



**Benha University
Faculty of Medicine**

Program Specification

**Bachelor of Medicine and Surgery
(M.B.B.Ch.)**

(According to the credit hours system)

(2013-2014)

Contents

Item	Page
A. Basic Information	
B. Professional Information	
<ol style="list-style-type: none"> 1. Program aims 2. Intended learning outcomes (ILOs) 3. Academic standards 4. Program structure and contents 5. Program courses 6. Admission requirements 7. Regulations for progression and program completion 8. methods of students assessment 9. Program evaluation 10. learning strategies 	
<p style="text-align: center;">Annex 1: Courses Specifications:</p> <ul style="list-style-type: none"> • Human anatomy and Embryology courses • Medical Biochemistry courses • Histology & Cell Biology courses • Medical Physiology courses • Behavioral Science (Psychology) • English • Medical Microbiology & Immunology courses • Medical parasitology courses • Pathology courses • Clinical Pharmacology courses • Human Rights • Public health & Community medicine courses • Oto-rhinoLaryngology courses • Forensic medicine & Clinical toxicology courses • Ophthalmology courses • General medicine courses • Pediatrics courses • Obstetrics & Gynecology courses • General Surgery courses 	
Annex 2: National Academic Reference Standards (NARS)	
Annex 3: Program Courses vs ILOs matrix	
Annex 4: Program Aims & ILOs vs NARS	



Benha University
Faculty of Medicine



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: 30 Departments, according to the Faculty's bylaw:

- Human Anatomy & Embryology, Medical Physiology, Histology & Cell Biology, Medical Biochemistry, Pathology, Clinical Pharmacology, Medical Parasitology, Medical Microbiology & Immunology, Forensic medicine & Clinical Toxicology, Public Health & Community Medicine, Ophthalmology, Oto-Rhino-Laryngeology, Pediatrics, General medicine & its subspecialties (Cardiology, Gastroenterology & Hepatology, Rheumatology & Rehabilitation, Neurology & Psychiatry, Chest diseases, Clinical Pathology, Radio-diagnosis, Dermatology & Andrology, and Emergency medicine), Obstetrics & Gynecology and General surgery & its subspecialties (Cardiothoracic surgery, Neurosurgery, Urosurgery, Orthopedics and Anesthesia & ICU).

4- 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: Abdelrehim Shoulah

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, 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.** Life long 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 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. Illustrate 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. Recognize 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 undergraduate).
- 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. **Complies** with the requirements of 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 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. *Establish*** lifelong learning in order to be able to retrieve, 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 will 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 levels divided into 12 semester for 6 Academic years followed by one year clinical training as house officers.

5. b- Program structure:

٢٢٤ ساعة معتمدة (١٥٦ نظري، ٦٤ عملي و اكلينيكي + ٤ ساعات متطلبات كلية).

- Total teaching hours in the program: 224 credit hours= 4260 hours
- Theoretical hours in the program: 156 credit hours×15 = 2340 hours
- Practical & clinical hours in the program: 64 credit hours ×30 = 1920 hours
- Faculty requirements: 4 credit hours
 - Hours of Basic Sciences Courses: 2220 hours = 52.1 %
 - Hours of Social Sciences and Humanities Courses (Behavioral Science, human rights and English language): 90 hours = 2.1 %
 - Hours of Clinical Sciences Courses: 2040 hours = 47.9 %
 - Hours of field training Courses: 56 hours = 1.3 %
 - Computer: 30 hours

5.c- levels & courses of the program:

تنقسم الدراسة في كلية الطب إلى مرحلتين : مرحلة أكاديمية ومرحلة إكلينيكية تتكون كل منهما من ثلاث مستويات دراسية

Compulsory courses:

أولاً : المرحلة الأكاديمية: مرحلة العلوم الطبية والأساسية (ما قبل الإكلينيكية)

المستوى الأول

الفصل الدراسي الأول

Code	Course title	Credit hours			Teaching Hours		
		Lecture	Practical	Total	Lecture	Practical	Total
ANT 101	Anatomy I	2	1	3	30	30	60
ANT 102	Anatomy II	2	1	3	30	30	60
PSL 105	Physiology I	3	1	4	45	30	75
PSL 106	Physiology II	2	-	2	30	-	30
HIT 109	Histology I	2	1	3	30	30	60
BIC 111	Biochemistry I	3	1	4	45	30	75
Total		14	5	19	210	150	360

نظام الامتحان:

الدرجة العظمى	الامتحانات			المقرر الدراسي
	شفوية	عملية	تحريرية	
درجة ١٢٥	+	+	١,٥ ساعة	التشريح الادمى
درجة ١٢٥	+	+	١,٥ ساعة	الفسيولوجيا
درجة ٧٥	+	+	ساعة واحدة	الكيمياء الحيوية
درجة ٧٥	+	+	ساعة واحدة	علم الأنسجة
٤٠٠ درجة				المجموع

الفصل الدراسي الثاني Second Semester

Code	Course title	Credit hours			Teaching Hours		
		Lecture	Practical	Total	Lecture	Practical	Total
ANT 103	Anatomy III	2	1	3	30	30	60
ANT 104	Anatomy IV	2	1	3	30	30	60
PSL 107	Physiology III	3	1	4	45	30	75
PSL 108	Physiology IV	2	-	2	30	-	30
HIT 110	Histology II	2	1	3	30	30	60
BIC 112	Biochemistry II	3	1	4	45	30	75
ENG 114	English*	2	-	2	30	-	30
Total		16	5	21	240	150	390

* لا تضاف للمجموع التراكمي.

نظام الامتحان:

الدرجة العظمى	الامتحانات			المقرر الدراسي
	شفوية	عملية	تحريرية	
درجة ١٢٥	+	+	١,٥ ساعة	التشريح الادمى
درجة ١٢٥	+	+	١,٥ ساعة	الفسيولوجيا
درجة ٧٥	+	+	ساعة واحدة	الكيمياء الحيوية
درجة ٧٥	+	+	ساعة واحدة	علم الأنسجة
٥٠ درجة *	-	-	ساعة واحدة	اللغة الإنجليزية
٤٠٠ درجة				المجموع

المستوى الثاني Second level

الفصل الدراسي الأول First Semester

Code	Course title	Credit hours			Teaching Hours		
		Lecture	Practical	Total	Lecture	Practical	Total
ANT 201	Anatomy V	2	1	3	30	30	60
ANT 202	Anatomy VI	2	1	3	30	30	60
PSL 205	Physiology V	3	1	4	45	30	75
PSL 206	Physiology VI	2	-	2	30	-	30
HIT 209	Histology III	2	1	3	30	30	60
BIC 211	Biochemistry III	3	1	4	45	30	75
SCO 213	Social study I	1	-	1	15	-	15

Total	15	5	20	225	150	375
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نظام الامتحان:

الدرجة العظمى	الامتحانات			المقرر الدراسي
	شفوي	عملية	تحريري	
درجة ١٢٥	+	+	١,٥ ساعة	التشريح الادمي
درجة ١٢٥	+	+	١,٥ ساعة	الفسولوجيا
درجة ٧٥	+	+	ساعة واحدة	الكيمياء الحيوية
درجة ٧٥	+	+	ساعة واحدة	علم الأنسجة
درجة ٢٥	-	-	نصف ساعة	العلوم السلوكية
٤٢٥ درجة				المجموع

الفصل الدراسي الثاني Second Semester

Code	Course title	Credit hours			Teaching Hours		
		Lecture	Practical	Total	Lecture	Practical	Total
ANT 203	Anatomy VII	2	1	3	30	30	60
ANT 204	Anatomy VIII	2	1	3	30	30	60
PSL 207	Physiology VII	3	1	4	45	30	75
PSL 208	Physiology VIII	2	-	2	30	-	30
HIT 210	Histology IV	2	1	3	30	30	60
BIC 212	Biochemistry IV	3	1	4	45	30	75
SCO 214	Social study II	1	-	1	15	-	15
Total		15	5	20	225	150	375

نظام الامتحان:

الدرجة العظمى	الامتحانات			المقرر الدراسي
	شفوي	عملية	تحريري	
درجة ١٢٥	+	+	١,٥ ساعة	التشريح الادمي
درجة ١٢٥	+	+	١,٥ ساعة	الفسولوجيا
درجة ٧٥	+	+	ساعة واحدة	الكيمياء الحيوية
درجة ٧٥	+	+	ساعة واحدة	علم الأنسجة
درجة ٢٥	-	-	نصف ساعة	العلوم السلوكية
٤٢٥ درجة				المجموع

المستوى الثالث Third level

الفصل الدراسي الأول First Semester

Code	Course title	Credit hours			Teaching Hours		
		Lecture	Practical	Total	Lecture	Practical	Total
PAT 301	Pathology I	4	2	6	60	60	120
PCL 303	Pharmacology I	4	1	5	60	30	90
MIC 305	Microbiology I	3	1	4	45	30	75
PAS 307	Parasitology I	2	1	3	30	30	60
HR 309*	Human Rights	1	-	1	15	-	15
Total		14	5	19	210	150	360

نظام الامتحان:

الدرجة العظمى	الامتحانات			المقرر الدراسي
	شفويہ	عملية	تحريريہ	
درجة ١٥٠	+	+	ساعة ورقة أولي ساعة ورقة ثانية	الباثولوجي
درجة ١٥٠	+	+	ساعة ورقة أولي ساعة ورقة ثانية	الفارماكولوجي
درجة ١٠٠	+	+	١,٥ ساعة	الميكروبيولوجي
درجة ٧٥	+	+	ساعة واحدة	الباراسيتولوجي
درجة ٥٠ *	-	-	نصف ساعة	حقوق الإنسان *
٤٧٥ درجة				المجموع

* لا تضاف للمجموع التراكمي.

الفصل الدراسي الثاني Second Semester

Code	Course title	Credit hours			Teaching Hours		
		Lecture	Practical	Total	Lecture	Practical	Total
PAT 302	Pathology II	4	2	6	60	60	120
PCL 304	Pharmacology II	4	1	5	60	30	90
MIC 306	Microbiology II	3	1	4	45	30	75
PAS 308	Parasitology II	2	1	3	30	30	60
HR 310*	Human Rights	1	-	1	15	-	15
Total		14	5	19	210	150	360

نظام الامتحان:

الدرجة العظمى	الامتحانات			المقرر الدراسي
	شفويہ	عملية	تحريريہ	
درجة ١٥٠	+	+	ساعة ورقة أولي ساعة ورقة ثانية	الباثولوجي
درجة ١٥٠	+	+	ساعة ورقة أولي ساعة ورقة ثانية	الفارماكولوجي
درجة ١٠٠	+	+	١,٥ ساعة	الميكروبيولوجي
درجة ٧٥	+	+	ساعة واحدة	الباراسيتولوجي
درجة ٥٠ *	-	-	نصف ساعة	حقوق الإنسان *
٤٧٥ درجة				المجموع

* لا تضاف للمجموع التراكمي

ثانياً : المرحلة الإكلينيكية

المستوي الرابع
First Semester الفصل الدراسي الأول

Code	Course title	Credit hours			Teaching Hours		
		Lecture	Practical	Total	Lecture	Practical	Total
COM 401	Public health and Community medicine I	2	0.5	2.5	30	15	45
COM 402	Public health and Community medicine II	2	0.5	2.5	30	15	45
OPL 405	Ophthalmology I	3	1	4	45	30	75
FNS 407	Forensic medicine I	2	1	3	30	30	60
ENT 409	Ear, Nose Throat I	2	1	3	30	30	60
Total		11	4	15	165	120	285

نظام الامتحان:

الدرجة العظمى	الامتحانات			المقرر الدراسي
	شفوي	عملية	تحريريه	
درجة ١٥٠	+	+	ساعتين	الصحة العامة وطب المجتمع
درجة ١٢٥	+	+	١,٥ ساعة	طب وجراحة العيون
درجة ١٠٠	+	+	١,٥ ساعة	الطب الشرعي والسموم
درجة ١٠٠	+	+	١,٥ ساعة	الأنف والأذن والحنجرة
٤٧٥ درجة				المجموع

Second Semester الفصل الدراسي الثاني

Code	Course title	Credit hours			Teaching Hours		
		Lecture	Practical	Total	Lecture	Practical	Total
COM 401	Public health and Community medicine I	2	0.5	2.5	30	15	45
COM 402	Public health and Community medicine II	2	0.5	2.5	30	15	45
OPL 405	Ophthalmology I	3	1	4	45	30	75
FNS 407	Forensic medicine I	2	1	3	30	30	60
ENT 409	Ear, Nose Throat I	2	1	3	30	30	60
Total		11	4	15	165	120	285

نظام الامتحان:

الدرجة العظمى	الامتحانات			المقرر الدراسي
	شفوي	عملية	تحريري	
درجة ١٥٠	+	+	ساعتين	الصحة العامة وطب المجتمع
درجة ١٢٥	+	+	١,٥ ساعة	طب وجراحة العيون
درجة ١٠٠	+	+	١,٥ ساعة	الطب الشرعي والسموم
درجة ١٠٠	+	+	١,٥ ساعة	الأنف والأذن والحنجرة
٤٧٥ درجة				المجموع

FIFTH level المستوى الخامس
الفصل الدراسي الأول First Semester

Code	Course title	Credit hours			Teaching Hours		
		Lecture	Practical	Total	Lecture	Practical	Total
PED 501	Pediatrics I	3	3	6	45	90	135
MED 503	General medicine I	2	1	3	30	30	60
MED 504	General medicine II	2	1	3	30	30	60
MED 505	General medicine III	2	1	3	30	30	60
MED 506	General medicine IV	2	1	3	30	30	60
Total		11	7	18	165	210	375

نظام الامتحان:

الدرجة العظمى	الامتحانات			المقرر الدراسي
	شفوية	عملية	تحريرية	
درجة ٤٥٠	+	+	ورقتين مدة كل منهما ساعتين ورقة ثالثة مدتها ساعتين اختبار موضوعي لتقييم حالة مرضية	الباطنه العامة
درجة ٢٥٠	+	+	ورقة أولى مدتها ساعتين ورقة ثانية مدتها ١,٥ ساعة اختبار موضوعي لتقييم حالة مرضية	الأطفال
٧٠٠ درجة				المجموع

الفصل الدراسي الثاني Second Semester

Code	Course title	Credit hours			Teaching Hours		
		Lecture	Practical	Total	Lecture	Practical	Total
PED 502	Pediatrics II	3	3	6	45	90	135
MED 507	General medicine V	2	1	3	30	30	60
MED 508	Special medicine I	2	1	3	30	30	60
MED 509	Special medicine II	2	1	3	30	30	60
MED 510	Special medicine III	2	1	3	30	30	60
Total		11	7	18	165	210	375

نظام الامتحان:

الدرجة العظمى	الامتحانات			المقرر الدراسي
	شفوية	عملية	تحريرية	
٤٥٠ درجة	+	+	ورقتين مدة كل منهما ساعتين ورقة ثالثة مدتها ساعتين اختبار موضوعي لتقييم حالة مرضية	الباطنه العامة
٢٥٠ درجة	+	+	ورقة أولى مدتها ساعتين ورقة ثانية مدتها ١,٥ ساعة اختبار موضوعي لتقييم حالة مرضية	الأطفال
٧٠٠ درجة				المجموع

المستوي السادس Sixth

الفصل الدراسي الأول First Semester

Code	Course title	Credit hours			Teaching Hours		
		Lecture	Practical	Total	Lecture	Practical	Total
OBS 601	Obstetric & Gynecology I	4	2	6	60	60	120
SUR 603	General surgery I	2	1	3	30	30	60
SUR 604	General surgery II	2	1	3	30	30	60
SUR 608	Special surgery I	2	1	3	30	30	60
SUR 609	Special surgery II	2	1	3	30	30	60
Total		12	6	18	180	180	360

نظام الامتحان:

الدرجة العظمى	الامتحانات			المقرر الدراسي
	شفوية	عملية	تحريرية	
٤٥٠ درجة	+	+	<ul style="list-style-type: none"> ▪ ورقة أولى ساعتين شاملة التشريح الجراحي ▪ ورقة ثانية ساعتين شاملة التشريح الجراحي ▪ ورقة ثالثة ساعتين اختبار موضوعي لتقييم حالة مرضية 	الجراحة العامة
٢٥٠ درجة	+	+	<ul style="list-style-type: none"> ▪ ورقة أولى ساعتين ▪ ورقة ثانية ١,٥ ساعة اختبار موضوعي لتقييم حالة مرضية 	أمراض النساء والوليد
٧٠٠ درجة				المجموع

الفصل الدراسي الثاني Second Semester

Code	Course title	Credit hours			Teaching Hours		
		Lecture	Practical	Total	Lecture	Practical	Total
OBS 602	Obstetric & Gynecology II	4	2	6	60	60	120
SUR 605	General surgery III	2	1	3	30	30	60
SUR 606	General surgery IV	2	1	3	30	30	60
SUR 607	General surgery V	2	1	3	30	30	60
SUR 610	Special surgery III	2	1	3	30	30	60
Total		12	6	18	180	180	360

نظام الامتحان:

الدرجة العظمى	الامتحانات			المقرر الدراسي
	شفوية	عملية	تحريرية	
٤٥٠ درجة	+	+	<ul style="list-style-type: none"> ▪ ورقة أولى ساعتين شاملة التشريح الجراحي ▪ ورقة ثانية ساعتين شاملة التشريح الجراحي ▪ ورقة ثالثة ساعتين اختبار موضوعي لتقييم حالة مرضية 	الجراحة العامة
٢٥٠ درجة	+	+	<ul style="list-style-type: none"> ▪ ورقة أولى ساعتين ▪ ورقة ثانية ١,٥ ساعة اختبار موضوعي لتقييم حالة مرضية 	أمراض النساء والوليد
٧٠٠ درجة				المجموع

- تشمل أمراض الباطنة التخصصات التالية:- الأمراض الصدرية – الأمراض العصبية – الأمراض النفسية – الأمراض المتوطنة – الأمراض الجلدية والتناسلية – الطب الطبيعي والتأهيل والروماتيزم – أمراض القلب والأوعية الدموية – الباثولوجي الاكلينيكي – طب الطوارئ – الأشعة التشخيصية

- تشمل الجراحة التخصصات التالية:- جراحة العظام – جراحة المسالك البولية - جراحة المخ والأعصاب – جراحة التجميل – جراحة القلب والصدر – جراحة الأوعية الدموية – التخدير والعناية المركزة – علاج الأورام والطب النووي.

Elective courses:

يحق للطالب اختيار أحد المقررات الدراسية الحرة مثل مهارة فنون الأتصال أو مقرر معمل المهارات الإكلينيكية أو إدارة المستشفيات علي أن يقوم بتسجيل المادة التي يرغب فيها في بداية الفصل الدراسي.

6- Courses contents: محتويات المقررات

راجع استمارات توصيف المقررات

Code	Title	Courses
Ant 101	Anatomy I	General anatomy & general embryology
Ant 102	Anatomy II	Upper limb
Ant 103	Anatomy III	Lower limb
Ant 104	Anatomy IV	Thorax
Ant 201	Anatomy V	Abdomen, pelvic & perineum
Ant 202	Anatomy VI	Systemic embryology
Ant 203	Anatomy VII	Head & neck
Ant 204	Anatomy VIII	Neuroanatomy
PSL 105	Physiology I	Introduction, blood, immunity
PLS106	Physiology II	Autonomic nervous system, Nerve & muscle
PLS 107	Physiology III	Cardiovascular system
PLS 108	Physiology IV	Respiratory system
PLS 205	Physiology V	Endocrine, reproduction
PLS 206	Physiology VI	Digestive system, Kidney
PLS 207	Physiology VII	Central nervous system
PLS 208	Physiology VIII	Special sense
HIT 109	Histology I	General Histology, microscopy, cytology, epithelial & connective tissue
HIT 110	Histology II	Special Histology, muscle, nerve, blood, lymph, immune system
HIT 209	Histology III	Systemic histology, respiratory system, digestive system, endocrine glands.,
HIT 210	Histology IV	Systemic histology, urinary, male & female genital systems, neuro-endocrine systems, eye & ear, CNS.
BIC 111	Biochemistry I	Chemistry of biomolecules
BIC 112	Biochemistry II	Molecular biology
BIC 211	Biochemistry III	Metabolism

BIC 212	Biochemistry IV	Special topics
CSL113	ICDL	Computer science
ENG 114	English	English language and terminology
SOC213	Social study I	General
SOC 214	Social study II	Special
PAT 301	Pathology I	General Pathology
PAT 302	Pathology II	Systemic Pathology
PCL 303	Pharmacology I	General Pharmacology: Autonomic nervous system, Ocular pharmacology, Skeletal muscle relaxants, Autacoids respiratory, renal pharmacology, cardio-vascular pharmacology, GIT, Blood & Blood forming organs.
PCL 304	Pharmacology II	Psycho-neuro pharmacology, Hormones & their antagonists Chemotherapy & local antiseptics, Drug abuse, Drug interaction Chelating agents, Vitamins & food supplements immuno-pharmacology, pharmaco-economics, Pharmacogenetics, Prescription writing
MIC 305	Microbiology	General microbiology & immunology
MIC 306	Microbiology II	Systemic bacteriology, virology, mycology & infection control
PAS 307	Parasitology	Helminthology
PAS 308	Parasitology II	Protozoa & Arthropoda
COM401	Public health and Community medicine Med I	General epidemiology
COM402	Public health and Community medicine Med II	Communicable and non communicable disease, population & demography
COM403	Public health and Community medicine Med III	Public health administration, health services, nutrition, environmental sanitation
COM404	Public health and Community medicine Med IV	Research methodology, vital statistics
OPIL 405	Ophthalmology I	Anatomy, Physiology, disease of anterior chamber
OPIL 406	Ophthalmology II	Disease of posterior chamber, errors of refraction, optical nerve & ocular tumors
FNS 407	Forensic med I	, forensic medicine, Ethical principles

FNS 408	Forensic med II	Clinical toxicology
ENT 409	Ear, nose, throat I	Otology, nose, paranasal sinuses
ENT 410	Ear, nose, throat II	Larynx, pharynx, oesophagus, trachea
PED 501	Pediatrics I	Theoretical topic
PED 502	Pediatrics II	Clinical topics & cases
MED 503	General Medicine I	General
MED 504	General Medicine II	Infection disease
MED 505	General Medicine III	Cardiology & Chest
MED 506	General Medicine IV	Gastroenterology
MED 507	General Medicine V	Neurology
MED 508	Special Medicine I	Hematology & Oncology
MED 509	Special Medicine II	Endocrinology & Nephrology
MED 510	Special Medicine III	Immunology, Rheumatology & dermatology
OBS 601	Obs. &Gynecology I	Anatomy, physiology, infection, normal labour
OBS 602	Obs. &Gynecology II	Function , diseases, tumors, abnormal labour
Sur 603	General surgery I	General
Sur 604	General surgery II	Urology & Breast
Sur 605	General surgery III	GIT (1)
Sur 606	General surgery IV	GIT (2)
Sur 607	General surgery V	Head & neck
Sur 608	Special surgery I	Traumatology
Sur 609	Special surgery II	Orthopedic
Sur 610	Special surgery III	Operative

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:

- تنقسم الدراسة في كلية الطب إلى مرحلتين : مرحلة أكاديمية ومرحلة إكلينيكية تتكون كل منهما من ثلاث مستويات دراسية . ولكل مستوي فصلين دراسيين مدة كل منهما ١٧ أسبوعاً يخصص الأسبوعين الأخيرين منهم لأمتحانات نهاية الفصل ، ويجوز تخصيص فصل دراسي ثالث (صيفي) عند اللزوم. وكل ساعة دراسية معتمدة تعادل ساعة تدريسية نظري اسبوعيا او ساعتين تدريسي عملي لمدة ١٥ اسبوع عدا الفرقة الخامسة والسادسة مدة الدراسة في كل منهما ١٨ اسبوع. ويشترط قضاء سنة تدريب إجبارية عقب الحصول على درجة البكالوريوس وذلك بإحدى المستشفيات الجامعية أو المستشفيات التابعة لوزارة الصحة تحت إشراف الكلية وذلك قبل حصوله على ترخيص مزاوله المهنة.
- على الطالب متابعة المحاضرات والدروس العملية ولمجلس الكلية بناء على طلب مجالس الأقسام المتخصصة أن يحرم الطالب من التقدم للامتحان كله أو بعضه إذا رأى إن مواظبته على حضور الدروس والتمرينات العملية غير مرضيه (إذا زادت نسبة غياب الطالب عن ٢٥ %) وفي هذه الحالة يعتبر الطالب راسباً (F) في المقررات التي حرم من التقدم للامتحان فيها إلا إذا قدم عذرا يقبله مجلس الكلية فيعتبر غائبا بعذر مقبول (W) في المقرر الذي حرم منه فقط .
- يحق للطالب الانسحاب من المقرر في بداية الفصل الدراسي (أول اسبوعين).
- **نظم الأمتحان وتوزيع نسب الدرجات من الدرجة الكلية للمقرر**

الفصل الدراسي الأول		
أمتحان تحريري للفصل الدراسي الأول	٢٥%	يؤدي الطالب الأمتحان في شهريناير عدا المستوي الخامس والسادس يتم الأمتحان بعد أنتهاء عدد الساعات المتعمدة
الأمتحانات الدورية للفصل الدراسي الأول	١٠%	أنظر أسفل الجدول*
شفوي وعملي ومعمل المهارات للفصل الدراسي الأول	١٠%	
المواظبة والسلوك والكراسة للفصل الدراسي الأول	٥%	
مجموع نسب درجات الفصل الدراسي الأول من الدرجة الكلية للمقرر = ٥٠%		
الفصل الدراسي الثاني		
أمتحان تحريري للفصل الدراسي الثاني	٢٥%	يؤدي الطالب الأمتحان في شهر يونيو عدا المستوي الخامس والسادس يتم الأمتحان بعد أنتهاء عدد الساعات المتعمدة
الأمتحانات الدورية للفصل الدراسي الثاني	١٠%	أنظر أسفل الجدول*
شفوي وعملي ومعمل المهارات للفصل الدراسي الثاني	١٠%	
المواظبة والسلوك والكراسة للفصل الدراسي الثاني	٥%	
مجموع نسب درجات الفصل الدراسي الثاني من الدرجة الكلية للمقرر = ٥٠%		

* الامتحانات الدورية تكون متتالية علي مدار الفصل ويكون المسئول عنها جميع الأقسام العلمية المشاركة في التدريس يحدد ميعادها مجلس القسم وبموافقة مجلس الكلية فيما عدا اللغة الإنجليزية والعلوم السلوكية والإنسانية وحقوق الإنسان فليس لها امتحانات دورية.

■ درجة النجاح في اللغة الإنجليزية وحقوق الإنسان ٥٠% ولا تضم الدرجات التي يحصل عليها الطالب فيهما إلى مجموع الدرجات سواء للفرقة أو إلى المجموع التراكمي.

■ انتقال الطالب للمستوى الأعلى:

١. يسمح لطالب المرحلة الأكاديمية الانتقال للمستوي الأعلى في حالة استكمال له العدد المحدد من الساعات التدريسية للمقررات المطلوبة ونجاحه في ٥٠% علي الأقل من المقررات الأساسية (لا تشمل اللغة الإنجليزية والعلوم السلوكية والإنسانية وحقوق الإنسان)
٢. أما طالب الفرقة الثالثة فلا ينتقل إلى المرحلة الإكلينيكية إلا إذا كان ناجحاً في كل مقررات المرحلة قبل الإكلينيكية (المقررات الأساسية وغير الأساسية)
٣. ولا ينقل الطالب داخل المرحلة الإكلينيكية إلى الفرقة الدراسية الأعلى إلا إذا كان ناجحاً في جميع المواد الدراسية بالفرقة الدراسية المقيد بها.

■ أعادة دراسة المقررات الدراسية:

١. الطلاب الراسبون والمتخلفون في أي مقرر من الفصلين الدراسين يحق لهم التقدم لامتحانات تالية فيما رسبوا او تخلفوا عنه.
٢. الطالب الراسب (الذي حصل علي أقل من D) تكون الأعادة إجبارية في المقررات الإجبارية وتكون اختياري في المقررات الاختيارية.
٣. الحد الأقصى للتقدير للطالب الراسب هي C وإذا حصل الطالب علي درجة أقل من C تحسب له الدرجة الفعلية التي حصل عليها ويحسب للطالب عدد الساعات المعتمدة للمقرر المعاد مرة واحدة فقط في معدله التراكمي.
٤. يحق للطالب الحاصل علي تقدير أقل من C اعادة المقرر وذلك بغرض تحسين معدله التراكمي وذلك وفق للشروط التالية:
 - أ- ثلاثة مرات فقط طوال مرحلة البكالوريوس.
 - ب- ألا تزيد الساعات المعتمدة التي يعاد فيها في المقررات عن ١٠% من إجمالي الساعات المعتمدة للمقررات كلها (٢٢٤ ساعة معتمدة).
 - ت- يحتسب التقدير الجديد بدلا من القديم سواء أكثر أو أقل من السابق.

- الإنذار الأكاديمي: يتم وضع الطلاب غير القادرين علي الحصول علي الحد الأدنى المطلوب في المعدل الأكاديمي (GPA) علي قائمة الإنذار الأكاديمي (Probation).
- التعويض للنجاح يكون وفقا لما يقره مجلس الكلية ومجلس الجامعة وتكون الدرجات المضافة للوصول لدرجة النهاية الصغرى للمادة إضافة حقيقية وليست اعتبارية.
- أن يكون كل قسم فرعى (خاص) من فروع الباطنة العامة او الجراحة العامة مسئول عن تقييم الطلاب خلال فترة الدراسة به في ضوء الزمن المخصص بالجدول الدراسي ودرجة أعمال السنة المخصصة ويتم تسليم كشوف الدرجات النهائية مجمعة للقسم الأم (باطنة عامة – جراحة عامة).
- أولاً: تخصص نسبة من الدرجات للأفرع الخاصة لقسم الباطنة العامة كالتالي:-

١٠ درجات لكل قسم عبارة عن أمتحان أعمال سنة لتقييم الطالب بعد كل دورة للأفرع التالية (متوتنة - صدرية - قلب - نفسية وعصبيه - روماتيزم وتأهيل) (أجمالي ٥٠ درجة) خمسون درجة

ثانياً: تخصص نسبة من الدرجات للأفرع الخاصة لقسم الجراحة العامة كالتالي: ١٠ درجات لكل قسم عبارة عن أمتحان أعمال سنة لتقييم الطالب بعد كل دورة للأفرع التالية (مسالك بولية - عظام - جراحة قلب وصدر - جراحة مخ وأعصاب - تخدير)

ثالثاً: ١. تخصص ٥٠ درجة لامتحانات الباثولوجيا الإكلينيكية من درجات الباطنة العامة.

٢. تخصص ٥٠ درجة لامتحانات الجلدية من درجات الباطنة العامة.

٣. تجرى هذه الامتحانات بمعرفة القسم المختص في صورة (تحريري أو شفوي أو عملي)

طبقاً لما يقره مجلس القسم وموافقة مجلس الكلية على ذلك على ان تعقد هذه الامتحانات

مع امتحانات الفرقة في نهاية الفصل الدراسي الثاني .

- إذا تغيب الطالب عن اي فرع من فروع امتحان المادة (تحريري أو شفوي أو عملي) يعتبر الطالب راسب ولا ترصد له الدرجات الحاصل عليها في أفرع المادة التي تم امتحانه فيها.
- يعتبر الطالب راسباً إذا حصل على أقل من ٣٠% في الامتحان التحريري لأي مادة من المواد.
- يحتسب التقدير العام للطلاب في درجة البكالوريوس على أساس المجموع الكلي للدرجات التي حصلوا عليها في كل السنوات الدراسية كما يتم ترتيبهم وفقاً لهذا المجموع عدا اللغة الإنجليزية وحقوق الإنسان.
- للحصول على شهادة البكالوريوس يشترط إتمام جميع متطلبات الخطة الدراسية ونجاح الطالب في جميع المواد بمعدل تراكمي (GPA) لا يقل عن درجة واحدة وقضاء الحد الأدنى من المدة المطلوبة للحصول على المؤهل والحصول على شهادة قيادة الحاسب الآلي الدولية (ICDL).
- يمنح الطالب مرتبة الشرف إذا كان تقديره النهائي ممتاز أو جيد جداً على الأقل تقديره العام في أي فرقة من فرق الدراسة عن جيد جداً ويشترط لحصول الطالب على مرتبة الشرف إلا يكون قد رسب في أي امتحان تقدم له في أي فرقة.
- مرتبة الشرف الأولى: تمنح للطلاب الحاصلين على معدل تراكمي (GPA) ٣,٦ أو أكثر.
- مرتبة الشرف الثانية: تمنح للطلاب الحاصلين على معدل تراكمي (GPA) ٣ وأقل من ٣,٦.

9- Methods of Students Assessment:

Method	Measured (ILOs)
Written examination:	To assess: <ul style="list-style-type: none"> ▪ knowledge & understanding: (2.a.1 to 2.a. 13) ▪ intellectual skills: (2.e.1.to 2.e.13)
Oral examination:	To assess: <ul style="list-style-type: none"> ▪ 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: <ul style="list-style-type: none"> ▪ 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.)

	<ul style="list-style-type: none"> ▪ Communication skills (2.d.1 to 2.d.6) ▪ general & transferable skills (2.f. to 2.f.6)
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التقدير وأسلوب التقييم

يقدر نجاح الطلاب ورسوبهم فى المواد الدراسية والتقدير العام للفرقة والتقدير العام لسنوات الدراسة بأحد التقديرات الآتية:-

عدد النقاط	النسبة المئوية للدرجة	الدرجة	
Weight	Mark %	Grade	التقدير
٤	٩٠% أو أكثر	A	ممتاز
٣,٧	٨٥% إلى أقل من ٩٠%	A-	
٣,٣	٨٠% إلى أقل من ٨٥%	B+	جيد جدا
٣,٠٠	٧٨% إلى أقل من ٨٠%	B	
٢,٧	٧٥% إلى أقل من ٧٨%	B-	جيد
٢,٣	٧٢% إلى أقل من ٧٥%	C+	
٢,٠٠	٦٩% إلى أقل من ٧٢%	C	مقبول
١,٧	٦٥% إلى أقل من ٦٩%	C-	
١,٣	٦٢,٥% إلى أقل من ٦٥%	D+	راسب
١,٠٠	٦٠% إلى أقل من ٦٢,٥%	D	
٠,٠٠	لأقل من ٦٠%	F	لم يتقدم للاختبار
		W	

تحديد مستوي ومسمى الفرقة للطالب

عدد الساعات المعتمدة	مسمى الطالب	مستوي الفرقة الدراسية
أكثر من ٣٢	Freshman	مستوي الفرقة الدراسية الأولى
أكثر من ٣٢ إلى ٦٤	Sophomore	مستوي الفرقة الدراسية الثانية
أكثر من ٦٤ إلى ٩٦	Junior	مستوي الفرقة الدراسية الثالثة
أكثر من ٩٦ إلى ١٣٨	Senior 1 st year	مستوي الفرقة الدراسية الرابعة
أكثر من ١٣٨ إلى ١٧٠	Senior 2 nd year	مستوي الفرقة الدراسية الخامسة
أكثر من ١٧٠ إلى ٢٢٤	Senior 3 rd year	مستوي الفرقة الدراسية السادسة

حساب معدلات الطالب (GPA) Grade point Average

- حساب مجموع نقاط المقرر الواحد = المكافئ الرقمي لتقدير المادة (عدد النقاط) X عدد الساعات المعتمدة للمادة
- حساب متوسط المعدل الفصلى = مجموع (حاصل ضرب المكافئ الرقمي لتقدير كل مادة X عدد الساعات المعتمدة للمادة)

- إجمالي الساعات المعتمدة في الفصل الدراسي
- حساب متوسط المستوى الدراسي (GPA) = مجموع (حاصل ضرب المكافئ الرقمي لتقدير كل مادة خلال الفصلين X عدد الساعات المعتمدة للمادة في الفصلين)
 - إجمالي الساعات المعتمدة في الفصلين
 - حساب متوسط المعدل التراكمي (Final GPA) = مجموع النقاط التي حصل عليها الطالب في المقررات خلال فترة الدراسة / مجموع الساعات المعتمدة لهذه المقررات خلال فترة الدراسة

10- Evaluation of Program:

Evaluator	Tool	Sample
1. Internal evaluator (s)	Reports	Reports 1-2
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:** Mohammed Elshafey **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 نواتج التعلم المستهدفة للبرنامج مع المعايير الأكاديمية القومية المرجعية (program- NARS matrix)
- ملحق 4 : مصفوفة المقوررات مع البرنامج Program-Courses ILOs Matrix

Annex,"1"

Program courses specifications



Benha University
Faculty of Medicine.
Department of Anatomy & Embryology

Course Specifications

Course title: Anatomy I
Code: ANT 101
Academic Year (2013 – 2014)

A) Basic Information:

1. **Course title:** Anatomy I, **code:** ANT 101
2. **Speciality:** M.B. & B.Ch. program
3. **Department offering the course:** Human Anatomy and Embryology
4. **Academic year:** first semester of first year
5. **Date of specification approval:** Department council date: 15 / 9/2013
6. **Internal Evaluator:** Prof. Dr. ESSAM MOHAMED EID
7. **Allocated marks:** 62.5 marks.
8. **Course duration:** 15 weeks of teaching.
9. **Teaching hours:**

1- Theoretical	2 credit hrs = 30 hrs
2- Practical	1 credit hrs = 30 hrs

B) Professional Information:

1- Overall Aim of the Course: this course aims to:

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.
2. provide appropriate ethical and professional education necessary for dealing with cadavers.
3. 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. **Explain** the basic principles of structure of different tissues , organs and systems of the human body.
- 2.a.3. **Describe** the surface landmarks of the underlying bones ,muscles ,tendons and internal structures(nerves, vessels & viscera).
- 2.a.4. **Summarize** the different stages of the human development and growth
- 2.a.5. **State** major clinical applications of anatomical facts.
- 2.a.6. **Mention** the 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, students 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. **Identify** the different surface markings and determine the position or course of the internal structures.
- 2.b.4. **Identify** the different internal structures in cadavers and specimen's faculty of Medicine, Benha University.
- 2.b.5. **Demonstrate** the different surface markings and determine the position or course of the internal structures.

2.c. Professional Attitude and Behavioral Skills:

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

- 2.c.1. **Demonstrate** respect for dealing with cadavers, and dealing with surrounding colleagues .
- 2.c.2. **Respect** dealing with the staff and involve them in any problems facing the students whether social or educational problems to apply the fact of one family .

- 2.c.3. *Reflect honesty and integrity in all interactions with teachers, colleagues, and others with whom we must interact in their professional lives.*
- 2.c.4. *Value the ethics and respect to all individuals inside and outside the dissecting room and pay a good deal of respect to the cadavers.*
- 2.c.5. *Demonstrate a professional image concerning behavior, dress and speech*

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 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 (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 **Relate** 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. **Establish** 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)	Small group discussion (hrs)	Practical (hrs)	Total (hrs)	% of Total
General Anatomy					
1-Definitions , terms of positions & planes, movements	2	1	1	4	6.7%
2-Bones: names , structure, functions classifications, general features ,blood supply Cartilage : features &types	4	4	4	12	20%
3 -Joints :definition , classifications , structure of synovial joints -Muscles : types , characters of skeletal muscles -skin : features - fascia :form & features	5	6	5	16	26%
4-Nervous system: parts of CNS, cranial & spinal nerves, autonomic nervous system	2	2	2	6	10%
5-Blood vessels : characters of arteries and veins, types of anastomoses lymphatic system :characters of lymph vessel, lymph nodes, lymph	2	2	3	7	11.6%
Total	15	15	15	45	75 %

General Embryology					
1-male & female reproductive system,	2	-	-	2	3.3%

oogenesis, ovulation					
2-spermatogenesis, structure of mature sperm, fertilization	2	-	-	2	3.3%
3-cleavage, implantation & decidua, bilaminar disc, trilaminar disc	3	-	-	3	5%
4-Folding of embryo	2	-	-	2	3.3%
5-Derivatives of ectoderm & endoderm & mesoderm	1	-	-	1	1.6%
6-Fetal membranes: placenta, umbilical cord, amnion, yolk sac - Twins: types ,characters	4	-	-	4	6.7%
7-Causes of congenital malformation	1	-	-	1	1.6%
Total	15	-	-	15	25%
TOTAL	30	15	15	60	100%

4- Teaching and learning methods:

METHODS USED:

- Modified Lectures.
- Practical classes
- Small group discussions
- 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.5 2.d.1-----2.d.4 2.f.1-----2.f.7
Practical classes	practical Jars, specimens	2.b.1-----2.b.5
Small group discussions	Museum specimens, demonstration (x ray films and data show), models	2.b.1-----2.b.5 2.c.1-----2.c.5 2.d.1-----2.d.4 2.f.1-----2.f.7 2.e.1-----2.e.3
Self learning	Students activity e.g. ; - Researches - Self-presentation	2.b.1-----2.b.5 2.c.1-----2.c.5 2.d.1-----2.d.4 2.f.1-----2.f.7

	- Student logbook	2.e.1-----2.e.3
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TEACHING PLAN:

Lectures: 30 lectures
Small group discussion: 15 tutorials
Practical classes: 15 practical classes

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	<u>2</u> times/week/15weeks (2 hours /week)	30 hours	50%
Practical classes	<u>2</u> times/week/ 15week (1/2 hours/week)	15 hours	25%
Tutorials	<u>2</u> times/week/ 15 week (1/2hours/week)	15 hours	25%
Total	4 hours /week/15 week	60 hours	100%

5- Students Assessment methods:**5-A) ATTENDANCE CRITERIA:**

1. Lectures(at least 50% attendance).
2. Practical books(at least 75% attendance)
3. Log book(2013)

5-B) Assessment TOOLS:

Tool	Evidence	Purpose (ILOs)
Written examination <ul style="list-style-type: none"> • Short essay • Case study • Complete • Cross matching • MCQS 	Attached module of Examination	2.a.1----2.a.6 2.c.1----2.c.5 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.5

		2.d.1----2.d.4 2.e.1----2.e.3 2.f.1----2.f.7
Practical examination	Practical Reports	2.b.1----2.b.5

5-C) Weighting System:

Examination	Marks allocated	% of Total Marks
<i>1-post completion test</i> (P.C.T.)in general anatomy & general embryology	(10) 7 for general anatomy + 3 for general embryology	8%
2- Assignments & other activities	2.5	2.0%
3- Final exam:		
a- Written	32.5	26%
b- Practical	12.5	10%
c- Oral	5	4%
Total	62.5	50%

FORMATIVE ASSESSMENT:

- Student knows his marks after the Formative exams.

5-D) Examination description:

Examination	Description
1- p.c.t in ANT 101	Short questions, case study , complete, cross matching ,MCQS
3- Final exam:	
a- Written	<ul style="list-style-type: none"> • select (MCQs), Short essay , cases, complete, cross matching
b- Practical	<ul style="list-style-type: none"> • spot identification
c- Oral	<ul style="list-style-type: none"> • Two sessions
4- Assignments & other activities	Assignments, projects, practical books

6- List of references:6.1- Basic materials:

Department books:

1.-*General Anatomy book (2013)*: written by Prof. Dr Abd Wannas El Awadan

2.-*General Embryology book (2013)*: written by Prof. Dr Abd Wannas ElAwadan and Prof. Saadia Ahmed Shalaby

3.-*Practical books (2013)*:(log book + book of museum)
Anatomy Department, Benha Faculty of Medicine

6.2- Essential books (text book):

Gray's Anatomy for Student (2012): a standard text book by **Richard L.Dark,A.Wayne Vogel and Adam W.M.Michel** ,2nd Edition

6.3- Recommended books:

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

Sadler T.W,(2008) : Langman's Medical Embryology, 11th ed., Lippincott Williams & Wilkins.

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 & archive

Course coordinator: Prof. Dr./ essam mohammed eid

Head of Department: Prof. Dr./ Saadia Ahmed Shalaby

Date: 9/ 2013



Benha University
Faculty of Medicine
Department of Anatomy & Embryology

Course Specifications

Course title: Anatomy II

Code: ANT 102

Academic Year (2014 – 2015)

- **Department offering the course:** Human Anatomy and Embryology
- **Academic year of M.B. & B.Ch. program:** first semester of first year
- **Date of specification approval:**
 - **Department council** **date:** 15 /9/2013
 - **Internal Evaluator:** Prof. Dr. / ESSAM MOHAMED EID

• **A) Basic Information:**

- **Allocated marks:** 62.5marks.
- **Course duration:** 15 weeks of teaching.
- **Teaching hours:**

1- Theoretical	30 hrs
2- Practical	30 hrs

B) Professional Information:

1- Overall Aim of the Course:

- 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.
- To provide appropriate ethical and professional education necessary for dealing with cadavers.
- 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** the anatomical regions of the upper limb.
- 2.a.2. **Describe** the basic structures of upper limb (bones ,muscles ,nerves ,vessels and joints).
- 2.a.3. **List** the surface landmarks of the underlying bones ,muscles ,tendons ,nerves and vessels of upper limb .
- 2.a.4. **Outline** the effects of injuries of nerves and vessels of upper limb .
- 2.a.5. **Mention** the collateral circulations and vascular anastomosis in upper limb.

2b. Practical and Clinical Skills

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

- 2.b.1. **Identify** the different internal structures of upper limb in human cadavers .
- 2.b.2. **Identify** the bones and joints of upper limb by X ray.
- 2.b.3. **Apply** the anatomical facts of upper limb while examining the living subject .
- 2.b.4. **Demonstrate** the surface markings of different nerves and vessels of upper limb
- 2.b.5. **Identify** the deformities of upper limb in photographs .

2.c. Professional Attitude and Behavioral Skills:

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

- 2.c.1. **Demonstrate** respect for dealing with cadavers, and dealing with surrounding colleagues .
- 2.c.2. **Respect** dealing with the staff and involve them in any problems facing the students whether social or educational problems to apply the fact of one family .
- 2.c.3. **Reflect honesty and integrity in all interactions with teachers, colleagues, and others with whom we must interact in their professional lives.**

2.c.4. **Value** the ethics and respect to all individuals inside and outside the dissecting room and pay a good deal of respect to the cadavers.

2.c.5. **Demonstrate** a professional image concerning behavior, dress and speech

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 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 (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 deformities in upper limb .

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

2.e.3 **Distinguish** between the distributions of each nerve of upper limb .

