in solving clinical problems:
a. Recognize, define and prioritize problems.
b. Interpret, analyze, and evaluate information objectively, recognizing its limitations.
6.3. Use personal judgment for analytical and critical problem solving and seek out information.
6.4. Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.
6.5. Construct appropriate management strategies for patients with common diseases, both acute and chronic, including medical, psychiatric, and surgical conditions.
6.6. Design an initial course of management for stabilization of patients with serious illnesses.
6.7. Classify factors that place individuals at risk for disease or injury, to determine strategies for appropriate response.
6.8. Retrieve, analyze, and evaluate relevant and current data
from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM).
6.9. Recognize and cope with uncertainty that is unavoidable
in the practice of medicine by accepting and reacting to uncertain situation through proper counseling ,consultation and referral
6.10. Involvement into research and scientific methods through:
a. Formulation of research questions that is pertinent to medicine.
b. Recognition of the importance of precision in collecting, analyzing and interpreting medical data.

7. General and Transferable Skills:

7.1. Be prepared for the lifelong learning needs of the medical profession.

7.2. Use information and communication technology effectively in the field of medical practice.
7.3. Retrieve, manage, and manipulate information by all means, including electronic means.
7.4. Present information clearly in written, electronic and oral forms.
7.5. Communicate ideas and arguments effectively.
7.6. Work effectively within a team.
7.7. Analyze and use numerical data including the use of simple statistical methods).

House Officers should be able to:
7.8. Use Evidence Based Medicine in management decisions.
7.9. Effectively manage time and resources and set priorities.
7.10. Work efficiently within the health care team and as an effective team leader.
7.11. Solve problems related to patients, work management, and among colleagues.
7.12. Cope with a changing work environment.
7.13. Apply safety and infection control measures during practice.
7.14. Evaluate their work and that of others using constructive feedback.

II. Glossary

1. Institution
A University, faculty or higher institute providing education programs leading to a first university degree or a higher degree (Master's or Doctorate).

2. Graduate Attributes
Competencies expected from the graduate based on the acquired knowledge and skills gained upon completion of a particular program.

3. National Academic Reference Standards (NARS)
Reference points designed by NAQAAE to outline / describe the expected minimum knowledge and skills necessary to fulfill the requirements of a program of study.

4. Academic Standards
Reference points defined by an institution comprising the collective knowledge and skills to be gained by the graduates of a particular program. The academic standards should surpass the NARS, and be approved by NAQAAE.

5. Subject Benchmark Statements
Guideline statements that detail what can be expected of a graduate in terms of the learning outcomes to satisfy the standards set for the program. They enable the outcomes to be compared, reviewed and evaluated against agreed upon standards.

6. The Program

A set of educational courses and activities designed by the institution to determine the systematic learning progress. The program also imparts the intended competencies required for the award of an academic
degree.

7. Intended Learning Outcomes (ILOs)

Subject-specific knowledge, understanding and skills intended by the institution to be gained by the learners completing a particular educational activity. The ILOs emphasize what is expected that learners will be able to do as a result of a learning activity.

8. Knowledge and Understanding

Knowledge is the intended information to be gained from an educational activity including facts, terms, theories and basic concepts. Understanding involves comprehending and grasping the meaning or the underlying explanation of scientific objects.

9. Intellectual Skills

Learning and cognitive capabilities that involve critical thinking and creativity. These include application, analysis, synthesis and evaluation of information.

10. Professional and Practical Skills

Application of specialized knowledge, training and proficiency in a subject or field to attain successful career development and personal advancement.

11. General and Transferable Skills

Skills that are not subject-specific and commonly needed in education, employment, life-long learning and self development. These skills include
communication, team work, numeracy, independent learning, interpersonal relationship, and problem solving... etc.