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** 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	Small group discussion	Practical	Total	% of
	(hrs)	(hrs)	(hrs)	(hrs)	Total

Upper Limb					
1-Pectoral region and breast , Axilla, Back ,Shoulder region	8	3	4	15	25%
2-Superficial veins of U.L. ,cutaneous nerves , Compartments of arm, Anastomoses around elbow, Cubital fossa & compartments of forearm	10	6	5	21	35%
3- Dorsum of hand , palm of hand	5	2	2	9	15%
4-Joints of U.L. : shoulder joint, joints of shoulder girdle elbow joint, radio-ulnar joint ,wrist joint, joints of fingers	4	2	2	9	15%
5-nerve injuries, collateral circulation in upper limb	3	2	2	6	10%
Total	30	15	15	60	100%

4- Teaching and learning methods:

METHODS USED:

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

<i>Method</i>	<i>Evidence</i>	<i>ILOs</i>
Modified Lectures	<i>CDs of Lectures including (video films, brain storming, problem solving, etc.....)</i>	2.a.1-----2.a.5 2.c.1-----2.c.5 2.d.1-----2.d.4 2.f.1-----2.f.7
Practical classes	practical Jars, specimens	2.b.1-----2.b.5
Small group discussions	Museum specimens, demonstration (x ray films and data show), models	2.b.1-----2.b.5 2.c.1-----2.c.5 2.d.1-----2.d.4 2.f.1-----2.f.7 2.e.1-----2.e.3
Self learning	Students activity e.g.; - Researches - Self-presentation - Student logbook	2.b.1-----2.b.5 2.c.1-----2.c.5 2.d.1-----2.d.4 2.f.1-----2.f.7 2.e.1-----2.e.3

TEACHING PLAN:**Lectures: 30 lectures****Small group discussions: 15 group****Practical classes: 15 practical classes****Time plan:**

Item	Time schedule	Teaching hours	Total hours
Lectures	<u>2</u> times/week/15 weeks (1 hours each) (2 hours /week)	30 hours	50%
Practical classes	<u>2</u> times/week/15week (1/2 hours/week)	15hours	25%
Small group discussion	<u>2</u> times/week/ 15week (1/2hours/week)	15 hours	25%
Total		60 hours	

5- Students Assessment methods:**5-A) ATTENDANCE CRITERIA:**

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

5-B) Assessment TOOLS:

Tool	Evidence	Purpose (ILOs)
Written examination <ul style="list-style-type: none"> • Short essay • Case study • Complete • Cross matching • MCQS 	Attached module of examination	2.a.1----2.a.5 2.c.1----2.c.5 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.5 2.c.1----2.c.5 2.d.1----2.d.4 2.e.1----2.e.3 2.f.1----2.f.7
Practical examination	Practical Reports	2.b.1----2.b.5

5-C) Weighting System:

Examination	Marks allocated	% of Total Marks
1- P.C.T in upper limb)	10	8%
2- Assignments & other activities	2.5	2 %
3- Final exam:		
a- Written	32.5	26%
b- Practical	12.5	10%
c- Oral	5	4%
Total	62.5	50%

FORMATIVE ASSESSMENT:

- Student knows his marks after the Formative exams.

5-D) Examination description:

Examination	Description
3- P.C.T in ANT 102	-Short essay , case study ,complete , cross matching ,MCQS, diagrams
3- Final exam: a- Written b- Practical c- Oral	<ul style="list-style-type: none"> • Short essay , cases, complete, cross matching, MCQS • Spot identification • 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):

Gray's Anatomy for Student (2012): a standard text book by **Richard L .Dark, A.Wayne Vogol and Adam W.M.Michel** ,2nd Edition .

6.3- Recommended books:

Last's Anatomy(2012) :Chummy, S.S.: 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 & archive

Course coordinator: Prof. Dr. / ESSAM MOHAMMED EID

Head of Department: Prof. Dr./ Saadia Ahmed Shalaby

Date: 9/2013



Benha University
Faculty of Medicine
Department of Anatomy & Embryology



Course Specifications

Course title: Anatomy III

Code: (ANT103)

Academic Year (2013 – 2014)

- **Department offering the course: Human Anatomy and Embryology**
- **Academic year of **M.B. & B.Ch.** program: second semester of second year(2013-2014)**
- **Date of specification approval:**
 - **Department council date: 15 /9/2013**
 - **Internal Evaluator: Professor Doctor /ESSAM MOHAMED EID**

A) Basic Information:

- **Allocated marks: 62.5 marks.**
- **Course duration: 15 weeks of teaching.**
- **Teaching hours:**

1- Theoretical	30 hrs
2- Practical	30 hrs

B) Professional Information:

1- Overall Aim of the Course:

- **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**
- **To provide appropriate ethical and professional education necessary for dealing with cadavers.**
- **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** the anatomical regions of the lower limb.
- 2.a.2. mention** the basic structures of lower limb (bones ,muscles ,nerves ,vessels and joints).
- 2.a.3. Describe** the surface landmarks of the underlying bones ,muscles ,tendons ,nerves and vessels of lower limb.
- 2.a.4. Outline** the effects of injuries of nerves and vessels of lower limb .
- 2.a.5. list** the collateral circulations and vascular anastomosis in lower limb.

2.b. Practical and Clinical Skills

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

- 2.b.1. . Identify** the different internal structures of lower limb in human cadavers.
- 2.b.2. Identify** the bones and joints of lower limb by X ray.
- 2.b.3. Apply** the anatomical facts of lower limb , while examining the living subject .
- 2.b.4. Demonstrate** the surface markings of different nerves and vessels of lower limb
- 2.b.5. Identify** the deformities of lower limb in photographs .

2.c. Professional Attitude and Behavioral skills:

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

- 2.c.1. Demonstrate respect for dealing with cadavers, and dealing with surrounding colleagues**
- 2.c.2. Respect dealing with the staff and involve them in any problems facing the students whether social or educational problems to apply the fact of one family**

- 2.c.3. *Reflect honesty and integrity in all interactions with teachers, colleagues, and others with whom we must interact in their professional lives***
- 2.c.4. *Value the ethics and respect to all individuals inside and outside the dissecting room and pay a good deal of respect to the cadavers.***
- 2.c.5. *Demonstrate a professional image concerning behavior, dress and speech***

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. Analyze** some clinical deformities in lower limb .
- 2.e.2. Interpret** the normal bones and joints by X-ray
- 2.e.3. Distinguish** between the distributions of each nerve of lower limb .

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- Course contents:

Subject	Lectures (hrs)	Tutorial / Small group discussion (hrs)	Practical (hrs)	Total (hrs)	% of Total
1-Front of thigh and its medial side	8	4	4	16	13.4%
2-Gluteal region	2	2	2	6	5 %
3-Back of thigh and Popliteal fossa	4	2	2	8	6.7%
4-anterior and lateral compartments of leg and dorsum of foot	5	2	2	9	7.5%
5-Posterior compartment of leg and sole of foot	6	4	4	14	11.6%
6-Joints of lower limb and applied	5	1	1	7	5.8%
Total	30	15	15	60	50%

4- Teaching and learning methods:

METHODS USED:

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

Method	Evidence	ILOs
Modified Lectures	CDs of Lectures including (video films, brain storming, problem solving, etc.....)	2.a.1-----2.a.4 2.c.1-----2.c.5 2.d.1-----2.d.3 2.f.1-----2.f.6
Practical classes	practical Jars, specimens	2.b.1-----2.b.7
Small group discussions	Museum specimens, demonstration (x ray films and data show), models	2.b.1-----2.b.7 2.c.1-----2.c.5 2.d.1-----2.d.3 2.f.1-----2.f.6 2.e.1-----2.e.3
Self learning	Students activity e.g.; - Researches - Self-presentation - Student logbook	2.b.1-----2.b.7 2.c.1-----2.c.5 2.d.1-----2.d.3 2.f.1-----2.f.6 2.e.1-----2.e.3

TEACHING PLAN:

Lectures: 30 lectures

Small group discussion : 15 tutorials

Practical classes: 15 practical classes

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	<u>2</u> times/week/15 weeks Each 1 hours (2 hours /week)	30 hours	50%
Practical classes	<u>2</u> times/week/ 15 week Each 1/2 hours (1hours/week)	15hours	25%
Small group discussion	<u>2</u> times/week/ 15week Each 1/2 hours (1hours/week)	15 hours	25%
Total	4 hours/weak	60 hours	100%

5- Students Assessment methods:

A) ATTENDANCE CRITERIA:

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

B) Assessment TOOLS:

Tool	Evidence	Purpose (ILOs)
Written examination <ul style="list-style-type: none"> • MCQs • Case study • Short essay • Complete • Cross matching 	Attached module of examination	2.a.1----2.a.4 2.c.1----2.c.5 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.5 2.c.1----2.c.5 2.d.1----2.d.3 2.e.1----2.e.3 2.f.1----2.f.6
Practical examination	Practical Reports	2.b.1----2.b.7

5-C) TIME SCHEDULE:

Exam	Week
1- PCT	After 7 th week
2- Final examination	At end of term (week 15)

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- P.C.T in Lower limb	10	8%
2- Final exam:		
a- Written	32.5	26%
b- Practical	12.5	10%
c- Oral	5	4%
3- Assignments & other activities	2.5	2%
Total	62.5	50%

FORMATIVE ASSESSMENT:

- Student knows his marks after the Formative exams.

5-E) Examination description:

Examination	Description
1- PCT	Short QS, case study ,complete ,cross matching ,MCQS
3- Final exam: a- Written b- Practical c- Oral	<ul style="list-style-type: none"> • Short essay , cases ,Complete ,cross matching ,MCQS • Do,spot identification • Two sessions
4- Assignments & other activities	. Assignments, projects, practical books

6- List of references:

6.1- Basic materials:

Department books:

1.- **Lower Limb (2013):** Anatomy Department, Benha Faculty of Medicine

2.- *Practical books (2013):*(log book + book of museum)
Anatomy Department, Benha Faculty of Medicine

6.2- Essential books (text books):

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

6.3- Recommended books:

Last's Anatomy(2012) :Chummy, S.S.: 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.**

Course coordinator: Professor Doctor / Essam Mohamed Eid

Head of Department: Professor Doctor / Saadia Ahmed Shalaby

Date 9 / 2013



Benha University
Faculty of Medicine.
Department of Anatomy & Embryology

Course Specifications

Course title: Anatomy IV

Code: ANT 104

Academic Year (2013 – 2014)

- **Department offering the course:** Human Anatomy and Embryology
- **Academic year of M.B. & B.Ch. program:** second semester of the first year (2013-2014)
- **Date of specification approval:**
 - **Department council** date: 15 /9/2013
 - **Internal Evaluator:** Prof. DR. ESSAM MOHAMED EID

A) Basic Information:

- **Allocated marks** 37.5 marks.
- **Course duration** 15 weeks of teaching.
- **Teaching hours:**

1- Theoretical	30 hrs
2- Practical	30 hrs

B) Professional Information:

1- Overall Aim of the Course:

- 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
- To provide appropriate ethical and professional education necessary for dealing with cadavers.
- 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** the anatomical regions of the thorax .
- 2.a.2. **Describe** the basic structures of thorax (thoracic cage ,muscles of thoracic wall ,thoracic nerves ,thoracic vessels and thoracic organs).
- 2.a.3. **Mention** the surface landmarks of the underlying thoracic organs and vessels .
- 2.a.4. **Outline** the effects of injuries of thoracic organs and vessels of thorax .
- 2.a.5. **State** the collateral circulations and vascular anastomosis in thorax

2.b. Practical and Clinical Skills

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

- 2.b.1. **Identify** the different internal structures of thorax in human cadavers .
- 2.b.2. **Identify** the features of thoracic organs by x- ray.
- 2.b.3. **Apply** the anatomical facts of thorax, while examining the living subjects
- 2.b.4. **Demonstrate** the surface markings of different organs and vessels of thorax .
- 2.b.5. **Identify** the abnormal changes in structures of thorax in photographs **and data show** .

2.c. Professional Attitude and Behavioral kills:

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

- 2.c.1. **Respect** dealing with cadavers, and dealing with surrounding colleagues
- 2.c.2. **Respect** dealing with the staff and involve them in any problems facing the students whether social or educational problems to apply the fact of one family

- 2.c.3. **Reflect** honesty and integrity in all interactions with teachers, colleagues, and others with whom we must interact in their professional lives
- 2.c.4. **Value** the ethics and respect to all individuals inside and outside the dissecting room and pay a good deal of respect to the cadavers.
- 2.c.5. **Demonstrate** a professional image concerning behavior, dress and speech

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 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 (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** the clinical symptoms and signs of some diseases by anatomical facts .
- 2.e.2. **Interpret** the normal anatomical structures of thorax by x- ray
- 2.e.3. **Differentiate** between the relations of different organs in thorax .

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

3- Course contents:

Subject	Lectures (hrs)	Small group discussion (hrs)	Practical (hrs)	Total (hrs)	% of Total
1-Thoracic cage, thoracic wall, intercostals spaces, azygos system	6	3	3	12	10%
2-Mediastinum and its divisions (superior ,anterior ,middle and posterior mediastinum)	4	2	2	8	6.7%
3-Lung and pleurae	6	3	3	12	10%
4-Heart and pericardium	8	4	4	16	13.3%
5-Large arteries (aorta, pulmonary trunk),big veins ,nerves ,tubes (trachea, oesophagus , thoracic duct ,lymph nodes, joints and applied anatomy	6	3	3	12	10%

Total	30	15	15	60	50%
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4- Teaching and learning methods:

METHODS USED:

- **Modified Lectures.**
- **Practical classes**
- **Small group discussions**
- **Self learning**

Method	Evidence	ILOs
Modified Lectures	<i>CDs of Lectures including (video films, brain storming, problem solving, etc.....)</i>	2.a.1-----2.a.5 2.c.1-----2.c.5 2.d.1-----2.d.4 2.f.1-----2.f.7
Practical classes	practical Jars, specimens	2.b.1-----2.b.5
Small group discussions	Museum specimens, demonstration (x ray films and data show), models	2.b.1-----2.b.5 2.c.1-----2.c.5 2.d.1-----2.d.4 2.f.1-----2.f.7 2.e.1-----2.e.3
Self learning	Students activity e.g.; - Researches - Self-presentation - Student logbook	2.a.1-----2.a.5 2.c.1-----2.c.5 2.d.1-----2.d.4 2.f.1-----2.f.7 2.e.1-----2.e.3

TEACHING PLAN:

Lectures: 30 lectures

Tutorials: 15 Small group discussions

Practical classes: 15 practical classes

Time plan:

Item	Time schedule	Teaching hours	Total hours
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Lectures	<u>2</u> times /week/15 weeks (1 hours each) 2hours /week)	30 hours	50%
Practical classes	<u>2</u> times/week/ 15week (1/2 hour each) (1 hours/week)	15 hours	25%
Small group discussions	<u>2</u> times/week/ 15week (1/2 hour each) (1hours/week)	15 hours	25%
Total		60 hours	100%

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA:

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

5-B) Assessment TOOLS:

Tool	Evidence	Purpose (ILOs)
Written examination <ul style="list-style-type: none"> • Short essay • Clinical case • Completion • Cross matching • M.C.Qs. 	Attached module of examination	2.a.1----2.a.5 2.c.1----2.c.5 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.5 2.c.1----2.c.5 2.d.1----2.d.4 2.e.1----2.e.3 2.f.1----2.f.7
Practical examination	Spots on bones ,museum specimens , x-ray	2.b.1----2.b.5

5-C) TIME SCHEDULE:

Examination	Week
2- Assessment	After Week 7
4- Final exam	At end of term (after week 15)

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- post completion test (P.C.T in thorax)	6.5m	5.2%
3- Final exam:		
a- Written	19 m	15.2%
b- Practical	7.5m	6%
c- Oral	3m	2.4%
4- Assignments & other activities	1.5m	1.2%
Total	37.5	30%

FORMATIVE ASSESSMENT:

- Student knows his marks after the Formative exams.

5-E) Examination description:

Examination	Description
2- P.C.T in ANT 104	Short Qs, clinical case ,completion ,cross matching and M.C.Qs.
3- Final exam:	
a- Written	a-Short Qs, clinical case , completion ,cross matching and M.C.Qs.
b- Practical	b- Spot identification on bones ,museum specimens and x-ray
c- Oral	c- one session consists of 2 staff
4- Assignments & other activities	Assignments, projects, practical books

6- List of references:

6.1- Basic materials:

Department books:

1- Anatomy of thorax (2013):by prof. Dr . Abd Alwaness AlAwadn

2.- Practical books(2013): (log book- museum book)by Staff member ,Anatomy Department, Benha Faculty of Medicine

6.2- Essential books (text books):

Gray's Anatomy for Student (2012): a standard text book by ***Richard L.Dark,A.Wayne Vogol and Adam W.M.Michel*** ,2nd Edition .

6.3- Recommended books:

Last's Anatomy(2012) :Chummy, S.S.: 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: PRO. Dr. ESSAM MOHAMMAD EID

Head of Department: PROF.DR. Sadia Ahmed Shalaby

Date: 9/2013



Benha University
Faculty of Medicine
Department of Anatomy & Embryology

Course Specifications

Course title: Anatomy V
Code: ANT 201
Academic Year (2013 – 2014)

- **Department offering the course:** Human Anatomy and Embryology
- **Academic year of M.B. & B.Ch. program:** second semester of the first year (2013-2014)
- **Date of specification approval:**
 - **Department council :** / 9 /2013
 - **Internal Evaluator:** Prof. Dr. ESSAM MOHAMED EID

A) Basic Information:

- **Allocated marks 87.5** marks.
- **Course duration 15** weeks of teaching.
- **Teaching hours:**

1- Theoretical	30 hrs
2- Practical	30 hrs

B) Professional Information:

1- Overall Aim of the Course:

- 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
- To provide appropriate ethical and professional education necessary for dealing with cadavers.
- 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** the anatomical regions of the abdomen ,pelvis and perineum.
- 2.a.2. **Describe** the basic structures of abdomen ,pelvis and perineum (bones ,muscles ,nerves ,vessels ,fascia and organs).
- 2.a.3. **Mention** the surface landmarks of the underlying organs, vessels and nerves .
- 2.a.4. **Outline** the effects of injuries of organs ,nerves and vessels of abdomen ,pelvis and perineum .
- 2.a.5. **Enumerate** the collateral circulations and vascular anastomosis in abdomen ,pelvis and perineum .

2.b. Practical and Clinical Skills

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

- 2.b.1. **Identify** the different internal structures of abdomen ,pelvis ,perineum in human cadavers .
- 2.b.2. **Identify** the features of abdominal and pelvic organs by X ray.
- 2.b.3. **Apply** the anatomical facts of abdomen and pelvis , while examining the living subject .
- 2.b.4. **Demonstrate** the surface markings of different organs and vessels of abdomen and pelvis .
- 2.b.5. **Identify** the abnormal changes in structures of abdomen and pelvis in photographs **and data show** .

2.c. Professional Attitude and Behavioral skills:

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

- 2.c.1. **Respect** dealing with cadavers, and dealing with surrounding colleagues

- 2.c.2. **Respect** dealing with the staff and involve them in any problems facing the students whether social or educational problems to apply the fact of one family
- 2.c.3. *Reflect honesty and integrity in all interactions with teachers, colleagues, and others with whom we must interact in their professional lives*
- 2.c.4. *Value the ethics and respect to all individuals inside and outside the dissecting room and pay a good deal of respect to the cadavers.*
- 2.c.5. **Demonstrate** a professional image concerning behavior, dress and speech

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 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 (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** the clinical symptoms and signs of some diseases by anatomical facts .
- 2.e.2. **Interpret** the normal anatomical structures of abdomen ,pelvis by x ray
- 2.e.3. **Differentiate** between the relations of different organs in abdomen and pelvis .

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

3-Course contents :

Abdomen					
Subject	Lectures (hrs)	Tutorial / Small group discussion (hrs)	Practical (hrs)	Total (hrs)	% of Total
1-Anterior abdominal wall, rectus sheath, inguinal canal and male external genitalia	4	2	2	8	6.8%
2-Peritoneum , classification of peritoneal folds, lesser sac ,abdominal oesophagus and stomach	3	2	2	7	5.8%
3-Small intestine (duodenum ,jejunum & ilium) ,large intestine (caecum ,appendix ,colon and colic flexures)	3	1	1	5	4.2%
4-Liver, biliary system ,spleen and pancreas	3	2	2	7	5.8%
5-Arterial supply of G.I.T.	2	1	1	4	3.3%

portal system					
6-Kidney ,ureters and suprarenal glands	2	1	1	4	3.3%
7-Diaphragm ,muscles of posterior abdominal wall, abdominal aorta , I.V.C., lymph nodes ,lumbar plexus and autonomic fibers	4	1	1	6	5%
Total	21	10	10	41	34.2%
Pelvis &Perineum					
1-Arrangement of pelvic organs ,pelvic fascia ,pelvic muscles ,pelvic vessels ,pelvic nodes and pelvic nerves.	3	2	2	7	5.8 %
2-Distal part of G.I.T. (rectum and anal canal)and urinary system (pelvic part of ureter ,urinary bladder and urethra)	3	2	2	7	5.8%
3-Genital systems(in male and female),perineum (ischiorectal fossa and urogenital triangle ,pudendal nerve and internal pudendal vessels)	3	1	1	5	4.2%
Total	9	5	5	19	15.8 %
TOTAL	30	15	15	60	50 %

4- Teaching and learning methods:**METHODS USED:**

- **Modified Lectures.**
- **Practical classes**
- **Small group discussions**
- **Self learning**

Method	Evidence	ILOs
Modified Lectures	<i>CDs of Lectures including (video films, brain storming, problem solving, etc.....)</i>	2.a.1-----2.a.5 2.c.1-----2.c.5 2.d.1-----2.d.4 2.f.1-----2.f.7
Practical classes	practical Jars, specimens	2.b.1-----2.b.5
Small group discussions	Museum specimens, demonstration (x ray films and data show), models	2.b.1-----2.b.5 2.c.1-----2.c.5 2.d.1-----2.d.4 2.f.1-----2.f.7 2.e.1-----2.e.3
Self learning	Students activity e.g.; - Researches - Self-presentation - Student logbook	2.a.1-----2.a.5 2.c.1-----2.c.5 2.d.1-----2.d.4 2.f.1-----2.f.7

TEACHING PLAN:

Lectures: 30 lectures

Small group discussions : 15 groups

Practical classes: 15 practical classes

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	<u>2</u> times/week/15 weeks (1 hours each) (2hours /week)	30 hours	50%
Practical classes	Two times/week/ 15week (½ hour each)	15	25%

	(1 hours/week)	hours	
1. Small group discussions	<u>Two</u> times/week/ 15 week (½ hours each) (1hours/week)	15 hours	25%
Total		60 hours	100%

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA:

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

5-B) Assessment TOOLS:

Tool	Evidence	Purpose (ILOs)
Written examination <ul style="list-style-type: none"> • Short essay • Clinical cases • Completion • Cross matching • M.C.QS. 	Attached module of examination	2.a.1----2.a.5 2.c.1----2.c.5 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.5 2.c.1----2.c.5 2.d.1----2.d.4 2.e.1----2.e.3 2.f.1----2.f.7
Practical examination	Spots on bones , museum specimens and x –rays	2.b.1----2.b.5

5-C) TIME SCHEDULE:

Exam	Week
1- Assessment	After 7 weeks
4- Final examination	At end of term (after 15 weeks)

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
2-(P.C.T in abdomen	13.5	11.2%

&pelvis)		
3- Final exam:		
a- Written	45	36.4%
b- Practical	17.5	14%
c- Oral	7	5.6%
4- Assignments & other activities	3.5	2.8%
Total	87.5	70.0%

FORMATIVE ASSESSMENT:

- Student knows his marks after the Formative exams.

5-E) Examination description:

Examination	Description
1- P.C.T in ANT 201	Short questions, clinical case ,completion ,cross matching and Quiz (M.C.Qs.)
2- P.C.T in ANT 104	Short questions, clinical case ,completion ,cross matching and Quiz (M.C.Qs.)
3- Final exam: a- Written b- Practical c- Oral	a-Short questions, clinical case ,completion ,cross matching and Quiz (M.C.Qs.) b-Spots on bones , museum specimens &x-ray c-one session consists of 2 staff
4- Assignments & other activities	- Assignments, projects, practical books

6- List of references:

6.1- Basic materials:

Department books:

1- *Anatomy of Abdomen (2013)*: prepared by Prof. DR. ESSAM MOHAMMAD EID

2- *Anatomy of Pelvis (2013)*: prepared by Prof. DR. Saadia Ahmed Shalaby

3 -*Practical (Log) books(2013)*: by Anatomy Department staff , Benha Faculty of Medicine

6.2- Essential books (text books):

***Gray's Anatomy for Student (2012)*:** a standard text book by **Richard L.Dark,A.Wayne Vogol and Adam W.M.Michel** ,2nd Edition .

6.3- Recommended books:

Last's Anatomy(2012) :Chummy, S.S.: 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. DR. ESSAM MOHAMMAD EID

Head of Department: Prof. DR. Saadia Ahmed Shalaby

Date: 9/2013



Benha University
Faculty of Medicine
Department of Anatomy & Embryology

Course Specifications

Course title: Anatomy VI
Code: ANT(202)
Academic Year (2013 – 2014)

- **Department offering the course:** Human Anatomy and Embryology
- **Academic year of program:** first semester of second year(2013-2014)
- **Date of specification approval:**
 - Department council **date:** 15 /9 /2013
 - Internal Evaluator:-** Professor Doctor /*Essam Mohamed Eid*
- **A) Basic Information:**
 - **Allocated marks:** 40 marks.
 - **Course duration:** 15 weeks of teaching.
 - **Teaching hours:**

1- Theoretical	30 hrs
2- Practical	30 hrs

B) Professional Information:

1- Overall Aim of the Course:

- **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**
- **To provide appropriate ethical and professional education necessary for dealing with cadavers.**
- **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 the different embryological terminology.
- 2.a.2. Describe the steps of development of the structure ,organ,.....
- 2.a.3. Mention the anomalies of organ ,structure ,.....
- 2.a.4. Enumertae major clinical applications of embryological facts.

2.b. Clinical Skills:

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

- 2.b.1. Identify the anomalies by inspection or through x-ray
- 2.b.2. Identify the cause of the anomalies
- 2.b.3. Identify the complication of anomaly.

2.c. Professional Attitude and Behavioral skills:

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

- 2.c.1. Demonstrate the anomaly
- 2.c.2. Respect dealing with the staff and involve them in any problems facing the students whether social or educational problems to apply the fact of one family
- 2.c.3. Reflect honesty and integrity in all interactions with teachers, colleagues, and others with whom we must interact in their professional lives
- 2.c.4. Value the ethics and respect to all individuals inside and outside the dissecting room and pay a good deal of respect to the cadavers.
- 2.c.5. Demonstrate *a professional image concerning behavior, dress and speech*

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 *Correlate* clinical findings in relation to developmental basis
- 2.e.2. Interpret the cause of this anomaly .
- 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- Course contents:

Subject	Lectures (hrs)	Tutorial / Small group discussion (hrs)	Practical (hrs)	Total (hrs)	% of Total
Systemic Embryology					

1- Development and anomalies of heart ,big vessels ,Fetal circulation	7	3	3	13	10.8%
2- Development and anomalies of GIT, related glands& Respiratory s.	6	3	3	12	10%
3- Development and anomalies of urinary system	4	2	2	8	6.7%
4- Development and anomalies of genital system in male and female	4	3	3	10	8.3%
5-Development and anomalies of branchial arches	5	2	2	9	7.5%
6-Development and anomalies of face ,palate , tongue ,thyroid gland	4	2	2	8	6.7%
TOTAL	30	15	15	60	50%

4- Teaching and learning methods:

METHODS USED:

6. Lectures.
7. Data show

<i>Method</i>	<i>Evidence</i>	<i>ILOs</i>
Modified Lectures	CDs of Lectures including (video films, brain storming, problem solving, etc.....)	2.a.1-----2.a.4 2.c.1-----2.c.5 2.d.1-----2.d.3
Practical classes	Data show	2.b.1-----2.b.3
Small group discussions	x ray films and data show	2.b.1-----2.b.3

TEACHING PLAN:

Lectures: 30 lectures
Benha Faculty of Medicine

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	<u>Two</u> time/week/15 weeks (2 hours /week)	30 hours	50%
Practical classes	<u>Two</u> time/week/15 weeks Each ½ h/ weak (1hours /week)	15	25%
Tutorials	<u>Two</u> time/week/15 weeks Each ½ h/ weak (1hours /week)	15	25%
Total		60 hours	100%

5- Students Assessment methods:**5-A) ATTENDANCE CRITERIA:**

- Lectures(at least 50% attendance).

5-B) Assessment TOOLS:

Tool	Evidence	Purpose (ILOs)
Written examination <ul style="list-style-type: none"> • Short essay • Case study • Complete • Cross matching • MCQS 	Attached module of examination	2.a.1----2.a.4 2.c.1----2.c.5 2.d.1----2.d.3 2.e.1----2.e.3
Oral examination	Viva card system	2.a.1----2.a.4 2.c.1----2.c.5 2.d.1----2.d.3 2.e.1----2.e.3

5-C) TIME SCHEDULE:

Examination	Week
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1- Assessment 1	After 7 th Week
4- Final examination	At end of term (week 15)

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1-P.C.T in Embryology	8	6.4 %
2- Final examination:		
• Written	25	20 %
• Practical	4	3.2%
• Oral	3	2.4%
Total	40	32%

FORMATIVE ASSESSMENT:

- Student knows his marks after the Formative exams.

5-E) Examination description:

Examination	Description
1- P.C.T in Embryology	Short essay, cases, complete , cross matching MCQs
2- Final examination :	Short essay, cases, complete , cross matching MCQs
• Written	Identification of anomalies
• Practical	
• Oral	

6- List of references:**6.1- Basic materials:**

Department books: Systemic Embryology (2013) , Saadia Ahmed Shalaby

Anatomy Department, Benha Faculty of Medicine

6.2- Essential books (text books):

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

6.3- Recommended books:

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

2-*Sadler T.W,(2008)* : Langman's Medical Embryology, 11th ed., Lippincott Williams & Wilkins.

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: Professor Doctor / Essam Mohamed Eid

Head of Department: Professor Doctor / Saadia Ahmed Shalaby

Date: 9/2013



Benha University
Faculty of Medicine
Department of Anatomy & Embryology

Course Specifications

Course title: Anatomy VII
Code: (ANT203)
Academic Year (2013 – 2014)

- Department offering the course: Human Anatomy and Embryology
- Academic year of M.B. & B.Ch. program: first semester of second year(2013-2014)
- Date of specification approval:
 - Department council date: 15 /9/2013
 - Internal Evaluator: Professor Doctor /Essam Mohamed Eid

A) Basic Information:

- Allocated marks: 85 marks.
- Course duration: 15 weeks of teaching.
- Teaching hours

1- Theoretical	30 hrs
2- Practical	30 hrs

B) Professional Information:

1- Overall Aim of the Course:

- 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
- To provide appropriate ethical and professional education necessary for dealing with cadavers.
- 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** the anatomical regions of the head and neck.
- 2.a.2. Describe** the basic structures of head and neck (skull ,cervical vertebrae ,muscles ,nerves ,vessels ,glands and organs).
- 2.a.3. Mention** the surface landmarks of the underlying vessels ,nerves and organs .
- 2.a.4. Outline** the effects of injuries of nerves and vessels of head and neck .
- 2.a.5 Summarize** the collateral circulations and vascular anastomosis in head and neck.

2.b. Practical and Clinical Skills

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

- 2.b.1. Identify** the different internal structures of head and neck in human cadavers .
- 2.b.2. Identify** the skull bones and joints of head and neck by X- ray.
- 2.b.3. Apply** the anatomical facts of head and neck, while examining the living subject .
- 2.b.4. Demonstrate** the surface markings of different nerves and organs of head and neck
- 2.b.5. Identify** the signs of cranial nerves injuries in photographs and data show.

2.c. Professional Attitude and Behavioral skills:

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

- 2.c.1. Demonstrate respect for dealing with cadavers, and dealing with surrounding colleagues**

2.c.2. Respect dealing with the staff and involve them in any problems facing the students whether social or educational problems to apply the fact of one family

2.c.3. *Reflect honesty and integrity in all interactions with teachers, colleagues, and others with whom we must interact in their professional lives*

2.c.4. *Value the ethics and respect to all individuals inside and outside the dissecting room and pay a good deal of respect to the cadavers.*

2.c.5. *Demonstrate a professional image concerning behavior, dress and speech*

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 the clinical symptoms and signs of some diseases in head and neck according to anatomical facts .

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

2.e.3. Distinguish between the distributions of each cranial nerves in head and neck .

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- Course contents:

Subject	Lectures (hrs)	Tutorial / Small group discussion (hrs)	Practical (hrs)	Total (hrs)	% of Total
Head					
1-Face ,scalp ,parotid gland	3	2	2	7	5.8%
2-Temporal , infratemporal regions , tempromandibular joint and styloid apparatus	4	2	2	8	6.6%
3-Cranial cavity, Dura ,dural sinuses and pituitary gland	3	2	2	7	5.8%
4-Orbit and orbital contents	4	1	1	6	5%
5-Nose ,Nasal cavity and paranasal sinuses	2	1	1	4	3.3%
6-External ear ,middle ear & inner ear	2	1	1	4	3.3%
Total	18	9	9	36	29%
Neck					

7-Surface landmark, Fascia of neck , triangles of neck ,posterior triangle	2	2	2	6	5%
8-Anterior triangle ,submandibular region, thyroid and parathyroid	3	1	1	5	4.3%
9-Blood vessels of H&N ,Cranial nerves, cervical nerves,	3	1	1	5	4.3%
10-Oral cavity ,tongue, palate, pharynx ,larynx ,trachea ,oesophagus	3	1	1	5	4.3%
11-lymphatic drainage of H&N, Joints of neck	1	1	1	3	2.5%
Total	12	6	6	24	21%
Total	30	15	15	60	50%

4- Teaching and learning methods:

METHODS USED:

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

<i>Method</i>	<i>Evidence</i>	<i>ILOs</i>
Modified Lectures	<i>CDs of Lectures including (video films, brain storming, problem solving, etc.....)</i>	2.a.1-----2.a.5 2.c.1-----2.c.5 2.d.1-----2.d.3 2.f.1-----2.f.6
Practical classes	practical Jars, specimens	2.b.1-----2.b.7
Small group discussions	Museum specimens, demonstration (x ray films and data show), models	2.b.1-----2.b.7 2.c.1-----2.c.5 2.d.1-----2.d.3 2.f.1-----2.f.6 2.e.1-----2.e.3

Self learning	Students activity e.g.;	2.a.1-----2.a.5 2.c.1-----2.c.5 2.d.1-----2.d.4 2.f.1-----2.f.7
	- Researches - Self-presentation - Student logbook	

TEACHING PLAN:**Lectures: 30 lectures****Small group discussions: 15 group****Practical classes: 15 practical classes****Time plan:**

Item	Time schedule	Teaching hours	Total hours
Lectures	<u>two</u> times/week/15 weeks (2hours /week)	30 hours	50%
Practical classes	<u>two</u> times/week/ 15 week each ½ hour/week (1 hours/week)	15hours	25%
Tutorials	<u>two</u> times/week/ 15 week each ½ hour/week (1hours/week)	15 hours	25%
Total		60 hours	100%

5- Students Assessment methods:**5-A) ATTENDANCE CRITERIA:**

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

5-B) Assessment TOOLS:

Tool	Evidence	Purpose (ILOs)
Written examination • Short essay • Case study	Attached module of	2.a.1----2.a.5 2.c.1----2.c.5 2.d.1----2.d.3

<ul style="list-style-type: none"> • Complete • Cross matching • MCQS. 	examination	2.e.1----2.e.3 2.f.1----2.f.6
Oral examination	Viva card system	2.a.1----2.a.5 2.c.1----2.c.5 2.d.1----2.d.3 2.e.1----2.e.3 2.f.1----2.f.6
Practical examination	Practical Reports	2.b.1----2.b.7

5-C) TIME SCHEDULE:

Examination	Week
1- Assessment 1	After 7 th Week
4- Final examination	At end of term (week 15)

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- P.C.T in head and neck	12	9.6%
2- Final exam:		
a- Written	40	32%
b- Practical	21	16.8%
c- Oral	7	5.6%
3- Assignments & other activities	5	4%
Total	85	68%

FORMATIVE ASSESSMENT:

- Student knows his marks after the Formative exams.

5-E) Examination description:

Examination	Description
1- P.C.T in head and neck	Short questions ,case study, complete ,cross matching ,MCQS
2- Final exam:	
a- Written	<ul style="list-style-type: none"> • select (MCQs) , Short essay , cases, complete & cross matching
b- Practical	<ul style="list-style-type: none"> • Do, spot identification
c- Oral	<ul style="list-style-type: none"> • Two sessions

3- Assignments & other activities	- Assignments, projects, practical books
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6- List of references:

6.1- Basic materials:

Department books:

- 1- Anatomy of Head&neck (2013): Pro. Dr .Mostafa Abo Senna ,Anatomy Department, Benha Faculty of Medicine**
- 2- *Practical (Log) books(2013):* by Anatomy Department staff , Benha Faculty of Medicine**

6.2- Essential books (text books):

Gray's Anatomy for Student (2012): a standard text book by **Richard L.Dark,A.Wayne Vogol and Adam W.M.Michel** ,2nd Edition .

3- 6.3- Recommended books:

Last's Anatomy(2012) :Chummy, S.S.: 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: Professor Doctor / Essam Mohamed Eid

Head of Department: Professor Doctor / Saadia Ahmed Shalaby

Date: 9/2013



Benha University

Faculty of Medicine

Department of Anatomy & Embryology

Course Specifications

Course title: Anatomy VIII

Code: (ANT204)

Academic Year (2013 – 2014)

- **Department offering the course:** Human Anatomy and Embryology
- **Academic year of M.B. & B.Ch. program:** second semester of second year(2013-2014)
- **Date of specification approval:**
 - **Department council** **date:** 15 /9/ 2013
 - **Internal Evaluator:** Professor Doctor / ESSAM MOHAMED EID

A) Basic Information:

- **Allocated marks** 62.5 marks.
- **Course duration:** 15 weeks of teaching.
- **Teaching hours:**

1- Theoretical	30 hs
2- Practical	30 hs

B) Professional Information:

1- Overall Aim of the Course:

- **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**
- **To provide appropriate ethical and professional education necessary for dealing with cadavers.**
- **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 terminology.**
- 2.a.2 summarize the basic 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. Enumerate major clinical applications of anatomical facts.**
- 2.a.5. 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 by X- ray.**
- 2.b.2. Identify some clinical findings in relation to developmental basis.**
- 2.b.3. Demonstrate the different surface markings and determine 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. Demonstrate the normal anatomical structures on x ray**
- 2.b.6. Identify the different surface markings and determine the position or course of the internal structures.**
- 2.b.7. Identify the different internal structures in cadavers and specimen's faculty of Medicine, Benha University**

2.c. Professional Attitude and Behavioral skills:

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

- 2.c.1. Demonstrate respect for dealing with cadavers, and dealing with surrounding colleagues**
- 2.c.2. Respect dealing with the staff and involve them in any problems facing the students whether social or educational problems to apply the fact of one family**
- 2.c.3. *Reflect honesty and integrity in all interactions with teachers, colleagues, and others with whom we must interact in their professional lives***
- 2.c.4. *Value the ethics and respect to all individuals inside and outside the dissecting room and pay a good deal of respect to the cadavers.***
- 2.c.5. *Demonstrate a professional image concerning behavior, dress and speech***

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. Relate 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- Course contents:

Subjects	Lectures (hrs)	Tutorial / Small group discussion (hrs)	Practical (hrs)	Total (hrs)	% of Total
1-Base of the brain and brain stem(M.O. , pons & midbrain)	5	2	2	9	7.5%
2- Cerebellum & 4th ventricle	4	2	2	8	6.7%
3-Diencephalon & 3rd ventricle	4	2	2	8	6.7%
4-Cerebrum ,internal structure ,lateral ventricle	6	4	4	14	11.6%
5-Spinal cord , Meninges ,CSF	3	2	2	7	5.8%
6-Blood vessels of the brain and spinal cord	4	2	2	8	6.7%
7-Tractolog (pyramidal ,extrapyramidal tracts ,sensory pathways)	4	1	1	6	5 %
Total	30	15	15	60	50%

4- Teaching and learning methods:**METHODS USED:**

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

<i>Method</i>	<i>Evidence</i>	<i>ILOs</i>
Modified Lectures	<i>CDs of Lectures including (video films, brain storming, problem solving, etc.....)</i>	2.a.1-----2.a.4 2.c.1-----2.c.5 2.d.1-----2.d.3 2.f.1-----2.f.6
Practical classes	Practical Jars, specimens	2.b.1-----2.b.7
Small group discussions	Museum specimens, demonstration (x ray films and data show), models	2.b.1-----2.b.7 2.c.1-----2.c.5 2.d.1-----2.d.3 2.f.1-----2.f.6 2.e.1-----2.e.3
Self learning	Students activity e.g.; - Researches - Self-presentation - Student logbook	2.a.1-----2.a.5 2.c.1-----2.c.5 2.d.1-----2.d.4 2.f.1-----2.f.7

TEACHING PLAN:

Lectures: 30 lectures

Small group discussion: 15 group

Practical classes: 15 practical classes

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	<u>2</u> times/week/7.5 weeks (1 hours each) (2 hours /week)	30 hours	50%
Practical classes	<u>2</u> times/week/ 15week (1/2 hours each)	15hours	25%

	(1hours/week)		
Tutorials	2__times/week/ 15week (1/2 hours each) (1hours/week)	15 hours	25%
Total	4 hours /week	60 hours	100%

5- Students Assessment methods:**5-A) ATTENDANCE CRITERIA:**

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

5-B) Assessment TOOLS:

Tool	Evidence	Purpose (ILOs)
Written examination <ul style="list-style-type: none"> • Short essay • Case study • Complete • Cross matching • MCQS 	Attached module of examination	2.a.1----2.a.5 2.c.1----2.c.5 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.5 2.c.1----2.c.5 2.d.1----2.d.3 2.e.1----2.e.3 2.f.1----2.f.6
Practical examination	Practical Reports	2.b.1----2.b.7

5-C) TIME SCHEDULE:

Examination	Week
1- PCT	After 7th Week
2- Final examination	At end of term (week 15)

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1-P.C.T in neuroanatomy	10	8%

2- Final exam:		
a- Written	32.5	26%
b- Practical	12.5	10%
c- Oral	5	4%
3- Assignments & other activities	2.5	2%
Total	62.5	50%

FORMATIVE ASSESSMENT:

- Student knows his marks after the Formative exams.

5-E) Examination description:

Examination	Description
1- PCT	Short QS, cases ,complete ,cross matching, MCQS.
3- Final exam: a- Written b- Practical c- Oral	<ul style="list-style-type: none"> • Short essay , cases ,Complete ,cross matching ,MCQS • Do,spot identification • Two sessions
4- Assignments & other activities	. Assignments, projects, practical books

6- List of references:6.1- Basic materials:

Department books:

1- Neuroanatomy (2013):Prof.Dr, Abd Waness Awaden , Anatomy Department, Benha Faculty of Medicine

2.- Practical books(2013): (Log book, Museum book)

6.2- Essential books (text books):

Gray's Anatomy for Student (2012): a standard text book by **Richard L.Dark,A.Wayne Vogol and Adam W.M.Michel** ,2nd Edition .

6.3- Recommended books:

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

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- <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: Professor Doctor / Essam Mohamed Eid

Head of Department: Professor Doctor / Saadia Ahmed Shalaby

Date: 2013- 2014



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

Course Specifications

Course title: Physiology I

Code: PSL 105

Academic Year (2013 – 2014)

- **Department offering the course:** Medical Physiology.
- **Academic year of M.B. & B.Ch. program:** First year 2013 – 2014.
- **Date of specification approval:**

Department council No:231

Date: 9 / 9 /2013

Internal evaluator : Dr.Alaa El-Deen El-taleas

A) Basic Information:

- **Allocated marks:** 76 marks.
- **Course duration:** 15 weeks of teaching.
- **Teaching hours:**

1- Theoretical	45 hrs
2- Practical	30 hrs

B) Professional Information:

1- Overall Aim of the Course is to:

- 1.a. **Enable** the student to know the different types of transport across the cell membrane and its underlying mechanisms and to know different components of the blood and its functions
- 1.b. **Enable** the student to correlate between the basic physiological functions of the blood components and its applications clinically.
- 1.c. **Develop** several practical skills 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. **List** components of cell membrane, types of plasma proteins, types of white blood cells, causes of anemia etc.....
- 2.a.2. **Discuss** functions of plasma proteins, RBC's, platelets, etc.....
- 2.a.3. **List** factors affecting erythropoiesis, causes of anemia, steps of hemostasis, etc.....
- 2.a.4. **Define** anemia, immunity, hemostasis, active transport, diffusion, homeostasis, etc.....
- 2.a.5. **Enumerate** functions of white blood cells.
- 2.a.6. **Discuss** distribution of body water, types and hazards of blood transfusion and types of immunity .

2.b. Practical and Clinical Skills

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

- 2.b.1. **Measure** ESR.
- 2.b.2. **Comment** on different blood groups.
- 2.b.3. **Perform** test for bleeding time.
- 2.b.4. **Perform** test for clotting time.
- 2.b.5. **Write** a comment on RBC's fragility.

2.c. Professional Attitude and Behavioral skills:

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

- 2.c.1. **Reflect** 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 the graduate will 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: anemia etc....
- 2.e.3. **proof** scientific phenomena during the practical study

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:

For the first semestre:

Subject	Lectures (hrs) 45	Practical (hrs) 30	Total (hrs) 75	% of Total
1- Introduction:	10	5	15	20%
1-Cell membrane and transport across it.	2	1	3	4%
2- Types of ion channels.	2	1	3	4%
3-Total body water.	2	1	3	4%
4- Composition of ECF& ICF.	2	1	3	4%
5-homeostasis.	2	1	3	4%
2-Blood and immunity: basic knowledge:	35	25	60	80 %
Blood and plasma proteins:				
1-General functions of the blood and Composition of the blood.				
2-Plasma proteins(functions and sites of its formation).	2	1	3	4%
RBCs:				
Erythropoiesis, Anemias,hemoglobin	3	1	4	5.3%
White Blood Cell:				
Immunity,				
Blood typing & Blood transfusion	12	6	18	
Platlets:				24%
1-Hemostasis.	4	3	7	
2- Anticoagulants.	4	3	7	
3- Hemostatic function tests.	2	4	6	9.3%
Applied:				8%
1- Effects of anemia.	3	2	5	
	3	2	5	6.6%
	3	2	5	6.6%
	3	4	7	6.6 %
				9.3%
Total	45	30	75	100%

4- Teaching and learning methods:

METHODS USED:

1. Modified Lectures: the scientific material is presented through:
 - a) PowerPoint presentations.
 - b) Animations.
2. Practical classes : vedioes showing cell membrane structure and the Na-K pump action, the blood tests as ESR, osmotic fragility, hematocrite value, blood grouping , bleeding and clotting time the students perform them.
3. Problem solving
4. Self learning

Method	Evidence	ILOs
Modified lectures	CDs of lectures	2.a.1-----2.a.6 2.c.1.----2.c.4 2.d.1.----2.d.5 2.f.1. ----2.f.6
Practical classes	Practical book	2.b.1.----2.b.6
Problem solving	Case scenarios	2.b.1.----2.b.5 2.e.1.----2.e.3
Self-learning	1- Self presentation 2- Researches 3- log book	2.a.1-----2.a.6 2.d.1.----2.d.5 2.f.1. ----2.f.6

TEACHING PLAN for each semster:

Lectures: 45 hours.

Practical classes: 30 hours .

Time plane:

Item	Time schedule	Teaching hours	Total hours
Lectures	3 h/week for 15 week	45 hours	65.8%
Practical classes	(2 Hours/ week for 15 week)	30 hours	34.2%

Total		75 hours	100%
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5- Students Assessment methods:

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

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

5-B) Assessment TOOLS:

Tool	Evidence	Purpose (ILOs)
Written examination: <ul style="list-style-type: none"> • 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.5 2.e.1.----2.e.3 2.f.1. ----2.f.5
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.3 2.f.1. ----2.f.6
Practical examination	Practical Reports	2.b.1.----2.b.5

5-C) TIME SCHEDULE FOR EACH SEMESTER:

Exam	Week
1- Assessment 1	Week----- 8
3- Assessment 2 (Final exam)	Week----- 15

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- mid term exam:		
a- MCQ	4.5 marks	5.9%
activities	2.5 marks	3.2%

2- Final exam:		
a. Written	27.5 marks	36.1%
b. Oral	6.5 marks	9%
c. practical exam	10 marks	13.1%
d. practical book	5 marks	6.5%
e. log book	5 marks	6.5%
f. sheet	15 marks	19.7%
Total	76	100%

FORMATIVE ASSESSMENT:

- Student knows his marks after the Formative exams.

5-E) Examination description:

Examination	Description
1- Mid-term exam	Quiz (MCQs)
2- Final exam: a- Written b- Practical c- Oral	short essay- true or false with explanation- complete- MCQ Determination of blood group, osmotic fragility, calculation of blood indices, ESR. 1 session by 2 staff members
3- Assignments & other activities	practical book and student activities

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 Guyton; 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 9/2013



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

Course Specifications

Course title: Physiology II

Code: PSL 106

Academic Year (2013 – 2014)

- **Department offering the course:** Medical Physiology.
- **Academic year of M.B. & B.Ch. program:** First year 2013 – 2014.
- **Date of specification approval:**

Department council No: 231

Date: 9 / 9 /2013

- **Internal evaluator :** Dr.Alaa El-Deen El-taleas

B) Basic Information:

- **Allocated marks:** 49 marks.
- **Course duration:** 15 weeks of teaching.
- **Teaching hours:**

Theoretical	30 hrs
Practical	-----

B) Professional Information:

1- Overall Aim of the Course is to:

- 1.a. **Enable** the student to know the functions of the autonomic nervous system system, nerve and different types of muscles and its underlying mechanisms of actions.
- 1.b. **Enable** the student to correlate between the basic physiological functions of the these systems and its applications clinically.

2- Intended Learning Outcomes (ILOs):

2.a. Knowledge and understanding:

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

2.a.1. **Enumerate** causes of resting membrane potential, types of adrenergic and cholinergic receptors, muscle fatigue, divisions of the nervous system etc.....

2.a.2. **Discuss** components of action potential, functions of sympathetic and parasympathetic nervous systems.

2.a.3. **List** types of stimuli and factors affecting its effectiveness, autonomic ganglia.

2.a.4. **Discuss** physiological anatomy and mechanisms of neuromuscular transmission and factors affecting it.

2.a.5. **Define** reflex action, sympathetic nervous system

2.a.6. **List** mechanisms of higher control of autonomic function drugs acting on adrenergic and cholinergic receptors.

2.a.7. **Discuss** smooth muscle, types of skeletal muscle fibres, mechanism of muscle contraction and its types.

2.b. Professional Attitude and Behavioral skills:

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

2.b.1. **Reflect** 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.b.2. **Demonstrate** good relations with colleague: Through dividing the students into small groups sharing the same experiment in practical lessons

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

2.c. Communication skills:

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

2.c.1. **Communicate** clearly and effectively with colleagues.

- 2.c.2. **Establish** trial for a good presentation in front of his colleagues during scientific discussions.
- 2.c.3. **Communicate** effectively with individuals regardless of their social, cultural, ethnic backgrounds or their disabilities.
- 2.c.4. **Cope up** with difficult situations as oral exams and this is done by continuous assessment through practical lessons.
- 2.c.5. **Respect** all his colleagues and supervisors.

2.d. Intellectual Skills:

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

- 2.d.1. **Integrate** facts about function of different organs subserving the homeostasis
- 2.d.2. **Analyze** medical problems related to diagnosis & treatment of physiological problems.
- 2.d.3. **proof** scientific phenomena during the practical study

2.e. General and transferable Skills:

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

- 2.e.1. **Establish** life-long self-learning required for continuous professional development.
- 2.e.2. **Use** the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.
- 2.e.3. **Retrieve, manage, and manipulate** information by all means, including electronic means.
- 2.e.4. **Present** information clearly in written, electronic and oral forms.
- 2.e.5. **Establish** effective interpersonal relationship to Communicate ideas and arguments.

3- Course contents:

Subject	Lectures (hrs)	Total (hrs)	% of Total
1- Autonomic nervous system :Basic knowledge:	10	10	33.3%

1-Divisions of nervous system. And Autonomic ganglia.	2	2	6.6%
2- Sympathetic nervous system	2	2	6.6%
3-Parasympathetic nervous system.	2	2	6.6%
Applied:			
Chemical transmission, (cholinergic transmission, Adrenergic transmission)	4	4	13.3%
2-Physiology of nerve and muscle:	20	20	66.6%
Nerve:			
1-Excitability, Resting membrane potential.			
2-Action potential.			
3-Excitability changes during an action potential.	4	4	13.3%
Muscle:			
Skeletal muscle:			
1-Mechanism of neuro-muscular transmission, properties of neuro-muscular transmission.	2	2	6.6%
2-Excitation-contraction coupling.	2	2	6.6%
3-Molecular mechanism of muscle contraction, EMG.			
4-effects of stimulation of skeletal by: single. 2 successive stimuli, several successive stimuli.)			
5- types of muscle contraction	2	2	6.6%
Smooth muscle:			
Types of Smooth muscles, control of its contraction.	2	2	6.6%
Total			
	2	2	6.6 %
	2	2	6.6%
	4	2	13.3%
	30	30	100%

4- Teaching and learning methods:

METHODS USED:

- Modified Lectures: the scientific material is presented through:
 - PowerPoint presentations.
 - Animations.
- Problem solving
- Self learning

Method	Evidence	ILOs
Modified lectures	CDs of lectures	2.a.1-----2.a.7 2.c.1.----2.c.4 2.d.1.----2.d.5 2.f.1. ----2.f.6
Problem solving	Case scenarios	2.b.1.----2.b.5 2.e.1.----2.e.3
Self-learning	<ul style="list-style-type: none"> • Self presentation • Researches • log book 	2.a.1-----2.a.7 2.d.1.----2.d.5 2.f.1. ----2.f.6

TEACHING PLAN for each semester:

Lectures: 30 hours.

Time plane:

Item	Time schedule	Teaching hours	Total hours
Lectures	2 h/week/15 week	30 hours	100%
Total		30 hours	100%

5- Students Assessment methods:

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

4. Lectures (at least 50% attendance .)

5-B) Assessment TOOLS:

Tool	Evidence	Purpose (ILOs)
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Written examination: <ul style="list-style-type: none"> • 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.5
Oral examination	Via 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.5

5-C) TIME SCHEDULE FOR EACH SEMESTER:

Exam	Week
1- Assessment 1	Week----- 8
3- Assessment 2 (Final exam)	Week----- 15

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- mid term exam:		
b- MCQ activities	5.5 marks 2.5 marks	11.2% 5.1%
2- Final exam:		
g. Written	35 marks	71.5%
h. Oral	6 marks	12.2%
Total	49	100%

FORMATIVE ASSESSMENT:

- Student knows his marks after the Formative exams.

5-E) Examination description:

Examination	Description
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1- Mid-term exam	Quiz (MCQs)
2- Final exam: a- Written b- Oral	short essay – complete- true or false - matching 1 session by 2 staff members.
3- Assignments & other activities	student activities

6- List of references:

6.a- Basic materials:

6.a- Basic materials:

Department books:

- 1- Medical physiology part II (physiology of autonomic nervous system and physiology of nerve and muscle) by staff members of physiology department 2014-2015.

6.b- Essential books (text books):

- a) John E Hall and Arthur C Guyton; 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 9/2013



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

Course Specifications

Course title: Physiology III

Code: PSL 107

Academic Year (2013 – 2014)

- **Department offering the course:** Medical Physiology.
- **Academic year of M.B. & B.Ch. program:** First year 2013 – 2014.
- **Date of specification approval:**

Department council No:231

Date:9/9/2013

Internal evaluator : Dr.Alaa El-Deen El-taleas

C) Basic Information:

- **Allocated marks:** 92 marks.
- **Course duration:** 15 weeks of teaching.
- **Teaching hours:**

1- Theoretical	45hrs
2- Practical	30hrs

B) Professional Information:

1- Overall Aim of the Course is to:

- 1.a. Enable** the student to know the functions of the different parts of the cardiovascular system and its underlying mechanisms.
- 1.b. Enable** the student to correlate between the basic physiological functions of the cardiovascular system and its applications clinically.
- 1.c. Develop** several practical skills 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. **define** different terminology as (C.O.P, stroke volume , mean systemic ,systolic and diastolic blood pressure,etc)
- 2.a.2. **identify** functional anatomy of the haert.
- 2.a.3. **discuss** properities of cardiac muscle (excitability , auto-rhythmicity , conductivity, contractility).
- 2.a.4. **described** different phasis of cardiac cycle .
- 2.a.5. **list** difference between heterometric&homeometricautoregulation of C.O.P.
- 2.a.6. **Summarize** factors which detremine arterial blood pressure& pulse preasure.
- 2.a.7. **explain** mechanisms of physiologic variations of arterial blood preasure .
- 2.a.8. **enumerate** mechanisms of regulatin of heart rate .

2.b. Practical Skills

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

- 2.b.1. **Comment on** physiological records of E.C.G .
- 2.b.2. **observe** different types of ECG waves .
- 2.b.3. **measure** arterial blood pressure by using sphegmomanometer & stethoscope .
- 2.b.4. **examine** radial pulse .
- 2.b.5. **observe** heart sounds by using stethoscope .

2.c. Professional Attitude and Behavioral kills:

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

2.c.1. **Reflect** 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 the graduate will 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.

2.e.3. **proof** scientific phenomena during the practical study

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:

	Lectures (hrs)	Practical (hrs)	Total (hrs)	% of Total
Circulation:	45	30	75	100%
Basic knowledge:		-		
<i>1-Physiological anatomy of the heart.</i>	3		3	4%
<i>2-Properties of the cardiac muscle:</i>	9	-	9	12%
<i>a. Excitability</i>				
<i>b. Auto-rhythmicity</i>				
<i>c. Conductivity</i>				
<i>d. contractility</i>				
<i>3-Cardiac Cycle.</i>	3	-	3	4%
<i>4-Electrocardiogram.</i>	3	20	23	30.6%
<i>-ECG of normal heart</i>				
<i>-Abnormal ECG (arrhythmia)</i>				
<i>5- The Cardiac Output.</i>	2	-	2	2.66%
<i>6- Heart Rate.</i>	2	5	7	9.3%
<i>7- Hemodynamics</i>	4	-	4	5.3%
<i>8- Arterial blood pressure</i>	2	5	7	9.3%
<i>Regulation of ABP.</i>				
<i>9- Microcirculation.</i>	2	-	2	2.66%

<i>10- Venous Circulation.</i>	2	-	2	2.66%
<i>11- Lymphatic Circulation.</i>	2	-	2	2.66%
<i>12- Edema</i>	2	-	2	2.66%
Special circulation: <i>-The Coronary Circulation</i> <i>-The Pulmonary Circulation</i> <i>-The Cerebral Circulation.</i>	5	-	5	6.66%
Shock <i>Effect of exercise on the circulation</i> <i>physiology of Hypertension and heart failure).</i>	2	-	2	2.66%
Applied: <i>-Venous oxygen reserve.</i> <i>-arrhythmia.</i> <i>-physiology of hypertention</i> <i>- physiology of heart failure</i>	2	-	2	2.66%
total	45	30	75	100%

4- Teaching and learning methods:

METHODS USED:

- Modified Lectures: the scientific material is presented through:
 - PowerPoint presentations.
 - Animations.
- Practical classes : demonstration of normal ECG strips, measurement of arterial blood pressure, palpation of radial pulse.
- Problem solving
- Self-learning

Method	Evidence	ILOs
Modified lectures	CDs of lectures	2.a.1-----2.a.8 2.c.1.----2.c.4 2.d.1.----2.d.5 2.f.1. ----2.f.6
Practical classes +field training	Practical book+ report in log book	2.b.1.----2.b.6
Problem solving	Case scenarios	2.b.1.----2.b.6 2.e.1.----2.e.3
Self-learning	<ul style="list-style-type: none"> • Self presentation • Researches • log book 	2.a.1-----2.a.8 2.d.1.----2.d.5 2.f.1. ----2.f.6

TEACHING PLAN for each semester:

Lectures: 45 hours.

Practical classes: 30hours .

Time plane:

Item	Time schedule	Teaching hours	Total hours
Lectures	3 h/week/15 week	45hours	60%
Practical classes+ field training	2h/week/15 week	30hours	40%
Total		75 hours	100%

5- Students Assessment methods:

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

5. Lectures (at least 50% attendance .)
6. Practical (at least 75% attendance .)

7. Log book

5-B) Assessment TOOLS:

Tool	Evidence	Purpose (ILOs)
Written examination: <ul style="list-style-type: none"> • 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.3 2.f.1. ----2.f.5
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.3 2.f.1. ----2.f.5
Practical examination	Practical Reports	2.b.1.----2.b.6
Field training	Field visits report in logbook	2.b.4 ---2.b.5

5-C) TIME SCHEDULE FOR EACH SEMESTER:

Exam	Week
1- Assessment 1	Week----- 8
3- Assessment 2 (Final exam)	Week----- 15

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1-mid termexam:		
c- MCQ activities	6.5 marks	7.2%
	2.5 marks	2.7%
2-Final exam:		
i. Written	40 marks	44%
j. Oral	8marks	8.6%

k. practical exam	10 marks	11%
l. practical book	5 marks	5.5%
m. log book	5 marks	5.5%
n. sheet	13 marks	13.5%
o. field training visits		
Total	92	100%

FORMATIVE ASSESSMENT:

- Student knows his marks after the Formative exams.

5-E) Examination description:

Examination	Description
1- Mid-term exam	Quiz (MCQs)
2- Final exam: a- Written b- Practical	short essay – matching- true or false -complete Determination of Bl. Pressure, comment on ECG records as regard waves, segments
c- Oral	1 session by 2 staff members
3- Assignments & other activities	practical book and student activities

6- List of references:**6.a- Basic materials:**

Department books:

- 2- Medical physiology (cardiovascular system) by staff members of physiology department 2014-2015.

- 2- Practical book by staff members of physiology department 2014- 2015.

6.b- Essential books (text books):

- a) John E Hall and Arthur C Guyton; 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. AlaaAbd- Elaziz Al-teles

Date 9/2013



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

Course Specifications

Course title: Physiology IV

Code: PSL 108

Academic Year (2013 – 2014)

- **Department offering the course:** Medical Physiology.
- **Academic year of M.B. & B.Ch. program:** First year 2013 – 2014.
- **Date of specification approval:**

Department council No: 231

Date: 9/9/2013

Internal evaluator: Dr.Alaa El-Deen El-taleas

D) Basic Information:

- **Allocated marks:** 33marks.
- **Course duration:** 15 weeks of teaching.
- **Teaching hours:**

Theoretical	30hrs
Practical	-----

B) Professional Information:

1- Overall Aim of the Course is to:

1.a. Enable the student to know the functions of the respiratory system and its underlying mechanisms of actions.

1.b. Enable the student to correlate between the basic physiological functions of the respiratory system and its applications clinically.

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 physiologic terminology as (O_2 content of the blood , O_2 capacity of the blood , $O_2\%$ saturation ,alkali reserve ,etc).

2.a.2. **Describe** physiologic anatomy of respiratory system, surfactant and work of breathing.

2.a.3. **list** difference between inspiration & expiration .

2.a.4. **describe** phases of respiratory cycle and pulmonary ventilation .

2.a.5. **enumerate** lung volume and capacities and factors affecting exchange of gases .

2.a.6. **list** respiratory functions of the blood, hypoxia, cyanosis ,abnormal pattern of breathing, air embolism and artificial respiration.

2.a.7. **explain** mechanism of respiration, respiratory centers and regulation of respiration.

2.b. Professional Attitude and Behavioral skills:

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

2.b.1. **Reflect** 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.b.2. **Demonstrate** good relations with colleague: Through dividing the students into small groups sharing the same experiment in practical lessons

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

2.c. Communication skills:

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

2.c.1. **Communicate** clearly and effectively with colleagues.

- 2.c.2. **Establish** trial for a good presentation in front of his colleagues during scientific discussions.
- 2.c.3. **Communicate** effectively with individuals regardless of their social, cultural, ethnic backgrounds or their disabilities.
- 2.c.4. **Cope up** with difficult situations as oral exams and this is done by continuous assessment through practical lessons.
- 2.c.5. **Respect** all his colleagues and supervisors.

2.d. Intellectual Skills:

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

- 2.d.1. **Integrate** facts about function of different organs subserving the homeostasis
- 2.d.2 **analyze** medical problems related to diagnosis & treatment of physiological problems.
- 2.d.3. **proof** scientific phenomena during the practical study

2.e. General and transferable Skills:

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

- 2.e.1. **Establish** life-long self-learning required for continuous professional development.
- 2.e.2. **Use** the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.
- 2.e.3. **Retrieve** information by all means, including electronic means.
- 2.e.4. **Present** information clearly in written, electronic and oral forms.
- 2.e.5. **Establish** effective interpersonal relationship to Communicate ideas and arguments.

3- Course contents:

	Lectures (hrs)	Total (hrs)	% of Total
Respiration :	30	30	100%
Basic knowledge: <i>Physiological anatomy of the respiratory system.</i>	2	2	6.6%
1. <i>Mechanics of respiration.</i>	2	2	6.6%
2. <i>respiratory cycle.</i>	2	2	6.6%
3. <i>Lung volumes and capacities.</i>	3	3	10%
4. <i>Pulmonary ventilation.</i>	3	3	10%
5. <i>Exchange of gases.</i>	3	3	10%
6. <i>Respiratory function of the blood.</i>	3	3	10%
7. <i>Control of breathing (Localization of respiratory centers, generation of rhythmic respiration).</i>	3	3	10%
8. <i>Regulation of respiration .</i>	3	3	10%
9. <i>Hypoxia.</i>	3	3	10%
Applied: <i>1-Cyanosis and Asphyxia</i> <i>2-Effect of muscular exercise on respiration.</i> <i>3-Artificial respiration.</i> <i>4- Effect of exposure to increased barometric pressure.</i>	3	3	10%
TOTAL	30	30	100%

4- Teaching and learning methods:

METHODS USED:

- Modified Lectures: the scientific material is presented through:
 - PowerPoint presentations.
 - Animations.
- Problem solving
- Self learning

Method	Evidence	ILOs
Modified lectures	CDs of lectures	2.a.1-----2.a.7 2.b.1-----2.b.4 2.c.1.----2.c.5 2.e.1. ----2.e.5
Problem solving	Case scenarios	2.a.1.----2.a.6 2.d.1.----2.d.3
Self-learning	<ul style="list-style-type: none"> • Self presentation • Researches • log book 	2.a.1-----2.a.7 2.d.1.----2.d.5 2.f.1. ----2.f.6

TEACHING PLAN for each semester:

Lectures: 30 hours.

Time plane:

Item	Time schedule	Teaching hours	Total hours
Lectures	2h/week/15week	30hours	100%
Total		30hours	100%

5- Students Assessment methods:

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

8. Lectures (at least 50% attendance .)

5-B) Assessment TOOLS:

Tool	Evidence	Purpose (ILOs)
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Written examination: <ul style="list-style-type: none"> • MCQs • Case study • Short essay • Complete • True or false with explanation 	Attached module of examination	2.a.1-----2.a.7 2.b.1.----2.b.4 2.c.1.----2.c.5 2.d.1.----2.d.3 2.e.1. ----2.e.5
Oral examination	Viva card system	2.a.1-----2.a.7 2.b.1.----2.b.4 2.c.1.----2.c.5 2.d.1.----2.d.3 2.e.1. ----2.e.5

5-C) TIME SCHEDULE FOR EACH SEMESTER:

Exam	Week
1- Assessment 1	Week----- 8
3- Assessment 2 (Final exam)	Week----- 15

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1-mid term exam:		
d- MCQ	3.5 marks	10.6%
activities	2.5marks	7.6%
2-Final exam:		
p. Written	22.5 marks	68.2%
q. Oral	4.5 marks	13.6%
Total	33	100%

FORMATIVE ASSESSMENT:

- Student knows his marks after the Formative exams.

5-E) Examination description:

Examination	Description
1- Mid-term exam	Quiz (MCQs)

2- Final exam: a- Written	short essay .
b- Oral	1 session by 2 staff members.
3- Assignments & other activities	student activities

6- List of references:

6.a- Basic materials:

Department books:

- 3- Medical physiology (respiration) by staff members of physiology department 2014-2015.

6.b- Essential books (text books):

- a) John E Hall and Arthur C Guyton; 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. AlaaAbd- Elaziz Al-teles

Date 9/2013



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

Course Specifications

Course title: Physiology V

Code: PSL 205

Academic Year (2013 – 2014)

- Department offering the course: medical Physiology.
- Academic year of M.B. & B.Ch. program: Second year 2014– 2015.
- Date of specification approval
 Department council No: 231 Date:9 / 9 /2013
Internal evaluator: Dr.Alaa El DIN EL Tales

A) Basic Information:

-Allocated marks: 75 marks.

-Course duration: 15 weeks of teaching.

-Teaching hours:

1- Theoretical	45 hrs
2- Practical	30 hrs

B) Professional Information:

1- Overall Aim of the Course is to:

1.a. **Enable** the student to know the functions of the different endocrine glands and its underlying mechanisms of secretion and action of hormones.

1.b.**Enable** the student to correlate between the disturbance of the basic physiological functions of the endocrine glands and its applications clinically.

2- Intended Learning Outcomes (ILOs):

2.a. Knowledge and understanding:

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

2.a.1. **Identify** the main endocrine glands.

2.a.2. **Describe** hormones and mechanism of its action.

2.a.3. **List** the hormones secreted by different glands .

2.a.4. **Enumerate** the manifestations and causes of disturbances of different hormones secretion such as hyperthyroidism, myxedema, dwarfism, gigantism, cushing, etc.....

2.a.5. **Mention** the role of hormones in blood glucose regulation, calcium homeostasis and hormones of the male and female

2.a.6. **Define** endocrine gland, hormones, calcium homeostasis etc.....

2.a.7. **Explain** the underlying causes of hormone disturbances.

2.b. Practical and Skills

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

2.b.1. **Observe** hypothyroid manifestation.

2.b.2. **Identify** manifestations of tetany and how to diagnose it.

2.b.3. **Interpret** manifestation of growth hormone disorders.

2.b.4. **Comment on** pregnancy test.

2.c. Professional Attitude and Behavioral kills:

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

2.c.1. **Reflect** 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 the graduate will 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. **analyze** different mechanisms for regulation of hormones.

2.e.2. **Solve** medical problems related to different glands.

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 and communication technology to remain current with advances in knowledge and practice.

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.

3- Course contents:

Subject	Lectur es (hrs)	Practica l (hrs)	Total (hrs)	% of Total
1-ENDOCRINE & Reproduction Basic knowledge:	45	30	75	100%

1-Introduction of endocrinology. • Hormones. • Mechanism of action of hormones.	4	2	6	8%
2- The pituitary gland. Anterior pituitary Posterior pituitary	6 5	7 7	13 12	17.3% 16%
3-The thyroid gland.	6	4	10	13.3%
4- The parathyroid glands and Endocrine regulation of Ca ⁺⁺ .	4	4	8	10.7%
5- Suprarenal gland and Hormones regulating blood glucose level. • Mineralocorticoids. • Glucocorticoids. • Adrenal medulla.	8	6	14	18.7%
6- pancreas : insulin and glucagon	4		4	5.3%
6- The reproductive system. • Male reproductive system. • Female reproductive system.	4 4		4 4	5.3% 5.3%
Total	45	30	75	100%

4- Teaching and learning methods:

METHODS USED:

- Modified Lectures: the scientific material is presented through:
 - PowerPoint presentations.
 - Animations.
- Practical classes : demonstration of the endocrine disorders cases by colored cards showing the manifestation of each disorders e.g myxedema, dwarfism, cushing ...etc
- Problem solving
- Self learning

Method	Evidence	ILOs
Modified lectures	CDs of lectures	2.a.1-----2.a.6 2.c.1.----2.c.4 2.d.1.----2.d.5 2.f.1. ----2.f.6
Practical classes	Practical book	2.b.1.----2.b.6
Problem solving	Case scenarios	2.b.1.----2.b.5 2.e.1.----2.e.3
Self-learning	<ul style="list-style-type: none"> • Self presentation • Researches • log book 	2.a.1-----2.a.6 2.d.1.----2.d.5 2.f.1. ----2.f.6

TEACHING PLAN for the course:

Lectures: 45 hours.

Practical classes: 30 hours .

Time plane:

Item	Time schedule	Teaching hours	Total hours
Lectures	2 times/week/15 week (each 2h and 1h) (3 hours /week)	45 hours	60%
Practical classes	1 time/week/15 week (each 2 hours) (2 Hours/ week)	30 hours	40%
Total		75 hours	100%

5- Students Assessment methods:

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

9. Lectures (at least 50% attendance .)

10. Practical (at least 75% attendance .)

11. Log book

5-B) Assessment TOOLS:

Tool	Evidence	Purpose (ILOs)
Written examination: <ul style="list-style-type: none"> • 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.3 2.f.1. ----2.f.3
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.3 2.f.1. ----2.f.3
Practical examination	Practical Reports	2.b.1.----2.b.4

5-C) TIME SCHEDULE FOR EACH SEMESTER:

Exam	Week
1- Assessment 1	Week----- 8
3- Assessment 2 (Final exam)	Week----- 15

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- mid term exam:		
e- MCQ	5 marks	6.7%
activities	2.5 marks	3.3%

2- Final exam:		
r. Written	27.5 marks	36.6%
s. Oral	5 marks	6.7%
t. practical exam	10 marks	13.3%
u. practical book	5 marks	6.7%
v. log book	5 marks	6.7%
w. sheet	15 marks	20%
Total	75	100%

FORMATIVE ASSESSMENT:

- Student knows his marks after the Formative exams.

5-E) Examination description:

Examination	Description
1- Mid-term exam	Quiz (MCQs)
2- Final exam: a- Written b- Practical	short essay – true or false- complete- matching diagnose several endocrine disorders from the characteristic features presented by a picture.
c- Oral	1 session by 2 staff members.
3- Assignments & other activities	practical book and student activities

6- List of references:**6.a- Basic materials:**

Department books:

4- Medical physiology (endocrine and reproduction) by staff members of physiology department 2014-2015.

2- Practical book by staff members of physiology department 2014- 2015.

6.b- Essential books (text books):

a) John E Hall and Arthur C Guyton; 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 9/2013



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

Course Specifications

Course title: Physiology VI

Code: PSL 206

Academic Year (2013 – 2014)

- Department offering the course: medical Physiology.
- Academic year of M.B. & B.Ch. program: Second year 2013– 2014.
- Date of specification approval

Department council No: 231

Date: 9/ 9 / 2013

Internal evaluator: Dr.Alaa El din EL Talees

B) Basic Information:

-Allocated marks: 50 marks.

-Course duration: 15 weeks of teaching.

-Teaching hours

Theoretical	30 hrs
Practical	-----

B) Professional Information:

1- Overall Aim of the Course is to :

1.a. **Enable** the student to know the functions of the renal and digestive systems and its underlying mechanisms of actions.

1.b.**Enable** the student to correlate between the basic physiological functions of these body and its applications clinically.

2- Intended Learning Outcomes (ILOs):

2.a. Knowledge and understanding:

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

2.a.1. **Identify** the physiological anatomy of the kidney.

2.a.2. **Describe** the structure of digestive system, motility of the GIT, secretory functions of the GIT, digestive and absorptive functions of the GIT

2.a.3. **List** the digestive hormones and its actions, factors affecting renal handling of sodium.

2.a.4. **Enumerate** parameters of renal active transport.

2.a.5. **mention** renal handling of different ions and acid-base balance.

2.a.6. **Define** electrical activity of gastrointestinal smooth muscle.

2.a.7. **Explain** different causes of oedema and causes of jaundice.

2.b. Professional Attitude and Behavioral skills:

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

2.b.1. **Reflect** 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.b.2. **Demonstrate** good relations with colleague:

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

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

2.c. Communication skills:

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

2.c.1. **Communicate** clearly and effectively with colleagues.

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

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

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

2.c.5. **Respect** all his colleagues and supervisors.

2.d. Intellectual Skills:

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

2.d.1. **classify** digestive function of GIT.

2.d.2. **interpret** renal handling of different ions.

2.e. General and transferable Skills:

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

2.e.1. **Use** the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.

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

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

3- Course contents:

Subject	Lectures (hrs)	Total (hrs)	% of Total
1- Kidney:	15	15	50%
Basic knowledge:			
1-The overall kidney functions and Nephron and Renal blood flow.	1	1	3.3%
2-Glomerular filtration and GFR.	2	2	6.7%
3- Tubular function.	2	2	6.7%
4- Renal handling of water, water balance,	2	2	6.7%
5-Regulation of sodium excretion & extracellular fluid volume.	2	2	6.7%
6- Renal handling of K ⁺ , Ca ²⁺ , and phosphate.	2	2	6.7%
7- concentration of urine			
8-Role of the kidney in acid - base balance.	1	1	3.3%
Applied:			

1-pH	2	2	6.7%
2-micturition	2	2	6.7%
3- Diuretics.			3.3%
	1	1	
3- Physiology of Gastro-Intestinal Tract :Basic knowledge:	15	15	50%
1- Introduction and anatomy of GIT			
2-motility of the G.I.T	3	3	10%
3-G.I.T secretions.	6	6	20%
4- digestion and absorption in G.I.T)			
Applied:	5	5	16.7%
Vomiting, diarrhea and constipation.	1	1	c
Total			3.3%
	30	30	100%

4- Teaching and learning methods:

METHODS USED:

- Modified Lectures: the scientific material is presented through:
 - PowerPoint presentations.
 - Animations.
- Problem solving
- Self learning

Method	Evidence	ILOs
Modified lectures	CDs of lectures	2.a.1-----2.a.6 2.c.1.----2.c.4 2.d.1.----2.d.5 2.f.1. ----2.f.6
Problem solving	Case scenarios	2.b.1.----2.b.5 2.e.1.----2.e.3
Self-learning	<ul style="list-style-type: none"> • Self presentation • Researches • log book 	2.a.1-----2.a.6 2.d.1.----2.d.5 2.f.1. ----2.f.6

TEACHING PLAN for the semester:

Lectures: 30 hours. Time plane:

Item	Time schedule	Teaching hours	Total hours
Lectures	(2 hours /week)/15 week	30 hours	30
Total		30 hours	100%

5- Students Assessment methods:

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

12.Lectures (at least 50% attendance.)

5-B) Assessment TOOLS:

Tool	Evidence	Purpose (ILOs)
Written examination: <ul style="list-style-type: none"> • 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.3
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.3

5-C) TIME SCHEDULE FOR EACH SEMESTER:

Exam	Week
1- Assessment 1	Week----- 8
3- Assessment 2 (Final exam)	Week----- 15

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- mid term exam:		
f- MCQ activities	5 marks 2.5 marks	10% 5%

2- Final exam:		
x. Written	35 marks	70%
y. Oral	7.5 marks	15%
Total	50	100%

FORMATIVE ASSESSMENT:

- Student knows his marks after the Formative exams.

5-E) Examination description:

Examination	Description
1- Mid-term exam	Quiz (MCQs)
2- Final exam: a- Written	short essay- complete- matching-true or false
b- Oral	1 session by 2 staff members
3- Assignments & other activities	student activities

6- List of references:**6.a- Basic materials:**

Department books:

- 5- Medical physiology (kidney and digestion) by staff members of physiology department 2014-2015.

6.b- Essential books (text books):

a) John E Hall and Arthur C Guyton; 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 9/2013



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

Course Specifications

Course title: Physiology VII

Code: PSL 207

Academic Year (2013 – 2014)

- Department offering the course: medical Physiology.
- Academic year of M.B. & B.Ch. program: Second year 2013– 2014.
- Date of specification approval

Department council No: 231 Date: 9 / 9 /2013

Internal evaluator: Dr.Alaa El Din EL Talees

C) Basic Information:

-Allocated marks: 87.5 marks.

-Course duration: 15 weeks of teaching.

-Teaching hours:

1- Theoretical	45 hrs
2- Practical	30 hrs

B) Professional Information:

1- Overall Aim of the Course is to:

1. a. **Enable** the student to know the functions of the different parts of the central nervous system and its underlying mechanisms.
- 1 .b. **Enable** the student to correlate between the basic physiological functions of the different parts of the central nervous systems and its applications clinically.
- 1.c. **Develop** 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.**List**, functions of different areas of cerebral cortex, cerebellum thalamus and hypothalamus.

2.a.2.**Define** Sensory receptors, synapse, clonus, EEG, learning, memory, speech & ataxia.

2.a.3.**Describe** Pathways of different sensations (e.g crude touch, fine touch, pain, thermal). & disorders of different parts in CNS as pyramidal tract, cerebellum and basal ganglia.

2.a.4.**Explain** Causes of visceral pain & mechanism of referred pain.

2.a.5.**Identify** sensory & motor areas of the cerebral cortex.

2.a.6.**Enumerate** Types of sensations

2.a.7. **Summarize** Reflex action & reflex arc, classification & properties of sensory receptors, spinal cord reflexes, functions of cerebellum, functions of basal ganglia, differences between UMNL & LMNL, higher brain functions

2.b. Practical Skills

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

2.b.1.**Examine** Crude touch sensation, tactile localization, tactile discrimination, stereognosis, pain sensation, thermal sensation & deep sensations.

2.b.2.**Examine** Muscle power, muscle state, muscle tone.

2.b.3.**Examine** planter reflex, abdominal reflex, ankle jerk, knee jerk, biceps jerk, triceps jerk, subinator jerk, ankle clonus & knee clonus.

2.b.4.**perform** Finger nose test & heel knee shin test.

2.b.5.**Observe** Results in Crude touch sensation test, tactile localization test, tactile discrimination test, stereognosis test, etc.

2.b.6.**Interpret** Why tactile localization & discrimination are different in different areas of the body, abnormal planter reflex, abnormal abdominal reflex & abnormal tendon jerks.

2.c. Professional Attitude and Behavioral skills:

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

2.c.1. **Reflect** 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 the graduate will 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. **analyze** medical problems related to diagnosis & treatment of ataxia, parkinsonism and motor neuron lesion.

2.e.2. Differentiate between the different sensory & motor areas of the cerebral cortex

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 and communication technology to remain current with advances in knowledge and practice.

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.

3- Course contents: of the central nervous system (CNS).

Subject	Lectures (hrs)	Practical (hrs)	Total (hrs)	% of Total
1- Central Nervous System:	45	30	75	100%
Basic knowledge:				
1-Basic organization and functions of the central nervous system.	5	-	5	6.7%
The sensory system:				
1- the sensory receptors.	3	-	3	4%
2-Sensations: thermal and tactile.	3	6	9	12%
3 -pain sensation and Pain Control System.	3	6	9	12%
4-Synapses of the CNS.	6	-	6	8%
The Motor systems:				
1-the spinal cord.	5	-	5	6.7%
2- The vestibular apparatus.	3	12	15	20%
3- Postural reflexes.	2	-	2	2.7%
4- The thalamus.	2	-	2	2.7%
5- The basal ganglia.	4	-	4	5.3%
6- The cerebellum.	4	-	4	5.3%

7- The Hypothalamus.	2	6	8	10.6%
8- The cerebral cortex).	3	-	3	4%
Total	45	30	75	100%

4- Teaching and learning methods:

METHODS USED:

- Modified Lectures: the scientific material is presented through:
 - PowerPoint presentations.
 - Animations.
- Practical classes +field training : vedioes for sensory , motor examinations and co-ordination tests. Demonstration of these examinations.
- Problem solving
- Self learning

Method	Evidence	ILOs
Modified lectures	CDs of lectures	2.a.1-----2.a.6 2.c.1.----2.c.4 2.d.1.----2.d.5 2.f.1. ----2.f.3
Practical classes	Practical book	2.b.1.----2.b.6
Problem solving	Case scenarios	2.b.1.----2.b.5 2.e.1.----2.e.3
Self-learning	<ul style="list-style-type: none"> • Self presentation • Researches • log book 	2.a.1-----2.a.6 2.d.1.----2.d.5 2.f.1. ----2.f.6

TEACHING PLAN for CNS:

Lectures: 45 hours.

Practical classes: 30 hours .

Time plane:

Item	Time schedule	Teaching hours	Total hours
Lectures	2 times/week/15 week (each 2h and1h) (3 hours /week)	45 hours	60%
Practical classes+ field training	1 time/week/15 week (2 Hours/ week)	30 hours	40%
Total		75 hours	100%

5- Students Assessment methods:

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

13.Lectures (at least 50% attendance.)

14.Practical (at least 75% attendance.)

15.Log book

5-B) Assessment TOOLS:

Tool	Evidence	Purpose (ILOs)
Written examination: <ul style="list-style-type: none"> • 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.3 2.f.1. ----2.f.6
Oral examination	Via 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.3 2.f.1. ----2.f.6
Practical examination	Practical Reports	2.b.1.----2.b.6
Field training	Field training reports	2.b.1.----2.b.6

5-C) TIME SCHEDULE FOR 2nd SEMESTER:

Exam	Week
1- Assessment 1	Week----- 8
3- Assessment 2 (Final exam)	Week----- 15

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- mid term exam:		
g- MCQ activities	5.5 marks	6.3%
	2.5 marks	2.9%
2- Final exam:		
z. Written	37.5 marks	42.9%
aa. Oral	7 marks	8%
bb.practical exam	10 marks	11.4%
cc.practical book	5 marks	5.7%
dd.log book	5 marks	5.7%
ee.sheet	13 marks	14.8%
e. field training	2 marks	2.8%
Total	87.5	100%

FORMATIVE ASSESSMENT:

- Student knows his marks after the Formative exams.

5-E) Examination description:

Examination	Description
1- Mid-term exam	Quiz (MCQs)
2- Final exam: a- Written b- Practical c- Oral	short essay- complete-true or false-matching examination of superficial and deep sensations, examination of reflexes, examination of cerebellum 1 session by 2 staff members

3- Assignments & other activities	practical book and student activities
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6- List of references:

6.a- Basic materials:

Department books:

6- Medical physiology (central nervous system) by staff members of physiology department 2014-2015.

2- Practical book by staff members of physiology department 2014- 2015.

6.b- Essential books (text books):

a) John E Hall and Arthur C Guyton; 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: 2

- Department lectures halls: 1

- Department laboratories: 2

Course coordinator: Dr. mona maher

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

Date 9/2013



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

Course Specifications

Course title: Physiology VIII

Code: PSL 208

Academic Year (2013 – 2014)

- Department offering the course: medical Physiology.
- Academic year of M.B. & B.Ch. program: Second year 2013– 2014.
- Date of specification approval
 Department council No: 231 Date: 9 / 9 / 2013
- Internal evaluator: Dr.Alaa El Din EL Talees

D) Basic Information:

-Allocated marks: 37.5 marks.

-Course duration: 15 weeks of teaching.

-Teaching hours:

Theoretical	30 hrs
Practical	-----

B) Professional Information:

1- Overall Aim of the Course:

1.a. **Enabling** the student to know the functions of the different structures in eye and ear and its underlying mechanisms of action.

1.b. **Enabling** the student to correlate between the basic physiological functions of the eye and ear and its disturbances.

2- Intended Learning Outcomes (ILOs):

2.a. Knowledge and understanding:

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

- 2.a.1.**List** Causes of conductive deafness & Causes of perceptive deafness.
- 2.a.2.**Define** Hypermetropia, myopia, astigmatism, presbyopia, binocular vision & deafness.
- 2.a.3.**Describe** Visual, pupillary light reflex, accommodation reflex, auditory, taste, olfaction pathways.
- 2.a.4.**Explain** Causes of different forms of color blindness, mechanism of stimulation of taste receptors & mechanism of olfaction and taste.
- 2.a.5.**Identify** Physiological anatomy of the eye & ear, neural functions of the retina & special areas in the retina.
- 2.a.6.**Enumerate** errors of refraction & functions of eye lens.
- 2.a.7. **Summarize** Near response, properties of rods & cones & effect of lesions in visual pathway.

2.b. Professional Attitude and Behavioral skills:

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

- 2.b.1. **Reflect** 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.b.2. **Demonstrate** good relations with colleague:
- Through dividing the students into small groups sharing the same experiment in practical lessons
- 2.b.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.b.4. **Demonstrate** respect to superiors and establish a good student- teacher relationship.

2.c. Communication skills:

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

- 2.c.1. **Communicate** clearly and effectively with colleagues.

- 2.c.2. **Establish** trial for a good presentation in front of his colleagues during scientific discussions.
- 2.c.3. **Communicate** effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.
- 2.c.4. **Cope up** with difficult situations as oral exams and this is done by continuous assessment through practical lessons.
- 2.c.5. **Respect** all his colleagues and supervisors.

2.d. Intellectual Skills:

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

- 2.d.1. **Integrate** facts about function of different organs sub serving the homeostasis
- 2.d.2. **analyze** medical problems related to diagnosis & treatment of physiological problems.

2.e. General and transferable Skills:

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

- 2.e.1. **Use** the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.
- 2.e.2. **Retrieve**, manage, and manipulate information by all means, including electronic means.
- 2.e.3. **Present** information clearly in written, electronic and oral forms.

3- Course contents:

for the course semester

Subject	Lectures (hrs)	Total (hrs)	% of Total
1- Special senses:	30	30	100%
Basic knowledge:			
1-Physiology of vision:			
1-functional anatomy of the eye	2	2	6.6%
2- Optics of the eye	3	3	10%

3- The retina	4		13.3%
	3	4	10%
4- Neurophysiology of vision		3	
2-Physiology of hearing:	2		6.7%
1-Functional anatomy of the ear		2	
	2		6.7%
2- Sound waves		2	
	2		6.7%
3- Auditory pathway		2	
	2		6.7%
4- Deafness		2	
	2		6.7%
5- Hearing tests		2	
	4		13.3%
3- Taste sensation.		4	
	4		13.3%
4-Olfactory sensation.		4	
	4		13.3%
TOTAL	30	30	100%

4- Teaching and learning methods:

METHODS USED:

- Modified Lectures: the scientific material is presented through:
 - PowerPoint presentations.
 - Animations.
- Problem solving
- Self learning

Method	Evidence	ILOs
Modified lectures	CDs of lectures	2.a.1-----2.a.6 2.b.1.----2.b.4 2.c.1.----2.c.5 2.e.1. ----2.e.3
Problem solving	Case scenarios	2.d.1.----2.d.3
Self-learning	<ul style="list-style-type: none"> • Self presentation • Researches • log book 	2.a.1-----2.a.6 2.d.1.----2.d.5 2.f.1. ----2.f.6

TEACHING PLAN for the course:**Lectures:** 30 hours.**Time plane:**

Item	Time schedule	Teaching hours	Total hours
Lectures	1times/week/ 15 weeks (each,2h) (2 hours /week)	30 hours	100%
Total		30 hours	100%

5- Students Assessment methods:**5-A) ATTENDANCE CRITERIA:** according to faculty by laws.

16.Lectures (at least 50% attendance .)

5-B) Assessment TOOLS:

Tool	Evidence	Purpose (ILOs)
Written examination: <ul style="list-style-type: none"> • MCQs • Case study • Short essay • Complete • True or false with explanation 	Attached module of examination	2.a.1-----2.a.7 2.b.1.----2.b.4 2.c.1.----2.c.5 2.d.1.----2.d.3 2.e.1. ----2.e.3
Oral examination	Viva card system	2.a.1-----2.a.7 2.b.1.----2.b.4 2.c.1.----2.c.5 2.d.1.----2.d.3 2.e.1. ----2.e.3

5-C) TIME SCHEDULE FOR 2nd SEMESTER:

Exam	Week
1- Assessment 1	Week----- 8
3- Assessment 2 (Final exam)	Week----- 15

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- mid term exam:		
h- MCQ	4.5marks	12%
activities	2.5 marks	6.7%
2- Final exam:		
ff. Written	25 marks	66.7%
gg.Oral	5.5 marks	14.6%
Total	37.5	100%

FORMATIVE ASSESSMENT:

- Student knows his marks after the Formative exams.

5-E) Examination description:

Examination	Description
1- Mid-term exam	Quiz (MCQs)
2- Final exam:	
a- Written	short essay –complete-matching- true or false
b- Oral	1 session by 2 staff members
3- Assignments & other activities	practical book and student activities

6- List of references:**6.a- Basic materials:**

Department books:

- 7- Medical physiology (cardiovascular system) by staff members of physiology department 2014-2015.

6.b- Essential books (text books):

- a) John E Hall and Arthur C Guyton; 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 9/2013



Benha University
Faculty of Medicine
Department of Medical Biochemistry.

Course Specification

Course title: BIOCHEMISTRY I
(Code) : BIC111

First Academic Year (2013 – 2014) 1st semester

- **Department offering the course: MEDICAL BIOCHEMISTRY**
- **Academic year of M.B.& B.Ch. program: First year- 1st semester.**
 - **Date of specification approval: department council date - 9 - 2013**

A) Basic Information:

- **Allocated marks: 75 marks.**
- **Course duration 15 weeks**
- **Teaching hours:**

1- Theoretical	45 hours
2- Practical	30 hours

B) Professional Information:

1- Overall Aim of the Course:

- 1.1. To make the student aware of the essential topics of biochemistry including biomolecules of carbohydrates, lipids and some minerals
- 1.2. To make the student oriented with the physico-chemical basis of biological systems; and the related clinical problems.

2- Intended Learning Outcomes (ILOs):

2.1. Knowledge and understanding:

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

- 2.1.1. **Describe** the structure, classification and properties of carbohydrates of biological importance.
- 2.1.2. **Define** optical activity – isomerism – mutarotation
- 2.1.3. **Describe** chemical properties of monosaccharides

- 2.1.4. **illustrate** simple and derived monosaccharides – Disaccharides – oligosaccharides – polysaccharides of biological importance
- 2.1.5. **Describe** the structure, classification, properties and importance of Mucopolysaccharides (Glycosaminoglycans)
- 2.1.6. **classify** solutions according to concentration and size of molecules.
- 2.1.7. **Define** PH-buffers and anion gap
- 2.1.8. **identify** the role of buffers, respiratory and renal tracts in PH regulation.
- 2.1.9. **Explain** the mechanism and causes of acidosis and alkalosis.
- 2.1.10. **Describe** the structure, classification and properties of lipids of biological importance.
- 2.1.11. **Describe** saturated, unsaturated and essential F.A., their biological roles and biomedical importance.
- 2.1.12. **Demonstrate** the structure of Triacylglycerol-phospholipids-Glycolipids-Steroids, their biological roles and biomedical importance.
- 2.1.13. **Demonstrate** the importance of some minerals to the human body.

2.2. Practical and Clinical Skills

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

- 2.2.1. Identify lab instruments, apparatuses and glass wares and their uses in practice.
- 2.2.2. Practice basics of safety in the laboratory.
- 2.2.3. Apply different methods of PH determination.
- 2.2.4. determine physical properties of CHO.
- 2.2.5. Perform specific chemical tests to identify different sugars.

2.3. Professional Attitude and Behavioral skills:

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

- 2.3.1. Demonstrate respect and Work effectively as a member or a leader of an interdisciplinary team.
- 2.3.2. Establish good relations with colleagues to share all types of inter-professional activities including shared learning.

2.4. Communication skills:

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

- 2.4.1. Communicate clearly, sensitively and effectively with and their colleagues ,staff and co-staff.
- 2.4.2. Cope up with difficult situations
- 2.4.3. Respect superiors, colleagues and all members of the health profession.