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Annexe,"3": Program Courses *vs* Program ILOs matrix

2.a. Knowledge and Understanding

Program ILOs / Program Courses		2.a.1	2.a.2	2.a.3	2.a.4	2.a.5	2.a.6	2.a.7	2.a.8	2.a.9	2.a.10	2.a.11	2.a.12	2.a.13
Human Anatomy & Embryology	Med 0701a,b	x	x											
Histology & cell biology	Med 0702 a,b	x												
Medical Physiology	Med 0703 a,b	x												
Medical biochemistry	Med 0704 a,b	x			x									
English	Med 0772													X
Behavioral sciences	Med 0771		X											
Pathology	Med 0705			X	X									
Clinical Pharmacology	Med 0706					x								
Microbiology & Immunology	Med 0707				X							X		
Medical Parasitology	Med 0708				x									
Human Rights	Med 0777										X			
Forensic medicine & Clinical Toxicology	Med 0710							X			x			
Public Health & Community medicine	Med 0709								x	x		x		
Ophthalmology	Med 0711			x	x		x					x	x	
Oto-Rhino-Laryngeology	Med 0712			x	x		x	x				x		
General medicine	Med 0713			x	x		x	X	x			x	x	
Pediatrics	Med 0714		x	x	x			x					x	
Obstet. & Gynecology	Med 0715			x	x			X					x	
General surgery	Med 0716			x	X		x	X					X	

2.b. Practical and Clinical Skills

Program ILOs / Program Courses		2.b.1	2.b.2	2.b.3	2.b.4	2.b.5	2.b.6	2.b.7	2.b.8
Human Anatomy & Embryology	Med 0701a,b	X							
Histology & cell biology	Med 0702a,b	X							
Medical Physiology	Med 0703a,b	X							
Medical biochemistry	Med 0704a,b	X							
English	Med 0772								
Behavioral sciences	Med 0771								
Pathology	Med 0705	X							
Clinical Pharmacology	Med 0706	x						x	
Microbiology & Immunology	Med 0707	x							
Medical Parasitology	Med 0708	x							
Human Rights	Med 0777								
Forensic medicine & Clinical Toxicology	Med 0710						x		x
Public Health & Community medicine	Med 0709		X						
Ophthalmology	Med 0711						x	X	x
Oto-Rhino-Laryngeology	Med 0712						x		X
General medicine	Med 0713			x	x	X	x		x
Pediatrics	Med 0714			X	X	X	X		X
Obstet. &Gynecology	Med 0715			X	X	X	X		X
General surgery	Med 0716			X	X	X	X		X

2.c. Professional Attitude and Behavioral Skills

Program ILOs / Program Courses		2.c1	2.c2	2.c3	2.c4	2.c5
Human Anatomy & Embryology	Med 0701a,b		x			
Histology & cell biology	Med 0702a,b		x			
Medical Physiology	Med 0703a,b		x			
Medical biochemistry	Med 0704a,b		x			
English	Med 0772		x			
Behavioral sciences	Med 0771		x			
Pathology	Med 0705		x			
Clinical Pharmacology	Med 0706		x			
Microbiology & Immunology	Med 0707		x			
Medical Parasitology	Med 0708		x			
Human Rights	Med 0777		x			
Forensic medicine & Clinical Toxicology	Med 0710	x	x	x	X	
Community medicine	Med 0709	x	x		x	
Ophthalmology	Med 0711	x	x	x	x	x
Oto-Rhino-Laryngeology	Med 0712	x	x		x	
General medicine	Med 0713	x	x	x	x	x
Pediatrics	Med 0714	x	x	x		x
obstetrics	Med 0715	x	x	x		x
General surgery	Med 0716	x	x	x		x