2.5. Intellectual Skills:

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

- 2.5.1. **Interpret** the biochemical basis of some physiological processes occurring in the body and some clinical problems.
- 2.5.2. **analyze** biochemical knowledge to solve medical cases and suggest treatment.
- 2.5.3. **Correlate** biochemical alterations with clinical data to reach etiology,diagnosis and treatment.
- 2.5.4. **plan** and conduct a research task and collect scientific data.
- 2.5.5. **Interpret** the observations of chemical tests to identify unknown sugar solutions.

2.6. 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 .
- 2.6.6. Work effectively as a member or a leader of an interdisciplinary team

3- Course contents:

<u>subject</u>	<u>Lectures</u>			<u>Practical</u>		
	teaching hrs	% of Total for semester	% of Total for year	teaching hrs	% of Total for semester	% of Total for year
1-Physical chemistry : -Classification of solutions according to the concentration and size of molecules -Properties of colloidal solutions -LAW OF MASS ACTION -Reaction of solutions -PH -Determination of PH -Regulation of PH by buffers -Types of buffers -Respiratory regulation of PH -Renal regulation of PH -Anion Gap -Acidosis -Alkalosis -Isotopes	<u>11</u>	<u>24.4</u> <u>%</u>	<u>12.2</u> <u>%</u>	<u>4</u>	<u>13.3%</u>	<u>6.6%</u>
2-Carbohydrate chemistry: -Definition- Importance of carbohydrates- Classification -Optical activity -Isomerism -Cyclic structure of the sugar -Mutarotation -Formation of glycosides -Chemical properties of monosaccharides -Simple Monosaccharides of Biological Importance	<u>14</u>	<u>31.1</u> <u>%</u>	<u>15.5</u> <u>%</u>	<u>26</u>	<u>86.6%</u>	<u>43.3%</u>

-Derived Monosaccharides of Biological Importance -DISACCHARIDES -OLIGOSACCHARIDES -POLYSACCHARIDES -Different polysaccharides of biological importance - MUCOPOLYSACCHARIDES (Glycosaminoglycans)						
Chemistry of lipids: -definition and classification -fatty acids:general nomenclature and properties -structure of fatty acids:monocarboxylic, straight chain,even no.of c atoms • Saturated or unsaturated.Cis-trans isomers • Essential fatty acids -Triacylglycerol-phospholipids-Glycolipids-Steroids - Structural forms of lipids	<u>14</u>	<u>31.1</u> <u>%</u>	<u>15.5</u> <u>%</u>	..... ..	..... ..	..... ..
Minerals: • MAJOR ELEMENTS • TRACE ELEMENTS • ULTRATRACE ELEMENTS	<u>6</u>	<u>13.3</u> <u>%</u>	<u>6.6%</u>	..... .	..... .	..... .
Total	<u>45</u>	<u>100%</u>	<u>50%</u>	<u>30</u>	<u>100%</u>	<u>50%</u>

4- Teaching and learning methods:

METHODS USED:

METHOD	evidence	ILOs
Modified Lectures	CDs of Lectures	2.1/2.3/2.4/2.5/2.6.5
Small group discussion	Practical classes	2.2./2.3/2.4/2.5/2.6.5/2.6.6
Self learning	Research assignments	2.1/2.5/2.6
Problem solving	Case study	2.1/2.5

TEACHING PLAN:

Lectures: 45 teaching hours Lectures divided according to the current time table in general lecture halls

Practical classes: 30 teaching hours

Time plan:

Item	Time schedule	Total hours
Lectures	<u>3</u> hrs/week for 15 weeks	60%
Practical	<u>2</u> hour / week ___ for 15 weeks between 12 p.m.to 2 p.m.	40%
tutorial		
Total	5 hours/week	100%

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA: Faculty bylaws

5-B) Assessment TOOLS:

Tool	Purpose (ILOs)
Written examination: -short essay questions -MCQ -Match -True or false	2.1-2.5
Oral examination: oral examination station	2.1-2.3-2.4-2.5

with 2 staff members(10-15 min) viva Cards	
Practical examination: OSPE	2.2-2.3-2.4-2.5

5-C) TIME SCHEDULE: Faculty bylaws

Semester	Exam	Week or month
First semester	1- Assessment 1	3 rd week
	2- Assessment 2	7 th week
	3- Assessment 3	13 th week
	4- Final 1 st semester assessment	17 th week (January)
	5- Practical assessment	17 th week (January)

5-D) Weighting System for each semester:

Semester	Examination	Marks allocated	% of Total Marks
1 st semester	1- Shock exams	4	2.7%
	2- Assessment 1	3	2%
	3- Assessment 2	4	2.7%
	4- Assessment 3	4	2.7%
	5- Final exam:		
	a- Written	37.5	25%
	b- Practical exam	10	6.7%
	c- Oral	5	3.3%
6- Assignments, attendance & other activities	7.5	5%	
	Total	75	50%

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

FORMATIVE ASSESSMENT:

Student knows his marks after the Formative exams.

5-E) Examinations 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- Assessment 1	One hour written paper composed of short essay questions and MCQ
3- Assessment 2	One hour written paper composed of short essay questions

	and MCQ
4- Assessment 3	One hour written paper composed of short essay questions and MCQ
5- Final exam: a- Written	three hour written paper composed of short essay questions and MCQ.
b- Practical and tutorial exam	Identification of provided solutions
c- Oral	oral examination station with 2 staff members(10-15 min) viva Cards
6- Assignments & other activities	Assignments on the biochemical basis of medical subjects or problems + practical books +attendance.

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: 9/2013



Benha University
Faculty of Medicine
Department of Medical Biochemistry

Course Specification

Course title: BIOCHEMISTRY II

(Code) : BIC112

First Academic Year (2013 – 2014) 2nd semester

- **Department offering the course:** MEDICAL BIOCHEMISTRY
- **Academic year of M.B.& B.Ch. program:** First year -2nd semester.
- **Date of specification approval:** department: 3- 9 - 2013

A) Basic Information:

- **Allocated marks:** 75 marks
- **Course duration:** 15 weeks.
- **Teaching hours:**

1- Theoretical	45 hours
2- Practical	30 hours

B) Professional Information:

1- Overall Aim of the Course:

- 1.1. To make the student aware of the essential topics of biochemistry including biomolecules of proteins, nucleotides ,nucleic acids and enzymes.
- 1.2. To make the students aware with basic principles of Molecular biology and protein synthesis.
- 1.3. To enable the student to be familiar with biotechnology methods and their clinical implications.

2- Intended Learning Outcomes (ILOs):

2.1. Knowledge and understanding:

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

- 2.1.1. **Describe** the structure,classification,and properties of amino acids and protein.

- 2.1.2. **List** molecular structures and chemical properties of macromolecules , their functions including:enzymes.Hb,myoglobin,collagen , elastin and immunoglobulins.
- 2.1.3. **Describe** the structure and properties of proteins including enzymes of biological importance.
- 2.1.4. **Define** cofactors, Apoenzymes,holoenzymes, Active site, Enzyme specificity, Metallo-enzyme, coenzyme , prosthetic group and Isoenzymes.
- 2.1.5. **Explain** mode of action of enzymes and factors influencing enzyme activity.
- 2.1.6. **Describe** the structure and function of heme and proteins of the extra-cellular matrix.
- 2.1.7. **Demonstrate** the structure and importance of immunoglobulins
- 2.1.8. **mention** the chemistry of nucleotides and nucleic acids
- 2.1.9. **summarize** the processes of replication, transcription , translation and posttranslational modifications.
- 2.1.10. **Describe** the components ,regulation and abnormalities of cell cycle together with the causes and different types of DNA mutation and repair , telomere and telomerase enzyme.
- 2.1.11.**Define** genetic code and its features.
- 2.1.12. **Identify** recombinant DNA biotechniques and their clinical implications.
- 2.1.13. **Point out** the significance of human genome and proteome projects and the principles of gene therapy.
- 2.1.14. **Describe** the molecular biology techniques.

2.2. Practical and Clinical Skills

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

- 2.2.1.**Practice** basics of safety in the laboratory.
- 2.2.2.**Perform** some basic chemical tests to identify different proteins
- 2.2.3.**Determine** physical properties of different proteins.
- 2.2.5. **Write a Comment** on results of DNA electrophoresis

2.3. Professional Attitude and Behavioral skills:

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

- 2.3.1. Demonstrate respect and Work effectively as a member or a leader of an interdisciplinary team .
- 2.3.2. Establish good relations with colleagues to share all types of inter-

professional activities including shared learning.

2.4. Communication skills:

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

- 2.4.1. Communicate clearly, sensitively and effectively with their colleagues ,staff and co-staff.
- 2.4.2. Cope up with difficult situations
- 2.4.3. Respect superiors, colleagues and all members of the health profession.

2.5. Intellectual Skills:

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

- 2.5.1. **Interpret** the biochemical basis of some physiological processes occurring in the body and some clinical problems
- 2.5.2. **Analyze** the observations of chemical tests to identify unknown protein solutions.
- 2.5.3. **Correlate** biochemical alterations with clinical data to reach etiology, diagnosis and treatment.
- 2.5.4. **classify** causes, detection and consequences of genetic defect(s).
- 2.5.5. **Interpret** the photographs of electrophoresis runs of Polymerase chain reaction (PCR) products.

2.6. 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 .
- 2.6.6. Work effectively as a member or a leader of an interdisciplinary team

3- Course contents:

<u>subject</u>	<u>Lectures</u>			<u>Practical</u>		
	teaching hrs	% of Total for semester	% of Total for year	teaching hrs	% of Total for semester	% of Total for year
1-Protein chemistry: -Amino acids: <ul style="list-style-type: none"> • Definition • General structure • Classification(chemical classification - classification according to polarity-biological classification-metabolic classification) • Amino acids properties(solubility in water-optical property-amphoteric property-amino acids can act as buffers) -Protein structure: <ul style="list-style-type: none"> • Peptide bond • Primary structure • Secondary structure • Tertiary structure • quaternary structure Properties of Proteins Isolation, purification and fractionation of proteins -Classification of proteins: <ul style="list-style-type: none"> • -Classification based on functions • -Classification based on the shape • -Classification based on 	<u>14</u>	<u>31.1</u> <u>%</u>	<u>15.5</u> <u>%</u>	<u>25</u>	<u>83.3%</u>	<u>41.6</u> <u>%</u>

<p>nutritional value</p> <p>-Classification based on composition and solubility:</p> <p>I- Simple proteins.</p> <p>II- Compound or conjugated proteins.</p> <p>III- Derived proteins.</p> <p>-Physiologically active peptides</p> <p>-Chemistry of connective tissue</p> <ul style="list-style-type: none"> • Collagen • Elastin • Fibronectin • Integrins <p>-Immunoglobulins (Igs)</p> <p>-Hemoproteins</p> <p>-Hemoglobin and Hemoglobinopathies</p>						
2-Nucleotides and nucleic acid chemistry	<u>2</u>	<u>4.4</u> <u>%</u>	<u>2.2</u> <u>%</u>	..... .....	..... ...	.....
3-Cell cycle; regulatory factors, Apoptosis, Oncogens and Carcinogenesis	<u>3</u>	<u>6.6</u> <u>%</u>	<u>3.3</u> <u>%</u>	..... .....	..... ..	..... .....
4-DNA Replication,mutations and Repair , telomere & telomerase	<u>4</u>	<u>8.8</u> <u>%</u>	<u>4.4</u> <u>%</u>	..... .....	..... ..	..... .....
5- Gene Expression and Transcription	<u>3</u>	<u>6.6</u> <u>%</u>	<u>3.3</u> <u>%</u>	..... .....	..... ..	..... .....
6- Protein Synthesis and Modifications	<u>3</u>	<u>6.6</u> <u>%</u>	<u>3.3</u> <u>%</u>	..... .....	..... ..	..... .....
7-Recombinant DNA Technology, Hybridization & blotting techniques, DNA sequencing, microarray , Gene Therapy and Human	<u>7</u>	<u>15.5</u> <u>%</u>	<u>7.7</u> <u>%</u>	<u>5</u>	<u>16.6%</u>	<u>8.3%</u>

Genome and proteome projects						
8-Enzymes: -Definitions: <ul style="list-style-type: none"> • enzymes as biological catalysts • cofactors • Apoenzymes,holoenzymes • Active site -Nomenclature of enzymes -Enzme specificity -Examples of co-enzymes -Metallo-enzyme -Differences between coenzyme and prosthetic group -MODE OF ACTION OF ENZYMES - FACTORS INFLUENCING ENZYME ACTIVITY: <ul style="list-style-type: none"> • Enzyme concentration. • Substrate concentration. • Product concentration. • Temperature. • Hydrogen ion concentration (pH). • Allosteric regulation. • Covalent modification. • Presence of 	<u>9</u>	<u>20%</u>	<u>10%</u>	..... .....	..... ..	..... .....

activators. • Presence of inhibitors -clinical enzymology -Isoenzymes						
Total	<u>45</u>	<u>100</u> <u>%</u>	<u>50%</u>	<u>30</u>	<u>100%</u>	<u>50%</u>

4- Teaching and learning methods:

METHODS USED:

METHOD	evidence	ILOs
-Modified Lectures	CDs of Lectures	2.1/2.3/2.4/2.5/2.6.5
-Small group discussion	Practical classes	2.2./2.3/2.4/2.5/2.6.5/2.6.6
-Self learning	Research assignments	2.1/2.5/2.6
-Problem solving	Case study	2.1/2.5

TEACHING PLAN:

Lectures: 45 teaching hours Lectures divided according to the current time table in general lecture halls

Practical classes: 30 teaching hours

Time plan:

Item	Time schedule	Total hours
Lectures	<u>3</u> hrs/week for 15 weeks	60%
Practical	<u>2</u> hour / week for 15 weeks between 9 a.m.to 11 a.m.	40%
tutorial		
Total	5 hours/week	100%

5- Students Assessment methods:**5-A) ATTENDANCE CRITERIA:** Faculty bylaws**5-B) Assessment TOOLS:**

Tool	Purpose (ILOs)
Written examination: -short essay questions -MCQ -Match -True or fals	2.1-2.5
Oral examination: oral examination station with 2 staff members(10- 15 min) viva Cards	2.1-2.3-2.4-2.5
Practical examination: OSPE	2.2-2.3-2.4-2.5

5-C) TIME SCHEDULE: Faculty bylaws

Semester	Exam	Week or month
Second semester	1- Assessment 1	4 th week
	2- Assessment 2	11 th week
	3- Assessment 3	13 th week
	4- Final 2 nd semester assessment	17 th week (June)
	5- Practical assessment	17 th week (June)

5-D) Weighting System for the semester:

Semester	Examination	Marks allocated	% of Total Marks
2 nd semester	1- Shock exams	4	2.7%
	2- Assessment 1	4	2.7%
	3- Assessment 2	5	3.3%
	4- Assessment 3	2	1.3%
	5- Final exam: a- Written	37.5	25%
	b- Practical and tutorial exam	10	6.7%
	c- Oral	5	3.3%
	6- Assignments, attendance & other activities	7.5	5%

	Total	75	50%
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- The minimum passing & Passing grades (Faculty bylaws).

FORMATIVE ASSESSMENT:

Student knows his marks after the Formative exams.

5-E) Examinations 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- Assessment 1	One hour written paper composed of short essay questions and MCQ
3- Assessment 2	One hour written paper composed of short essay questions and MCQ
4- Assessment 3	One hour written paper composed of short essay questions and MCQ
5- Final exam: a- Written	three hour written paper composed of short essay questions and MCQ.
b- Practical and tutorial exam	Identification of provided solutions and short questions on DNA or RNA extraction ,PCR ,Identity assessment RNA and the electrophoresis photograph of PCR run and protein run
c- Oral	oral examination station with 2 staff members(10-15 min) viva Cards
6- Assignments & other activities	Assignments on the biochemical &/or molecular basis of medical subjects or problems + practical books +attendance.

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: 9/2013



Benha University
Faculty of Medicine
Department of Medical Biochemistry.



Course Specification

Course title: BIOCHEMISTRY IV
(Code): BIC 212

Second Academic Year (2013 – 2014) 2nd semester

- Department offering the course: **MEDICAL BIOCHEMISTRY**
- Academic year of M.B.& B.Ch. program: **Second year 2nd semester**
- Date of specification approval: **department council ,date -9-2013**

A) Basic Information:

- **Allocated marks** 75 marks
- **Course duration:** 15 weeks of teaching.
- **Teaching hours:**

1- Theoretical	45 hours
2- Practical	30 hours

B) Professional Information:

1- Overall Aim of the Course:

- 1.1. To enable the student to be oriented with the biochemical importance of some macro- and micronutrients.
- 1.2. To enable the student to illustrate and/or describe the metabolic pathways of some macronutrients and nucleotides.
- 1.3. To enable the students to point-out some hereditary and acquired metabolic disturbances and their biochemical laboratory and clinical outcomes.
- 1.4. To enable the student to describe major body fluids composition and their clinical impact.
- 1.6. To enable the student to interpret medical laboratory reports

2- Intended Learning Outcomes (ILOs):

2.1. Knowledge and understanding:

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

- 2.1.1. Define the metabolic pathways of proteins, nucleotides and their micro-molecules and determine the site of each.
- 2.1.2. Illustrate the steps and regulatory mechanisms of these pathways.
- 2.1.3. Define some important nitrogenous compounds derived from amino acid and describe their synthesis and functions.

- 2.1.4.State the sources and fate of ammonia in human body and cause of ammonia intoxication.
- 2.1.5. Point out the related metabolic disorders and their clinical prints on biochemical and molecular basis.
- 2.1.6. Describe micronutrients, their biochemical, clinical and laboratory importance and deficiency manifestations of each.
- 2.1.7. Describe the components of some body fluids; viz. blood, urine, milk, Semen,CSF and sweat.
- 2.1.8. Explain how xenobiotics are metabolized inside the body.

2.2. Practical and Clinical Skills

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

- 2.2.1.Practice basics of safety in the laboratory.
- 2.2.2.Apply the principles of Colorimetry.
- 2.2.3. Estimate serum levels of glucose, total proteins, , creatinine and uric acid by colorimetric methods.
- 2.2.4.write a commnet on the results of these estimations.

2.3. Professional Attitude and Behavioral skills:

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

- 2.3.1. Demonstrate respect and Work effectively as a member or a leader of an interdisciplinary team .
- 2.3.2.Establish good relations with colleagues to share all types of inter-professional activities including shared learning.

2.4. Communication skills:

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

- 2.4.1.Communicate clearly, sensitively and effectively with and their colleagues ,staff and co-staff.
- 2.4.2.Cope up with difficult situations
- 2.4.3.Respect superiors, colleagues and all members of the health profession.

2.5. Intellectual Skills:

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

- 2.5.1.Correlate biochemical alterations with clinical data to reach etiology,diagnosis and treatment.
- 2.5.2.classify causes,detection and consequences of inborn errors of metabolism.
- 2.5.3. Interpret symptoms, signs and biochemical laboratory findings of some metabolic disorders.
- 2.5.4.Analyze and evaluate laboratory results and use them in diagnosis of diseases as impaired renal functions.
- 2.5.5. assess the clinical significance of determination of plasma levels of glucose, total proteins, , creatinine and uric acid.

2.6. 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 .

2.6.6. Work effectively as a member or a leader of an interdisciplinary team .

3-Course contents:

<u>subject</u>	<u>Lectures</u>			<u>Practical</u>		
	teaching hrs	% of Total for semester	% of Total for year	teaching hrs	% of Total for semester	% of Total for year
1-Protein Metabolism: <ul style="list-style-type: none"> • Digestion, Absorption(The sodium-amino acids transporter- The □-glutamyl cycle) • Nitrogen Balance- Amino acid pool • Metabolism of □□keto acids • Metabolism of ammonia • Deamination of Amino Acids: <ul style="list-style-type: none"> -Oxidative deamination. -Transamination. -Transdeamination. -Specific deamination. • Urea cycle • Hyperammonemia • Creatine and Creatinine Metabolism • Metabolic fate of amino acid 	<u>15</u>	<u>33.3%</u>	<u>16.6%</u>	.....	.....	.....

<p>carbon skeletons</p> <ul style="list-style-type: none"> Metabolism of individual amino acid 						
<p>2-nucleoprotein metabolism:</p> <ul style="list-style-type: none"> Definition- Structure- Absorption. Purine Metabolism: <ul style="list-style-type: none"> A-Biosynthesis of purines: <ul style="list-style-type: none"> I- De Novo synthesis. II- Salvage system Regulation of biosynthesis of purine nucleotides Regulation of biosynthesis of IMP Regulation of conversion of IMP to ATP and GTP Catabolism of purines (Uric acid formation): Disorder of purine catabolism: <ul style="list-style-type: none"> 1-Gout (Hyperuricemia) 2. Hypouricemia Pyrimidine Metabolism <ul style="list-style-type: none"> I- De Novo synthesis. II- Salvage system. Regulation of pyrimidine synthesis Catabolism of pyrimidines Disorder of Pyrimidine Metabolism 	<u>5</u>	<u>11.1%</u>	<u>5.5%</u>	.....	.....	.....
<p>3-vitamins:</p> <ul style="list-style-type: none"> Definition- Vitamer- Vitagens Fat soluble vitamins: A, D, E and K Water soluble vitamins: 	<u>10</u>	<u>22.2%</u>	<u>11.1%</u>	.....	.....	.....

vitamin B complex and vitamin C						
4-detoxification: <ul style="list-style-type: none"> ▪ Biotransformation- Detoxification- Xenobiotics ▪ Phases of Detoxification Process: Phase I reactions: <ul style="list-style-type: none"> ✓ Oxidation and Hydroxylation ✓ Reduction ✓ Hydrolysis Phase II Reactions (Conjugation): <ul style="list-style-type: none"> ✓ Glucuronic Acid ✓ Sulfate ✓ Cysteine and Glutathione ✓ Glycine ✓ Acetate ✓ Glutamine ✓ Succinate ✓ Sulfuration Methylation 	<u>5</u>	<u>11.1%</u>	<u>5.5%</u>	.....	.....	.....
5- body fluids 1. Urine: <ul style="list-style-type: none"> ▪ Definition ▪ Non protein nitrogenous compounds (NPN) in urine. ▪ Abnormal constituents of urine: <ol style="list-style-type: none"> 1- Proteins (proteinuria). 2- Sugars or glycosuria 3- Ketone bodies 4- Bile pigments ▪ Urinary sediments (deposits) 2. Blood: Non protein nitrogenous compounds in blood 3. Milk: -Physical properties- Colostrums	<u>10</u>	<u>22.2%</u>	<u>11.1%</u>	.....	.....	.....

-Chemical Properties						
-Colorimetry	.....	.....	.....	<u>2</u>	<u>6.6%</u>	<u>3.3%</u>
-Estimation of blood glucose	.....	.....	.....	<u>7</u>	<u>23.3%</u>	<u>11.6%</u>
-Estimation of serum total protein	.....	.....	.....	<u>7</u>	<u>23.3%</u>	<u>11.6%</u>
-Estimation of creatinine	.....	.....	.....	<u>7</u>	<u>23.3%</u>	<u>11.6%</u>
- Estimation of serum uric acid	.....	.....	.....	<u>7</u>	<u>23.3%</u>	<u>11.6%</u>
Total	<u>45</u>	<u>100%</u>	<u>50%</u>	<u>30</u>	<u>100%</u>	<u>50%</u>

4-Teaching and learning methods:

METHOD	evidence	ILOs
Modified Lectures	CDs of Lectures	2.1/2.3/2.4/2.5/2.6.5
Small group discussion	Practical classes	2.2./2.3/2.4/2.5/2.6.5/2.6.6
Self learning	Research assignments	2.1/2.5/2.6
Problem solving	Case study	2.1/2.5

TEACHING PLAN:

Lectures: 45 teaching hours Lectures divided according to the current time table in general lecture halls

Practical classes: 30 teaching hours

Time plan:

Item	Time schedule	Total hours
Lectures	<u>3</u> hrs/week for 15 weeks	60%
Practical	<u>2</u> hour / week___for 15 weeks between 9 a.m.to 11 a.m.	40%
tutorial		
Total	5 hours/week	100%

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA: Faculty bylaws

5-B) Assessment TOOLS:

Tool	Purpose (ILOs)
Written examination: -short essay questions -MCQ -Match -True or false	2.1-2.5
Oral examination: oral examination station with 2 staff members(10- 15 min) viva Cards	2.1-2.3-2.4-2.5
Practical examination: OSPE	2.2-2.3-2.4-2.5

5-C) TIME SCHEDULE: Faculty bylaws

Semester	Exam	Week or month
2nd semester	1- Assessment 1	4 th week
	2- Assessment 2	11 th week
	3- Assessment 3	13 th week
	4- Final 2 nd semester assessment	17 th week (June)
	5- Practical assessment	17 th week(June)

5-D) Weighting System:

5-D) Weighting System for each semester:

Semester	Examination	Marks allocated	% of Total Marks
2 nd semester	1- Shock exams	4	2.7%
	2- Assessment 1	4	2.7%
	3- Assessment 2	5	3.3%
	4- Assessment 3	2	1.3%
	5- Final exam:		
	a- Written	37.5	25%
	b- Practical and tutorial exam	10	6.7%
	c- Oral	5	3.3%
	6- Assignments, attendance & other activities	7.5	5%
	Total	75	50%

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

FORMATIVE ASSESSMENT:

Student knows his marks after the Formative exams.

5-E) Examinations 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- Assessment 1	One hour written paper composed of short essay questions and MCQ and case study
3- Assessment 2	one hour written paper composed of short essay questions and MCQ and case study.
4- Assessment 3	One hour written paper composed of short essay questions and MCQ and case study
5- Final exam: a- Written	three hour written paper composed of short essay questions and MCQ and case study .
b- Practical	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
c- Oral	oral examination station with 2 staff members(10-15 min) viva Cards
6- Assignments & other activities	e.g. 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

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: 9/2013



Benha University
Faculty of Medicine
Department of Medical Biochemistry.

Course Specification

Course title: BIOCHEMISTRY III

(Code) :BIC 211

Second Academic Year (2013 – 2014) 1st semester

- **Department offering the course:** MEDICAL BIOCHEMISTRY
- **Academic year of M.B.& B.Ch. program:** Second year 1st semester
- **Date of specification approval:** department council ,date -9-2013

A) Basic Information:

- **Allocated marks**75 marks .
- **Course duration:** 15 weeks
- **Teaching hours:**

1- Theoretical	45 hours
2- Practical	30 hours

B) Professional Information:

1- Overall Aim of the Course:

- 1.1.To enable the student to be oriented with the biochemical importance of some macro- and micronutrients .
- 1.2. To enable the student to illustrate and/or describe the metabolic pathways of some macronutrients.
- 1.3. To enable the students to point-out some hereditary and acquired metabolic disturbances and their biochemical laboratory and clinical outcomes.
- 1.4. To enable the student 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 enable the student to interpret some medical laboratory reports

2- Intended Learning Outcomes (ILOs):

2.1. Knowledge and understanding:

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

- 2.1.1. **Describe** the metabolic pathways of carbohydrates and lipids
- 2.1.2. **List** the steps and regulatory mechanisms of these pathways.
- 2.1.3. **mention** the related metabolic disorders and their clinical prints on biochemical and molecular basis.
- 2.1.4.**define** type1 and type2 diabetes mellitus with respect to cause,metabolic changes and complications.

2.1.5. **Describe** some hormones, their actions and mechanism of action.

2.1.6. **summarize** Signaling pathways of hydrophobic and hydrophilic hormones and their second messengers.

2.1.7. **Describe** the mechanism of collection of released energy.

2.1.8.**list** the components of mitochondrial ETC,their inhibitors and the mechanism of oxidative phosphorylation

2.2. Practical and Clinical Skills

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

2.2.1.**Practice** basics of safety in the laboratory.

2.2.2. **Identify** the physical characters of normal urine under different physiological conditions.

2.2.3. **Identify** the chemical characters of normal urine under different physiological conditions.

2.2.4. **Perform** chemical tests to detect abnormal constituents of urine and report it in a complete form.

2.3. Professional Attitude and Behavioral skills:

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

2.3.1. Demonstrate respect and Work effectively as a member or a leader of an interdisciplinary team .

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

2.4. Communication skills:

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

2.4.1.Communicate clearly, sensitively and effectively with and their colleagues ,staff and co-staff.

2.4.2.Cope up with difficult situations

2.4.3.Respect superiors, colleagues and all members of the health profession.

2.5. Intellectual Skills:

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

2.5.1. Interpret symptoms, signs and biochemical laboratory findings of some metabolic disorders.

2.5.2.Utilize problem solving skills in a variety of situations.

2.5.3.Correlate biochemical alterations with clinical data to reach etiology,diagnosis and treatment.

2.5.4. analyze causes, detection and consequences of inborn errors of metabolism.

2.5.5. Classify factors that place individuals at risk of metabolic diseases as atherosclerosis and diabetes.

2.5.6. Interpret urine report outcome.

2.6. 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 .

2.6.6. Work effectively as a member or a leader of an interdisciplinary team and

3- Course contents:

<u>subject</u>	<u>Lectures</u>			<u>Practical</u>		
	teachi ng hrs	% of Total for semes ter	% of Total for year	teachi ng hrs	% of Total for semes ter	% of Total for year
1-Bioenergetics:	<u>4</u>	<u>8.8%</u>	<u>4.4%</u>	.....	.....	.....
- energy:				...	...	...
• Definition						
• Storage of energy						
• Low energy bonds						
• high energy bonds						
- Mechanism of collection of released energy						
- The electron transport chain						

<ul style="list-style-type: none"> - Chemiosmotic theory of ATP synthesis - ATP transporter - Regulation of respiratory chain - P/O ratio <p>-Uncouplers of oxidative phosphorylation</p>						
<p>2-Hormones:</p> <ul style="list-style-type: none"> • Definition • Classification according to their nature • Classification according to their mechanism of action • Signaling pathways of hydrophobic hormones • Signaling pathways of hydrophilic hormones and their second messengers. 	<u>5</u>	<u>11.1</u> <u>%</u>	<u>5.5%</u>	..... ...	..... ...	..... ...
<p>3-Carbohydrate Metabolism:</p> <ul style="list-style-type: none"> • Digestion, Absorption, Disorders of carbohydrates digestion • Glycolysis(Embden-meyerhofpathway): <p>-Definition, Site, Steps, Importance and functions of glycolysis, Energy gain of glycolysis.</p> <p>-The transfer of NADH+H⁺ through mitochondrial membrane (Glycerophosphate shuttle- Malate shuttle)</p> <p>-Regulation of Glycolysis, Glycolysis in red blood cells</p>	<u>18</u>	<u>40%</u>	<u>20%</u>	..... .....	..... .....	..... .....

<p>-Aerobic oxidation of carbohydrates</p> <p>-AEROBIC PHASE OF GLUCOSE OXIDATION:</p> <ul style="list-style-type: none"> • Definition, Site, Steps. • Oxidative decarboxylation of pyruvic acid/ Regulation of pyruvate dehydrogenase (PDH) • Krebs' cycle: <p>-Definition- Site- Steps- ENERGY YIELD OF KREBS' CYCLE- ENERGY YIELD OF AEROBIC PHASE- ENERGY YIELD OF GLUCOSE OXIDATION- In vitro inhibition of Krebs' cycle- Importance of Krebs' cycle- Regulation of Krebs' cycle</p> <ul style="list-style-type: none"> • Hexose Monophosphate Shunt <p>-Definition- Site- Steps- Functions of HMP shunt- Importance of HMP shunt- Reductases use of NADPH +H+ - Hydroxylases use of NADPH+H+- Regulation of HMP Shunt-</p> <ul style="list-style-type: none"> •FAVISM: <p>-Definition- Cause- Mechanism- Treatment</p> <ul style="list-style-type: none"> •Differences between glycolysis and HMP-shunt •Uronic Acid Pathway (Glucuronic Acid Pathway): <p>Definition- Site- Steps- Importance- Essential pentosuria</p>						
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<ul style="list-style-type: none"> • GALACTOSE METABOLISM(In the liver/ In lactating mammary glands)- Galactosemias • FRUCTOSE METABOLISM: -Fructose is mainly converted to glucose: (In liver & intestines) -Glucose → Fructose -Inborn Errors of Fructose Metabolism -Essential Fructosuria -Hereditary Fructose Intolerance • GLYCOGEN METABOLISM - GLYCOGENESIS: -Definition- Site- Importance- Steps- Regulation of glycogenesis - GLYCOGENOLYSIS: -Definition- Site- Importance- Steps- Regulation of GLYCOGENOLYSIS -Cori's (Lactate) cycle (glucose - lactate cycle or alanine cycle) -Difference between liver glycogen and muscle glycogen -GLYCOGEN STORAGE DISEASE (GLYCOGENEOSIS) • GLUCONEOGENESIS: -Definition- Sources- Site- Importance- Steps: I. FROM LACTATE & PYRUVATE: II. FROM GLYCEROL III. FROM ODD CHAIN FATTY ACIDS IV. FROM PROTEINS -D/N ratio -REGULATION OF GLUCONEOGENESIS • Blood glucose level and its regulation • (Blood glucose homeostasis): • Importance- Factors affecting blood glucose level 						
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<ul style="list-style-type: none"> • Role of tissues in regulation of blood glucose • Role of hormones in regulation of blood glucose • Diabetes Mellitus: -Definition- Causes- Types- Metabolic changes in DM- Complications of Diabetes Mellitus- Diagnosis of DM- OTHER TYPES OF DIABETES • GLUCOSURIA: Definition- Causes <p>HYPOGLYCEMIA: Definition- Importance- Symptoms of hypoglycemia- Causes of hypoglycemia.</p>						
<p>4-Lipid Metabolism:</p> <ul style="list-style-type: none"> • Definition, functions, Classification, Digestion, Absorption • Simple lipid metabolism: <ul style="list-style-type: none"> - Lipogenesis - Glycerol metabolism - Fatty acids biosynthesis - Lipolysis - Fatty acids oxidations - Ketone bodies metabolism - Metabolism of unsaturated fatty acids - Prostaglandin metabolism <ul style="list-style-type: none"> • Complex lipid metabolism - Phospholipids metabolism - Glycolipids metabolism - Cholesterol metabolism - Lipoproteins metabolism <ul style="list-style-type: none"> • Fatty liver (Steatosis) 	<u>18</u>	<u>40%</u>	<u>20%</u>	..... ....	..... ....	..... ....
-Physical examination of Urine	..... ....	..... ....	..... ....	<u>6</u>	<u>20</u>	<u>10</u>
-Normal constituents of Urine	..... ....	..... ....	..... ....	<u>2</u>	<u>6.6</u>	<u>3.3</u>
-Abnormal constituents of Urine	..... ....	..... ....	..... ....	<u>6</u>	<u>20</u>	<u>10</u>

-Heat coagulation test	..... ....	..... ....	..... ....	<u>2</u>	<u>6.6</u>	<u>3.3</u>
-Fehling's and Benedict's tests	..... ....	..... ....	..... ....	<u>2</u>	<u>6.6</u>	<u>3.3</u>
-Hays sulfer test	..... ....	..... ....	..... ....	<u>2</u>	<u>6.6</u>	<u>3.3</u>
-Benzidine test	..... ....	..... ....	..... ....	<u>2</u>	<u>6.6</u>	<u>3.3</u>
-Rothera's test	..... ....	..... ....	..... ....	<u>2</u>	<u>6.6</u>	<u>3.3</u>
-Chemical examination of urine sample	..... ....	..... ....	..... ....	<u>6</u>	<u>20</u>	<u>10</u>
Total	<u>45</u>	<u>100%</u>	<u>50%</u>	<u>30</u>	<u>100%</u>	<u>50%</u>

4-Teaching and learning methods:

METHOD	evidence	ILOs
Modified Lectures	CDs of Lectures	2.1/2.3/2.4/2.5/2.6.5
Small group discussion	Practical classes	2.2./2.3/2.4/2.5/2.6.5/2.6.6
Self learning	Research assignments	2.1/2.5/2.6
Problem solving	Case study	2.1/2.5

TEACHING PLAN:

Lectures: 45 teaching hours Lectures divided according to the current time table in general lecture halls

Practical classes: 30 teaching hours

Time plan:

Item	Time schedule	Total hours
Lectures	3 hrs/week for 15 weeks	60%
Practical tutorial	2 hour / week for 15 weeks between 9 a.m.to 11 a.m.	40%
Total	5 hours/week	100%

5- Students Assessment methods:**5-A) ATTENDANCE CRITERIA:** Faculty bylaws**5-B) Assessment TOOLS:**

Tool	Purpose (ILOs)
Written examination: -short essay questions -MCQ -Match -True or false	2.1-2.5
Oral examination: oral examination station with 2 staff members(10- 15 min) viva Cards	2.1-2.3-2.4-2.5
Practical examination: OSPE	2.2-2.3-2.4-2.5

5-C) TIME SCHEDULE: Faculty bylaws

Semester	Exam	Week or month
First semester	1- Assessment 1	3 rd week
	2- Assessment 2	7 th week
	3- Assessment 3	13 th week
	4- Final 1 st semester assessment	17 th week (January)
	5- Practical assessment	17 th week (January)

5-D) Weighting System:**5-D) Weighting System for the semester:**

Semester	Examination	Marks allocated	% of Total Marks
1 st semester	1- Shock exams	4	2.7%
	2- Assessment 1	3	2%
	3- Assessment 2	4	2.7%
	4- Assessment 3	4	2.7%
	5- Final exam:		
	a- Written	37.5	25%
	b- Practical and tutorial exam	10	6.7%
	c- Oral	5	3.3%
6- Assignments, attendance & other activities	7.5	5%	
	Total	75	50%

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

FORMATIVE ASSESSMENT:

Student knows his marks after the Formative exams.

5-E) Examinations 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- Assessment 1	One hour written paper composed of short essay questions and MCQ and case study
3- Assessment 2	one hour written paper composed of short essay questions and MCQ and case study.
4- Assessment 3	One hour written paper composed of short essay questions and MCQ and case study
5- Final exam: a- Written	three hour written paper composed of short essay questions and MCQ and case study .
b- Practical	Detection of physical properties and abnormal constituents of a urine sample with some short questions on them oral examination station with 2 staff members(10-15 min) viva Cards
c- Oral	
6- Assignments & other activities	e.g. 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

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: 9/2013



Benha University.
Faculty of Medicine.
Department of Histology & Cell Biology

Course Specifications

Course title: Histology I

Code: HIT 109

Academic Year (2013 – 2014)

Department offering the course: Histology & Cell Biology

- **Academic year of program:** first Year / under graduate level
- **Date of specification approval :**
 - Department council date: /9/2013.

A) Basic Information:

- **Allocated marks:** 75 marks.
- **Course duration:** 15 weeks of teaching.
- **Teaching hours**

1- Theoretical	30 hrs
2- Practical	30 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 & tissue cells at the level of molecular & cellular biology.
- 1.2. To provide appropriate practical skills for tissue processing to prepare histological slides.
- 1.3. To enable the students to know basics of cytogenetics and cell biology.
- 1.4. To enable the students to correlate between histological structure and functions of various tissue and organs.

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. **Describe** the basic principles of structure of different body cells.
- 2.a.3. state the basic principles of cell cycles and basics of cytogenetic.
- 2.a.4. Outlines major clinical applications of cytogenetic diseases.
- 2.a.5. Describe the basic principles of histochemistry.
- 2.a.6. summarize basic structure of epithelium, C.T., blood, cartilage, bone.
- 2.a.7. Describe 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. Write comment on some clinical correlations in histological basis.
- 2.b.3. Apply the Histological facts while examining the slides in order to reach a proper diagnosis

2.c. Professional Attitude and Behavioral skills:

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

- 2.c.1. Demonstrate Respect for college's right & involve them in care takers in management decisions.
- 2.c.2. Demonstrate Respect to all colleges irrespective of their socioeconomics level, culture
- 2.c.3. Demonstrate Respect for right researches' and involve them and /or their in management decisions.
- 2.c.4. Respect the role and the contributions of other health care professionals regardless their degrees or rank (top management, subordinate or colleague).
- 2.c.5. Reflect critically on their own 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. 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. integrate facts about histological 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. proof scientific data during the practical study.

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:

First Semester:

TOPIC	Lecture	Practical	No of hours	<u>% of total hours</u>
I-Microtechnique 1-methods of preparation of microscopic sections.	3	3	6	<u>10%</u>

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.				
II-Microscopy 1-types of microscopes 2-préparation of sections for Light microscope &Electron microscope	2	2	4	<u>6.7%</u>
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 <i>and</i> microfilaments 2-inclusions 3-nucleus: structure by LM&EM ,function 4-DNA 5-types of RNA 6-physiological cell death	11	11	22	<u>36.7%</u>
IV-Cytogenetics 1-cell cycle and cell division (mitosis meiosis) 2-Gametogenesis(oogenesis &spermatogenesis) 3-structure of chromosomes 4-chromosomal study& <i>karyotyping</i> 5- <i>chromosomal bands: G banding, fluorescence in situ hybridization</i> 6-Sex chromatin (Barr body) 7-chromosomal aberrations: a-numerical abnormalities:	5	5	10	<u>16.6%</u>

<p>i-aneuploidy (<i>monosomy, trisomy</i>) ii-polyploidy (<i>triploidy , tetraploidy, endoreduplication</i>)</p> <p>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</p>				
<p>V-Epithelial tissue:</p> <p>1-Properties of epithelium . 2-Types of epithelium:(covering -glandular - neuro epithelium & myoepithelium) 3-Examples and sites of each type. 4-Functional importance. 5-Modification of epithelial cell surfaces. 6-_-clinical correlations</p>	4	4	8	<u>13.3%</u>
<p>VI- Connective tissue</p> <p>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</p>	5	5	10	<u>16.6%</u>

7--clinical correlations				
Total	30	30	60	100%

4- Teaching and learning methods:

METHODS USED:

- Modified Lectures.
- Practical classes
- Small group discussions

Method	Evidence	ILOs
Modified lectures	CDs of lectures including (video films, brain storming, problem solving, etc.....)	2.a.1.-----2.a.7 2.c.1.----- 2.c.5 2.d.1. ----2.d.5 2.f.1.-----2.f.6
Practical classes	Data show images of electron microscope, video films, slides under microscope, etc....	2.b.1.----2.b.3
Small group discussions	Slides under microscope	2.b.1.----2.b.3 2.c.1.----2.3.5 2.d.1.----2.d.5 2.e.1. ----2.e.4 2.f.1.-----2.f.6

TEACHING PLAIN:

Lectures: 2x15 lectures

Practical classes: 2x15 practical classes

Time plain:

Item	Time schedule	Teaching hours	Total hours
Lectures	<u>2</u> times/week; One hour each/15weeks	30 hours	50%

Practical classes	<u>2</u> times/week; 2 hour each/15 week	30 hours	50%
Total		60hours	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	Evidence	Purpose (ILOs)
Written examination: <ul style="list-style-type: none"> • MCQs • Enumerate • Short essay • Complete • True or false 	Attached module of examination	2.a.1.-----2.a.9 2.c.1.---- 2.c.4 2.d.1.----2.d.5 2.e.1.----2.e.4 2.f.1.----2.f.6
Oral examination	Viva card system	2.a.1.-----2.a.9 2.c.1.---- 2.c.4 2.d.1.----2.d.5 2.e.1.----2.e.4 2.f.1.----2.f.6
Practical examination	identify data show images with questions, identify slides under microscope	2.b.1.----2.b.3

5-C) TIME SCHEDULE:

Exam	Week
1- Assessment 1	Week -----6
2- Assessment 2	Week -----9
3- Assessment 3	Week -----12
4- Final exam	At end of 15 th week

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- Assessment 1	2.5	3.3%
2- Assessment 2	2.5	3.3
3- Assessment 3	2.5	3.3%
4- Final exam:		
a- Written	37.5	50%
b- Practical	15	20%
c- Oral	7.5	10%
5- Assignments & other activities	7.5	10%
Total	75	100%

- **The minimum passing score is 45 marks .**
 - **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) Examination description:

Examination	Description
1- Assessment 1	Quiz (MCQs), complete, true or false, short questions
2- Assessment 2	practical
3- Assessment 3	Quiz (MCQs), complete, true or false, short questions
4- Final exam:	
a- Written	<ul style="list-style-type: none"> • select (MCQs) ,enumerate , complete, true or false, Supply (Short questions) & cases
b- Practical	<ul style="list-style-type: none"> • Do, identify data show images with questions, identify slides under microscope
c- Oral	

	<ul style="list-style-type: none"> • How many sessions
5- Assignments & other activities	Assignments, posters, researches, 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 etc.

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 equipments (Computer , data show)

Course coordinator: Prof. Omayma Kamel Helal

Head of Department: Prof. Omayma Kamel Helal

Date: 9/2013



Benha University.
Faculty of Medicine.
Department of Histology & Cell Biology

Course Specifications

Course title: Histology II

Code: HIT110

Academic Year (2013 – 2014)

Department offering the course: Histology & Cell Biology
Department

- **Academic year of program:** first Year / under graduate level
- **Date of specification approval :**
- Department council , date: /9/2013. .

A) Basic Information:

- **Allocated marks:** 75 marks.
- **Course duration:** 15 weeks of teaching.
- **Teaching hours:**

1- Theoretical	30 hrs
2- Practical	30 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 & tissue cells at the level of molecular & cellular biology.
- 1.2. To provide appropriate knowledge for tissue processing for making histological slides.
- 1.3. To enable the students to know basics of cytogenetics and cell biology.
- 1.4. To enable the students to know the histological structures of normal organs of body system
- 1.5. To enable the students to correlate between histological structure and functions of various tissue and organs.

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. Describe the basic principles of structure of different body cells.
- 2.a.3. state the basic principles of cell cycles and basics of cytogenetic.
- 2.a.4. Outlines major clinical applications of cytogenetic diseases.
- 2.a.5. Describe the basic principles of histochemistry.
- 2.a.6. explain basic principles of epithelium, C.T., blood, cartilage, bone, muscle, nervous tissue, lymphatic & circulatory systems.
- 2.a.7. Describe 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. Interpret some clinical correlations in histological basis.
- 2.b.3. Apply the Histological facts while examining the slides in order to reach a proper diagnosis

2.c. Professional Attitude and Behavioral skills:

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

- 2.c.1. Demonstrate Respect for college's right & involve them in care takers in management decisions.
- 2.c.2. Demonstrate Respect to all colleges irrespective of their socioeconomics level, culture
- 2.c.3. Demonstrate Respect for right researches' and involve them and /or their in management decisions.
- 2.c.4. Respect the role and the contributions of other health care professionals regardless their degrees or rank (top management, subordinate or colleague).
- 2.c.5. Reflect critically on their own 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. 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. integrate facts about histological organs.
- 2.e.2. Analyze different histological data with its clinical correlations.
- 2.e.3. Interpret the normal histological facts with case scenario.