2.d. Communication skills

Program ILOs / Program Courses		2.d.1	2.d.2	2.d.3	2.d.4	2.d.5	2.d.6
Human Anatomy & Embryology	Med 0701a,b	x		x			
Histology & cell biology	Med 0702a,b	x		x			
Medical Physiology	Med 0703a,b	x		x			
Medical biochemistry	Med 0704a,b	x		x			
English	Med 0772	x		x			
Behavioral sciences	Med 0771	x		x			
Pathology	Med 0705	x		x			
Clinical Pharmacology	Med 0706	x		x			
Microbiology & Immunology	Med 0707	x		x			
Medical Parasitology	Med 0708	x		x			
Human Rights	Med 0777	x		x			
Forensic medicine & Clinical Toxicology	Med 0710	x		x			
Public Health & Community medicine	Med 0709	x		x			
Ophthalmology	Med 0711	**x**	**x**	x	**x**	**x**	
Oto-Rhino-Laryngeology	Med 0712	x		x			
General medicine	Med 0713	x	x	x	X	x	x
Pediatrics	Med 0714	x	x	x	X	x	x
Obstetrics	Med 0715	x	x	x	X	x	x
General surgery	Med 0716	x	x	x	X	x	x

2.e. Intellectual Skills

Program ILOs / Program Courses		2.e.1	2.e.2	2.e.3	2.e.4	2.e.5	2.e.6	2.e.7	2.e.8	2.e.9	2.e.10	2.e.11	2.e.12	2.e.13
Human Anatomy & Embryology	Med 0701a,b	x									x			
Histology & cell biology	Med 0702a,b	x									x			
Medical Physiology	Med 0703a,b	x									x			
Medical biochemistry	Med 0704a,b	x				x					x			
English	Med 0772										x			
Behavioral sciences	Med 0771										x			
Pathology	Med 0705	x									x			
Clinical Pharmacology	Med 0706	x									x			
Microbiology & Immunology	Med 0707	x				x					x			
Medical Parasitology	Med 0708	x				x					x			
Human Rights	Med 0777										x			
Forensic medicine & Clin. Toxicology	Med 0710				x	x	x	x	x		x			x
Public Health & Community med.	Med 0709							x			x	x	x	
Ophthalmology	Med 0711				x	x	x		x	x	x			x
Oto-Rhino-Laryngeology	Med 0712				x		x		x	X	x			x
General medicine	Med 0713		x	x	x	x	x		x	X	x			x
Pediatrics	Med 0714		x	x	x	x	x		x	X	x			x
obstetrics	Med 0715		x	x	x	x	x		x	X	x			x
General surgery	Med 0716		x	x	x	x	x		x	X	x			x

2.f. General and Transferable Skills

Program ILOs / Program Courses		2.f.1	2.f.2	2.f.3	2.f.4	2.f.5	2.f.6
Human Anatomy & Embryology	Med 0701a.b	x	x	x	x	x	
Histology & cell biology	Med 0702a,b	x	x	x	x	x	
Medical Physiology	Med 0703a,b	x	x	x	x	x	
Medical biochemistry	Med 0704a,b	x	x	x	x	x	
English	Med 0772	x	x	x	x	x	
Behavioral sciences	Med 0771	x	x	x	x	x	
Pathology	Med 0705	x	x	x	x	x	
Clinical Pharmacology	Med 0706	x	x	x	x	x	
Microbiology & Immunology	Med 0707	x	x	x	x	x	
Medical Parasitology	Med 0708	x	x	x	x	x	
Human Rights	Med 0777	x	x	x	x	x	
Forensic medicine & Clinical Toxicology	Med 0710	x	x	x	x	x	
Public Health & Community medicine	Med 0709	x	x	x	x	x	x
Ophthalmology	Med 0711		x	x	x	x	
Oto-Rhino-Laryngeology	Med 0712	x	x	x	x	x	
General medicine	Med 0713	x	x	x	x	x	
Pediatrics	Med 0714	x	x	x	x	x	
obstetrics	Med 0715	x	x	x	x	x	
General surgery	Med 0716	x	x	x	x	x	

Annexe,"4"

مقارنة ما يقدمه البرنامج من نتائج تعليمية مستهدفة مع المعايير المرجعية (NARS)

Attributes of the Graduates of Medical Medicine/ Program Aims

Attributes of the Graduates of Medical Medicine	Program Aims			
	1.1	1.2	1.3	1.4
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.		√		