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:**Second Semester :**

TOPIC	Lecture	Practical	No of hours	<u>% of total hours</u>
I- 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. <u>3--clinical correlations</u>	1	1	2	<u>3.3</u>
II-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 <u>6--clinical correlations</u>	4	4	8	<u>13.3%</u>
III-Blood 1-red blood corpuscles (histological structure &function). 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	4	4	8	<u>13.3%</u>

marrow& active red bone marrow). 8--clinical correlations				
IV-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	5	5	10	<u>16.7%</u>

<p>V-Nervous tissue</p> <p>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 myelination 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</p>	6	6	12	<u>20%</u>
<p>VI-CARDIOVASCULAR SYSTEM</p> <p>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 myocardium ,myocardium ,endocardium and ves clinical correlations</p>	5	5	10	<u>16.7%</u>
<p>VII-THE IMMUNE SYSTEM AND LYMPHOID ORGANS</p> <p>1-structure of lymph vessels 2-distribution and structure of lymphoid tissue . 3-lymphatic organs: a- Lymph Nodes (histological structure</p>	5	5	10	<u>16.7%</u>

&function) b-Spleen(histological structure &function& microcirculation) c-Tonsils(histological structure &function) d-Thymus(histological structure &function) e-Mucosal immune system (histological structure &function) 4-Mononuclear phagocytes 5-Cells involved in the immune system 6- Antigen presenting cells 7--clinical correlations				
Total	30	30	60	100%

4- Teaching and learning methods:

METHODS USED:

- Modified Lectures.
- Practical classes
- Small group discussions

Method	Evidence	ILOs
Modified lectures	CDs of lectures including (video films, brain storming, problem solving, etc.....)	2.a.1.-----2.a.7 2.c.1.---- 2.c.5 2.d.1. ----2.d.5 2.f.1.----2.f.6
Practical classes	Data show images of electron microscope, video films, slides under microscope, etc....	2.b.1.----2.b.3
Small group discussions	Slides under microscope	2.b.1.----2.b.3 2.c.1.----2.3.5 2.d.1.----2.d.5 2.e.1. ----2.e.4 2.f.1.----2.f.6

TEACHING PLAIN:

Lectures: 2x15 lectures .

Practical classes: 2x15 practical classes .

Time plain:

Item	Time schedule	Teaching hours	Total hours
Lectures	<u>2</u> times/week; One hour each/15weeks	30 hours	50%
Practical classes	<u>2</u> times/week; 2 hour each/15 week	30 hours	50%
Total		60hours	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	Evidence	Purpose (ILOs)
Written examination: <ul style="list-style-type: none"> • MCQs • Enumerate • Short essay • Complete • True or false 	Attached module of examination	2.a.1.-----2.a.9 2.c.1.---- 2.c.4 2.d.1.----2.d.5 2.e.1.----2.e.4 2.f.1.----2.f.6
Oral examination	Viva card system	2.a.1.-----2.a.9 2.c.1.---- 2.c.4 2.d.1.----2.d.5 2.e.1.----2.e.4 2.f.1.----2.f.6

Practical examination	identify data show images with questions, identify slides under microscope	2.b.1.----2.b.3
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5-C) TIME SCHEDULE:

Exam	Week
1- Assessment 1	Week -----6
2- Assessment 2	Week -----9
3- Assessment 3	Week -----12
4- Final exam	At end of 15 th week

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- Assessment 1	2.5	3.3%
2- Assessment 2	2.5	3.3
3- Assessment 3	2.5	3.3%
4- Final exam:		
a- Written	37.5	50%
b- Practical	15	20%
c- Oral	7.5	10%
5- Assignments & other activities	7.5	10%
Total	75	100%

- **The minimum passing score is 45 marks .**
- **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) Examination description:

Examination	Description
1- Assessment 1	Quiz (MCQs), complete, true or false, short questions
2- Assessment 2	practical
3- Assessment 3	Quiz (MCQs), complete, true or false, short questions
4- Final exam: a- Written b- Practical c- Oral	<ul style="list-style-type: none"> • select (MCQs) ,enumerate , complete, true or false, Supply (Short questions) & cases • Do, identify data show images with questions, identify slides under microscope • How many sessions
5- Assignments & other activities	Assignments, posters, researches, 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 etc.

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 equipments (Computer , data show)

Course coordinator: Prof. OMayma Kamel Helal

Head of Department: Prof. OMayma Kamel Helal

Date: 9/2013



Benha University.

Faculty of Medicine.

Department of Histology & Cell Biology.

Course Specifications

Course title: Histology III

Code: HIT 209

Academic Year (2013 – 2014)

- Department offering the course: *Histology & Cell Biology.*
- Academic year of program: Second Year / under graduate level

Date of specification approval: -

Department council , date: /9/2013. .

A) Basic Information:

- Allocated marks: 75 marks.
- Course duration: 15 weeks of teaching.
- Teaching hours:

1- Theoretical	30 hrs
2- Practical	30 hrs

B) Professional Information:

1- Overall Aim of the Course:

- 1.1. To enable the students to know the histological structures of normal organs of body system
- 1.2 .To enable the students to correlate between histological structure and functions of various tissue and organs
- 1.3. Give students information about histological structures of various parts of CNS.
- 1.4. To prepare the students for studying histopathology in 3rd year

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 system by light & electron microscopes

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

2.a.3. mention 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. Describe pathways of ascending and descending tracts.

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

2.a.8. explain 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. Diagnose different histological stains.

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

2.c. Professional Attitude and Behavioral skills:

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

2.c.1. Demonstrate Respect for college's right & involve them in care takers in management decisions.

2.c.2. Demonstrate Respect to all colleges irrespective of their socioeconomics level, culture

2.c.3. Demonstrate Respect for right researches' and involve them and /or their in management decisions.

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

2.c.5. Reflect critically on their own 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 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. 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. integrate facts about histological organs.

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

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

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:

First Semester:

TOPIC	Lecture	practical	No of hours	% of total
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	16	6	12	20%
II-THE RESPIRATORY SYSTEM 1- conducting portion of respiratory system (histological structure and function) nasal cavity, nasal conchae, olfactory area, paranasal sinuses, nasopharynx, pharyngeal tonsils,	5	5	10	16.7%

larynx, epiglottis, trachea, bronchial tree, bronchioles) 2- respiratory portion respiratory (histological structure and function) bronchioles, 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				
III-THE DIGESTIVE SYSTEM 1-Oral cavity(Lip, cheeks, Tongue) salivary glands(classification, typesof acini ,parotid ,sublingual& submandibular) palate and pharynx 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	12	12	24	40%

IV- THE ENDOCRINE SYSTEM	7	7	14	23.3%
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				
Total	30	30	60	100%

4- Teaching and learning methods:

METHODS USED:

- Modified Lectures.
- Small group discussions.
- Practical classes

Method	Evidence	ILOs
Modified lectures	CDs of lectures including (video films, brain storming, problem solving, etc.....)	2.a.1.-----2.a.9 2.c.1.---- 2.c.5 2.d.1. ----2.d.5 2.f.1.----2.f.6
Practical classes	Data show images of electron microscope, video films, slides under microscope, etc....	2.b.1.----2.b.3
Small group discussions	Slides under microscope	2.b.1.----2.b.3 2.c.1.----2.c.5 2.d.1.----2.d.5 2.e.1. ----2.e.4 2.f.1.----2.f.6

TEACHING PLAIN:

Lectures: 2x15 lectures .

Practical classes: 2x15 practical classes .

Time plain:

Item	Time schedule	Teaching hours	Total hours
Lectures	<u>2</u> times/week; One hour each/15weeks	30 hours	50%
Practical classes	<u>2</u> times/week; 2 hour each/15 week	30 hours	50%
Total		60hours	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	Evidence	Purpose (ILOs)
Written examination: <ul style="list-style-type: none"> • MCQs • Enumerate • Short essay • Complete • True or false 	Attached module of examination	2.a.1.-----2.a.9 2.c.1.---- 2.c.5 2.d.1.----2.d.5 2.e.1.----2.e.4 2.f.1.----2.f.6

Oral examination	Viva card system	2.a.1.-----2.a.9 2.c.1.---- 2.c.5 2.d.1.----2.d.5 2.e.1.----2.e.4 2.f.1.----2.f.6
Practical examination	identify data show images with questions, identify slides under microscope	2.b.1.----2.b.3

5-C) TIME SCHEDULE:

Exam	Week
1- Assessment 1	Week -----6
2- Assessment 2	Week -----9
3- Assessment 3	Week -----12
4- Final exam	At end of 15 th week

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- Assessment 1	2.5	3.3%
2- Assessment 2	2.5	3.3
3- Assessment 3	2.5	3.3%
4- Final exam:		
a- Written	37.5	50%
b- Practical	15	20%
c- Oral	7.5	10%
5- Assignments & other activities	7.5	10%
Total	75	100%

- **The minimum passing score is 45 marks .**

- **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) Examination description:

Examination	Description
1- Assessment 1	Quiz (MCQs), complete, true or false, short questions
2- Assessment 2	practical
3- Assessment 3	Quiz (MCQs), complete, true or false, short questions
4- Final exam: a- Written b- Practical c- Oral	<ul style="list-style-type: none"> • select (MCQs) ,enumerate , complete, true or false, Supply (Short questions) & cases • Do, identify data show images with questions, identify slides under microscope • How many sessions
5- Assignments & other activities	Assignments, posters, researches, practical books

6- List of references:

6.1- Basic materials:

Department books:

- 1- Histology & Cell biology book.
- 2- Histology & Cell biology practical book.

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):**

Junqueira S basic Histology

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

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 equipments (Computer , data show)

Course coordinator: Prof. Omayma Kamel Helal

Head of Department: Prof. Omayma Kamel Helal

Date: 9/2013



Benha University.
Faculty of Medicine.
Department of Histology & Cell Biology.

Course Specifications

Course title: Histology IV

Code: HIT210

Academic Year (2013 – 2014)

- Department offering the course: *Histology & Cell Biology.*
- Academic year of: Second Year / under graduate level

Date of specification approval: -

Department council, date: /9/2013. .

A) Basic Information:

- Allocated marks: 75 marks.
- Course duration: **15** weeks of teaching.
- Teaching hours:

1- Theoretical	30 hrs
2- Practical	30 hrs

B) Professional Information:

1- Overall Aim of the Course:

- 1.1. To enable the students to know the histological structures of normal organs of body system
- 1.2 .To enable the students to correlate between histological structure and functions of various tissue and organs
- 1.3. Give students information about histological structures of various parts of CNS.
- 1.4. To prepare the students for studying histopathology in 3rd year

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 system by light & electron microscopes

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

2.a.3. mention 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. enumerate the histological structures with correlation to function of cerebrum and cerebellum.

2.a.6. Describe pathways of ascending and descending tracts.

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

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

2.a.9. mention 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.c. Professional Attitude and Behavioral kills:

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

2.c.1. Demonstrate Respect for college's right & involve them in care takers in management decisions.

2.c.2. Demonstrate Respect to all colleges irrespective of their socioeconomics level, culture

2.c.3. Demonstrate Respect for right researches' and involve them and /or their in management decisions.

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

2.c.5. Reflect critically on their own 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 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. 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. integrate facts about histological organs.

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

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

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	Lecture	Practical	No of hours	% of total
I-THE URINARY SYSTEM 1-Kidneys 2-The Ureter 3-Urinary Bladder 4-male urethra 5-female urethra 6- Clinical correlations	4	4	8	13.3%
II-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	4	4	8	13.3%
III- 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 7-vagina(histological structure &function)	5	5	10	16.7%

8-external genitalia 9- Mammary Glands (Resting & Lactating Mammary Gland) Clinical correlations				
IV-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	5	5	10	16.7%
V- 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	4	4	8	13.3%

VI-CNS	8	8	16	26.6%
1- Anatomical consideration of CNS				
2- meninges				
3- spinal cord				
4- medulla oblongata				
5- pons				
6- mid brain				
7- cerebellum				
8- diencephalon				
9- cerebral cortex				
Total	30	30	60	100%

4- Teaching and learning methods:

METHODS USED:

- Modified Lectures.
- Small group discussions.
- Practical classes

Method	Evidence	ILOs
Modified lectures	CDs of lectures including (video films, brain storming, problem solving, etc.....)	2.a.1.-----2.a.9 2.c.1.---- 2.c.5 2.d.1. ----2.d.5 2.f.1.----2.f.6
Practical classes	Data show images of electron microscope, video films, slides under microscope, etc....	2.b.1.----2.b.3
Small group discussions	Slides under microscope	2.b.1.----2.b.3 2.c.1.----2.c.5 2.d.1.----2.d.5 2.e.1. ----2.e.4 2.f.1.----2.f.6

TEACHING PLAN:

Lectures: 2x15 lectures .

Practical classes: 2x15 practical classes .

Time plain:

Item	Time schedule	Teaching hours	Total hours
Lectures	<u>2</u> times/week; One hour each/15weeks	30 hours	50%
Practical classes	<u>2</u> times/week; 2 hour each/15 week	30 hours	50%
Total		60hours	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	Evidence	Purpose (ILOs)
Written examination: <ul style="list-style-type: none"> • MCQs • Enumerate • Short essay • Complete • True or false 	Attached module of examination	2.a.1.-----2.a.9 2.c.1.---- 2.c.5 2.d.1.----2.d.5 2.e.1.----2.e.4 2.f.1.----2.f.6

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Practical examination	identify data show images with questions, identify slides under microscope	2.b.1.----2.b.3

5-C) TIME SCHEDULE:

Exam	Week
1- Assessment 1	Week -----6
2- Assessment 2	Week -----9
3- Assessment 3	Week -----12
4- Final exam	At end of 15 th week

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- Assessment 1	2.5	3.3%
2- Assessment 2	2.5	3.3
3- Assessment 3	2.5	3.3%
4- Final exam:		
a- Written	37.5	50%
b- Practical	15	20%
c- Oral	7.5	10%
5- Assignments & other activities	7.5	10%
Total	75	100%

- **The minimum passing score is 45 marks .**

- **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) Examination description:

Examination	Description
1- Assessment 1	Quiz (MCQs), complete, true or false, short questions
2- Assessment 2	practical
3- Assessment 3	Quiz (MCQs), complete, true or false, short questions
4- Final exam: a- Written b- Practical c- Oral	<ul style="list-style-type: none"> • select (MCQs) ,enumerate , complete, true or false, Supply (Short questions) & cases • Do, identify data show images with questions, identify slides under microscope • How many sessions
5- Assignments & other activities	Assignments, posters, researches, practical books

6- List of references:6.1- Basic materials:

Department books:

- 1- Histology & Cell biology book.
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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):

Junqueira S basic Histology

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

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 equipments (Computer , data show)

Course coordinator: Prof. Omayma Kamel Helal

Head of Department: Prof. Omayma Kamel Helal

Date: 9/2013

Benha University
Faculty of medicine

Course specifications

Course title: English

(Code): ENG 114

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 :**

1. Theoretical	
2. 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-textbookwww.ece.ucsb.eduwww.eric.ed.gov/ericwebportal/**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: 9/2013



Benha University

Faculty of Medicine

Department of Neuropsychiatry

Course Specification

Course title: Social study I

(Code) SCO 213

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- Therortical	15
2- Practical	-----

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. Identify the concept of learning
- 2.a.2. state the basis of psychophysiology.
- 2.a.3. list areas of psychological functioning
- 2.a.4. summarize individual differences

2.a.5. Enumerate some psychometry instruments

2.c. Professional Attitude and Behavioral skills:

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

2.c.1. Perform round discussions with each other.

2.c.2. Able to behave in the expected manner of a future physician.

2.c.3. Do proper assessments

2.d. Communication skills:

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

2.d.1. Use the knowledge to communicate better with colleagues.

2.d.2. Use the knowledge to communicate better with the professors.

2.d.3.. Use the knowledge to communicate better with the patients.

2.d.4. To 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. *Compare methods of behavior modification.*

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.

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			
7. Emotions	3			
8. Aggression	3			
9. Intelligence	2			
10. Frustration	2			
11. Defense mechanisms	2			
12. Thinking	2			
13. Coping with stress	2			
Total			30	

4- Teaching and learning methods:

METHODS USED:

- modified lectures

Method	Evidence	ILOs
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Lecture	Given once weekly for the whole academic year in the main university lecture halls	2,a . 2,e
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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:

Tool	Evidence	Purpose (ILOs)
<ul style="list-style-type: none"> • Written examination: • MCQs 	Bank of questions prepared by staff members (on preparation)	2,a
<ul style="list-style-type: none"> • Short question Forms 	Bank of questions prepared by staff members (on preparation)	2,e

FORMATIVE ASSESSMENT:

Student knows his marks after the Formative exams.

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 up to date 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

Head of Department: Prof Victor Sami

Date: 9/ 2013



Benha University

Faculty of Medicine

Department of Neuropsychiatry

Course Specification

Course title: Social study II

(Code) SCO 214

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:** 5 marks
- **Course duration:** 2 weeks of teaching that is a total of 10 working days.
- **Teaching hours**

1- Therortical	15
2- Practical	-----

B) Professional Information:

1- Overall Aim of the Course:

- 1.1 To highlight the beginning of psychiatry.
- 1.2 To have a background on the basics of psychiatry.
 - 1.1. To highlight the relationship between psychology and psychiatry.
 - 1.2. To highlight the relationship between the psychiatry and general medicine.

2- Intended Learning Outcomes (ILOs):

2.a. Knowledge and understanding:

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

- 2.a.1. Identify the concept of learning
- 2.a.2. state the basis of psychophysiology.
- 2.a.3. list areas of psychological functioning
- 2.a.4. summarize individual differences

2.a.5. Enumerate some psychometry instruments

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. Able to behave in the expected manner of a future physician.

2.c.3. Do proper assessments

2.d. Communication skills:

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

2.d.1. Use the knowledge to communicate better with colleagues.

2.d.2. Use the knowledge to communicate better with the professors.

2.d.3.. Use the knowledge to communicate better with the patients.

2.d.4. To 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. *Compare methods of behavior modification.*

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.

3- Course contents:

Subject	Lectures (hrs)	Practical (hrs)	Total (hrs)	% of Total

1- Psychiatry sheet.	1	1		
2- Bipolar Disorders	1	1		
3- Anxiety Disorders	1	1		
4- Psychotic Disorders	1	1		
5- Psychosomatic Disorders	1	1		
6- Drug Abuse	1	1		
7-Somatoform Disorders	1	1		
8- Child Psychiatry	1	1		
1- Dementia	1	1		
10-Psychopharmacology	1	1		
Total			20	

4- Teaching and learning methods:

METHODS USED:

- modified lectures

Clinical roun

Method	Evidence	ILOs
Lecture	Given once daily for 2 weeks	2,a . 2,e

TEACHING PLAN:

Lectures: Division of students into small groups.

5 times /week, occurring from 9 am to 1 pm .

Time plan:

Item	Time schedule	Teaching hours	Total hours
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Lectures	once daily; one hour daily from 9am to 10 pm	5	10
Practical	An hour / 5 times/ week from 10am to 11 am	5	10
Total		10	20

5- Students Assessment methods:

5-A) **ATTENDANCE CRITERIA:** Faculty Attendance sheets

5-B) **Assessment TOOLS:**

Tool	Evidence	Purpose (ILOs)
Written examination: • MCQs	Bank of questions prepared by staff members (on preparation)	2,a

FORMATIVE ASSESSMENT:

Student knows his marks after the Formative exams.

5-Examinations description:

Examination	Description
5- Final exam: a- Written	select (MCQs) & Supply (Short essay) questions
Total	5 marks

6- List of references:

6.1- Basic materials:

- 101 course books of Psychiatry

6.2- Essential books (text books):

6.3- Recommended books: The uptodate books of Psychiatry

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. Hesham El Sayed

Head of Department: Prof Victor Sami

Date: 9/ 2103

جامعة: بنها
كلية: طب بنها
قسم: الطب الشرعي والسموم الإكلينيكية

توصيف المقرر ٢٠١٣/٢٠١٤

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 الشرعي 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 الجندي

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
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<p>٤. التعرف علي موقف الدستور المصري من حقوق الانسان</p> <p>٥. مناقشة حقيقة القضايا التي تثار في عالمنا المعاصر باسم قضايا حقوق الإنسان.</p> <p>٦. تطبيق حقوق الملكية الفكرية والنشر</p> <p>٧. التعرف علي أنواع وأساليب انتهاك حقوق الإنسان.</p> <p>٨. دور الطب في قضايا انتهاك حقوق الإنسان.</p>	
نواتج التعلم المستهدفة:	
<p>أ ١- يذكر المقصود بقانون حقوق الانسان</p> <p>أ ٢- يتعرف نشأة الاجيال المختلفة لحقوق الإنسان</p> <p>أ ٣- يعدد اهم الحقوق التي يطلق عليها حقوق الشعوب</p> <p>أ ٤- يشرح المصادر الوطنية والدولية لحقوق الانسان</p> <p>أ ٥ - يشرح مفهوم الدستور وأبوابه</p> <p>أ ٦- يذكر أنواع حقوق الإنسان</p> <p>أ ٧- يصف القيود المفروضة على حقوق الانسان</p> <p>أ ٨- يشرح كيف حافظت الشريعة الاسلامية علي حقوق الانسان</p> <p>أ ٩- يصف ضمانات واليات حماية حقوق الانسان على المستوى الوطنى</p> <p>أ ١٠- يتعرف حقوق المرأة والطفل وذوى الاحتياجات الخاصة</p> <p>أ ١١- يذكر مفهوم المصطلحات الاساسية المرتبطة بحقوق الملكية الفكرية والنشر.</p> <p>أ ١٢- يشرح الواجبات والمسؤوليات الفئوية والمهنية</p> <p>أ ١٣- يعدد اساليب انتهاك حقوق الانسان</p>	<p>أ- المعرفة والفهم</p>
<p>ب ١- يناقش قضايا حقوق الإنسان المختلفة</p> <p>ب ٢- يربط بين التشريعات والدستور</p> <p>ب ٣- يستنتج دوره في المجتمع لحماية حقوق الانسان</p> <p>ب ٤- يقيم التشريعات والقوانين طبقا لحقوق الإنسان</p> <p>ب ٥- يفرق بين حقوق المؤلف والناشر</p> <p>ب ٦- يربط بين مواثيق حقوق الانسان ومهنة الطب</p> <p>ب ٧- يستنتج دوره كطبيب في قضايا انتهاك حقوق الانسان</p>	<p>ب-المهارات الذهنية</p>

<p>ج ١- يحل قضايا حقوق المرضى اثناء مزاولته مهنة الطب ويقترح حلول لها</p> <p>ج ٢- يطبق مبادئ حقوق الإنسان في مجال مهنة الطب بالمجتمع</p> <p>ج ٣ - يشخص حالات انتهاك حقوق الانسان والتعذيب</p>	<p>ج-المهارات والعملية</p>
<p>د ١- يدير النقاش مع المنظمات الوطنية والدولية الخاصة بحقوق الانسان</p> <p>د ٢- يستخدم التكنولوجيا الحديثة في الحصول علي المعلومات المتعلقة بحقوق الانسان</p> <p>د ٣- يعمل في فرق مرتبطة بمجال حقوق الانسان</p> <p>د ٤- يشارك في العمل التطوعي لحماية حقوق الانسان</p> <p>د ٥- يساعد زملاؤه في اكتساب الخبرة في مجال حقوق الإنسان</p>	<p>د- المهارات والمنقولة</p>
<p>٣-١ قانون حقوق الإنسان ومصادره</p> <p>٣-٢ صور حقوق الانسان</p> <p>٣-٣ حقوق الانسان في الاسلام</p> <p>٣-٤ حقوق المرأة والطفل</p> <p>٣-٥ حقوق الملكية الفكرية والنشر</p> <p>٣-٦ موائيق حقوق الانسان والطب</p> <p>٣-٧ انتهاك حقوق الانسان</p>	<p>٣- محتوى المقرر:</p>
<p>٤-١ محاضرات</p> <p>٤-٢ جلسات المناقشة والعصف الذهني</p> <p>٤-٣ الفروض البحثية والعروض التقديمية (تعلم ذاتي والبحث عن المعلومات وجمعها من مصادر مختلفة: حقوق الانسان في الاسلام وحقوق المرأة والطفل</p>	<p>٤ طرق التعليم والتعلم:</p>
<p>٥- تقويم الطلاب :</p>	
<p>امتحان تحريري</p> <p>تكليفات (اعداد تقارير ٢٠% من الدرجات)</p>	<p>أ- الأساليب المستخدمة</p>
<p>امتحان تحريري: نهاية العام الدراسي</p> <p>تكليفات: طوال العام الدراسي</p>	<p>ب- التوقيت</p>
<p>١٠٠ درجة امتحان نظري</p>	<p>ج- توزيع الدرجات</p>

(لا تضاف إلي الدرجات الكلية للبرنامج)	
٦- 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
(٢٠١٣/٩/٢٥)



Benha University
Faculty of Medicine
Department of Pathology.

Course Specification

Course title: Pathology 1
(Code): (PAT301)

Academic Year (2013 – 2014)

- **Department offering the course:** Pathology Department
- **Academic year of program:** third year/ undergraduate level, 1st semester
- **Date of specification approval:** department council , date 9/2013
Internal evaluator: Dr. Hala A. Agina

A) Basic Information:

- **Allocated marks:** 150 marks
- **Course duration:** 15 weeks
- **Teaching hours:** .

1- Theroretical	60
2- Practical	60

B) Professional Information:

1- Overall Aim of the Course:

- To **familiarize** students with fundamental bases of disease processes.
- To **provide** the students with knowledge disease development, associated alteration of structure "morphological changes", functional changes, and complications of diseases in different body systems.
- To provide the students with practical skills needed for microscopical identification of different pathological leasions.

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** different causes, mechanisms, effects, types of cell injury and morphology (gross & microscopic) of tissues affected.

2.a.2. **list** different causes, mechanisms, effects, types of inflammation (including granulomatous inflammation), the morphology (gross & microscopic) of tissues affected and **discuss** different types and effects of bacterial and viral infections.

2.a.3. **Describe** types of stem cells and different processes of repair.

2.a.4 **Explain** the basic facts of immunopathology as well as the basic mechanisms underlying different immunological disorders affecting the body.

2.a.5. **Define** and explain the mechanisms of different circulatory disturbances, their complications and morphology (gross & microscopic) of tissues affected.

2.a.6. **summarize** disorders of growth including neoplasia , its basic facts and concepts, examples for different types of tumors

2.a.7 **Mention** the basis of genetic disorders and its contributions in various disease processes.

2.b. Practical skills:

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

2.b.1 **Apply** the gross features of surgically removed specimen.

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

2.b.3- **Write** a pathological request concerning main features of gross appearance of the specimen.

2.b.4- **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 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.

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

2.e. Intellectual skills

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

- 2.e.1. interpret** pathology reports.
- 2.e.2. integrate** requested data for histopathological examination
- 2.e.3. Analyze** data to suggest diagnosis
- 2.e.4. combine** the obtained information to diagnose a particular clinical problem according to the principles of evidence-based medicine
- 2.e.5. Differentiate** between related pathological disorders affecting body
- 2.e.6. Solve** related medical problems through frequent case studies

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				
Preparation of histological sections		3	3	
Cell response to injury	9	3	12	
Acute and chronic Inflammation	6	3	9	
Stem cells & Tissue repair and healing	3		3	
Immunology and graft rejection	6		6	
Granulomas	7	6	13	
Viral infections	3		3	
Bacterial infections	1		1	
Haemodynamic disturbances	8	3	11	
Disorders of cellular growth, differentiation and maturation	1		1	
Genetics	2		2	
Irradiation	1		1	

Vitamin deficiency	1		1	
Molecular carcinogenesis	1		1	
Neoplasia	11	12	24	
Tutorial: 2 hours/week (2 x15)		30	30	
Total	60	60	120	

4- Teaching and learning methods:

Methods used:

Method	Evidence	ILOs
1- Modified lectures	white board, electronic, ppt. presentation.	2.a.(1-7), ,2.c.3., 2.c.4, 2.d.1, 2.e.2., 2.e.3, 2.e.4
2- Small group discussions	case studies	2.a.(1-7), ,2.c.3., 2.c.4, 2.d.1, 2.e.2., 2.e.3, 2.e.4
3- Practical sessions	Museum specimens and slides covering most subjects of the content	2.a.1, 2.a.2, 2.a.3, 2.a.5, 2.a.6, .,2.b.1,2.b.2,2.b.3, 2.b.4, 2.c.1, 2.c.4., 2.e.1,2.e.2., 2.e.3., 2.e.4
self learning	Researches done by small groups with ppt. Presentation by each group	2.a.(1-7), ,2.c.3., 2.c.4, 2.d.1, 2.e.2., 2.e.3, 2.e.4

TEACHING PLAN:

*Lectures: Division of students into one group
4 hours /week, Time from 10 to 11 .*

Tutorials: 1 hour/ week, time from 11am to 12 pm

*Practical classes: Division of students into 4 groups
3 hours /week, Time from 12 pm to 3 pm .*

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	4 times/week	4 x 15	60
Practical	3hour / week	3x15	45

Tutorial	1 hour /week	1x15	15
Total	8 hours/week	8 X15	120

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA:

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

5-B) Assessment TOOLS:

Tool	Purpose (ILOs)	Evidence
Written examination <ul style="list-style-type: none"> • Short essay • Compare • True & false • MCQ • Case study 	2.a.1., 2.a.2, 2.a.3, 2.a.4,2.a.5, 2.a.6, 2.a.7,	Exam model
Oral examination Viva cards	2.a.(1-7), 2.c.2, 2.c.3., 2.c.4, 2.d.4	Viva cards
Practical examinations <ul style="list-style-type: none"> • Identify specimens • Write a report • Short questions upon the given specimen 	2.a.1, 2.a.2, 2.a.3, 2.a.5, 2.a.6, 2.b.1, 2.b.2, 2.b.3, 2.b.4, 2.c.1, 2.e.1,	Slides, jars, photos (practical exam model)
Quizes <ul style="list-style-type: none"> • True & false • MCQ • Case study 	2.e.2, 2.e.3., 2.e.4., 2.e.5, 2.e.6	Quiz model
Simple researches	2.d.1,2.d.2,	Ppt presentations and researches

prepared by a group and presented by selected students	2.d.3, 2.d.4, 2.f.1, 2.f.2	
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5-C) TIME SCHEDULE:

Exam	Week
Quiz	At the end of each lecture
Researches	According to student grouping
Mid-term exams	1 formative exam and 1 mid-term exam during the term
5- Final exam	At the end of term (Jan 2014)

5-D) Weighting System:

Examination	% of Total Marks	Marks allocated
a- Mid-term exam b- Short questions and MCQ	20%	30
- Final exam: a- Written	50%	75
b- Practical	20%	20
c- Oral	10% "including oral presentation"	10
- Attendance & behavior - Tutorial activity	5%	15
Total	100%	150

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

FORMATIVE ASSESSMENT:

Student knows his marks after the Formative exams.

5-E) Examinations description:

Examination	Description
-------------	-------------

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

6- List of references:

6.1- Basic materials:

- 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 Benhathology 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 staff members)
- Power point presentations covering all *subjects* presented during the course (prepared by staff 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 Pathology.

Course Specification

Course title: Pathology 2
(Code): (PAT302)

Academic Year (2013 – 2014)

- **Department offering the course:** Pathology Department
- **Academic year of 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:** 150 marks
- **Course duration:** 15 weeks of teaching
- **Teaching hours:**

1- Therortical	60
2- Practical	60

B) Professional Information:

1- Overall Aim of the Course:

- To **familiarize** students with fundamental bases of disease processes.
- To **provide** the students with knowledge concerning disease development, associated alteration of structure "morphological changes", functional changes, and complications of diseases in different body systems.
- To **prepare** the students for 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. **Define** the terms of different cardiovascular diseases,

- 2.a.2. describe** the morphological changes occurring as a result of & complications of each cardiovascular disease.
- 2.a.3. **Identify** the main categories of respiratory tract diseases, the pathogenesis of different types of respiratory diseases
- 2.a.4. **state** the terms of different GIT, pancreatic and hepatobiliary diseases, the basic mechanisms underlying main GIT, pancreatic and hepatobiliary diseases,
- 2.a.5. **summarize** the main categories of urinary tract and male genital tract diseases
- 2.a.6. **list** the main categories of female genital tract and breast diseases,
- 2.a.6. **Define** the terms of different endocrine glands diseases, the basic mechanisms underlying main endocrine glands diseases
- 2.a.7. **mention** the main categories of blood and lymphatic diseases; the types, morphological changes, fate and complications of each disease
- 2.a.8. **explain** the types, morphological changes, fate and complications of each disease
- 2.a.9. **describe** the types, morphological changes, fate and complications of each disease

2.b. Practical skills:

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

- 2.b.1 **write** a comment on the gross features of surgically removed specimen.
- 2.b.2- **Use** the light microscope to examine and identify microscopic findings of some selected examples of studied diseases.
- 2.b.3- **Write** an adequate 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 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.
- 2.d.4. **Cope up** with different situations as breaking news.

2.e. Intellectual skills

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

- 2.e.1. **compose** a pathology report.
- 2.e.2. **Collect** requested data for histopathological examination
- 2.e.3. **Analyze** data to suggest diagnosis
- 2.e.4. **Utilize** the obtained information to diagnose a particular clinical problem according to the principles of evidence-based medicine
- 2.e.5. **Differentiate** between related pathological disorders affecting human body
- 2.e.6. **Correlate** the pathological finding with clinical, laboratory and x-rays findings to reach the most accurate pathological diagnosis.

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
Systemic pathology				
Cardiovascular system	8	3	11	
Respiratory system	6	3	9	
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		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		2	
Tutorial: 2 hours/ week (2 x12)		30	30	
Total	60	60	120	

4- Teaching and learning methods:

Methods used:

Method	Evidence	ILOs
1- Modified lectures	white board, electronic, ppt. presentation.	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.e.2
2- Small group discussions	case studies	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.c.3., 2.c.4, 2.d.1, 2.e.2., 2.e.3, 2.e.4., 2.e.5, 2.e.6, 2.e.7
3- Practical sessions and field training	Museum specimens and slides covering most subjects of the content & field visits	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.b.1,2.b.2,2.b.3, 3.b.4,2.b.5,2.c.1, 2.e.1,2.e.2, 2.e.3, 2.e.4., 2.e.5,
self learning	Researches done by small groups with ppt. Presentation by each group	2.a.(1-7), 2.c.3., 2.c.4, 2.d.1, 2.e.2., 2.e.3, 2.e.4

TEACHING PLAN:

*Lectures: Division of students into one group
4 hours /week, Time from 10 to 11.*

Tutorials: 1 hour/week, time from 11 am to 12 pm

*Practical classes: Division of students into 4 groups
3 hours /week, Time from 12 pm to 3 pm.*

Time plan:

Item	Time schedule	Teaching hours	Total hours
lectures	4 times/week	4x15	60
Practical	3hour / week	3x15	45
Tutorial	1 hour /week	1x15	15
Total	8 hours/week	8x15	120

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA:

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

5-B) Assessment TOOLS:

Tool	Purpose (ILOs)	Evidence
Written examination <ul style="list-style-type: none"> • Short essay • Compare • True & false • MCQ • Case study 	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	Exam model
Oral examination Viva cards	2.a, 2.c.2, 2.c.3., 2.c.4, 2.d.4	Viva cards
Practical examinations <ul style="list-style-type: none"> • Identify specimens • Write a report • Short questions 	2.a., 2.b.1, 2.b.2, 2.b.3, 2.b.4, 2.b.5, 2.c.1, 2.e.1, 2.e.3, 2.e.4, 2.e.5	Slides, jars, photos (practical exam model)

upon the given specimen		
Quizzes <ul style="list-style-type: none"> • True & false • MCQ • Case study 	2.e.3, 2.e.4, 2.e.5.,2.e.6.,	Quiz model
Simple researches prepared by a group and presented by selected students	2.d.1,2.d.2, 2.d.3, 2.d.4, 2.f.1, 2.f.2	Ppt presentations and researches

5-C) TIME SCHEDULE:

Exam	Week
Quiz	At the end of each lecture
Researches	According to student grouping
Mid-term exams	7 th week from starting the term
5- Final exam	At the end of the course

5-D) Weighting System:

Examination	% of Total Marks	Marks allocated
c- Mid-term exam d- Short questions and MCQ	20%	30
- Final exam: a- Written	50%	75
b- Practical and field visits	30%	25
c- Oral	10% "including oral presentation"	10
- Attendance & behavior - Tutorial activity	10%	10
Total	100%	150

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

FORMATIVE ASSESSMENT:

Student knows his marks after the Formative exams.

5-E) Examinations description:

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

6- List of references:**6.1- Basic materials:**

- Systemic 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 systemic pathology prepared by staff members of the Department on Behapathology 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 staff members)
- Power point presentations covering all *subjects* presented during the course (prepared by staff 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 Medical Microbiology & Immunology.

Course Specifications

Course title: MICROBIOLOGY I

Code: MIC305

Academic Year (2013– 2014)

- **Department offering the course: MEDICAL MICROBIOLOGY AND IMMUNOLOGY**
- **Academic year of M.B.B.Ch. program: third year (2013– 2014).**
- **Date of specification approval: department council 9-2013**

A) Basic Information:

- **Allocated marks: 100 marks.**
- **Course duration: 15 weeks of teaching.**
- **Teaching hours**

1- Theroretical	45 hrs
2- Practical	30 hrs

B) Professional Information:

1- Overall Aim of the Course:

- 1.1 To Provide students with the essential knowledge of general bacteriology, virology, microbial genetics and the structure and function of the immune system.
- 1.2. To provide the student with skills essential for the appropriate specimen for diagnosis and suitable technique used for diagnosis of bacterial, viral and fungal infection.

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, microbial physiology, genetics and the basis of molecular biology.
- 2.a.2. Mention the principles of growing and cultivating microorganisms
- 2.a.3. summarize the host parasite relationship and microbial pathogenesis.
- 2.a.4. enumerate the basics of antimicrobial chemotherapy and resistance, their mode of action, application and complications in vivo.
- 2.a.5. list the principles and methods of decontamination and sterilization.
- 2.a.6. list RNA viruses 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.b. Practical Skills:

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

- 2.b.1. Perform and distinguish the results of Gram staining and Ziehl-Neelsen staining and microscopic examination of stained preparations
- 2.b.2. Identify different microbial culture media.
- 2.b.2. Identify the biochemical and serological tests commonly used for bacterial identification and distinguish positive and negative results.
- 2.b.4. Identify different methods used in diagnosis of viral diseases.

2.c. Professional Attitude and Behavioral skills:

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

- 2.c.1. Establish good relations with his colleagues inside the lab, as well as solving problems.
- 2.c.2. Respect his teachers, colleagues as well as other personnel in the field.
- 2.c.3. Demonstrate respect and Work effectively as a member or a leader of an interdisciplinary team.

2.d. Intellectual Skills:

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

- 2.d.1. Categorize a microorganism as a bacterium, virus or fungus according to standard taxonomy.
- 2.d.2. Differentiate between physical and chemical methods of sterilization.
- 2.d.3. determine the appropriate antimicrobial used in treatment different infections.
- 2.d.4. Determine the appropriate clinical sample suitable for each disease.
- 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. Evaluate 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.

3- Course contents:

	Subject	Lectures (hrs)	Practical (hrs)	Total (hrs)	% of Total
1.	Introduction to Microbiology	1	-	1	1.3%
2.	Bacterial Cell Structure	1	-	1	1.3%
3.	Bacterial Physiology, Metabolism, Reproduction And Growth Curve	1	-	1	1.3%
4.	Host parasite relationship	1	-	1	1.3%
5.	Bacterial genetics & Genetic engineering	3	-	3	4%
6.	Antimicrobial chemotherapy	2	-	2	2.7%

7.	Safety procedure & Microscope	-	4	4	5.3%
8.	Film preparation and different stains	-	2	2	2.7%
9.	Disinfection and Sterilization	2	4	6	8%
10.	Culture media and identification of isolated bacteria	-	10	10	13.3%
11.	Collection of samples for bacteriological examination	-	2	2	2.7%
12.	Basic Immunology	8	-	7	9.3%
13.	Special immunology	7	-	7	9.3%
14.	Serological tests	2	4	6	8%
15.	General virology	6	-	6	8%
16.	Laboratory diagnosis of viral infections	1	2	3	4%
17.	RNA viruses	5	-	5	6.7%
18.	HIV infection	1	-	1	1.3%
19.	Prion diseases	1	-	1	1.3%
20.	Revisions	3	2	5	6.7%
		45	30	75	100%

4- Teaching and learning methods:

METHODS USED:

Method	Evidence	ILOs
1. Modified Lectures.	Sample ppt. , lecture presentations, discussion ,	2.a / 2.c.2 / 2.d
2. Practical classes	Sample ppt. ,	2.b/ 2.c / 2.d / 2.e.1

	presentations	
3. Case study.	Thought in practical classes	2.a.6/ 2.b.4/2.e.2/ 2.d.3/ 2.d.4
4. Self-learning	- Seminars presented by students at the end of each practical class.	2.a.6/ 2.b.4/2.e.2/ 2.d.3/ 2.d.4
5. Small group discussion	Thought in practical classes	2.a/ 2.b/2.c/ 2.d/

TEACHING PLAN:

Lectures: modified lectures

Practical classes: practical classes

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	3Times/week (each time 1hour)	45 hours	60%
Practical classes	2 Hours/ week	30 hours	40%
Total	5 hrs/week	75 hours	100%

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA: 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) Assessment TOOLS:

Tool	Purpose (ILOs)	evidence
Written examination <ul style="list-style-type: none"> • Short essay • Complete • True or false • Case study • MCQ 	2.a 2.b.1 2.b.4 2.b.5 2.d.1 2.d.2 2.d.3 2.d.4	Exam model
Oral examination <ul style="list-style-type: none"> • Viva cards 	2.a 2.b.1 2.b.4 2.b.5 2.c.2 2.d.1 2.d.2 2.d.3 2.d.4	Viva cards
Practical examination <ul style="list-style-type: none"> • Identify the specimen • Short complete questions upon the given specimen 	2.b	Ppt slides & practical exam model
Quiz <ul style="list-style-type: none"> • Short essay • True or false • Complete • MCQ • Case study 	2.a 2.b.1 2.b.4 2.b.5 2.d.1 2.d.2 2.d.3 2.d.4	Quiz model
Seminars <ul style="list-style-type: none"> • Prepared by a group and presented by a selected student 	2.c.1 2.c.2 2.e.2 2.e.3 2.e.4	Seminar Ppt and research
Practical drawing <ul style="list-style-type: none"> • Draw the practical slides in the practical class book 	2.b.2	Practical book

5-C) TIME SCHEDULE:

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	At the middle of the term (November).
Final exam	At the end of the term (January).

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- • Midterm exam • Quiz • attendance • Practical book drawing Total	12 3 3 2 20	 20%
2- Final exam: a- Written b- Practical c- Oral Total	50 20 10 80	50% 20% 10% 80%
Total	100	100%

- The minimum passing score is **60 marks** provided at least **15 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	<ul style="list-style-type: none"> • One hour written paper composed of short essay-type questions • Complete • Case study • MCQs 	<ul style="list-style-type: none"> • 1 hr.

		<ul style="list-style-type: none"> • True/False questions 	
Final Examination	1. Written	<ul style="list-style-type: none"> • A two-hour written paper composed of short essay-type questions • complete • MCQs • True/False questions • A case study 	<ul style="list-style-type: none"> • 2 hrs
	2. Practical	Spots <ul style="list-style-type: none"> • Spots including slides, culture media, serological tests and instruments. On each specimen, small complete questions should be answered. 	<ul style="list-style-type: none"> • 2 min. for each spot
	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 2008* by 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 Microbiology & Immunology.

Course Specifications

Course title: MICROBIOLOGY II

Code: MIC306

Academic Year (2013– 2014)

- **Department offering the course: MEDICAL MICROBIOLOGY AND IMMUNOLOGY**
- **Academic year of M.B.B.Ch. program: third year (2013 – 2014).**
- **Date of specification approval: department council 9-2013**

A) Basic Information:

- **Allocated marks: 100 marks.**
- **Course duration: 15 weeks of teaching.**
- **Teaching hours:**

1- Therortical	45 hrs
2- Practical	30 hrs

B) Professional Information:

1- Overall Aim of the Course:

- 1.1 To Provide students with the essential knowledge of general bacteriology, virology, microbial genetics and the structure and function of the immune system.
- 1.2. To provide the student with skills essential for the appropriate specimen for diagnosis and suitable technique used for diagnosis of bacterial, viral and fungal infection.

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 bacteria of medical importance with emphasis on: morphology, culture, antigenic structure, virulence, pathogenesis, clinical diseases they caused, diagnosis, treatment, prevention and control.
- 2.a.2. list basic characteristics of fungi, clinical picture, diagnosis, and treatment of major mycotic diseases and be aware of the available antifungal drugs and their uses.
- 2.a.3. Point out DNA viruses of medical importance with emphasis on: morphology, culture, antigenic structure, virulence, pathogenesis, clinical diseases they caused, diagnosis, treatment, prevention and control.
- 2.a.4. Enumerate causative organisms of different clinical cases and understand how to investigate them.
- 2.a.5. . Discuss the Nosocomial infections, the important causative agents, sources, their cycles of transmission and methods of their prevention.
- 2.a.6. Mention principles and different methods of the different infection control policies.

2.b. Practical Skills:

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

- 2.b.1. Identify different organisms according to their microscopic and cultural characters and according to the results of biochemical and serological tests.
- 2.b.2. manage the practical of the basic infection control measures as hand wash, use of different methods of sterilization and disinfection.
- 2.b.3. Identify different methods used in diagnosis of bacterial and fungal diseases

2.c. Professional Attitude and Behavioral kills:

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

- 2.c.1.. Establish good relations with his colleagues 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.c.3. Demonstrate respect and Work effectively as a member or a leader of an interdisciplinary team.

- 2.c.4. Select the most appropriate and cost effective method of diagnosis for each infection

2.d. Intellectual Skills:

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

- 2.d.1. Plan a diagnostic approach 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. 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.d.4. Generate a list of initial diagnostic hypotheses (differential diagnosis) for each problem

2.e. General and transferable Skills:

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

- 2.e.1. Evaluate 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.

3- Course contents:

	Subject	Lectures (hrs)	Practical (hrs)	Total (hrs)	% of Total
21.	Staphylococci , streptococci, pneumococci and Neisseria	4	4	8	10.7%
22.	Corynebacteria	1	2	3	4%

23.	Bacillus Group	1	2	3	4%
24.	Clostridium	2	2	4	5.3%
25.	Mycobacteria	2	2	4	5.3%
26.	Gram negative bacilli	5	8	11	14.7%
27.	Spirochaetes	2	2	4	5.3%
28.	Rickettsia	1	-	1	1.3%
29.	Chlamydia	1	-	1	1.3%
30.	Miscellaneous organisms	1	-	1	1.3%
31.	Brucella, Haemophilus, Yersinia & Bordetella	3	2	5	6.7%
32.	Mycoplasma & Actinomycetes	1	-	1	1.3%
33.	DNA viruses	4	-	3	4%
34.	Hepatitis viruses	2	-	2	2.7%
35.	Oncogenic viruses	1	-	1	1.3%
36.	Mycology	5	4	7	9.3%
37.	Nosocomial infections and Infection control	3	-	3	4%
15.	Applied microbiology	4	-	3	4%
16.	Revisions	2	2	10	13.3%
		45	30	75	100%

4- Teaching and learning methods:

METHODS USED:

Method	Evidence	ILOs
• Modified Lectures.	Sample ppt. & lecture presentations	2.a / 2.c.2 / 2.d
• Practical classes	Sample ppt. &	2.b/ 2.c / 2.d / 2.e.1

	presentations	
• Self-learning	- Seminars presented by students at the end of each practical class.	2.a.6/ 2.b.4/2.e.2/ 2.d.3/ 2.d.4
• Brain storming	Through modified lecture and practical classes	2.a/ 2.b/2.c/ 2.d/ 2.d
• Small group discussion	Thought in practical classes	2.a/ 2.b/2.c/ 2.d/ 2.d

TEACHING PLAN:

Lectures: modified lectures

Practical classes: practical classes

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	3Times/week (each time 1hour)	45 hours	60%
Practical classes	2 Hours/ week	30 hours	40%
Total	5 hrs/week	75 hours	100%

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA: to assess degree of commitment

5. Practical attendance.
6. Log book.
7. Quiz.
8. 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) Assessment TOOLS:

Tool	Purpose (ILOs)	Evidence
Written examination <ul style="list-style-type: none"> • Short essay • Complete • True or false • Case study • MCQ 	2.a 2.b.1 2.d.1 2.d.2 2.d.3	Exam model
Oral examination <ul style="list-style-type: none"> • Viva cards 	2.a 2.b.1 2.c.2 2.d.1 2.d.2 2.d.3	Viva cards
Practical examination <ul style="list-style-type: none"> • Identify the specimen • Short complete questions upon the given specimen 	2.b 2.d.1	Ppt slides & practical exam model
Quiz <ul style="list-style-type: none"> • Short essay • True or false • Complete • MCQ • Case study 	2.a 2.b.1 2.d.1 2.d.2 2.d.3	Quiz model
Seminars <ul style="list-style-type: none"> • Prepared by a group and presented by a selected student 	2.c.1 2.c.2 2.e.2 2.e.3 2.e.4	Seminar Ppt and research
Practical drawing <ul style="list-style-type: none"> • Draw the practical slides in the practical class book 	2.b.2	Practical book

5-C) TIME SCHEDULE:

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	At the middle of the term (March).
Final exam	At the end of the term (June).