2.a. Knowledge& understanding

Program ILOs	NARS
2.a.1	2.1. Normal Human Body: a. Normal structure and function of the body (as an intact organism) and of each of its major systems.
2.a.1	b- Molecular, biochemical, and cellular mechanisms which are important in maintaining the body homeostasis.
2.a.2.	c. Main developmental changes in humans and the effect of growth, development and aging on the individual and his family
2.a.2. , 2.a.3.	d. Basics of normal and abnormal human behaviors.
2.a.3.	2.2. Altered structure and function of the body and its major systems that are seen in various diseases and integrate it in clinical conditions.
2.a.4.	2.3. Etiology, pathogenesis, clinical features, diagnoses and complications of common and lifethreatening illnesses affecting the body and each of its major organ systems, presenting throughout the age spectrum.
2.a.5., 2.a.6., 2.a.7., 2.a.12	2.4. Principles of management of common and life threatening illnesses including: a. Pharmacological and non pharmacological basics of therapy. b. Non invasive and invasive intervention. c. Basic pre- and post operative care. d. Pain relief and palliative care.
2.a.8., 2.a.9.	2.5. Population Health and Health Systems: a. The determinants of health, principles of disease prevention and early detection of common community health problems. b. Principle and organization of National Health Care System.

	c. Epidemiological principles of demography and biological variability. d. Principles of disease surveillance and screening. e. Communicable disease control and health promotion. f. Population-based approaches to health care services and their role in improving medical practice.
2.a.10	2.6. Basics of ethics, medico legal aspects of health problems, malpractice and common medical errors.
2.a.11	2.7. Basics of health and patient's safety and safety procedures during practical and clinical years.
2.a.12.	2.8. Principles of clinical audit.

2.b. Practical and Clinical Skills

Program ILOs	NARS
2.b.1., 2.b.2.,	3.1. Demonstrate basic sciences practical skills relevant to future practice.
2.b.3.,	3.2. Take and record a structured, patient centered history.
2.b.5.,	3.3. Perform full physical examination of patients with acute and chronic clinical conditions appropriate to the age, gender, acute and chronic clinical conditions while being culturally sensitive.
2.b.4,	3.4. Assess the mental state of the patient
2.b.3.,	3.5. Record patients ' data appropriately.
2.b.6.,	3.6. Formulate a management plan for common diseases and acute emergencies.
2.b.7.	3.7. Write safe prescriptions of different types of drugs based on patient's weight, age and health condition
2.b.8.	3.8. Provide first aid measures for injured and critically ill patients.

2.b.9, 2.b.10, 2.b.11, 2.b.12, 2.b.13, 2.b.14, 2.b.15, 2.b.16, 2.b.17, 2.b.18, 2.b.19, 2.b.20, 2.b.21, 2.b.22.	**Procedures and technical skills acquired under appropriate supervision during undergraduate and house officer training:** 3.9. Perform venipuncture and collect blood samples. 3.10. Insert a cannula into peripheral veins. 3.11. Give intramuscular, subcutaneous, intradermal and intravenous injections. 3.12. Perform suturing of superficial wounds. 3.13. Demonstrate competency in cardiopulmonary resuscitation and basic life-support. 3.14. Administer compulsory childhood vaccines. 3.15. Perform and interpret basic bedside laboratory tests. 3.16. Perform and interpret ECG. 3.17. Administer basic oxygen therapy. 3.18. Perform and interpret basic respiratory function tests. 3.19. Use a nebulizer for administration of inhalation therapy. 3.20. Insert a nasogastric tube. 3.21. Perform bladder catheterization. 3.22. Perform procedure of normal labor. 3.23. Adopt suitable measures for infection control.