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- • Midterm exam • Quiz • Attendance • Seminars • Practical book drawing Total	10 2 3 3 2 20	 20%
2- Final exam: a- Written b- Practical c- Oral Total	50 20 10 80	 50% 20% 10% 80%
Total	100	100%

- The minimum passing score is **60 marks** provided at least **15 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	<ul style="list-style-type: none"> • One hour written paper composed of short essay-type questions • Complete • Case study • MCQs • True/False questions 	<ul style="list-style-type: none"> • 1 hr.
Final Examination	1. Written	<ul style="list-style-type: none"> • A two-hour written paper composed of short essay-type questions • complete • MCQs • True/False questions 	<ul style="list-style-type: none"> • 2 hrs

		• A case study		
	2. Practical	Spots	• Spots including slides, culture media, serological tests and instruments. On each specimen, small complete questions should be answered.	• 2 min.for each spot
	3. Oral	One oral examination station with 2 staff members (10-15 minutes: 4-5 questions)		

6- List of references:

6.1- Basic materials:

4. Medical Microbiology: Department book and practical manual.(2013-2014)
5. Lectures on Medical Virology: Department book.(2013-2014)
6. Basic Immunology: Department book. (2013-2014)

6.2- Essential books (text books):

3. Jawetz, Melnick and Adelberg's *Medical Microbiology 24th Edition* . Copyright © 2007 by The McGraw-Hill Companies, Inc
4. *Mackie & McCartney Practical Medical Microbiology. 14e(hb)2008*by 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:

3. Richard A Harvey, Pamela C Champe, Bruce D Fisher (2007):Lippincott,s illustrated review microbiology and parasitology ,by Lippincott Williams & Wilkins ISBN: 0781782155
4. 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:

12. asmnews@asmusa.org
13. <http://www.phage.org/black09.htm>
14. http://www.microbe.org/microbes/virus_or_bacterium.asp
15. <http://www.bact.wisc.edu/Bact330/330Lecturetopics>
16. http://whyfiles.org/012mad_cow/7.html
17. <http://www.microbelibrary.org>
18. <http://www.hepnet.com/hepb.htm>

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
Academic year: **9/2013**



Benha University
Faculty of Medicine

Department of Medical Parasitology

Course Specification

Course title: Parasitology I
Course code: PAS 307
Academic Year: 2013 – 2014
Department offering the course: Medical Parasitology
Academic year of M.B.& B.Ch. program: Third year.
Date of specification approval:
 Department council date: date /9/2013.

Internal evaluator: Prof.Dr. Hassan Hammadto

A) Basic Information:

Allocated marks: 75 marks
Course duration: 15 weeks of teaching
Teaching hours:

1- Theroretical	30
3- Practical	30

B) Professional Information:

1- Overall Aim of the Course:

- 1.1. To focus on: applied clinical Parasitology, diagnosis, prevention and control of the different parasitic infections.
- 1.2. To be aware of basic epidemiological and environmental factors in relation to parasitic infections with special emphasis on local endemicity.
- 1.3. To provide a 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 helminthic parasitic zoonosis.
- 2.a.2. Identify the basic concepts and principle of parasitism.
- 2.a.3. mention pathogenesis, pathology, clinical picture and host parasite relationship of different helminthic parasites.
- 2.a.4: illustrate morphology, life cycle of different helminthic parasites.
- 2.a.5: Classify different helminthic parasitic infections.
- 2.a.6: Explain diagnostic methods (direct and indirect) treatment, prevention and control of helminthic parasitic diseases.

2.b. Practical skills:

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

- 2.b.1. Perform different methods of blood, urine and stool examination and some staining procedures.
- 2.b.2. Operate laboratory equipments safely and carefully.

2.b.3. Illustrate different helminthic 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. Able to collaborate with his colleagues in a team work inside the lab, as well as solving problems.

2.c.2. Able to 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 program the graduate will 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:

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 helminthic parasitic infections of endemic character.

2.F.3. Analyse case scenario of parasitic infections to reach proper diagnosis.

3- Course contents:

	Lectures (2 lectures / week, one credit each)	Teaching hours	Relative wt.		Practical 2hrs/week (=1 credit)
			%	Final exam. mark	
1	Introduction to parasitology	1	3.3%	1.25	1
2	Helminth immunology: immune respons , pathology, immunodiagnosis	3	10%	3.75	-
3	CLASS: TREMATODA	7	23.3%	8.74	3
	introduction	1	3.3%	1.25	1
	Schistosomes ; immunity	2	6.6%	2.5	
	Snails	1	3.3%	1.25	1
	Fasciola	1	3.3%	1.25	
	Heterophyes	1	3.3%	1.25	
	Case study	1	3.3%	1.25	
	Revision				1

4	CLASS: CESTODA	6	20%	7.0	3
	Introduction	1	3.3%	1.25	1
	Diphyllobothrium; sparganosis	1	3.3%	1.25	
	Taenia, cysticercosis	1	3.3%	1.25	
	Hymenolepis and Dipylidium	1	3.3%	1.25	1
	Echinococcus, Hydatidosis	1	3.3%	1.25	
	Case study	1	3.3%	1.25	
	Revision				1
5	CLASS: NEMATODA	10	33.3%	12.5	5
	Introduction, Entrobisus	1	3.3%	1.25	1
	Ascaris and Toxocara	1	3.3%	1.25	
	Hookworm, Trichostrongylus	1	3.3%	1.25	1
	Strongyloides, larva migrans	1	3.3%	1.25	
	Trichuris, Clinical cases	1	3.3%	1.25	1
	Trichinella	1	3.3%	1.25	
	Filaria ; immunity	3	10%	3.75	1
	Case study	1	3.3%	1.25	
	Revision				1
7	Stool, urine and blood exam.	3	10%	3.5	2
8	Practical exam				1
TOTAL		30	100%	37.5	15

4- Teaching and learning methods:**METHODS USED:**

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

TEACHING PLAN:

Lectures: 30 teaching hours

Practical classes: 30 teaching hours

Time plan:

Item	Time schedule	Total teaching hours	Credit hours
Lectures	2 lectures/week; one hour each	30	2
Practical	2 hours / 15 week	30	1
Total	4 hrs/week	60	3

5- Students Assessment methods:**5-A) ATTENDANCE CRITERIA:** Faculty bylaws

1. Practical attendance.
2. lectures attendance.
3. Log book.
4. Formative assessment by Quiz tests.

5-B) Assessment TOOLS:

Tool	Purpose (ILOs)

Written examination	To assess knowledge , understanding and intellectual skills.
Oral examination	To assess knowledge, skills and intellectual functions, and attitude.
Practical examination	To assess knowledge, professional skills and attitude.

5-C) TIME SCHEDULE: Faculty bylaws

Exam	Week
1- midterm exam	7th
2- Practical exam	15th
3- Final exam	End of the term
4- Oral exam	End of the term

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
3- Mid-term	12	16%
5- Final exam:		
a- Written	37.5	50%
b- Practical	15	20%
c- Oral	5	6.7%
6- Assignments & other activities	5.5	7.3%
Total	75	

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

FORMATIVE ASSESSMENT:

Student knows his marks after the Formative exams.

5-E) Examinations description:

Examination	Description
1- Shock exams	Quizzes
3- Mid-year	Objective questions, problem solving and case studies
5- Final exam:	
Written	- Objective questions , short essay questions problem solving and case studies.
Practical	- OSPE exam. using microscopic slides and data show pictures, boxes and snails.
Oral	- Two sessions.
6- Assignments & other activities	- Assignments, projects, practical books etc
Total	75 marks

6- List of references:**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 Medical Parasitology
Course Specification**

Course title: Parasitology II
Course code: PAS 308
Academic Year: 2013 – 2014
Department offering the course: Medical Parasitology
Academic year of M.B.& B.Ch. program: Third year.
Date of specification approval:
 Department council date: /9/2013.

Internal evaluator: Prof.Dr. Hassan Hammadto

A) Basic Information:

Allocated marks: 75 marks
Course duration: 15 weeks of teaching
Teaching hours:

1- Theroretical	30
2- Practical	30

B) Professional Information:

1- Overall Aim of the Course:

- 1.1. To focus on: applied clinical Parasitology, diagnosis, prevention and control of the different parasitic infections.
- 1.2. To be aware of basic epidemiological and environmental factors in relation to parasitic infections with special emphasis on local endemicity.
- 1.3. To provide a 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 protozoal parasitic zoonosis.
- 2.a.2. Identify the basic concepts and principle of parasitism.
- 2.a.3. summarize pathogenesis, pathology, clinical picture and host parasite relationship of protozoa infecting human being.
- 2.a.4. summarize pathogenesis, pathology, clinical picture and host parasite relationship of arthropods affecting human being.
- 2.a.5: Illustrate morphology, life cycle of different protozoa infecting Human being.
- 2.a.6. Illustrate morphology, life cycle of medically important arthropods.
- 2.a.7: Classify different protozoal infections.
- 2.a.8: Explain diagnostic methods (direct and indirect), treatment, prevention and control of protozoal parasitic diseases.

2.a.9: Explain diagnostic methods (direct and indirect), treatment, prevention and control of diseases due to arthropods parasitism.

2.b. Practical skills:

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

2.b.1. identify different protozoal parasitic stages, preserve fresh specimens and apply safety precautions.

2.b.2. identify medically important arthropods.

2.b.3. Operate laboratory equipments safely and carefully.

2.c. Professional attitude and behavioral skills:

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

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

2.c.2. Able to 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 program the graduate will 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:

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. Analyse case scenario of parasitic infections to reach proper diagnosis.

3- Course contents:

	LECTURES				Practical 2hrs/week (=1 credit)
	Lectures (2 lectures / week, one credit each)	Teatching hours	Relative wt.	Final exam mark	
1	- Protozoa: Introduction	1	3.3%	1.25	1
2	- Protozoa immunology	2	6.7%	2.5	-
3	- Amoeba & ciliates	3.0	10%	3.75	1
	- Amoeba	2	6.7%	2.5	1
	- Balantidium & clinical cases	1	3.3%	1.25	

5	- Flagellates	6.0	20%	7.5	1
	- Giardia ; Trichomonas vaginalis ;	1	3.3%	1.25	1
	- Leishmania ; leishmania immunity	2	6.7%	2.5	
	- Trypanosoma ; immunity.	2	6.7%	2.5	
- Clinical cases	1	3.3%	1.25		
6	- Sporozoa	7	23.4%	8.75	2
	- Plasmodium ; malaria immunity	2	6.7%	2.5	1
	- Toxoplasma	1	3.3%	1.25	1
	- Cryptosporidium ; Babesia isospora ; cyclospora ; sarcocystis	3	10%	3.75	
	- Clinical cases	1	3.4%	1.25	-
7	- Entomology: introduction	1	3.3%	1.25	-
8	- Mosquitoes	2	6.7%	2.5	1
9	- Flies	2	6.7%	2.5	1
10	- Fleas	1	3.3%	1.25	1
11	- Ticks	1	3.3%	1.25	1
12	- Mites	1	3.3%	1.25	1
13	- Lice	1	3.3%	1.25	1
14	- Bugs ; Cyclops ; clinical cases	2	6.7%	2.5	1
16	- Practical revision				2
17	- Practical exam				1
TOTAL		30 hrs	100%	37.5 marks	15 hrs

4- Teaching and learning methods:**METHODS USED:**

- Modified lectures.
- Practical classes.
- Self learning.
- Field study.

TEACHING PLAN:

Lectures: 30 teaching hours

Practical classes: 30 teaching hours

Time plan:

Item	Time schedule	Total teaching hours	Credit hours
Lectures	2 lectures/week; one hour each	30	2
Practical	2 hours / 15 week	30	1
Total	4 hrs/week	60	3

5- Students Assessment methods:5-A) **ATTENDANCE CRITERIA:** Faculty bylaws

1. Practical attendance.
2. lectures attendance.
3. Log book.
4. Formative assessment by Quiz tests.

5-B) Assessment TOOLS:

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

5-C) TIME SCHEDULE: Faculty bylaws

Exam	Week
1- midterm exam	7th
2- Practical exam	15th
3- Final exam	End of the term
4- Oral exam	End of the term

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
3- Mid-term	12	16%
5- Final exam:		
a- Written	37.5	50%
b- Practical	15	20%
c- Oral	5	6.7%
6- Assignments & other activities	5.5	7.3%
Total	75	

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

FORMATIVE ASSESSMENT:

Student knows his marks after the Formative exams.

5-E) Examinations description:

Examination	Description
1- Shock exams	Quizzes
3- Mid-year exam.	Objective questions, problem solving and case studies
5- Final exam: Written	<ul style="list-style-type: none"> - Objective questions , short essay questions problem solving and case studies. - OSPE exam. using microscopic slides and data show

Practical	pictures, boxes and snails.
Oral	- Two sessions.
6- Assignments & other activities	- Assignments, projects, practical books etc
Total	75 marks

6- List of references:**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).

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 Clinical Pharmacology

COURSE SPECIFICATIONS

Course title: Pharmacology I

Code: PCL 303

Academic Year (2013-2014)

- Department offering the course: Clinical Pharmacology Department
- Academic year of M.B. & B.Ch. program: 3rd year (201³-201⁴).
- Date of specification approval:
 - Dep. Council No.195 , date 9/11/2013

- Internal evaluator : Professor Dr/Mohanad Shehab

A) Basic information:

- Allocated marks: 150 marks
- Course duration: 15 weeks of teaching.
- Teaching hours:

1- Theroretical	60 hrs
2- Practical	30 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 **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. define** different terms in pharmacology.
- 2.a.2. explain** the basis of pharmacokinetics and pharmacodynamics of different drugs.
- 2.a.3. Explain** the mechanisms of action of sympathomimetics , sympatholytics , parasympathomimetics , parasympatholytics , ganglion stimulants , ganglion blockers , cardiac glycosides , antihypertensives , nitrates , antiarrhythmic drugs , anticoagulants , antiplatelets , etc...
- 2.a.4. Enumerate** indications , preparations , side effects , contraindications , main interactions of the studied drugs.
- 2.a.5. Identify** proper methods of pharmacological intervention for different common diseases.
- 2.a.6. Describe** manifestations , main lines of management of major drug groups (atropine , organophosphorus , cardiac glycosides , anticoagulants , iron)
- 2.a.7. Summarize** the precautions , limitations of drugs with narrow safety margin (Dopamine , dobutamine , aminophylline and cardiac glycosides)
- 2.a.8. Mention** methods for ameliorating sufferings of critically ill patients and different emergency conditions.

2.b. Practical skills

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

- 2.b.1. Apply** different techniques of drug administration in humans .
- 2.b.2.** Select the proper drug(s) for the proper common clinical situations in proper dosage.
- 2.b.3. Write** a prescription for selected important diseases: Heart failure Angina , myocardial infarction , urticaria , postoperative urine retention , megaloplastic anemia , hypertension , DVT , open angle glaucoma , Supraventricular tachycardia , acute ventricular tachycardia , senile enlargement of prostate , erectile dysfunction , different types of anemia
- 2.b.4. Audit** prescriptions citing multiple drugs with significant interactions (digoxin , nitrates , anticoagulants , quinidine)

2.b.5. Demonstrate the effect of autonomic drugs and skeletal muscle relaxants on isolated organs (toad's heart ,rabbit intestine ,toad's rectus) and on the rabbit's eye and rat's blood pressure.

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.c.3. Explain clearly therapeutic plan for different clinical situations specified in 2.a.6

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. Cope up with difficult situations as breaking news.

2.d.5. 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. Select properly the drugs suitable for different patient populations (renal ,hepatic , pediatric , geriatrics ,pregnancy)

- 2.e.2 Calculate** accurately drug's dosage, bioavailability, plasma half life and volume of distribution in different patient populations (renal ,hepatic , pediatric , geriatrics)
- 2.e.3. **Predict** beneficial and harmful drug interaction in cases of multiple drug administration.
- 2.e.4. **Integrate** knowledge about biological effects of drugs and their pharmacokinetics to explain the therapeutic uses and adverse reactions on pharmacological basis.
2. e.5 . **plan** for a specific clinical situation using non drug and drug therapy by specific dose and duration .

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.
- 2. F.5. Adopt** the questioning approach to own work & that of others to solve clinical problems.

3- Course contents

Topics	Lectures (Hrs)	practical (Hrs)	Total (Hrs)	% of total

1-General pharmacology	10	6	16	8.8
2-Autonomic nervous system	16	12	28	15.5
3-Ocular pharmacology	2	4	6	3.3
4-Skeletal muscle relaxants	3	4	7	3.3
5-Autacoids	5	-	5	2.2
7-Renal pharmacology	4	-	4	2.2
8-Cardio-vascular pharmacology	14	4	18	7.7
9-Blood and blood forming organs	6	-	6	3.3
Total	60	30	90	50

4- Teaching and learning methods

METHODS USED:

- Modified Lectures
- Practical classes
- Problem based pharmacotherapy.
- Small group discussion
- Self learning

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	2.a.2---2.a.4 2.b.1---2.b.5 2.c.1---2.c.2 2.d.1---2.d.5

	including (power point files and videos ,etc....) -Different drug formulations -Note books including curves for in vitro and in vivo drug studies	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 experiments , 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
Self learning	samples of students researches and power point presentations	2.a.1----2.a.4 2.b.1----2.b.2 2.c.1----2.c.2 2.d.2----2.d.5 2.e.1----2.e.4 2.f.1-----2.f.6

TEACHING PLAN:

Lectures: 60 lectures.

Practical classes: 30 practical classes.

TIME PLAN:

Item	Time schedule	Teaching hours	% of Total hours
Lectures	4 times / week /15weeks (one hour each)	60	33

Practical classes	2 hours/ week/15	30	17
Total	6 hours /week/15 weeks	90	50

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:	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	Assignment samples	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
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5.C) TIME SCHEDULE:

Exam	Week
2- Assessment 2	Week 10
3-Assessment 3(Final exam)	Week 15

5-D) Weighting system:

Examination	Marks allocated	% of total Marks
1-Assessment exams Written(MCQ ,compare , explain, short essay questions)	20	6.6.%
2-Assignments & Other activities (log book)	10	3.3%
3- Final Examination		
a- Written	75	25%
b- Practical	30	10%
c- Oral	15	5%
Total	150	50%

-The minimum passing score is 90 marks provided that at least 23 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%

Formative Assessment:

- Student knows his marks after the formative exams.

5-E) Examination description:

Examination	Description
1- Mid -year exam	MCQ ,compare , explain, short essay questions
2- Final exam a- Written b- Practical c- Oral	(MCQs) – compare , explain, 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.micromedex.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
- 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 Clinical Pharmacology

COURSE SPECIFICATIONS

Course title: Pharmacology II

Code: PCL 304

Academic Year (2013-2014)

- Department offering the course: Clinical Pharmacology Department
- Academic year of M.B. & B.Ch. program: 3rd year (2013-2014).
- Date of specification approval: Dep. Council No. 195, date 9/11/2013
- Internal evaluator : Professor Dr/ El-sayed Ahmed Abd El-latif

A) Basic information:

- Allocated marks: 150 marks
- Course duration: 30 weeks of teaching.
- Teaching hours:

1- Lectures	60 hrs
3- Practical	30 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.define psychedelic , analeptic , analgesis, narcotic antidepressants , mood stabilizer ,balanced anesthesia , and , drug addiction ,chelating agent

2.a.2. enumerate Different groups and preparations of drugs affecting central nervous system , GIT , respiratory system , hormones , antimicrobial ,antiviral ,anti fungal ,anti protozoal ,anticancer , immunomodulators , chelating agents , and different methods of gene therapy

2.a.3.Illustrate the effect of drugs specified in 2.a.2. on different body organs

2.a.4. Explain the mechanism of action , of drugs and drug groups mentioned in 2.a.2.

2.a.5.Enumerate indications , preparations , side effects ,contraindications , main interactions of drugs mentioned in 2.a.2.

2.a.6. Identify proper methods of pharmacological intervention for : parkinsonism , diabetes mellitus , metabolic bone diseases , hypercalcemia osteoporosis , thyrotoxic crisis , cushing disease , addison s disease , male and female, hypogonadism , , cyanide poisoning. , respiratory distress syndrome

2.a.7. describe manifestations , main lines of management of major drug groups toxicities

2.a.8. summarize the precautions , limitations of drugs with narrow safety margin (morphine ,salicylates ,phenytoin ,barbiturates ,benzodiazepines ,aminophylline , carbamazepine)

2.a.9. state methods for proper therapeutic prescription for hepatic patients

2.b. Practical skills

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

2.b.1.Perform with precision different techniques of drug administration in humans

2.b.2. Select the proper drug(s) for the proper common clinical situations in proper dosage :peptic ulcer ,epilepsy ,typhoid , thyrotoxic crisis, diabetes , parkinsonism , tetany ,osteoporosis

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

2.b.4. Audit prescriptions citing multiple drugs with significant interactions (antipsychotics ,antidepressants ,antiepileptic , sedative , hypnotics cytoprotective agents,proton pump inhibitors , antimicrobial ,oral hypoglycemic ,different types of insulin ,corticosteroids ,contraceptives)

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.c.3. Explain clearly therapeutic plan for different clinical situations specified in 2.a.6

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. Cope up with difficult situations as breaking news.

2.d.5. 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. Select properly the drugs suitable for different patient populations (renal , hepatic , pediatric , geriatrics ,pregnancy)

2.e.2 Calculate accurately drug's dosage, bioavailability, plasma half life and volume of distribution in different patient populations (renal ,hepatic , pediatric , geriatrics)

2.e.3. Obtain and record a comprehensive drug history of the patient.

2.e.4. Document drug adverse reactions.

2.e.5. Adopt the questioning approach to own work & that of others to solve clinical problems.

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- Course contents

Topics	Lectures (Hrs)	practical (Hrs)	Total (Hrs)	% of total
1-Respiration	2	2	4	2.2
2-Gastrointestinal pharmacology	4	-	4	2.2
3-Psycho-neuro-pharmacology	18	2	20	10
4-Hormones and their antagonists	8	2	10	4.4
5-Chemotherapy oral	10	6	16	5.5

antiseptics				
6- Cancer chemotherapy	8	-	8	4.4
7-Drug interactions	2	-	2	1.1
8-Drug abuse	1	-	1	0.6
9- Pharmaco-economics	1	2	3	0.9
10-Chelating agents	1	-	1	0.6
11-Vitamins and food supplements	1	-	1	0.6
12- Immunopharmacology	2	-	2	1.1
13- Gene therapy	1	-	1	0.6
12- Iatrogenic diseases	1	-	1	0.6
13 -Prescription writing	-	6	6	3.3
14- Choice of proper drug	-	2	2	2.2
15- Problem based solving	-	10	10	5.5
Total	60	30	90	50

4- Teaching and learning methods

METHODS USED:

1. Modified Lectures
2. Practical classes
3. Problem based pharmacotherapy.
4. Small group discussion
5. Self learning

Method	Evidence	ILOs
Modified lectures	-A schedule for undergraduate Lectures -CDs of lectures including (Power	2.a.1----2.a.4 2.b.2----2.b.5 2.d.3----2.d.5

	point files ,video films, problem solving, etc.....) -Papers of lectures	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
Self learning	samples of students researches and power point presentations	2.a.1----2.a.4 2.b.1----2.b.2 2.c.1----2.c.2 2.d.2----2.d.5 2.e.1----2.e.4 2.f.1----2.f.6

TEACHING PLAN:

Lectures: 120 lectures.

Practical classes: 60 practical classes.

TIME PLAN:

Item	Time schedule	Teaching hours	% of Total hours
Lectures	4 times / week /15 weeks (one hour each)	60	33

Practical classes	2 hours/ week/15	30	17
Total	6 hours /week/15 weeks	90	50

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: <ul style="list-style-type: none"> • 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	Assignment samples	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
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5.C) TIME SCHEDULE:

Exam	Week
1- Assessment 1	Week 7
2-Assessment 2 (Final exam)	Week 15

5-D) Weighting system:

Examination	Marks allocated	% of total Marks
1-Assessment exams Written(MCQ ,compare , explain, short essay questions)	20	6.6 %
2-Assignments & Other activities (log book)	10	3.3%
3- Final Examination		
a- Written	75	25%
b- Practical	30	10%
c- Oral	15	5%
Total	150	50%

-The minimum passing score is 90 marks provided that at least 25 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%

Formative Assessment: Student knows his marks after the formative exams.

5-E) Examination description:

Examination	Description
1- Mid -year exam	MCQ - short essay
2- Final exam a- Written b- Practical c- Oral	MCQs– short 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 (2010): 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.micromedex.com

7- Facilities Required for Teaching and Learning

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

Course Coordinator: Dr. Mohanad Shehab

Head of Department: Prof. Dr. Ahmed Selim Mohamed

Date : 9/11/2013



Benha University
Faculty of Medicine
Department of otorhinolaryngology.



Course Specification

Course title: Ear,Nose,Throat |

(Code): ENT409

Academic Year (2013 – 2014)

- **Department offering the course: department of otorhinolaryngology.**
- **Academic year of M.B.& B.Ch. program: 4th year.**
- **Date of specification approval: Department council date 10/9/2013**

A) Basic Information:

- **Allocated marks: 100 marks**
- **Course duration: 15 weeks of teaching**
- **Teaching hours:**

1- Lectures	30
2- Practical or clinical	30

(B) Professional information

1- Aims of the Course:

- The aims of the course are to provide the undergraduate with educational experience necessary for further practice and specialization in the field of otorhinolaryngology through providing of :

- 1.1. Basic scientific knowledge essential to practice medicine at the primary health care in otorhinology with proper awareness of the social and community prosperities.
- 1.2. Basic ethical and professional education essential for establishing & maintaining good doctor/patient relationship, appropriate attitudes with colleagues and paramedicals.
- 1.3. Skills essential for proper evaluation and management of the common health problems.

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 causes of common ear emergencies and disorders and the method of transmission of common ORL infections.

- 2.a.2. **List** clinical symptoms and signs of the most important ear disorders.
- 2.a.3. **Determine** the appropriate diagnostic tools and therapeutic lines for the most important ear disorders including applicable recent modalities.
- 2.a.4. **Outline** the management priorities for different laryngeal emergencies.
- 2.a.5. **state** different rehabilitation for the most common permanent handicapping problems in larynx.
- 2.a.6. **Explain** the relationship between some general symptoms of illness and laryngeal problems.

2-b: Practical and Clinical Skills

- 2.b.1. **Obtain** a complete & focused medical history from patients with ear and related head and neck problems.
- 2.b.2. **Perform** adequate clinical examination for ear, neck and cranial nerves to identify diversions from normal and use equipment available to the primary health care practitioner.
- 2.b.3. **Present** patient data in an organized and informative manner.
- 2.b.4. **write** ENT clinical sheet suitable to record otolaryngological problems met in clinical practice.

2-c: Professional Attitude and Behavioral skill:

- 2.c.1. **Respect** patients' rights and involve them and 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.
- 2.c.4. **complies** with the requirements of the national code of ethics issued by the Egyptian Medical Syndicate.
- 2.c.5. **React** kindly and respectfully to the patient during the history taking and clinical examination.

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 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. **Interpret** the most important symptoms and signs of ear and laryngeal diseases.
- 2.e.2. **Formulate appropriate management plans for individual patients** .
- 2.e.3. **Integrate** the facts of the basic laryngeal diseases with clinical data.
- 2.e.4. **construct** appropriate management strategies for patients with common airway diseases.
- 2.e.5. **combine** the clinical and investigational database to be proficient in clinical problem solving.
- 2.e.6. **prioritize** the otological problems and their different diagnoses.

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)	Tutorial / Small group discussion (hrs)	Practical (hrs)	Total (hrs)	% of Total
Topic (1): The ear	15	6	6	27	56%

<ul style="list-style-type: none"> * anatomy of ear. *Congenital anomalies. *Anatomy of facial nerve. *Traumatic conditions Of the ear. *Traumatic conditions of middle ear and inner ear. *Inflammatory conditions of auricle and external auditory canal. *Acute Otitis media. *Chronic suppurative otitis media. *Complications of suppurative otitis media. *Tumors * facial nerve paralysis. 					
<p>Topic(2): The larynx and trachea</p> <ul style="list-style-type: none"> *Anatomy of the larynx and cervical trachea. *physiology of the larynx. *congenital anomalies of the larynx. *Traumatic conditions of the larynx. *Acute and chronic laryngitis. *Laryngeal paralysis. *Restoration of the 	9	6	6	21	44%

airway.					
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4- Teaching and learning methods:

METHODS USED:

- | |
|--|
| <ol style="list-style-type: none"> 1. Modified Lectures. 2. Clinical classes. 3. Small group discussions 4. Problem solving. |
|--|

Method	Evidence	ILOs
Modified lectures	CDs of lectures including (video films, brain storming, problem solving)	2.a.1.....2.a.6 2.c.1.....2.a.4 2.d.1.....2.d.5 2.f.1.....2.f.5
Clinical classes	Symptomatology of the ear. Diagnostic audiology, Otologic procedures. Diagnostic audiology.	2.b.1.....2.b.4
Small group discussions	All topics in ear, larynx and trachea (slides, photographs and video films)	2.b.1.....2.b.4 2.c.1.....2.c.4. 2.d.1.....2.d.5. 2.f.1.....2.f.5. 2.e.1.....2.e.3
Problem solving	Case scenarios	2.b.1.....2.b.4. 2.e.1.....2.e.3.

TEACHING PLAN:

Lectures: All students will take the lectures in the lectures hall in the faculty building as one group.

Clinical study : students will be classified into 4 groups A, b C, and D. each group will visit otorhinolayrngology department at banha university hospital once per week:

Clinical hours: 1 hour /week, Time from 9 am to 10 am.

Small group discussions: 1hour/week from 10 am to 11am

Time plan:

Item	Time schedule	Teaching hours/week	Total hours
Lectures	2 times/week; one hour each between 12pm to 1pm	2	24
Practical	<u>1 hour</u> / week	12	12
Small group discussions	<u>1 hour</u> / week	12	12
Total	4	12	48

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA: Faculty bylaws

- 1- Lectures: at least 50% attendance.
- 2- Practical at least 75 % attendance.

5-B) Assessment TOOLS:

Tool	Purpose (ILOs)
Written examination	To assess knowledge acquisition including MCQs, and problem solving.
Oral examination	To assess student's understanding , attitude , presentation and stability of knowledge given.
Practical examination	To assess practical skills

5-C) TIME SCHEDULE: Faculty bylaws

Exam	Week
1- Mid-term exam	After 6 weeks
2- end –term exam	After 12 weeks

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- Mid-term exam.	10	10%
2- End term exam :	80	80%
a- Written.	50	50%
b- Practical.	20	20%
c- Oral.	10	10%
3- Assignments, log book.	10	10%
Total	100	100%

The minimum passing & Passing grades (Faculty bylaws).

FORMATIVE ASSESSMENT:

Student knows his marks after the Formative exams.

5-E) Examinations description:

Examination	Description
1- Mid-term.	MCQs, shorts assay, complete, true or false.
2- Final exam: a- Written b- Practical c- Oral	a: MCQs, shorts assay, complete, true or false.
3- Assignments & other activities	A short assay in a selected subject is done.

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 Elsis

Head of the department: Prof. Dr. Hossam Abdelhay Gad

Date : 10/9/2013



Benha University
Faculty of Medicine
Department of otorhinolaryngology.

Course Specification

Course title: Ear,Nose,Throat |

(Code): ENT409

Academic Year (2013 – 2014)2nd semester

- **Department offering the course: department of otorhinolaryngology.**
- **Academic year of M.B.& B.Ch. program: 4th year.**
- **Date of specification approval: Department council date 10/12/2013**

A) Basic Information:

- **Allocated marks: 100 marks**
- **Course duration: 15 weeks of teaching**
- **Teaching hours:**

1- Lectures	30hs
2- Practical or clinical	30hs

(B) Professional information

1- Aims of the Course:

- The aims of the course are to provide the undergraduate with educational experience necessary for further practice and specialization in the field of otorhinolaryngology through providing of :

- 1.1. Basic scientific knowledge essential to practice medicine at the primary health care in otorhinology with proper awareness of the social and community prosperities.
- 1.2. Basic ethical and professional education essential for establishing & maintaining good doctor/patient relationship, appropriate attitudes with colleagues and paramedicals.
- 1.3. Skills essential for proper evaluation and management of the common rhinological problems.

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 causes of common nasal emergencies and disorders and the method of transmission of common ORL infections.

2.a.2. mention clinical symptoms and signs of the most important nose disorders.

2.a.3. Determine the appropriate diagnostic tools and therapeutic lines for the most important pharyngeal disorders including applicable recent modalities.

2.a.4. Outline the management priorities for different pharyngeal emergencies.

2.a.5. list different rehabilitation for the most common permanent handicapping problems in oesophagus.

2.a.6. Explain the relationship between some general symptoms of illness and nasal problems.

2-b: Practical and Clinical Skills

2.b.1. Obtain a complete & focused medical history from patients with nose and related head and neck problems.

2.b.2. Perform adequate clinical examination for nose, and pharynx to identify diversions from normal and use equipment available to the primary health care practitioner.

2.b.3. Present patient data in an organized and informative manner.

2.b.4. write ENT clinical sheet suitable to record otolaryngological problems met in clinical practice.

2-c: Professional Attitude and Behavioral skill:

2.c.1. Respect patients' rights and involve them and 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.

2.c.4. complies with the requirements of the national code of ethics issued by the Egyptian Medical Syndicate.

2.c.5. React kindly and respectfully to the patient during the history taking and clinical examination.

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 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. **Interpret** the most important symptoms and signs of the nose and pharynx diseases.
- 2.e.2. **Formulate** appropriate management plans for individual patients .
- 2.e.3. **Integrate** the facts of the basic pharyngeal diseases with clinical data.
- 2.e.4. **construct** appropriate management strategies for patients with common oesophageal diseases.
- 2.e.5. **combine** the clinical and investigational database to be proficient in clinical problem solving.
- 2.e.6. **prioritize** the nasal problems and their different diagnoses.

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)	Tutorial / Small group discussion (hrs)	Practical (hrs)	Total (hrs)	% of Total
<p>Topic (1): The Nose</p> <p>* anatomy of the nose.</p> <p>*Congenital anomalies.</p> <p>*Traumatic conditions Of the nose.</p> <p>*Inflammatory conditions of the nose.</p> <p>. *complications of sinusitis.</p> <p>* Diseases of the nasal septum.</p> <p>*Polypi of paranasal sinuses.</p> <p>*Reactive disorders of the nose.</p> <p>*cysts of the PNS.</p> <p>*tumors of the nose an sinuses.</p> <p>*Rhinological procedures.</p>	15	6	6	27	56%
<p>Topic(2): The pharynx</p> <p>*Anatomy of the pharynx.</p>	9	6	6	21	44%

*Physiology of the pharynx. *Diseases of waldeyer's ring. *Tumors of the pharynx. *Pharyngeal operations. * Diseases of the Oesophagus. *Symptoms of pharyngeal diseases.					
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4- Teaching and learning methods:

METHODS USED:

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| 5. Modified Lectures.
6. Clinical classes.
7. Small group discussions
8. Problem solving. |
|--|

Method	Evidence	ILOs
Modified lectures	CDs of lectures including (video films, brain storming, problem solving)	2.a.1.....2.a.6 2.c.1.....2.a.4 2.d.1.....2.d.5 2.f.1.....2.f.5
Clinical classes	Symptomatology of the ear. Diagnostic audiology, Otologic procedures. Diagnostic audiology.	2.b.1.....2.b.4
Small group discussions	All topics in ear, larynx and trachea (slides, photographs and video films)	2.b.1.....2.b.4 2.c.1.....2.c.4. 2.d.1.....2.d.5. 2.f.1.....2.f.5. 2.e.1.....2.e.3

Problem solving	Case scenarios	2.b.1.....2.b.4. 2.e.1.....2.e.3.
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TEACHING PLAN:

Lectures: All students will take the lectures in the lectures hall in the faculty building as one group.

Clinical study : students will be classified into 4 groups A, b C, and D. each group will visit otorhinolayrngology department at banha university hospital once per week.

Clinical hours: 1 hour /week, Time from 9 am to 10 am.

Small group discussions: 1hour/week from 10 am to 11am

Time plan:

Item	Time schedule	Teaching hours/week	Total hours
Lectures	2 times/week; one hour each between 12pm to1pm	2	24
Practical	<u>1</u> hour / week	12	12
Small group discussions	<u>1</u> hour / week	12	12
Total	4	12	48

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA: Faculty bylaws

3- Lectures: at least 50% attendance.

4- Practical at least 75 % attendance.

5-B) Assessment TOOLS:

Tool	Purpose (ILOs)
Written examination	To assess knowledge acquisition including MCQs, and problem solving.
Oral examination	To assess student's understanding , attitude , presentation and

	stability of knowledge given.
Practical examination	To assess practical skills

5-C) TIME SCHEDULE: Faculty bylaws

Exam	Week
1- Mid-term exam	After 6 weeks
2- end –term exam	After 12 weeks

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- Mid-term exam.	10	10%
2- End term exam :	80	80%
a- Written.	50	50%
b- Practical.	20	20%
c- Oral.	10	10%
3- Assignments, log book.	10	10%
Total	100	100%

The minimum passing & Passing grades (Faculty bylaws).

FORMATIVE ASSESSMENT:

Student knows his marks after the Formative exams.

5-E) Examinations description:

Examination	Description
1- Mid-term.	MCQs, shorts assay, complete, true or false.
2- Final exam: a- Written b- Practical c- Oral	a: MCQs, shorts assay, complete, true or false.
3- Assignments & other activities	A short assay in a selected subject is done.

6- List of references:

6.1- Basic materials: the book of Benha ORI 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 Elsis

Head of the department: Prof. Dr. Hossam Abdelhay Gad

Date : 10/12/2013



Benha University
Faculty of Medicine
Department of Ophthalmology.



Course Specification

Course title: Ophthalmology I
 (Code) : OPL 405

Academic Year (2013 – 2014)

- Department offering the course: Ophthalmology Department
- Academic year of M.B. B.Ch. program: 4th year 2013/2014.
- Date of specification approval:
 - Department council no 278 , date 7 / 9 /2013,

A) Basic Information:

- Allocated marks: 125 marks
- Course duration: 15 weeks of teaching.
- Teaching hours:

1- Theoretical	45 hrs
2- Practical	30 hrs

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.
- be 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:

.a.1 Describe the anatomy of the eye, adnexa. This includes aspects of embryology, anatomy in childhood and during ageing.

2.a.2 explain the physiology of the eye, adnex. This extends to the organization, function, mechanism of action, regulation and adaptations of structures and their component tissues relevant to clinical methods of assessment (e.g. acuity, pupil reactivity).

2.a.3 Identify the etiology (including pathogenesis, genetics and interactions with patients' physical and social environment), clinical manifestations, investigation, diagnosis, management and prevention of visual impairment.

2.a.4 list differential diagnosis, for an appropriate management strategy from the options available.

2.a.5 Enumerate the major types of refractive errors (myopia, hyperopia & astigmatism) and their proper management.

2.a.6 Mention indications for, and intraoperative and postoperative complications of cataract surgery and related anterior segment procedures.

2.a.7 Memorize the basic principles of eyelid, lacrimal and orbital surgeries.

2.a.8 state basic principle of uveal tissue diseases.

2.b. Practical and Clinical Skills

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

2.b.1 Take a proper history for the patient (including that from the parent or guardian of a child).

2.b.2 Perform proper clinical examination, developing investigative strategies through an appropriate choice of tests, analyzing the evidence in order to formulate a provisional diagnosis, and outlining an approach to therapeutic interventions (including indications and contraindications).

2.b.3. Perform a proper 1st aid in different ophthalmic emergencies.

2.b.4 Present patient data in an organized and informative manner.

2.b.5 Work as part of a team including the professions allied to medicine, colleagues in other specialties and other agencies.

2.c. Professional Attitude and Behavioral skills:

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

2.c.1 Respect the role and the contribution of health care professionals regardless their degrees or rank.

2.c.2 Demonstrate the respect for patient's rights irrespective of their culture or religion.

2.c.3 Demonstrate appropriate professional attitudes and behaviors in different practice situations.

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 Interpret the most important symptoms and signs of diseases in ophthalmic patients.

2.e.2. Analyze case scenario of ophthalmic disease and possible treatment plan.

2.e.3. Select investigations appropriately according to the limitations of the tests and their context.

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 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)	Practical (hrs)	Total (hrs)	% of Total
1 Lid	5	3	8	10.67
2 Conjunctiva	5	4	9	12
3 Lacrimal System	3	2	5	6.67

4	Orbit	2	1	3	4
5	Cornea	8	5	13	17.33
6	Lens	8	5	13	17.33
7	Uvea & Pupil	4	2	6	8
8	Errors of refraction	7	5	12	16
9	Trauma	3	3	6	8
Total		45	30	75	100

4- Teaching and learning methods:

METHODS USED:

- Modified lectures.
- Practical classes.
- Small group discussions.
- Self learning
- Clinical visit to outpatient clinic.

Method	Evidence	ILOs
Modified lectures	CDs of lectures including (video films, brain storming, problem solving, etc.....)	2.a.1-----2.a.7 2.c.1-----2.c.3 2.d.1-----2.d.5 2.f.1. ----2.f.5
Practical classes	Demonstration of different instruments and how to use, case presentation.....etc	2.b.1.----2.b.4
Small group discussions	Demonstration (slides, photographs and Video films).	2.b.1.----2.b.4 2.c.1.----2.c.3 2.d.1.----2.d.5 2.f.1. ----2.f.5 2.e.1.----2.e.4
Self learning	samples of students researches, power point presentations and case	2.a.1-----2.a.7 2.c.1.----2.c.3 2.d.1.----2.d.5 2.f.1. ----2.f.5

	studies	
Clinical visits to outpatient clinic.	Demonstration of instruments, demonstration of clinical signs of ophthalmic diseases on clinical cases	2.b.1.----2.b.4 2.e.1.----2.e.4

TEACHING PLAN:

Lectures: 45 hrs.

Practical classes: 30 hrs.

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	3 times (one hour each)/week/15 weeks (3 credit hours/week)	45 hours	60%
Practical	Once (2 hours) /week/ 15 weeks (1 credit hour/week)	30 hours	40%
Total		75 hours	100%

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA: Faculty bylaws

5-B) Assessment TOOLS:

Tool	Evidence	Purpose (ILOs)
Written examination: <ul style="list-style-type: none"> • 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.43 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.7 2.c.1.----2.c.3 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.4

5-C) TIME SCHEDULE: Faculty bylaws

Exam	Week
1-research	End of 15 th wk of the semester
2-End round exam	End of 15 th wk of the semester
3-final exam: a-written b-oral	End of the semester

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- End round exam	25	20%
2- Final exam: a- Written b- Oral & Practical	65 25	52% 20%
3-Attendance & Research	10	8%
Total	125	100%

The minimum passing & Passing grades (Faculty bylaws)

- **Passing grades are:**
 1. Excellent: $\geq 85\%$
 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) Examinations description:

Examination	Description
1- End-round exam:	Select (MCQs), slides, clinical cases, complete, case study, and true or false with explanations.
2- Final exam: a- Written b- Oral & Practical	Short assay, complete, and case study. Two sessions
3- Assignments & other activities	Research, Round assignments, projects, log book..... etc

6- List of references:

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 Ophthalmology.

Course Specification

Course title: Ophthalmology II
(Code) : OPL 406

Academic Year (2013 – 2014)

- Department offering the course: Ophthalmology Department
- Academic year of M.B. B.Ch. program: 4th year 2013/2014.
- Date of specification approval:
 - Department council no 278 , date 7 / 9 /2013

A) Basic Information:

- Allocated marks: 125 marks
- Course duration: 15 weeks of teaching.
- Teaching hours:

1- Theoretical	45 hrs
2- Practical	30 hrs

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 common diseases affecting the eye.

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 anatomy & physiology of the visual pathways and associated aspects of head, neck and neuro anatomy.

2.a.2. Identify the etiology, pathogenesis, clinical manifestations, investigation, diagnosis, management and prevention of visual impairment.

2.a.3. mention the relevant differential diagnosis of common ophthalmic diseases.

2.a.4. list the etiologies for, evaluation of, and treatment of glaucoma.

2.a.5. Outline the typical features, evaluation and management of visual pathway diseases and ocular motor neuropathies.

2.a.6. Describe basic examination techniques (ductions & versions, cover and uncover testing, prism cover testing) and methods of management of strabismus.

2.a.7. state basic principles of retinal and macular diseases.

2.a.8. Describe the clinical symptoms and signs of ocular manifestation associated with systemic diseases (e.g. diabetes, hypertension, ...etc).

2.a.9. Outline the management of ocular emergencies and priority of their management.

2.a.10. State the basic principles of drugs & lasers used in the ophthalmic field.

2.b. Practical and Clinical Skills

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

2.b.1 Take a proper history for the patient (including that from the parent or guardian of a child).

2.b.2 Carry out an appropriately targeted clinical examination, to formulate a provisional diagnosis, and outlining an approach to therapeutic interventions (including indications and contraindications).

2.b.3. Perform a proper 1st aid in different ophthalmic emergencies.

2.b.4 Present patient data in an organized and informative manner.

2.c. Professional Attitude and Behavioral skills:

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

.c.1 Respect the role and the contribution of health care professionals regardless their degrees or rank.

2.c.2 Demonstrate the respect for patient's rights irrespective of their culture or religion.

2.c.3 Demonstrate appropriate professional attitudes and behaviors in different practice situations.

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 Interpret the most important symptoms and signs of diseases in ophthalmic patients.

2.e.2- Select between basic ophthalmic investigations for proper diagnosis.

2.e.3. Analyze case scenario of ophthalmic disease and possible treatment plan.