2.c. Professional Attitude and Behavioral Skills

Program ILOs	NARS
2.c.1.	4.1. Adopt an empathic and holistic approach to the patients and their problems.
2.c.1.	4.2. Respect patients' rights and involve them and /or their caretakers in management decisions.
2.c.2.	4.3. Understand and respect the different cultural beliefs and values in the community they serve.
2.c.3.	4.4. Recognize the important role played by other health care professions in patients' management.
2.c.4.	4.5. Be aware of and understand the national code of ethics issued by the Egyptian Medical Syndicate
2.c.1.	4.6. Counsel patients and families suffering from different

	conditions.
2.c.5.	4.7. Recognize one's own limitations of knowledge and skills and refer patients to appropriate health facility at the appropriate stage.
2.c.6, 2.c.7, 2.c.8, 2.c.9, 2.c.10, 2.c.11.	**House Officers should be able, under appropriate supervision, to:** 4.8. Ensure confidentiality and privacy of patients' information. 4.9. Treat all patients equally, and avoid stigmatizing any category regardless of believes, culture, and behaviors. 4.10. Demonstrate respect and work cooperatively with other health care professions for effective patient management. 4.11. Be willing to share in all types of inter-professional activities including collaborative and shared learning 4.12. Ensure the cost effectiveness of health care management. 4.13. Notify/report about any physical or mental conditions related to himself, colleagues or any other person that might jeopardize patients safety.

2.d. Communication skills

Program ILOs	NARS
2.d.2.	5.1. Communicate clearly, sensitively and effectively with patients and their relatives, and colleagues from a variety of health and social care professions.
2.d.1., 2.d.3.	5.2. Communicate effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.
2.d.4.	5.3. Cope with situations where communication is difficult including breaking bad news.
2.d.5.	5.4. Show compassion to the patients and their relatives in situations of stress and grief.
2.d.6.	5.5. Honor and respect patients and their relatives, superiors, colleagues and any other member of the health profession.

2.e. Intellectual Skills:

Program ILOs	NARS
2.e.1.	6.1.Integrate basic biomedical science with clinical care
2.e.2., 2.e.5.,2.e.6.	6.2. Reason deductively in solving clinical problems: a. Recognize, define and prioritize problems. b. Interpret, analyze, and evaluate information objectively, recognizing its limitations.
2.e.5.	6.3. Use personal judgment for analytical and critical problem solving and seek out information.
2.e.3.,2.e.8.	6.4. Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.
2.e.4	6.5. Construct appropriate management strategies for patients with common diseases, both acute and chronic, including medical, psychiatric, and surgical conditions.
2.e.13	6.6. Design an initial course of management for stabilization of patients with serious illnesses.
2.e.12.	6.7. Classify factors that place individuals at risk for disease or injury, to determine strategies for appropriate response.
2.e.7.	6.8. Retrieve, analyze, and evaluate relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM).
2.e.9.	6.9. Recognize and cope with uncertainty that is unavoidable in the practice of medicine by accepting and reacting to uncertain situation through proper counseling ,consultation and referral
2.e.10.	6.10.a. Involvement into research and scientific methods through: a. Formulation of research questions that is pertinent to medicine.
2.e.11.	b. Recognition of the importance of precision in collecting, analyzing and interpreting medical data.

2.f. General and Transferable Skills:

Program ILOs	NARS
2.f. 1	7.1. Be prepared for the lifelong learning needs of the medical profession.
2.f. 2,	7.2. Use information and communication technology effectively in the field of medical practice.
2.f. 3.	7.3. Retrieve, manage, and manipulate information by all means, including electronic means.
2.f. 4.	7.4. Present information clearly in written, electronic and oral forms.
2.f. 2,	7.5. Communicate ideas and arguments effectively.
2.f. 5.	7.6. Work effectively within a team.
2.f. 6.	7.7. Analyze and use numerical data including the use of simple statistical methods).
2.f.7, 2.f.8, 2.f.9, 2.f.10, 2.f.11, 2.f.12, 2.f.13.	**House Officers should be able to:** 7.8. Use Evidence Based Medicine in management decisions. 7.9. Effectively manage time and resources and set priorities. 7.10. Work efficiently within the health care team and as an effective team leader. 7.11. Solve problems related to patients, work management, and among colleagues. 7.12. Cope with a changing work environment. 7.13. Apply safety and infection control measures during practice. 7.14. Evaluate their work and that of others using constructive feedback.