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)	Practical (hrs)	Total (hrs)	% of Total
1 Glaucoma	9	7	16	21.33
2 Strabismus	9	7	16	21.33
3 Optic nerve	3	2	5	6.67
4 Visual pathway	2	1	3	4
5 Retina & Vitreous	8	5	13	17.33
6 Systemic Diseases	5	2	7	9.33
7 Ocular	3	2	5	6.67

Symptoms				
8 Clinical problems	3	2	5	6.67
9 Drugs & Lasers	3	2	5	6.67
Total	45	30	75	100

4- Teaching and learning methods:

- Modified lectures.
- Practical classes.
- Small group discussions.
- Problem solving.
- Clinical visit to outpatient clinic.
- Self learning

Method	Evidence	ILOs
Modified lectures	CDs of lectures including (video films, brain storming, problem solving, etc.....)	2.a.1-----2.a.7 2.c.1-----2.c.3 2.d.1.----2.d.5 2.f.1. ----2.f.5
Practical classes	Demonstration of different instruments and how to use, case presentation.....etc	2.b.1.----2.b.4
Small group discussions	Demonstration (slides, photographs and Video films).	2.b.1.----2.b.4 2.c.1.----2.c.3 2.d.1.----2.d.5 2.f.1. ----2.f.5 2.e.1.----2.e.4
Problem solving	Case scenarios	2.b.1.----2.b.4 2.e.1.----2.e.4
Clinical visits to outpatient clinic.	Demonstration of instruments, demonstration of clinical signs of ophthalmic diseases on clinical cases	2.b.1.----2.b.4 2.e.1.----2.e.4
Self learning	samples of students researches, power point presentations and case studies	2.a.1-----2.a.7 2.c.1.----2.c.3 2.d.1.----2.d.5 2.f.1. ----2.f.5

TEACHING PLAN:*Lectures: 45 hrs.**Practical classes: 30 hrs.***Time plan:**

Item	Time schedule	Teaching hours	Total hours
Lectures	3 times (one hour each)/week/15 weeks (3 credit hours/week)	45 hours	60%
Practical	Once (2 hours) /week/ 15 weeks (1 credit hour/week)	30 hours	40%
Total		75 hours	100%

5- Students Assessment methods:**5-A) ATTENDANCE CRITERIA:** Faculty bylaws**5-B) Assessment TOOLS:**

Tool	Evidence	Purpose (ILOs)
Written examination: <ul style="list-style-type: none"> • 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.43 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.7 2.c.1.----2.c.3 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.4

5-C) TIME SCHEDULE: Faculty bylaws

Exam	Week
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1-research	End of 15 th wk of the semester
2-End round exam	End of 15 th wk of the semester
3-final exam: a-written b-oral	End of the semester

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- End round exam	25	20%
2- Final exam: a- Written b- Oral & Practical	65 25	52% 20%
3-Attendance & Research	10	8%
Total	125	100%

The minimum passing & Passing grades (Faculty bylaws)

- **Passing grades are:**
 1. Excellent: $\geq 85\%$
 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) Examinations description:

Examination	Description
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1- End-round exam:	Select (MCQs), slides, clinical cases, complete, case study, and true or false with explanations.
2- Final exam: a- Written b- Oral & Practical	Short assay, complete, and case study. Two sessions
3- Assignments & other activities	Research, Round assignments, projects, log book..... etc

6- List of references:

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: 7 / 9/ 2013



Benha University

Faculty of Medicine

Department of Forensic Medicine and Clinical Toxicology

Course Specifications

Course title: Forensic medicine I

Code: FNS 407

Academic Year (2013 – 2014)

- **Department offering the course:** Forensic Medicine and Clinical Toxicology
- **Academic year of M.B. & B.Ch. program:** 4th year (1st semester).
- **Date of specification approval:**
 - Department council: no (245) date: 14 /9 /2013.
- **Internal evaluator:** Prof. Ola Gaber Haggag

A) Basic Information:

- **Allocated marks:** 100 marks.
- **Course duration:** 15 weeks of teaching.
- **Teaching hours:**

1- Theoretical	30 hrs.
2- Practical & clinical	30 hrs.

B) Professional Information:

1- Overall Aim of the Course:

- To provide the undergraduate students with basic scientific knowledge that enable them to deal with common medicolegal conditions (either in living or dead cases).
- To provide essential practical and clinical skills necessary for proper dealing with common medicolegal conditions that will be met during practicing medicine.
- To provide the undergraduate students with basic ethical, professional education 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** different general forensic terminology, including death and its phases, brain death and their medicolegal importance.
- 2.a.2. List** differences between the cause, mechanism, mode and manner of death, and types of the postmortem changes and their importance in determining the time of death.
- 2.a.3. Identify** points of unknown body identification whether living or dead, identification of physical evidences and ages of medicolegal importance in Egypt and their estimation.
- 2.a.4. Mention** causes of sudden unexpected natural death and their post mortem diagnosis.
- 2.a.5. List** different types of wounds (legal, etiological and regional: head, neck, chest and abdominal injuries), and medicolegal importance and mechanisms of death from wounds.
- 2.a.6. Enumerate** different types of traumas and injuries of medicolegal importance including (firearm injuries, violent asphyxia and physical injuries).
- 2.a.7. Describe** characteristics of thermal injuries, their mechanism of death and methods of postmortem diagnosis.
- 2.a.8. Define** common sexual offenses including (rape, sodomy and indecent assault), and their medicolegal investigations.
- 2.a.9. Explain** the medicolegal aspects of pregnancy, delivery, abortion and the mechanisms of death from criminal abortion.
- 2.a.10. Summarize** types of injuries in infancy, infanticide, sudden infant death syndrome and child abuse.
- 2.a.11. Enumerate** common medical ethics and common medical malpractice.

2.b. Practical 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. *Write* reports on different types of museum jars, specimens including that of (wounds, violent asphyxia, firearm injuries, physical traumas, abortion and infanticide).
- 2.b.3. *Write* a proper primary wound report on different wounds photographs.
- 2.b.4. *Identify* age, sex and race of different bones of body and x-ray photographs.
- 2.b.5. *Write* a comment on different types of microscopical slides (hair, fibers, blood and semen, etc.....),.

2.c. Professional Attitude and Behavioral skills:

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

- 2.c.1. *Demonstrate* respect for his colleges.
- 2.c.2. **Respect** the staff members and involve them in any problems facing him whether social or educational problems to apply the fact of one family.
- 2.c.3. *Respect* dealing with bone specimens, museum jars and other forensic samples.
- 2.c.4. *Reflect* critically on their own performance and that of others.
- 2.c.5. **Demonstrate** a professional image concerning behavior, dress and speech

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 his colleagues and medical staff.

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

2.d.3. Cope up with difficult situations as breaking news.

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. Analyze common ethical dilemmas and suggest a proper solution.

2.e.2. Interpret case scenario of clinical forensic medicine and forensic pathology and their medicolegal aspects.

2.e.3. Distinguish different problems of malpractices.

2.e.4. Differentiate between cause, mechanism, mode and manner of death, and different type of wounds.

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	Lectur es (hrs)	Practica l (hrs)	Total (hrs)	% of Total
1- General forensic terminology (forensic medicine, forensic science, autopsy, physical and medical evidences, scene of crime, etc..)	0.5	0	0.5	0.8%

2- Death (Definition, Diagnosis, The concept of brain death, mechanism, mode and manner of death, Death Certificate, Medicolegal deaths and their handling, time of death and postmortem changes.)	3.5		4	7.5	12.5 %
3-Identification (necessity of identification, identification of living and dead, bones, physical evidence).	2		8	10	16.6 %
4- Unexpected and sudden natural death	1		-	1	1.6 %
5- Wounds (definition, doctor' duty in wounding cases classification mechanisms of death from wounds.	2		3	5	8.3 %
6- Regional injuries: (head, neck, chest and abdominal)	3		4	7	11.6 %
7- Firearm Injuries: (types of firearms and ammunition, characters, range and direction firing, mechanisms and manner death, doctor' duty in firearm injuries)	2		3	5	8.3 %
8- physical Injuries: (heat, cold and electricity)	2		2	4	6.6 %
9- Violent Asphyxia: (classical signs, types immersion and drowning)	4		2	6	10 %
10- Sexual Offences: (rape, indecent assault and homosexual offences).	2		0	2	3.3 %
11- Pregnancy, delivery and Abortion	3		2	5	8.3 %
12- Death and injury in infancy & child abuse	3		2	5	8.3 %
13- Medical Ethics & Malpractice	2		0	2	3.3 %
TOTAL	30		30	60	100%

4- Teaching and learning methods:

METHODS USED:

- Modified lectures.
- Practical classes.
- Case study.
- Self learning
- Field visits to emergency department of university hospitals.

Method	Evidence	ILOs
Modified lectures	CDs of lectures including (video films, brainstorming, problem solving, etc...)	2.a.1-----2.a.11. 2.c.1-----2.c.5 2.d.1-----2.d.4 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.5
Self learning	samples of students researches, case studies and power point presentations	2.a.1-----2.a.11. 2.c.1-----2.c.5 2.d.1-----2.d.4 2.f.1. ----2.f.5
Case study	Case scenarios	2.a.1-----2.a.11. 2.e.1-----2.e.4
Field visits	Log book (wound reports)	2.b.1-----2.b.5

TEACHING PLAN:

The students will be classified in to four groups (rounds), for practical classes, but all students will be taught lectures together as one group.

Time plain:

Item	Time schedule	Teaching hours
Lectures	2times/week/15 weeks (each 1 hours) =(2 hs/w)	30 hours
Practical classes, field training & case study	once/week/15 weeks (each 2 hs) = (2 hs/week)	30 hours
Total	4 hs/week	60 hours

5- Students Assessment methods:**5-A) ATTENDANCE CRITERIA:**

4. Lectures (at least 50% attendance).
5. Practical (at least 75% attendance).
6. Log book (practical reports & students activity).

5-B) Assessment TOOLS:

Tool	Evidence	Purpose (ILOs)
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Written examination: <ul style="list-style-type: none"> • MCQs • Case study • Short essay • Complete • True or false with explanation 	Attached module of examination	2.a.1-----2.a.11, 2.e.1.----2.e.4
Oral examination	Viva card system	2.a.1-----2.a.11, 2.c.1.----2.c.5 2.d.1.----2.d.4 , 2.f.1. ----2.f.5
Practical examination & field training	Practical Reports & log book	2.b.1.----2.b.5

5-C) TIME SCHEDULE:

Exam	Week
1- Assessment 1 (<i>mid-semester</i>)	Week -----7
2- Assessment 2 (<i>Final exam= end semester</i>)	At end of semester (week----15)

FORMATIVE ASSESSMENT:

- Student knows his marks after the Formative exams.

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- Mid-semester exam:	20	20 %
a- Written	10	10 %
b- Practical	5	5 %
c- Assignments & other activities (log book)	5	5 %
2- End semester:	80	80%
a- Written	50	50%
b- Practical & field training	20	20%
c- Oral	10	10%
Total	100	100%

5-E) Examination description :

Examination	Description
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1- Mid-semester exam: a- Written b- Practical b- Practical	Short assay, select (MCQs), complete & case study, true or false with explanations. Write reports and comments on specimens Spots identification & write a report (death certificate, wound report and x-ray report).
2- End semester: a- Written b- Practical c- Oral c- Oral	Short assay, select (MCQs), complete & case study, true or false with explanations. Write reports and comments on specimens Viva cards divided into in two sessions Two sessions (forensic and toxicology)
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: September 9/2013



Benha University

Faculty of Medicine

Department of Forensic Medicine and Clinical Toxicology

Course Specifications

Course title: Forensic medicine II

Code: FNS 408

Academic Year (2013 – 2014)

- **Department offering the course:** Forensic Medicine and Clinical Toxicology
- **Academic year of M.B. & B.Ch. program:** 4th year (2nd semester).
- **Date of specification approval:**
 - Department council: no (245) date: 14 /9 /2013.
- **Internal evaluator:** Prof. Ola Gaber Haggag

A) Basic Information:

- **Allocated marks:** 100 marks.
- **Course duration:** 15 weeks of teaching.
- **Teaching hours:**

1- Theoretical	30 hrs.
2- Practical & clinical	30 hrs.

B) Professional Information:

1- Overall Aim of the Course:

- To provide the undergraduate students with basic scientific knowledge that enable them to deal with common toxic cases, either acute or chronic poisoning and drug dependence.
- To provide essential practical and clinical skills necessary for proper dealing with the common toxic cases, that will face him during practicing medicine.
- To provide the undergraduate students with basic ethical, professional education 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. Mention the definitions of poison and poisoning, classification of poisons, factors affecting poisoning and doctor duty in case of poisoning.

2.a.2. List general steps of management of intoxicated patient, methods of decontamination and enhanced elimination of toxin and antidotal therapy.

2.a.3. Explain mechanism, clinical picture and management of common therapeutic drugs.

2.a.4. Summarize mechanism, clinical picture and management of the studied household poisons especially (corrosives, food poisoning, pesticides, hydrocarbons and other miscellaneous poisons).

2.a.5. Enumerate the circumstances of intoxication, management of poisoned patient with environmental toxins (heavy metals, gas poisons, etc...).

2.a.6. State clinical picture and management of animal toxins (snakes, scorpions, etc....).

2.a.7. Mention mechanism of actions, clinical picture and management of studied cases of drug of dependence e.g., (opioids, cocaine, alcohols, hallucinogens ...).

2.b. Practical Skills

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

2.b.1. Write a primary toxicological report.

2.b.2. Write a comment on toxicological specimens (plant specimens, etc....)

2.b.3. Diagnose some common studied intoxicated cases (therapeutics & household intoxicated cases).

2.c. Professional Attitude and Behavioral skills:

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

- 2.c.1. Demonstrate** respect for his colleges.
- 2.c.2. Respect** the staff members and involve them in any problems facing him whether social or educational problems to apply the fact of one family.
- 2.c.3. Demonstrate** Respect for patients' rights and involve them and /or their caretakers in management decisions.
- 2.c.4. 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.5. Respect** the role and the contributions of other health care professionals regardless their degrees or rank (top management, subordinate or colleague).
- 2.c.6. 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 program the graduate will be able to:

- 2.d.1. Communicate** clearly, sensitively and effectively with his colleagues and medical staff.
- 2.d.2. Communicate** effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.
- 2.d.3. Cope up** with difficult situations as breaking news.
- 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. Interpret** case scenario of clinical toxicology cases to put a proper plan for their manegemnt.
- 2.e.2. Differentiate** between similar cases of intoxication to formulate precise and accurate differential diagnosis of intoxicated cases.

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)	Practical (hrs)	Total (hrs)	% of Total
1- General Toxicology (classification of poisons, factors modifying poison action, doctor' duty in poisoning, diagnosis of poisoning, General management of poisoned patient)	4	8	12	20 %
2- Medicinal (Therapeutics) poisons (analgesics, sedative-hypnotic, anticholinergics, antidepressants, cardiac glycosides, B-blockers and others).	6	4	10	16.6 %
3- Household Products (corrosives, pesticides and hydrocarbons)	3	3	6	10 %
4- Environmental toxins (Heavy metals, Gas poisons)	6	4	10	16.6 %
5- Miscellaneous poisons (animal poisoning, food poisoning, strychnine & aconitine)	3	3	6	10 %
6- Alcohols and drugs of dependence and abuse: (Medicolegal aspects of dependence, ethanol, methanol, ethylene glycole, opioids, cocaine and amphetamine, hallucinogens, nicotine).	8	8	16	26.6 %
TOTAL	30	30	60	100%

4- Teaching and learning methods:

- Modified lectures.
- Practical classes.
- Case study.
- Self learning
- Field visits to Benha poisoning control unit.

Method	Evidence	ILOs
Modified lectures	CDs of lectures including (video films, brainstorming, problem solving, etc...)	2.a.1-----2.a.7., 2.c.1.----2.c.6 2.d.1.----2.d.4 , 2.f.1. ----2.f.5
Practical classes	Toxicological reports, log book.	2.b.1.----2.b.3
Case study	Case scenarios	2.a.1-----2.a.7. 2.e.1.----2.e.2
Self learning	samples of students researches, case studies and power point presentations	2.a.1-----2.a.11. 2.c.1.----2.c.5 2.d.1.----2.d.4 2.f.1. ----2.f.5
Field visits	Log book	2.b.1.----2.b.3

TEACHING PLAN:

The students will be classified in to four groups (rounds), for practical classes, but all students will be taught lectures together as one group.

Time plain:

Item	Time schedule	Teaching hours
Lectures	2times/week/15 weeks (each 1 hours) =(2 hs/w)	30 hours
Practical , clinical classes, field visits & case study	once/week/15 weeks (each 2 hs) = (2 hs/week)	30 hours

Total	4 hs/week	60 hours
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5- Students Assessment methods:**5-A) ATTENDANCE CRITERIA:**

7. Lectures (at least 50% attendance).
8. Practical & clinical (at least 75% attendance).
9. Log book (practical reports , field visits & students activity).

5-B) Assessment TOOLS:

Tool	Evidence	Purpose (ILOs)
Written examination: <ul style="list-style-type: none"> • MCQs • Case study • Short essay • Complete • True or false with explanation 	Attached module of examination	2.a.1-----2.a.7, 2.e.1.-----2.e.2
Oral examination	Viva card system	2.a.1-----2.a.7, 2.c.1.-----2.c.6 2.d.1.-----2.d.4 , 2.f.1. ----2.f.5
Practical & clinical examination	Practical, clinical & field visits Reports	2.b.1.----2.b.3

5-C) TIME SCHEDULE:

Exam	Week
1- Assessment 1 (<i>mid-semester</i>)	Week -----7
2- Assessment 2 (<i>Final exam= end semester</i>)	At end of semester (week----15)

FORMATIVE ASSESSMENT:

- Student knows his marks after the Formative exams.

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- Mid-semester exam:	20	20 %
a- Written	10	10 %
b- Practical	5	5 %
c- Assignments & other activities (log book)	5	5 %
2- End semester:	80	80%

c- Written	50	50%
d- Practical & Field training	20	20%
c- Oral	10	10%
Total	100	100%

5-E) Examination description :

Examination	Description
1- Mid-semester exam: c- Written d- Practical	Short assay, select (MCQs), complete & case study, true or false with explanations. Write reports and comments on specimens Spots identification & write a report (death certificate, wound report and x-ray report)
2- End semester: d- Written e- Practical f- Oral	Short assay, select (MCQs), complete & case study, true or false with explanations. Write reports and comments on specimens Viva cards divided into in two sessions Two sessions (forensic and toxicology)
3- Assignments & other activities	Round assignments, projects , log book... etc.

6- List of references:**6.1- Basic materials:**

- Department books by staff members (2014).

6.2- Essential books (textbooks):

- Goldfrank's Manual of Toxicologic Emergencies: Hoffman, R.S.; Nelson, L.S.; Howland, M.A. et al. (eds.), McGraw-Hill Companies, New York, 9th ed., (2007).
- Poisoning & Drug Overdose. By: **Olson, K.R.** (ed.), Lange medical books/McGraw-Hill, New York, Chicago, Toronto, (2007).

6.3- Recommended books:

- Goldfrank's Toxicologic Emergencies. By: Flomenbaum, N.E.; Goldfrank, L.R.; Hoffman, R.S., et al. (eds.), McGraw-Hill, New York, 8th ed., (2006).

- Clinical Toxicology. By: *Ford, M.D.; Delaney, K.A.; Ling, L.J. et al.* (eds.), W.B. Saunders Co., Philadelphia, 1st ed., (2001).

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. Marcelle Ramsis Haroun

Date: 9/2013



Benha University.
Faculty of Medicine.
Department of public health and Community Medicine

Course Specification

Course title: Community Medicine I
Code: COM 401

Academic Year (2013 – 2014)

- **Department offering the course:** public health and Community Medicine
- **Academic year of M.B. & B.Ch. program:** 4th year (2013 – 2014).
- **Date of specification approval:**
 - Department council No 255 , date 6/ 9/2013

A) Basic Information:

- **Allocated marks:** 75 marks
- **Course duration:** 15 weeks of teaching
- **Teaching hours**

Theoretical	30
Practical &Field visits	15

B) Professional Information:

1- Overall Aims Of The Course:

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

- ❑ 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.
- ❑ Basic knowledge of epidemiology of the 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. **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 of community health problems.

2.a.3. **Identify** the Principle & the organization of the Egyptian health care system.

2.a.4. **Describe** the principles of epidemiology and the basic principles governing population studies (demography).

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

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

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 *Demonstrate* 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 *Establish* a strategy for prevention and control of any health problem.

2.b.7. *Apply* infection control principles and safety measures during clinical practice.

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 care takers 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 program the graduate will 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.d.7. **Establish** Evidence Based Medicine in management decisions.

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. **Adopt** 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)	rounds (hrs)	Total (hrs)	% of Total
1- INTRODUCTION:- <ul style="list-style-type: none"> • Health & disease • Health education 	5	5	10	22.3
2- GENERAL EPIDEMIOLOGY:- <ul style="list-style-type: none"> • Definition of epidemiology • Reservoir of infection • Modes of transmission • Natural & acquired immunity • Vaccinations & seroprophylaxis • Pattern of spread of infectious diseases • Prevention & control measures • investigation of epidemics • Hospital acquired infection • Sterilization & disinfection • Surveillance 	25	10	35	77.7
Total	30	15	45	100

4- Teaching and learning methods:**Methods can be used:**

- Modified lectures using power point presentation.
- Small group discussions.
- Problem solving through statistical lab.
- Self learning
- Field visits and practical demonstration.

Method	Evidence	ILOs
Modified lectures	CDs of power point presentation of some lectures, educational videos.	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 demonstration	Examples of educational posters used during the round ,birth and death certificate, vaccination certificate, fridge of vaccination, tools of nutritional assessment ,etc....	2.b.1.----2.b.10
Small group discussions	CDs for some health education sessions	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
Problem solving	Examples of periodic quizzes containing some statistical problems	2.b.1.----2.b.10 2.e.1.----2.e.4
Self learning	<ul style="list-style-type: none"> • Researches • Logbook & power point student 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
Field visits	Log book & field visit reports	2.b.1.----2.b.10

TEACHING PLAN:

The students will attend in Community Medicine department from 11– 10-2014 for 15 weeks in lecture hall of Community Medicine department, provided that the total teaching hours adopted by the faculty, will not be changed.

Time plan:

Item	Hours/day	Total hours
Lectures	1hrs /d \2 days /w for 15 ws	30
Rounds (practical)	1 hrs / d / for 13 ws	13
Field visits	Once (2 hrs)/2 weeks	2
Total	6 hours weekly for 15 weeks	45hrs.

5- STUDENTS ASSESSMENT METHODS:

5-A) ATTENDANCE CRITERIA:

10. Lectures (at least 75% lectures).
11. Practical round (at least 75% of practical rounds not including field visits attendance).
3. Field visits attendance (at least 1 out of 1 visit).

5-B) ASSESSMENT TOOLS:

Tool	Evidence	Purpose (ILOs)
Written exams include <ul style="list-style-type: none"> • MCQs • Short essay • Complete • True or false with explanation • Enumeration 	Attached modules of Exam	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
Log book	Attached example of log book	2.b.1.----2.b.10

5-C) TIME SCHEDULE:

Exam	Time
2- Assessment 1 (<i>quizzes</i>)	Every 4 weeks
3- Assessment 2 (<i>mid-term exam</i>)	Mid term
4- Assessment 3(<i>Final term exam</i>)	At end of the <i>term</i>

5-D) WEIGHTING SYSTEM:

Examination	Marks allocated	% of Total Marks
Mid-term exam (written)	<u>15</u>	<u>20%</u>
Final term exam:	<u>45</u>	<u>60%</u>
i. Written	30	
ii. MCQ	7.5	
iii. Oral	7.5	
Field visits	<u>4</u>	<u>5.3%</u>
Activities	<u>1.5</u>	<u>2.1%</u>
Quizzes	<u>2.5</u>	<u>3.3%</u>

e-learning	<u>1</u>	<u>1.3%</u>
Attendance	<u>6</u>	<u>8%</u>
Total	<u>75</u>	<u>100%</u>

FORMATIVE ASSESSMENT:

- Student knows his\ her marks after the Formative exams.

5-E) EXAMINATION DESCRIPTION:

Examination	Description
<i>1-Mid- term exam</i>	Short questions& MCQs.
2-quizzes	Short questions& MCQs
4- <i>Final term exam:</i>	
a- Written	Short questions & MCQs.
b- Oral	Two oral sessions

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: 9-201۳



Benha University.
Faculty of Medicine.
Department of public health and Community Medicine

Course Specification

Course title: Community Medicine II

Code: COM 402

Academic Year (2013 – 2014)

- **Department offering the course:** public health and Community Medicine
Academic year of program: 4th year (2013 – 2014).
- **Date of specification approval:**
- Department council NO 255 , date 6/ 9/2013

B) Basic Information:

- **Allocated marks:** 75 marks
- **Course duration:** 15 weeks of teaching
- **Teaching hours:**

Theoretical	30hs
Practical &Field visits	15hs

B) Professional Information:

1- Overall Aims Of The Course:

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

- ☒ 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.

- ☒ Basic knowledge of epidemiology of the 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. **Mention** the basic issues for promoting health, preventing & controlling disease and disability

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

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

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 care takers 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 program the graduate will 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.d.7. **Establish** Evidence Based Medicine in management decisions.

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. **Adopt** the questioning approach to own work & that of others to solve clinical problems.
- 2.e.4. **Formulate** a research hypothesis & questions.

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)	rounds (hrs)	Total (hrs)	% of Total
8-COMMUNICABLE DISEASES:- <ul style="list-style-type: none"> • Air borne infections (Diptheria, Measles ,Mumps ,Rubella, Chicken pox, Small pox, Influenza, Avian flu ,Swine flu, Pertussis, T.B ,Meningitis & streptococcal infections) • Food borne infections(Hepatitis A, Typoid fever , Para typhoid ,Cholera, 	21	15	36	80

<p>Diarrheal diseases, Desentries, gastroenteritis ,Brucellosis ,Poliomyelitis& food poisoning and food borne parasitic diseases)</p> <ul style="list-style-type: none"> • Contact infections(Rabies, Schistosomiasis, STDs, AIDS, Tetanus & gas gangrene, Anthrax & leprosy & Q fever) • Arthropod borne infections (Filariasis, Leshmaniasis, Malaria , Rift valley fever, Yellow fever, Plague) • New vaccines 				
<p>9-NON COMMUNICABLE DISEASES:-</p> <ul style="list-style-type: none"> • C.V.Ds & hypertension • Cancer • D.M. • Smoking • Injuries 	7	-	7	15.5
<p>12- DEMOGRAPHY:</p> <ul style="list-style-type: none"> • Definition • Population pyramid • Population growth & overpopulation 	2	-	2	4.5
Total	30	15	45	100

4- Teaching and learning methods:

Methods can be used:

- Modified lectures using power point presentation.
- Small group discussions.
- Problem solving through statistical lab.
- Field visits and practical demonstration.
- Self learning

Method	Evidence	ILOs
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Modified lectures	CDs of power point presentation of some lectures, educational videos.	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 demonstration	Examples of educational posters used during the round ,birth and death certificate, vaccination certificate, fridge of vaccination, tools of nutritional assessment ,etc....	2.b.1.----2.b.10
Small group discussions	CDs for some health education sessions	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
Self learning	<ul style="list-style-type: none"> • Researches • Logbook & power point student 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
Problem solving	Examples of periodic quizzes containing some statistical problems	2.b.1.----2.b.10 2.e.1.----2.e.4
Field visits	Log book & field visit reports	2.b.1.----2.b.10 2.e.1.----2.e.4

TEACHING PLAN:

The students will attend in Community Medicine department from 11 – 10-2014 for 15 weeks in lecture hall of Community Medicine department, provided that the total teaching hours adopted by the faculty, will not be changed.

Time plan:

Item	Hours/day	Total hours
Lectures	1hrs /d \2 days /w for 15 ws	30
Rounds (practical)	1 hrs / d / for 13 ws	13
Field visits	Once (2 hrs)/2 weeks	2
Total	3 hours/ day for 15 ws	45 hrs.

5- STUDENTS ASSESSMENT METHODS:**5-A) ATTENDANCE CRITERIA:**

12. Lectures(at least 75% lectures).
13. Practical round (at least 75% of practical rounds not including field visits attendance).
3. Field visits attendance (at least 1 out of 1 visit).

5-B) ASSESSMENT TOOLS:

Tool	Evidence	Purpose (ILOs)
Written exams include <ul style="list-style-type: none"> • MCQs • Short essay • Complete • True or false with explanation • Enumeration 	Attached modules of Exam	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
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Log book	Attached example of log book	2.b.1.----2.b.10

5-C) TIME SCHEDULE:

Exam	Time
2- Assessment 1 (<i>quizzes</i>)	Every 4 weeks
3- Assessment 2 (<i>mid-term exam</i>)	Mid term
4- Assessment 3(<i>Final term exam</i>)	At end of the term

5-D) WEIGHTING SYSTEM:

Examination	Marks allocated	% of Total Marks
Mid-term exam (written)	<u>15</u>	<u>20%</u>
Final term exam:	<u>45</u> 30	<u>60%</u>

iv. Written	7.5	
v. MCQ	7.5	
vi. Oral		
Field visits	<u>4</u>	<u>5.3%</u>
Activities	<u>1.5</u>	<u>2.1%</u>
Quizzes	<u>2.5</u>	<u>3.3%</u>
e-learning	<u>1</u>	<u>1.3%</u>
Attendance	<u>6</u>	<u>8%</u>
Total	<u>75</u>	<u>100%</u>

- **The minimum passing score is 90 (60% of total marks), Passing grades are:**
 1. Excellent: 85%+
 2. Very good: 75-<85%
 3. Good: 65-<75%
 4. Fair: 60-<65%

FORMATIVE ASSESSMENT:

- Student knows his\ her marks after the Formative exams.

5-E) EXAMINATION DESCRIPTION:

Examination	Description
1-Mid-term exam	Short questions& MCQs.
2-quizzes	Short questions& MCQs
4- Final term exam:	
a- Written	Short questions & MCQs.
b- Oral	Two oral sessions

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. CairoUniversity

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 HamdyAffify

Assistant coordinator: Dr. Eman Mohammed Araby

Head of Department: Prof. Dr.Abd El moniemYounisDawah.

Date: 9-2013



Benha University.
Faculty of Medicine.

Department of Of public health and Community Medicine

Course Specification

Course title: Community Medicine III

Code: COM 403

Academic Year (2013 – 2014)

- **Department offering the course:** of public health and Community Medicine Academic year of M.B. & B.Ch. program: 4th year
- **Date of specification approval:**
 - Department council NO 255 , date 6/ 9/2013.

C) Basic Information:

- **Allocated marks** 75 marks
- **Course duration:** 15 weeks of teaching
- **Teaching hours**

Theoretical	30hs
Practical &Field visits	15hs

B) Professional Information:

1- Overall Aims Of The Course:

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

- ✚ 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.
- ✚ Basic administrative skills necessary for delivery of health service.
- ✚ Basic knowledge of environmental health problem and how to promote health.

2- Intended Learning Outcomes (ILOs):

2.a. Knowledge and understanding:

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

2.a.3. **Identify** the Principle & the organization of the Egyptian health care system.

2.a.7. **mention** 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.4 *Examine* the environment for any health hazards.

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

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.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 care takers 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 program the graduate will 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.d.7. **Establish** Evidence Based Medicine in management decisions.

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. **Adopt** the questioning approach to own work & that of others to solve clinical problems.
- 2.e.4. **Formulate** a research hypothesis & questions.

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)	rounds (hrs)	Total (hrs)	% of Total
1- ADMINISTRATION:- <ul style="list-style-type: none"> • Planning, Organization, Supervision, Controlling & Evaluation • Hospital administration • Quality of health care 	5	-	5	10.4

<ul style="list-style-type: none"> • Primary health care 				
<p>2-NUTRITION :-</p> <ul style="list-style-type: none"> • Basic nutrition(CHO,Fat,Protein, Vitamins, minerals & dietary fibers) • Nutritional disorders(PEM,Iron Deficiency anaemia, rickets, osteoporosis, dental caries, iodine deficiency, vitamin A deficiency & obesity) • Therapeutic nutrition • Nutritional assessment • Food balance sheet 	5	3	8	17.9
<p>4-MENTAL HEALTH:-</p> <ul style="list-style-type: none"> • Definition • Mental health problems in developing countries • Etiology of mental disorders • Prevention & control 	2	-	2	4.6
<p>5-ENVIRONMENTAL HEALTH:-</p> <ul style="list-style-type: none"> • Definition of environment • Air sanitation & air pollution • Water sanitation • Swimming pools • Food sanitation • Food additives • Waste disposal • Disaster management 	2	3	5	11.3
<p>6- OCCUPATIONAL:</p> <ul style="list-style-type: none"> • Occupational health • Occupational diseases(Occupational bronchial asthma, byssinosis, extrinsic allergic alveolitis, pneumoconiosis) • Physical health hazards(heat ,noise,vibration,radiation & pressure 	2	4	6	13.5

disorders) • Occupational health & safety program prevention & control technology)				
7-Introduction to safety	2	-	2	4.5
8-HEALTH SERVICES:- • Reproductive health • Maternal health • Child health • School health • Adolescent health • Rural health • Geriatric health	12	5	17	37.8
Total	30	15	45	100.0

4- Teaching and learning methods:

Methods can be used:

- Modified lectures using power point presentation.
- Small group discussions.
- Problem solving through statistical lab.
- Field visits and practical demonstration.
- Self learning

Method	Evidence	ILOs
Modified lectures	CDs of power point presentation of some lectures, educational videos.	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 demonstration	Examples of educational posters used during the round ,birth and death certificate, vaccination certificate, fridge of vaccination, tools of nutritional assessment ,etc....	2.b.1.----2.b.10
Small group discussions	CDs for some health education sessions	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

Self learning	<ul style="list-style-type: none"> • Researches • Logbook & power point student 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
Problem solving	Examples of periodic quizzes containing some statistical problems	2.b.1.----2.b.10 2.e.1.----2.e.4
Field visits	Log book & field visit reports	2.b.1.----2.b.10 2.e.1.----2.e.4

TEACHING PLAN:

The students will attend in Community Medicine department from 11-10 -2014 for 15 weeks in lecture hall of Community Medicine department, provided that the total teaching hours adopted by the faculty, will not be changed.

Time plan:

	Hours / day	Total hours
Lectures	1hrs /d \2 days /w for 15 ws	30
rounds	1 hrs / d / for 13 ws	13
Field visits	Once (2 hrs)/2 weeks	2
Total	3hrs per day for 15ws	45

5- STUDENTS ASSESSMENT METHODS:

5-A) ATTENDANCE CRITERIA:

14. Lectures (at least 75% lectures).
15. Practical round (at least 75% of practical rounds not including field visits attendance).
3. Field visits attendance (at least 1 out of 1 visits).

5-B) ASSESSMENT TOOLS:

Tool	Evidence	Purpose (ILOs)
Written exams include <ul style="list-style-type: none"> • MCQs • Short essay • Complete • True or false with 	Attached modules of Exam	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

explanation • Enumeration		
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
Log book	Attached example of log book	2.b.1.----2.b.10

5-C) TIME SCHEDULE:

Exam	Time
2- Assessment 1 (<i>quizzes</i>)	Every 4 weeks
3- Assessment 2 (<i>mid-term exam</i>)	Mid term
4- Assessment 3(<i>Final term exam</i>)	At end of the term

5-D) WEIGHTING SYSTEM:

Examination	Marks allocated	% of Total Marks
Mid-term exam (written)	<u>15</u>	<u>20%</u>
Final term exam:	<u>45</u>	<u>60%</u>
vii. Written	30	
viii. MCQ	7.5	
ix. Oral	7.5	
Field visits	<u>4</u>	<u>5.3%</u>
Activities	<u>1.5</u>	<u>2.1%</u>
Quizzes	<u>2.5</u>	<u>3.3%</u>
e-learning	<u>1</u>	<u>1.3%</u>
Attendance	<u>6</u>	<u>8%</u>
Total	<u>75</u>	<u>100%</u>

FORMATIVE ASSESSMENT:

- Student knows his\ her marks after the Formative exams.

5-E) EXAMINATION DESCRIPTION:

Examination	Description
<i>1-Mid-term exam</i>	Short questions& MCQs.
2-quizzes	Short questions& MCQs
4- <i>Final term exam:</i> a- Written	Short questions & MCQs.
b- Oral	Two oral sessions

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 public health and Community Medicine

Course Specification

Course title: Community Medicine IV
Code: COM 404

Academic Year (2013 – 2014)

- **Department offering the course:** public health and Community Medicine
- **Academic year of M.B. & B.Ch. program:** 4th year
- **Date of specification approval:**
 - **Department council No 255** , date 6/ 9/2013 ,

A) Basic Information:

- **Allocated marks** 75 marks
- **Course duration:** 15 weeks of teaching
- **Teaching hours**

Theoretical	30hs
Practical &Field visits	15hs

B) Professional Information:

1- Overall Aims Of The Course:

- To accept the undergraduate students with Basic knowledge essential for conducting scientific research

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 principles of epidemiology and the epidemiological methods (research methodology)
- 2.a.2. **mention** the basic principles governing population studies (demography) and.

.b. Practical and Clinical Skills

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

- 2.b.1 *Perform* simple statistical procedures

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 care takers 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 program the graduate will 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.d.7. **Establish** Evidence Based Medicine in management decisions.

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. **Adopt** the questioning approach to own work & that of others to solve clinical problems.
- 2.e.4. **Formulate** a research hypothesis & questions.

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)	rounds (hrs)	Total (hrs)	% of Total
3-MEDICAL STATISTICS:- <ul style="list-style-type: none"> • Types of data & presentation of data • Research methodology& ethical issues of research • Statistical methods of data collection (sampling ,screening , Survey, epidemiological studies) • Measures of central tendency & dispersion • Vital rates 	30	15	45	100
Total	30	15	45	100.0

4- Teaching and learning methods:**Methods can be used:**

- Modified lectures using power point presentation.
- Small group discussions.
- Problem solving through statistical lab.

- Field visits and practical demonstration.
- Self learning

Method	Evidence	ILOs
Modified lectures	CDs of power point presentation of some lectures, educational videos.	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 demonstration	Examples of educational posters used during the round ,birth and death certificate, vaccination certificate, fridge of vaccination, tools of nutritional assessment ,etc....	2.b.1.----2.b.10
Small group discussions	CDs for some health education sessions	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
Self learning	<ul style="list-style-type: none"> • Researches • Logbook & power point student 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
Problem solving	Examples of periodic quizzes containing some statistical problems	2.b.1.----2.b.10 2.e.1.----2.e.4
Field visits	Log book & field visit reports	2.b.1.----2.b.10 2.e.1.----2.e.4

TEACHING PLAN:

The students will attend in Community Medicine department from- -2015 for 15 weeks in lecture hall of Community Medicine department, provided that the total teaching hours adopted by the faculty, will not be changed.

Time plan:

	Hours / day	Total hours
Lectures	1hrs /d \2 days /w for 15 ws	30
rounds	1 hrs / d / for 13 ws	13

Field visits	Once (2 hrs)/2 weeks	2
Total	3hrs per day for 15ws	45

5- STUDENTS ASSESSMENT METHODS:

5-A) ATTENDANCE CRITERIA:

16. Lectures (at least 75% lectures).
17. Practical round (at least 75% of practical rounds not including field visits attendance).
3. Field visits attendance (at least 1 out of 1 visits).

5-B) ASSESSMENT TOOLS:

Tool	Evidence	Purpose (ILOs)
Written exams include <ul style="list-style-type: none"> • MCQs • Short essay • Complete • True or false with explanation • Enumeration 	Attached modules of Exam	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
Log book	Attached example of log book	2.b.1.----2.b.10

5-C) TIME SCHEDULE:

Exam	Time
2- Assessment 1 (<i>quizzes</i>)	Every 4 weeks
3- Assessment 2 (<i>mid-term exam</i>)	Mid term
4- Assessment 3 (<i>Final term exam</i>)	At end of the term

5-D) WEIGHTING SYSTEM:

Examination	Marks allocated	% of Total Marks
Mid-term exam (written)	15	20%

Final term exam:	<u>45</u>	
x. Written	30	
xi. MCQ	7.5	
xii. Oral	7.5	<u>60%</u>
Field visits	<u>4</u>	<u>5.3%</u>
Activities	<u>1.5</u>	<u>2.1%</u>
Quizzes	<u>2.5</u>	<u>3.3%</u>
e-learning	<u>1</u>	<u>1.3%</u>
Attendance	<u>6</u>	<u>8%</u>
Total	<u>75</u>	<u>100%</u>

- **The minimum passing score is 90 (60% of total marks), Passing grades are:**
 1. Excellent: 85%+
 2. Very good: 75-<85%
 3. Good: 65-<75%
 4. Fair: 60-<65%

FORMATIVE ASSESSMENT:

- Student knows his\ her marks after the Formative exams.

5-E) EXAMINATION DESCRIPTION:

Examination	Description
<i>1-Mid-term exam</i>	Short questions& MCQs.
2-quizzes	Short questions& MCQs
4- <i>Final term exam:</i>	
a- Written	Short questions & MCQs.
b- Oral	Two oral sessions

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
Paediatric Department



Course Specification

Course title: Pediatrics I

Code: PED 501

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 : September 2013.**

A) Basic Information:

- **Allocated marks: 250 marks**
- **Course duration: 18 weeks of teaching.**
- **Total Teaching hours: 135hrs [lectures:45 hrs--- Practical:90hrs]**

B) Professional Information:

1- Overall Aim of the Course:

- To provide undergraduate students with the basic knowledge of common pediatric health diseases & pediatric health problems commonly met within medical practice.
- To provide undergraduate students with diagnostic, problem solving and decision making skills as well as communication skills necessary for proper evaluation and management of pediatric health problems.
- To provides undergraduate students with 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- ***Discuss*** the etiology, risk factors, pathogenesis and the clinical manifestations of cardiac, respiratory, and neurological, diseases in pediatric .

2.a.2- ***List*** the causes, risk factors, pathogenesis and the clinical manifestations of renal, blood and endocrinal diseases in pediatric .

2.a.3- ***Mention*** the differential diagnosis of common pediatric diseases, as well as complications of diseases met with in common practice.

2.a.4- ***Describe*** the indications, the relative advantages and disadvantages of various therapeutic modalities for common and life threatening pediatric illness.

2.a.5- ***Enumerate*** the basic principles of formulating specific clinical sheets and art of utilizing sources of information.

2.a.6- ***Outline*** the basic issues for promoting health, preventing and controlling pediatric diseases and disabilities.

2.b. Practical and Clinical Skills

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

2. b.1- take complete and 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 child and adolescent.

2.b.4- Perform mental status assessment for child patient.

2.b.5- Diagnose different pediatric problems and how to deal with.

2.b.6- Manage the common pediatric diseases both acute and chronic conditions commonly met in clinical practice and ask for essential investigations for it.

2.b.7 –Choose basic bedside laboratory tests suitable for diagnosis different pediatric diseases.

2.c. Professional Attitude and Behavioral skills:

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

2.c.1 respects rights of patients and their families to full understanding, and involve them in management decision.

2.c.2. Respects patients irrespective of their socioeconomic levels, culture or religious believes.

2.c.3. Use appropriate language to establish good patient physician relationship.

2.c.4. recognize personal limitations regarding skills and knowledge reflect critically on their performance and that of others to refer patients to appropriate health facility at early stage.

2.d. Communication skills:

By the end of the program the graduate will 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 investigations database to be proficient 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 provisional diagnosis of studied pediatric diseases.

2.f. General and transferable Skills:

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

2.f.1- Establish lifelong 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 Nephrology	20	7	11	14.8
2 Cardiology	22	7	17	16.3
3 Respiratory system	23	7	16	17
4 Hematology/Oncology	23	7	16	17
5 Endocrinology	15	6	8	11
6 Neurology	22	7	15	16.3
7 Pediatric Emergencies	10	4	7	7.6
TOTAL	135	45	90	100

4- Teaching and learning methods:**METHODS USED:**

- 4.1- Modified Lectures.
- 4.2- Clinical rounds on patients.
- 4.3- Problem solving and case study.
- 4.4- self learning
- 4.5- Skill lab
- 4.6- field training

Method	Evidence	ILOs
-Modified Lectures	annex CD	2.a.2-2.a.3-2.a.4-2.a.5-2.a.6-2.a.7-
-Clinical rounds on patients -Skill lab	- Sheaths for cases -Tables of teaching {CD}	From 2.b.1 to 2.b.8. --from 2.d.1:2.d.4
-Problem solving and Case study	EXAMPLE IN CD	2.b.6-2.b.7-2.b.8—2.e.1-2.e.2-2.e.3-2.e.5-2.e.6-2.e.7
- self learning	- Researches	From 2.a.1 to

		2.a.9. 2.e.1-2.e.6- 2.e.7. From 2.f.1 to 2.f.4
- Field training	Course file	

TEACHING PLAN:

- **Tutorials (small groups):** 1 hours/week.
From 9 to 9:30 am, 2 times/week .

- **Practical classes:** 5 hours/week.
From 9:30 am to 12 pm, 2 times/week .

- **Lectures:** 3 hours /week.
From 12:15 to 1.45pm, 2 times/week .

Time plan:

Students have to attend 2days/week from 9 am till1.5 pm for 15 weeks.

Item	Time schedule	Teaching hours	% of total hours
Lectures	<u>2 times/week;</u> (3hrs / week)	3×15= 45	33.4%
Practical classes	<u>2 times/week</u> (5 hrs /week)	5 × 15=75	66.6 %
Tutorial (small groups)	<u>2 times/ week</u> (1 hrs / week)	1 ×15= 15	
Total	9 hours /week	9×15= 135	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)
1- Written Exams: <ul style="list-style-type: none"> • MCQs • Case study • Short essay 	In CD	2.a.2 to 2.a.8 2.b.6 - 2.b.7 - 2.b.8 —2.e.1-2.e.2-2.e.3-2.e.5 2.e.6 - 2.e.7. --2.a.2 to 2.a.9
2- Oral Exam.	VIVA CARDS	2.b.1- 2.b.3 - 2.b.4 - 2.b.5 - 2.b.6 2.f.3-2.f.4-2.f.5
3- Practical Exams; Clinical cases & OSCE		To assess practical skills. 2.b.1 - 2.b.3 - 2.b.4 to 2.b.8 2.d.1

5-C) Time schedules:

Exam	Week
Assessment 1	At end of the round.

5-D) Weighing System:

Examination	Marks allocated	% of Total Marks
log book + learning activities + Field training	10	4 %
2- Final exam: a- Written (2 papers)	125	50 %

b- Practical(2 cases)	40	46%
c- Oral(1 sessions)	20	
d- OSCE(11 stations)	55	
Total	250	100%

- The minimum passing score is 150 marks provided that at least 75 marks obtained in the final written exam.
- Passing grades are: 1-Excellent : \geq 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) Exam Description:

Examination	Description
Final exam: a- Written	2 papers Paper I: Short essay questions (2 hours) & MCQs Paper II: Case study (1.5 hours)
b- Practical c- Oral	1 clinical case 1 session
d- OSCE	11stations
Assignments & other activities	self learning researches, clinical sheets , log book ... etc

6- List of references:

- 6.1- Basic materials: -
-Nelson Essentials of Pediatrics, 7th edition, Marc dante K, Kliegman RM and Behrman RE, (ed.) ,2014 ,Saunders.

6.2- Essential Books (Text Books)

- Nelson Textbook of Pediatrics; Behrman RE, Kliegman RM, Jenon, HB; Elsevier Science; 19^h 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 Abdelmotaleb

Head of Department: Prof. Mohamed El Bakry.

Date 9/2013



Benha University
Faculty of Medicine
Paediatric Department

Course Specification

Course title: Pediatrics II
Code: PED 502
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 September 2013.**
 - **Faculty council: September 2014**

A) Basic Information:

- **Allocated marks: 250 marks**
- **Course duration: 18 weeks of teaching.**
- **Total Teaching hours: 135hrs [lectures:45 hrs--- Practical:90hrs]**

B) Professional Information:

1- Overall Aim of the Course:

- To provide undergraduate students with the basic knowledge of common pediatric health diseases & pediatric health problems commonly met within medical practice.
- To provide undergraduate students with diagnostic, problem solving and decision making skills as well as communication skills necessary for proper evaluation and management of pediatric health problems.
- To provides undergraduate students with 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- **Discuss** the etiology, risk factors, pathogenesis and the clinical manifestations of neonatal ,gastrointestinal and hepatic 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- **List** the basic principles of infectious diseases and its prevention.

2.a.5- **Illustrate** 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-**Discuss** the normal neonatal features and etiology, risk factors, pathogenesis and the clinical manifestations of the neonatal diseases.

2.a.8- **Clarify** 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- **summarize** the basic principles of normal nutrition and malnutrition in infancy and childhood.

2.b. Practical and Clinical Skills

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

2. b.1- Take complete and 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- Diagnose different pediatric problems and how to deal with.

2.b.6- Manage the common pediatric diseases both acute and chronic conditions commonly met in clinical practice and ask for essential investigations for it.

2.b.7 –Choose basic bedside laboratory tests suitable for diagnosis different pediatric diseases.

2.c. Professional Attitude and Behavioral skills:

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

2.c.1. Respects rights of patients and their families to full understanding, and involve them in management decision.

2.c.2. Respects patients irrespective of their socioeconomic levels, culture or religious believes.

2.c.3. Use appropriate language to establish good patient physician relationship.

2.c.4. recognize personal limitations regarding skills and knowledge reflect critically on their performance and that of others to refer patients to appropriate health facility at early stage.

2.d. Communication skills:

By the end of the program the graduate will 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 investigations database to be proficient 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 provisional diagnosis.

2.f. General and transferable Skills:

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

2.f.1-Establish lifelong 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	4	6	7.4
2 Growth and Development	10	4	6	7.4
3 Nutrition	20	6	14	15
4 Neonatology	26	8	18	19.2
5 Genetics	15	5	10	11
6 Infectious & parasitic diseases	20	6	14	15
7 Gastroenterology and Hepatology	28	8	20	20.6
8 Behavioral Pediatrics	6	4	2	4.4
TOTAL	135	45	90	100

4- Teaching and learning methods:

- Modified Lectures.
- Clinical rounds & Skill lab
- Self learning
- Problem solving and case study.
- field training.

Method	Evidence	ILOs
-Modified Lectures	Annex CD	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
-Clinical rounds on patients -Skill lab	- Sheaths for cases -Tables of teaching {CD}	From 2.b.1 to 2.b.8. --from 2.d.1:2.d.4
-Problem solving and Case study	EXAMPLE IN CD	2.b.6-2.b.7-2.b.8—2.e.1-2.e.2-2.e.3-2.e.5-2.e.6-2.e.7
- self learning	- Researches	From 2.a.1 to 2.a.9. 2.e.1-2.e.6- 2.e.7. From 2.f.1 to 2.f.4
- Field training	Course file	

TEACHING PLAN:

- **Tutorials(small groups):** 1 hours/week.
From 9 to 9:30 am, 2 times/week .
- **Practical classes:** 5 hours/week.
From 9:30 am to 12 pm, 2 times/week .
- **Lectures:** 3 hours /week.
From 12:15 to 1.45pm, 2 times/week .

Time plan:

Students have to attend 2days/week from 9 am till1.45 pm for 15 weeks.

Item	Time schedule	Teaching hours	% of total hours
Lectures	<u>2 times/week;</u> (3hrs / week)	3×15= 45	33.4%
Practical classes	<u>2 times/week</u> (5 hrs /week)	5 × 15=75	

Tutorial (small groups)	<u>2 times/ week</u> (1 hrs / week)	1 ×15= 15	66.6 %
Total	9 hours /week	9×15= 135	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)
1- Written Exams: • MCQs • Case study • Short essay	In CD	2.a.2 to 2.a.9 2.b.6 - 2.b.7 - 2.b.8 —2.e.1-2.e.2-2.e.3-2.e.5 2.e.6 - 2.e.7. --2.a.2 to 2.a.9
2- Oral Exam.	VIVA CARDS	2.b.1- 2.b.3 - 2.b.4 - 2.b.5 - 2.b.6 2.f.3-2.f.4-2.f.5
3- Practical Exams; Clinical cases & OSCE		To assess practical skills. 2.b.1 - 2.b.3 - 2.b.4 to 2.b.8 2.d.1

5-C) Time schedules:

Exam	Week
Assessment	At end of the semester.

5-D) Weighing System:

Examination	Marks allocated	% of Total Marks
-------------	-----------------	------------------

log book + learning activities + Field training	10	4 %
2- Final exam: a- Written (2 papers)	125	50 %
b- Practical(2 cases)	40	46%
c- Oral(1 sessions)	20	
d- OSCE(11 stations)	55	
Total	250	100%

- **The minimum passing score is 150 marks provided that at least 75 marks obtained in the final written exam.**
- **Passing grades are:** 1-Excellent : \geq 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) Exam Description:

Examination	Description
Final exam: a- Written	2 papers Paper I: Short essay questions (2 hours) & MCQs Paper II: Case study (1.5 hours)
b- Practical c- Oral	1 clinical case 1 session

d- OSCE	11stations
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, Marc Dante K, Kliegman RM and Behrman RE, (ed.), 2014 ,Saunders

6.2- Essential Books (Text Books)

- Nelson Textbook of Pediatrics; Behrman RE, Kliegman RM, Jenon, HB; Elsevier Science; 19^h 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 Abdelmotaleb

Head of Department: Prof. Mohamed El Bakry.

Date 9/2013

Benha University
Faculty of Medicine
Department of Internal Medicine

Course Specification

Course title: General medicine I

Code: MED 501

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 No. (261) , date 7/ 9/2013
- **Internal evaluator:-Prof-DR: - akeel khfny**

A)Basic Information:

- **Allocated marks** 150 marks.
- **Course duration:** 15 weeks of teaching.
- **Teaching hours:**

1- Lectures	30 hs
2- Clinical	30 hs

B)Professional Information:

1-Overall aims of the course:

- To provide basic scientific knowledge about common medical diseases in studied medical branches (metabolism /nutrition /genetics /hepatic diseases/ clinical pathology).
- To accept basic clinical skills in the form of (taking history – general examination - examination of different systems of the body), to diagnose the case, using approach schedules , determine the treatment needed .
- To provide communication skills and professional attitude for dealing with colleges and patients.

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 **Identify** the principles and basic knowledge of the clinical pathology .

2.a.2 **Mention** the investigations that help the internal medicine branches and its helping in the process of diagnosis

2.a.3. **Explain** normal structures ,function of the liver .

2.a.4 **State** etiologies and path physiology of hepatic diseases .

2.a.5. **Enumerate** the differential diagnosis of different symptoms, approach schedules, proper treatment of hepatic diseases.

2.a.6 **Describe** the genetic bases of the internal medicine diseases and how affect the diseases progression

2.a.7 **State** the clinical picture , diagnostic and treatment approaches in the genetic diseases .

2.a.8 **Describe** the normal metabolic pathways in the human body , its abnormalities

2.a.9 Explain the clinical picture , diagnostic and treatment plans in the metabolic diseases and .

2.a.10 Summarize clinical picture , diagnosis and treatment plans of nutritional diseases

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 in hepatic diseases patient .

2.b.2 **obtain** complete medical history in hepato biliary diseases

2.b.3 **perform** regional examination of the abdomen and assess liver organ

2.b.4 **diagnose** different medical hepato biliary diseases .

2.b.5 **manage** different medical hepatobiliary diseases including life threatening conditions .

2.c - General and transferable skills

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

2.c.1 - **Use** information and communication technology effectively in the field of medical practice.

2.c.2- **Work** effectively within a team.

2.d. Communication skills:

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

2.d.1. **Communicate** effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.

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

2.d.3 **Honor and respect** patients and their relatives ;colleagues and any other member of the health profession.

2.e -Intellectual skills:

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

2.e.1.-**Differentiate** between symptoms and signs in the hepatobiliary diseases and plan the differential diagnosis .

2.e.2.- **design** an appropriate diagnostic plan for evaluation of common hepatobiliary diseases

2e.3 **Interpret** the results of commonly used diagnostic procedures.

2.e.4 **Analyse** scenario of treatment plan, incorporating his knowledge, and patient's preferences in a cost effective manner to serve the hepatic biliary Patients

2.a.5 **relate** the genetics knowledge in manner that serve the medical diseases

2.a.6 **design** plans to approach the genetics diseases

2.F - Professional Attitude and Behavioral Skills:

2.f.1 **Respect** patients' rights and involve them and /or their caretakers in management decisions.

2.f.2 **Adopt** an empathic and holistic approach to the patients and their problems.

2.f.3 **Recognize** the important role played by other health care professions in patients' management and refer patients to appropriate health facility at the appropriate stage.

3- Contents

METABOLISM &NUTRITION			Lectures 6.1%=13
			Clinical 8.3%=30
Ca, phosphorous metabolism	1	4	
Lipoprotein metabolism & abnormalities, hemochromatosis, Wilson disease.	1	4	
Assesment of nutritional state, malnutrition .	1	1	
Obesity and eating disorders	1	1	
Genetics			Lectures = 4=1.8%
Principles of genetics	1	-	
Genetic & chromosomal disorders .	1	-	

Revision	1	-	
Exam on rheumatology infection , genetics .	1	-	

Liver			Lectures 6.9%=15
			Clinical 13.3%=48
Approach to patient with liver diseases .	1	5	
Liver cirrhosis	1	5	
Liver cell failure .	1	5	
Portal hypertension	1	4	
hepatitis	1	2	
Jaundice	1	5	
Ascites and GIT ,liver tumors and liver transplantation .	1	5	
Clinical pathology	10	-	
Field training	1hr / week /36 week		

4- Teaching and learning methods:

- Modified lectures.
- Small group discussions
- Clinical rounds.
- Problem solving .
- Self learning

Method	Evidence	ILOs
Modified lectures	CDs of lectures including (video films)	2.a.1- 2.a.10 2.e.1-2.e.6
Clinical rounds	Pictures involved in the file of internal medicine	2.b.1- 2.b.5 2.d.1- 2.d.3 2.c.1-2.c.2 2.f.1-2.f.3
Small group discussions	Sheats of student groups	2.a.1- 2.a.10 2.e.1-2.e.6
Self learning	Case study sheat	2.a.1-2.a.10
Problem solving	Case scenarios	2.e. 1 -2.e.6

TEACHING PLAN:

Lectures: 3 hs /week .

Practical classes: 3 hs/week .

Lectures		practical	Total
2hr/week		1hr /week	
Total	30	30	60

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA: using log book

1. Practical attendance
2. Small group attendance

ما تقيسة من مخرجات التعلم المستهدفة	الطريقة	م
To assess knowledge and understanding & intellectual skills: From 2.a.1.....2.a.10 and 2.b.1. ....2.b.5 2.e.1....2.e.6	Written examination including short essay case study, MCQ examination	1
To assess knowledge and understanding, intellectual skills & General & transferable skills 2.a.1.....2.a.10 ., 2.b.1.....2.b.5 ., 2.d.1.....2.d.3	Oral examination	2

Weighting System: the first semester papers

Examination	% of Total Marks	Marks allocated
1- End-different branches examination : Define, complete, true & false , Enumerate, , MCQs,...)	20%	90
2- Final exam: a- Written b- Oral ...c,clinical	40% 9 % 20%	180 40 90
Clinical pathology		50
Total		450

- The minimum passing score is **200** 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.

6- List of references:**6.1- Basic materials:**

Hand out of lectures prepared by staff Collected in branches .

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
- library
- in patient rooms
- data show

Course coordinator: prof /dr fawzi megahid .

Head of department: prof /dr Atef I brahim

Date: 9/2013

Benha University
Faculty of Medicine
Department of Internal Medicine

Course Specification

Course title: General medicine II

Code: MED 502

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 No. (261) , date 7/ 9/2013
- **Internal evaluator:-Prof-DR :- akeel khfny**

A)Basic Information:

- **Allocated marks** 100 marks.
- **Course duration:** 15 weeks of teaching.
- **Teaching hours:**

1- Lectures	30 hs
2- clinical	30 hs

B)Professional Information:

1-Overall aims of the course:

- To provide basic scientific knowledge about common medical diseases in studied medical branches (infection)
- To accept basic clinical skills in the form of (taking history – general examination - examination of different systems of the body).
- To provide communication skills and professional attitude for dealing with colleges and patients.

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 **Identify** the microbiological basics for medical diseases especially infectious diseases routes of infection methods of transfer .

2.a.2 **state** methods of transmission , the vectors , causes , and symptoms and sign of infectious diseases.

2.a.3 **Describe** the general and special method of prevention and control of infectious diseases immunological disease ,proper treatment and first aid with focus on endemic diseases on Egypt .

2.b.- practical and clinical skills : .

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

2.b.1 **perform** technique to assess vital signs with show the effect of different infectious diseases on it

2.b.2 **obtain** complete medical history of different body system as the infectious diseases systemic diseases .

2.b.3 **perform** regional examination in different body region to assess the infectious diseases as systemic diseases.

2.b.4 **diagnose** different medical infectious diseases .

2.b.5 **manage** different medical infectious diseases including life threatening conditions .

2.c - General and transferable skills

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

2.c.1 - *Use* information and communication technology effectively in the field of medical practice.

2.c.2- *Work* effectively within a team.

2.d. Communication skills:

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

2.d.1. **Communicate** effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.

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

2.d.3 **Honor and respect** patients and their relatives ;colleagues and any other member of the health profession.

2.e -Intellectual skills:

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

2.e.1.-**differential diagnosis** of the different sign that may be involved in the infectious diseases

2.e.2.- **design** an appropriate diagnostic plan for evaluation of common infectious diseases

2.e.3 **Design** prevention and surveillance procedures of the infectious diseases

2.e.4 **Analyse** scenario of treatment plan, incorporating his knowledge, and patient's preferences in a cost effective manner.

2.F - Professional Attitude and Behavioral Skills:

2.f.1 **Respect** patients' rights and involve them and /or their caretakers in management decisions.

2.f.2 **Adopt** an empathic and holistic approach to the patients and their problems.

2.f.3 **Recognize** the important role played by other health care professions in patients' management and refer patients to appropriate health facility at the appropriate stage.

3- Contents

Infection			Lectures 3.7%= 8
			Clinical 5.5% 20
Disorders of the body temperature ,salmonellosis, brucellosis, vibrio	2	7	

disease.			
Protozoal diseases (malaria, amebiasis, toxoplasmosis, leishmania).	2	6	
HIV , Herpes schistosoma ,	2	7	
Pneumonia	2	4	
tuberculosis	2	4	
Infective endocarditis	1	1	
Viral hepatitis	4	4	

4- Teaching and learning methods:

- Modified lectures.
- Small group discussions
- Clinical rounds.
- Problem solving .
- Self learning

Method	Evidence	ILOs
Modified lectures	CDs of lectures including (video films)	2.a.1- 2.a.3 2.e.1-2.e.4
Clinical rounds	Pictures involved in the file of internal medicine	2.b.1- 2.b.5 2.d.1- 2.d.3 2.c.1-2.c.2 2.f.1-2.f.3
Small group discussions	Sheats of student groups	2.a.1- 2.a.3 2.e.1-2.e.4
Problem solving	Case scenarios	2.e. 1 -2.e.4

Self learning	Case study sheat	2.e.1-2.e.4
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TEACHING PLAN:Lectures: 2 hs /week .

Practical classes: 1hs/week .

Lectures		practical	Total
2hr/week		1hr /week	
Total	30	30	60

5- Students Assessment methods:5-A) **ATTENDANCE CRITERIA:** using log book

1. Practical attendance
2. Small group attendance
3. Lectures

Students Assessment Methods

ما تقيسة من مخرجات التعلم المستهدفة	الطريقة	م
To assess knowledge and understanding & intellectual skills: From 2.a.1.....2.a.3 . and 2.b.1. ....2.b.5.	Written examination including short essay case study, MCQ examination	1
To assess knowledge and understanding, intellectual skills & General & transferable skills 2.a.1.....2.a.3 2.b.1.....2.b.5 2.d.1.....2.d.3 2.e.1..2.e.4	Oral examination	2
To assess knowledge and understanding, intellectual skills & practical and clinical skills and General & transferable skills:	Practical & clinical examination	3

2.a.1.....2.a.3
 2.b.1.....2.b.5
 2.c.1.....2.c.2
 2.e.1..2.e.4

Weighting System: the first semester papers

Examination	% of Total Marks	Marks allocated
1- End-different branches examination : Define, complete, true & false , Enumerate, , MCQs,...)	20%	90
2- Final exam: a- Written b- Oral ...c,clinical	40% 9 % 20%	180 40 90
Clinical pathology		50
Total		400

- The minimum passing score is 200 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.

6- List of references:

6.1- Basic materials:

Hand out of lectures prepared by stuff Collected in branches .

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
- library
- in patient rooms
- data show

Course coordinator: prof /dr fawzi megahid .

Head of department: prof /dr Atef I brahim

Date: 9/2013

Benha University
Faculty of Medicine
Department of Internal Medicine

Course Specification

Course title: General medicine III

Code: MED 503

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 No. (261), date **7/ 9/2013**
- **Internal evaluator:-Prof-DR :-akeel khfny .**

A)Basic Information:

- **Allocated marks** **150** marks.
- **Course duration:** **15** weeks of teaching.
- **Teaching hours:**

1- Lectures	30 hs
2- clinical	30 hs

B)Professional Information:

1-Overall aims of the course:

- To provide basic scientific knowledge about common medical diseases in studied medical branches (cardiovascular and respiratory)
- To accept basic clinical skills in the form of (taking history – general examination - examination of different systems of the body).
- To provide communication skills and professional attitude for dealing with colleges and patients.

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. **State** the genetic basics s, prevalence, causes, and path physiology of cardiovascular diseases.

2.a.2 **Identify** the anatomical , physiological basics in cardiovascular diseases its clinical picture diagnosis schedules.

2.a.3 **list** the different lines of treatment for cardiovascular diseases the sequence of treatment /doses to begin with /determine the time to add other drugs side effect / drug interaction.

2.a.4 **Define** the anatomical structure ,functions of different respiratory system components.

2.a.5. **Summarize** causes ;pathphysiology, clinical picture ,keys for diagnosis ,principles for treatments associated with respiratory system .

2.b.- practical and clinical skills :

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

2.b.1 **perform** technique to assess vital signs assess how the cardiovascular disease s affect it.

2.b.2 **obtain** complete medical history in cardiovascular diseases .

2.b.3 **perform** regional examination of the chest including (lung ---heart

2.b.4 **diagnose** different medical cardiovascular diseases .

2.b.5 **manage** different cardiovascular medical diseases including life threatening conditions .

2.c - General and transferable skills

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

2.c.1 - *Use* information and communication technology effectively in the field of medical practice.

2.c.2- *Work* effectively within a team.

2.d. Communication skills:

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

2.d.1. **Communicate** effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.

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

2.d.3 **Honor and respect** patients and their relatives ;colleagues and any other member of the health profession.

2.e -Intellectual skills:

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

2.e.1. **Differentiate** between different symptoms and sign of cardiovascular diseases

2.e.2.- **Design** an appropriate diagnostic plan for evaluation of common cardiovascular complaints

2.e.3 **Analyse** scenario of treatment plan,to control the common cardiovascular diseases.

2.e.4 analyse the risk factors of the cardiovascular diseases and how prevent them .

2.F - Professional Attitude and Behavioral Skills:

2.f.1 **Respect** patients' rights and involve them and /or their caretakers in management decisions.

2.f.2 **Adopt** an empathic and holistic approach to the patients and their problems.

2.f.3 **Recognize** the important role played by other health care professions in patients' management and refer patients to appropriate health facility at the appropriate stage.

3- Contents

Chapter	Lectures	Clinical	Percentage
---------	----------	----------	------------

Cardiovascular system			Lectures 8.3% =18
			Clinical 11.1% =40
Approach to patient with cardiac diseases .	2	2	
Valvular heart diseases .	2	1	
Congenital heart diseases.	1	2	
Infective endocarditis and rheumatic fever .	1	6	
Pericardial diseases.	1	3	
Cor pulmonale and pulmonaru embolism .	1	4	
Systemic hypertension .	1	4	
Coronary artery diseases.	2	6	
Heart failure .	1	5	
Dysarrythmia	2	4	
Cardiomyopathy ,myocarditis ,syncope, cardiac arrest .	1	2	
Respiratory system			Lectures 6.1%=13
			Clinical 11.1%=40

Approach to patient with chest diseases.	1	4	
Respiratory failure .	1	2	
Pneumonia .	1	8	
Suppurative lung diseases	1	8	
Bronchial asthma .	1	10	
Chronic obstructive airway disease .	1	5	
Pleural diseases.	1	5	
Interstitial lung diseases .	1	4	
Intrathoracic tumors	1	2	

4- Teaching and learning methods:

- Modified lectures.
- Small group discussions
- Clinical rounds.
- Problem solving .
- Self learning

Method	Evidence	ILOs
Modified lectures	CDs of lectures including (video films)	2.a.1- 2.a.5 2.e.1-2.e.4
Clinical rounds	Pictures involved in the file of internal medicine	2.b.1- 2.b.5 2.d.1- 2.d.3 2.c.1-2.c.2

		2.f.1-2.f.3
Small group discussions	Sheats of student groups	2.a.1- 2.a.5 2.e.1-2.e.4
Problem solving	Case scenarios	2.e. 1 -2.e.4

TEACHING PLAN:Lectures: 2 hs /week .

Practical classes:1 hs/week

Lectures		practical	Total
2hr/week		1hr /week	
Total	30	30	60

5- Students Assessment methods:**5-A) ATTENDANCE CRITERIA:** using log book

1. Practical attendance
2. Small group attendance
3. Lectures

5-B) Assessment TOOLS:**Students Assessment Methods**

ما تقيسة من مخرجات التعلم المستهدفة	الطريقة	م
To assess knowledge and understanding & intellectual skills: From 2.a.1.....2.a.5 . and 2.b.1. ....2.b.5	Written examination including short essay case study, MCQ examination	1
To assess knowledge and understanding, intellectual skills & General & transferable skills 2.a.1.....2.a.5 ., 2.b.1.....2.b.5 ., 2.d.1.....2.d.3	Oral examination	2

2.e.1....2.e.4		
To assess knowledge and understanding, intellectual skills & practical and clinical skills and General & transferable skills: 2.a.1.....2.a.5., 2.b.1.....2.b.5 2.c.1.....2.c.2 2.e.1....2.e.4	Practical & clinical examination	3

Weighting System: the first semester papers

Examination	% of Total Marks	Marks allocated
1- End-different branches examination : Define, complete, true & false , Enumerate, , MCQs,...)	20%	90
2- Final exam: a- Written b- Oral....c,clinical	40% 9 % 20%	180 40 90
Clinical pathology		50
Total		450

- **The minimum passing score is 400 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.

6- List of references:

6.1- Basic materials:

Hand out of lectures prepared by staff Collected in branches .

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
- library
- in patient rooms
- data show

Course coordinator: prof /dr fawzi megahid .

Head of department: prof /dr Atef I brahim

Date: 9/2013

Course Specification

Course title: General medicine IV

Code: MED 504

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 No. (261) , date 7/ 9/2013

A)Basic Information:

- **Allocated marks** 50 marks.
- **Course duration:** 15 weeks of teaching.
- **Teaching hours:**

1- Lectures	30 hs
2- clinical	30 hs

B)Professional Information:

1-Overall aims of the course:

- To provide basic scientific knowledge about common medical diseases in studied medical branches (Gastroenterology)
- To accept basic clinical skills in the form of (taking history – general examination - examination of different systems of the body).
- To provide communication skills and professional attitude for dealing with colleges and patients.

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** anatomical principles , prevalence , causes, and path physiology of gastrointestinal disease

2.a.2 **Explain** methods of diagnosis and treatment lines for gastrointestinal diseases.

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 and the affection of gastroenterological diseases on it

2.b.2 **obtain** complete medical history in gastrointestinal diseases patient

2.b.3 **perform** regional abdominal examination .

2.b.4 **diagnose** different medical gastroenterological diseases .

2.b.5 **manage** different medical gastroenterological diseases

2.c - General and transferable skills

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

2.c.1 - *Use* information and communication technology effectively in the field of medical practice.

2.c.2- *Work* effectively within a team.

2.d. Communication skills:

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

2.d.1. **Communicate** effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.

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

2.d.3 **Honor and respect** patients and their relatives ;colleagues and any other member of the health profession.

2.e -Intellectual skills:

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

2.e.1. **Differentiate** between different symptoms and sign of gastroenterological diseases

2.e.2.- **Design** an appropriate diagnostic plan for evaluation of common gastroenterological complaints

2.e.3 **Analyze** scenario of treatment plan, to control the common gastroenterological diseases.

2.e.4 **analyze** the risk factors of the gastroenterological diseases and how prevent them .

2.F - Professional Attitude and Behavioral Skills:

2.f.1 **Respect** patients' rights and involve them and /or their caretakers in management decisions.

2.f.2 **Adopt** an empathic and holistic approach to the patients and their problems.

2.f.3 **Recognize** the important role played by other health care professions in patients' management and refer patients to appropriate health facility at the appropriate stage.

3- Contents

Gastroenterology			Lectures 6.9%=15
			Clinical 13.3%=48
Approach to patient with liver diseases.	1	5	
Liver cirrhosis	1	5	

Liver cell failure .	1	5	
Portal hypertension	1	4	
hepatitis	1	2	
Jaundice	1	5	
As cites and GIT ,liver tumors and liver transplantation .	1	5	
Peptic ulcer, gastritis .	1	5	
Diarrhea, malabsorption syndrome.	1	5	
Pancreatic and gall bladder diseases.	1	2	
GIT hemorrhage, dysphasia, dyspepsia, constipation.	1	5	
Diseases of the esophagus ,	1		

4- Teaching and learning methods:

- Modified lectures.
- Small group discussions
- Clinical rounds.
- Problem solving .
- Self learning

Method	Evidence	ILOs
Modified lectures	CDs of lectures including (video films)	2.a.1- 2.a.2 2.e.1-2.e.4
Clinical rounds	Pictures involved in the file of internal medicine	2.b.1- 2.b.5 2.d.1- 2.d.3 2.c.1-2.c.2 2.f.1-2.f.3
Self learning	Case study sheet	2.a.1- 2.a.2
Small group discussions	Sheets of student groups	2.a.1- 2.a.2 2.e.1-2.e.4
Problem solving	Case scenarios	2.e. 1 -2.e.6

TEACHING PLAN:Lectures: 2 hs /week .

Practical classes: 1hs/week .

Lectures		practical	Total
2hr/week		1hr /week	
Total	30	30	60

5- Students Assessment methods:**5-A) ATTENDANCE CRITERIA:** using log book

1. Practical attendance
2. Small group attendance
3. Lectures

5-BStudents Assessment Methods

ما تقيسة من مخرجات التعلم المستهدفة	الطريقة	م
Benha Faculty of Medicine	Program Specification	

To assess knowledge and understanding & intellectual skills: From 2.a.1.....2.a.2 . and 2.b.1. ....2.b.5 2.e.1....2.e.4.	Written examination including short essay case study, MCQ examination	1
To assess knowledge and understanding, intellectual skills & General & transferable skills From 2.a.1.....2.a.2 and 2.b.1. ....2.b.5 2.e.1....2.e.4. 2.f.1....2.f.3	Oral examination	2
To assess knowledge and understanding, intellectual skills & practical and clinical skills and General & transferable skills: 2.a.1.....2.a.2., 2.b.1.....2.b.5 2.e.1.....2.e.4 2.c.1.....2.c.2	Practical & clinical examination	3

Weighting System: the first semester papers

Examination	% of Total Marks	Marks allocated
1- End-different branches examination : Define, complete, true & false , Enumerate, , (MCQs,...)	20%	90
2- Final exam: a- Written b- Oral c,clinical	40% 9 % 20%	180 40 90
Clinical pathology		50
Total		450

- **The minimum passing score is 200 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.

6- List of references:

6.1- Basic materials:

Hand out of lectures prepared by stuff Collected in branches .

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:

- Department lectures halls: 5
- skill lab room 1
- black and white boards
- library
- in patient rooms
- data show

Course coordinator: prof /dr fawzi megahid .

Head of department: prof /dr Atef I brahim

Date: 9/2013

Benha University
Faculty of Medicine
Department of Internal Medicine

Course Specification

Course title: General medicine V

Code: MED 507

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 No. (261) , date 7/ 9/2013
- **Internal evaluator:-Prof-DR :- akel khfny**

A)Basic Information:

- **Allocated marks** 100 marks.
- **Course duration:** 15 weeks of teaching.
- **Teaching hours:**

1- Lectures	30 hs
2- clinical	30 hs

Professional Information:

1-Overall aims of the course:

- To provide basic scientific knowledge about common medical diseases in studied medical branches (neurology)
- To accept basic clinical skills in the form of (taking history – general examination - examination of different systems of the body).
- To provide communication skills and professional attitude for dealing with colleges and patients.

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 **Identify** anatomical principles , functions of nervous system (CNS-PNV).

2.a.2 . **Discuss** causes ,pathos physiology , clinical picture , of nervous system diseases .

2.a.3 **Explain** diagnostic plain , lines of treatment ,first aids in patient with nervous system diseases.

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 and the effect of the neurological diseases on it .

2.b.2 **obtain** complete medical history for neurological cases

2.b.3 **perform** complete neurological examination .

2.b.4 **diagnose** different medical neurological diseases .

2.b.5 **manage** different medical neurological diseases including life threatening conditions .

2.c - General and transferable skills

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

2.c.1 - *Use* information and communication technology effectively in the field of medical practice.

2.c.2- *Work* effectively within a team.

2.d. Communication skills:

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

2.d.1. **Communicate** effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.

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

2.d.3 **Honor and respect** patients and their relatives ;colleagues and any other member of the health profession.

2.e -Intellectual skills:

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

2.e.1 **interpret** the different neurological symptoms and sign .

2.e.2 **diagnose** different neurological diseases.

2.e.3 **plans for** proper treatment of different neurological diseases

2.F - Professional Attitude and Behavioral Skills:

2.f.1 **Respect** patients' rights and involve them and /or their caretakers in management decisions.

2.f.2 **Adopt** an empathic and holistic approach to the patients and their problems.

2.f.3 **Recognize** the important role played by other health care professions in patients' management and refer patients to appropriate health facility at the appropriate stage.

3- Contents

neurology			Lectures7.8%=17
			Clinical 13% =47
Anatomy and functions of the nervous system.	1	-	
Approach to the	1	4	

patient with neurological disorders .			
Lateralization of the lesion over cerebral cortex .	1	4	
Cranial nerves .	1	4	
Cerebrovascular diseases .	2	4	
Hemiplegia & paraplegia .	1	4	
Disease of the spinal cord .	1	4	
Peripheral neuropathy.	1	4	
Myopathic diseases, myoneural junction, ataxia.	1	4	
Extrapyramidal syndrome	1	4	
Epilepsy & headache	1	5	
Intracranial tumors ,disturbance of consciousness.	1	4	
Meningitis & encephalitis demylenating diseases and dementia .	1	2	

4- Teaching and learning methods:

- Modified lectures.
- Small group discussions
- Clinical rounds.
- Problem solving
- Self learning .

Method	Evidence	ILOs
Modified lectures	CDs of lectures including (video films)	2.a.1- 2.a.3 2.e.1-2.e.3
Clinical rounds	Pictures involved in the file of internal medicine	2.b.1- 2.b.5 2.d.1- 2.d.3 2.c.1-2.c.2 2.f.1-2.f.3
Small group discussions	Sheets of student groups	2.a.1- 2.a.3 2.e.1-2.e.3
Problem solving	Case scenarios	2.e. 1 -2.e.3
Self learning	Case study sheets	2.a.1- 2.a.3

TEACHING PLAN:Lectures: 2 hs /week .

Practical classes:1 hs/week

Lectures		practical	Total
2hr/week		1hr /week	
Total	30	30	60

5- Students Assessment methods:5-A) **ATTENDANCE CRITERIA:** using log book

1. Practical attendance
2. Small group attendance
3. Lectures

Students Assessment Methods

ما تقيسة من مخرجات التعلم المستهدفة	الطريقة	م
To assess knowledge and understanding & intellectual skills: From 2.a.1.....2.a.3 and 2.b.1. ....2.b.5 2.e.1....2.e.4.	Written examination including short essay case study, MCQ examination	1
To assess knowledge and understanding, intellectual skills & General & transferable skills From 2.a.1.....2.a.3 and 2.b.1. ....2.b.5 2.e.1....2.e.4. 2.f.1....2.f.3	Oral examination	2
To assess knowledge and understanding, intellectual skills & practical and clinical skills and General & transferable skills: 2.a.1.....2.a.3 2.b.1.....2.b.5 2.e.1.....2.e.4 2.c.1.....2.c.2 2.f.1....2.f.3	Practical & clinical examination	3

Weighting System: the first semester papers

Examination	% of Total Marks	Marks allocated
1- End-different branches examination : Define, complete, true & false , Enumerate, , MCQs,...)	20%	90
2- Final exam: a- Written b- Oral c,clinical	40% 9 % 20%	180 40 90

Dermatology		50
Total		450

- **The minimum passing score is 200 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.

6- List of references:

6.1- Basic materials:

Hand out of lectures prepared by staff Collected in branches .

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
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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
- library
- in patient rooms
- data show

Course coordinator: prof /dr fawzi megahid .

Head of department: prof /dr Atef I brahim

Date: 9/2013

Benha University
Faculty of Medicine
Department of Internal Medicine

Course Specification

Course title: special medicine I

Code: MED 508

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 No. (261) , date **7/ 9/2013**
- **Internal evaluator:-Prof-DR :- akeel khfny**

A)Basic Information:

- **Allocated marks** **50** marks.
- **Course duration:** 15 weeks of teaching.
- **Teaching hours:**

1- Lectures	30 hs
2- clinical	30 hs

B)Professional Information:

1-Overall aims of the course:

- To provide basic scientific knowledge about common medical diseases in studied medical branches (Hematology)
- To accept basic clinical skills in the form of (taking history – general examination - examination of different systems of the body).
- To provide communication skills and professional attitude for dealing with colleges and patients.

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 **State** structure ,functions of different compositions of hematological system.

2.a.2 **Discuss** etiology ,path physiology, clinical picture of the hematological diseases

2.a.3 **Describe**, diagnosis and treatment of hematological diseases

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 and assess how the hematological diseases affect them

2.b.2 **obtain** complete medical history .

2.b.3 **perform** regional examination of all the body .

2.b.4 **diagnose** different medical hematological diseases .

2.b.5 **manage** different medical hematological diseases including life threatening conditions .

2.c - General and transferable skills

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

2.c.1 - *Use* information and communication technology effectively in the field of medical practice.

2.c.2- *Work* effectively within a team.

2.d. Communication skills:

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

2.d.1. **Communicate** effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.

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

2.d.3 **Honor and respect** patients and their relatives ;colleagues and any other member of the health profession.

2.e -Intellectual skills:

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

2.e.1 **interpret** the different symptom and sign of the hematological disease

2.e.2 **Design** methods to diagnosis and treatment of the hematological diseases

2.F - Professional Attitude and Behavioral Skills:

2.f.1 **Respect** patients' rights and involve them and /or their caretakers in management decisions.

2.f.2 **Adopt** an empathic and holistic approach to the patients and their problems.

2.f.3 **Recognize** the important role played by other health care

3 **Recognize** the important role played by other health care professions in patients' management and refer patients to appropriate health facility at the appropriate stage.

3- Contents

Haematology			Lectures 4.6%=10
			Clinical 6. 9%=25
Anemias	3	10	
Myeloproliferative diseases.and acute leukemia .	1	3	

Malignancy of lymphocytes(lymphoma and chronic lymphocytic leukemia .	1	4	
Purpura and coagulation defect .	2	8	

4- Teaching and learning methods:

- . Modified lectures.
- Small group discussions
- Clinical rounds.
- Problem solving .
- Self learning

Method	Evidence	ILOs
Modified lectures	CDs of lectures including (video films)	2.a.1- 2.a.3 2.e.1-2.e.6
Clinical rounds	Pictures involved in the file of internal medicine	2.b.1- 2.b.5 2.d.1- 2.d.3 2.c.1-2.c.2 2.f.1-2.f.3
Self learning	Case study sheet	2.a.1- 2.a.3
Small group discussions	Sheets of student groups	2.a.1- 2.a.3 2.e.1-2.e.6
Problem solving	Case scenarios	2.e. 1 -2.a.6

TEACHING PLAN:Lectures: 2 hs /week .Practical classes: 1 hs/week .

Lectures		practical	Total
2hr/week		1hr /week	
Total	30	30	60

5- Students Assessment methods:5-A) **ATTENDANCE CRITERIA:** using log book

1. Practical attendance
2. Small group attendance
3. Lectures

Students Assessment Methods**Weighting System: the first semester papers**

ما تقيسة من مخرجات التعلم المستهدفة	الطريقة	م
To assess knowledge and understanding & intellectual skills: From 2.a.1.....2.a.3 . and 2.b.1. ....2.b.5 2.e.1....2.e.2.	Written examination including short essay case study, MCQ examination	1
To assess knowledge and understanding, intellectual skills & General & transferable skills From 2.a.1.....2.a.3 and 2.b.1. ....2.b.5 2.e.1....2.e.2. 2.f.1....2.f.3	Oral examination	2
To assess knowledge and understanding, intellectual skills & practical and clinical skills and General & transferable skills: 2.a.1.....2.a.3., 2.b.1.....2.b.5 2.e.1.....2.e.2 2.c.1.....2.c.2	Practical & clinical examination	3

Examination	% of Total Marks	Marks allocated
1- End-different branches examination : Define, complete, true & false , Enumerate, , MCQs,...)	20%	90
2- Final exam: a- Written b- Oral ...c,clinical	40% 9 % 20%	180 40 90
Dermatology		50
Total		450

- The minimum passing score is **200** 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.

6- List of references:

6.1- Basic materials:

Hand out of lectures prepared by staff Collected in branches .

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

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:

- Department lectures halls: 5
- skill lab room 1
- black and white boards
- library
- in patient rooms

Course coordinator: prof /dr fawzi megahid .

Head of department: prof /dr Atef I brahim

Date: 9/2013

Benha University
Faculty of Medicine
Department of Internal Medicine

Course Specification

Course title: special medicine II

Code: MED 509

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 No. (261) , date **7/ 9/2013**
- **Internal evaluator:-Prof-DR :- akeel khfny**

A)Basic Information

- **Allocated marks** **200** marks.
- **Course duration:** **15** weeks of teaching.
- **Teaching hours:**

1- Lectures	30 hs
2- clinical	30 hs

B)Professional Information:

1-Overall aims of the course:

- To provide basic scientific knowledge about common medical diseases in studied medical branches (Endocrinology/ nephrology)
- To accept basic clinical skills in the form of (taking history – general examination - examination of different systems of the body).
- To provide communication skills and professional attitude for dealing with colleges and patients.

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** anatomy ,physiology of the renal system (structure and different mechanisms for nephrons functions).

2.a.2. **Describe** etiology, clinical picture, path physiology of the renal and urological diseases.

2.a.3 **State** Diagnosis and treatment lines in renal diseases and syndromes.

2.a.4. **Explain** principles of hormonal function, autocrine ,paracrine ,endocrine effect ,gland structure and how assess their function.

2.a.5 **Identify** pathphysiological pathways , symptoms ,signs of the endocrinal diseases.

2.a.6 **Summarize** diagnosis and treatment lines and plans of different endocrine diseases.

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 and their variations with the endocrine *diseases*.

2.b.2 **perform** methods ,technique to assess vital signs and their variations with *nephrology diseases*

2.b.3 **obtain** complete medical history .

2.b.4 **perform** regional abdominal examination .

2.b.5 **diagnose** different common medical urological diseases .

2.b.6 **diagnose** different common medical endocrinal diseases .

2.b.7 **manage** different medical endocrinal diseases including life threatening conditions .

2.b.8 **manage** different medical urological diseases including life threatening conditions

2.c - General and transferable skills

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

2.c.1 - *Use* information and communication technology effectively in the field of medical practice.

2.c.2- *Work* effectively within a team.

2.d. Communication skills:

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

2.d.1. **Communicate** effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.

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

2.d.3 **Honor and respect** patients and their relatives ;colleagues and any other member of the health profession.

2.e -Intellectual skills:

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

2.e.1 **Design** approaches to medical neurological disease .

2.e.2 **Diagnose** the different common endocrinal diseases

2.e.3 **analyze** symptoms and signs of the endocrinal diseases

2.e.4 **interpret** the urological symptoms and signs

2.e.5 **Analyse** scenario of treatment plan, incorporating his knowledge, and patient's preferences in a cost effective manner

2.F - Professional Attitude and Behavioral Skills:

2.f.1 **Respect** patients' rights and involve them and /or their caretakers in management decisions.

2.f.2 **Adopt** an empathic and holistic approach to the patients and their problems.

2.f.3 **Recognize** the important role played by other health care

3 **Recognize** the important role played by other health care professions in patients' management and refer patients to appropriate health facility at the appropriate stage.

3- Contents

Endocrine			Lectures 6.1%=13
			Clinical 8.3%=30
Diabetes mellitus , hypoglycemia.	4	10	
disorders of The thyroid gland .	1	4	
disorders OF supra renal gland . Disordersof the parathyroid gland	1	2	
Disorders of pituitary ,dwarfism & disease of multiple endocrine gland .	1	4	
nephrology			Lectures 5% = 11
			Clinical 8% 29
Approach to apatient with renal diseases	1	2	

Glomerulonephritis	1	2	
Nephritic ,nephrotic syndrome	1	2	
Acute kidney injury .	1	3	
Chronic kidney diseases	1	4	
Tubulointerstitial diseases.	1	2	
Proteinuria, hematuria , polyuria ,oliguria .	1	2	
Acid base balance & imbalance electrolytes (Na ⁺ -k ⁺) disorders .	1	2	

4- Teaching and learning methods:

- Modified lectures.
- Small group discussions
- Clinical rounds.
- Problem solving .
- Self learning .

Method	Evidence	ILOs
Modified lectures	CDs of lectures including (video films)	2.a.1- 2.a.6 2.e.1-2.e.5

Clinical rounds	Pictures involved in the file of internal medicine	2.b.1- 2.b.8 2.d.1- 2.d.3 2.c.1-2.c.2 2.f.1-2.f.3
Small group discussions	Sheats of student groups	2.a.1- 2.a.6 2.e.1-2.e.5
Problem solving	Case scenarios	2.e. 1 -2.e.5
Self learning	Case study sheets	2.a.1- 2.a.6

TEACHING PLAN:Lectures: 2 hs /week .

Practical classes:1 hs/week .

Lectures	practical	Total
2hr/week	1hr /week	
Total	30	30
		60

5- Students Assessment methods:5-A) **ATTENDANCE CRITERIA:** using log book

1. Practical attendance
2. Small group attendance
3. Lectures

5-B) Students Assessment Methods

ما تقيسة من مخرجات التعلم المستهدفة	الطريقة	م
To assess knowledge and understanding & intellectual skills: From 2.a.1.....2.a.6 . and 2.b.1. ....2.b.8	Written examination including short essay case study, MCQ examination	1

2.e.1....2.e.5.		
To assess knowledge and understanding, intellectual skills & General & transferable skills From 2.a.1.....2.a.6 and 2.b.1. ....2.b.8 2.e.1....2.e.5. 2.f.1....2.f.3	Oral examination	2
To assess knowledge and understanding, intellectual skills & practical and clinical skills and General & transferable skills: 2.a.1.....2.a.6., 2.b.1.....2.b.8 2.e.1.....2.e.5 2.c.1.....2.c.2	Practical & clinical examination	3

Weighting System: the first semester papers

Examination	% of Total Marks	Marks allocated
1- End-different branches examination : Define, complete, true & false , Enumerate, , MCQs,...)	20%	90
2- Final exam: a- Written b- Oral....c,clinical	40% 9 % 20%	180 40 90
Dermatology		50
Total		450

- The minimum passing score is **400** 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.

6- List of references:**6.1- Basic materials:**

Hand out of lectures prepared by staff Collected in branches .

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 /dr fawzi megahid .

Head of department: prof /dr Atef I brahim

Date: 9/2013

Benha University
Faculty of Medicine
Department of Internal Medicine

Course Specification

Course title: special medicine III

Code: MED 509

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 No. (261), date **7/ 9/2013**
- **Internal evaluator:-Prof-DR :- akeel khfny**

A) Basic information:

- **Allocated marks:** **100** marks.
- **Course duration:** **15** weeks of teaching.
- **Teaching hours:**

1- Lectures	30 hs
2- clinical	30 hs

B)Professional Information:

1-Overall aims of the course:

- To provide basic scientific knowledge about common medical diseases in studied medical branches (Immunology, Rheumatology & dermatology)
- To accept basic clinical skills in the form of (taking history – general examination - examination of different systems of the body).
- To provide communication skills and professional attitude for dealing with colleges and patients.

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 compositions of the locomotors system ,normal function , ,clinical pictures of different syndromes and disease .

2.a. 2 **List** possible lines of treatments , approach for diagnosis in Rheumatologic diseases

2.a.3 **Identify** the basic immunological knowledge , abnormalities .

2.a.4 **Describe** the symptoms ,signs , diagnostic and treatment plans in the medical immunological diseases .

2.a.5 **Discuss** causes of dermatological diseases and its relations with other medical branches .

2.a.6 **mention** the diagnostic and treatment plans of the dermatological disease

2.b.- practical and clinical skills : .

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

2.b.1 **perform** complete e dermatological examination .

2.b.2 **obtain** complete medical history .

2.b.3 **perform** complete rheumatologic examination .

2.b.4 **diagnose** common rheumatologic disease diseases .

2.b.5 **manage** different rheumatologic diseases

2.b.6 **design** approaches for rheumatologic diseases

2.c - General and transferable skills

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

2.c.1 - *Use* information and communication technology effectively in the field of medical practice.

2.c.2- *Work* effectively within a team.

2.d. Communication skills:

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

2.d.1. **Communicate** effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.

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

2.d.3 **Honor and respect** patients and their relatives ;colleagues and any other member of the health profession.

2.e -Intellectual skills:

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

2.e.1.-**Differentiate** between symptoms and signs in the rheumatologic diseases and plan the differential diagnosis .

2.e.2.- **design** an appropriate diagnostic plan for evaluation of common rheumatological diseases

2e.3 **Interpret** the dermatological finding and their relations with the internal medicine systemic diseases .

2.e.4 **Analyze** scenario of treatment plan, incorporating his knowledge, and patient's preferences in a cost effective manner to serve the rheumatologic Patients

2.e.5 **relate** immunological knowledge in manner that serve the medical diseases

2.e.6 **design** plans to approach the rheumatological diseases

2.e. 7 plans for dermatological diseases treatment .

2.F - Professional Attitude and Behavioral Skills:

2.f.1 **Respect** patients' rights and involve them and /or their caretakers in management decisions.

2.f.2 **Adopt** an empathic and holistic approach to the patients and their problems.

2.f.3 **Recognize** the important role played by other health care

3 **Recognize** the important role played by other health care professions in patients' management and refer patients to appropriate health facility at the appropriate stage.

3- Contents

Rheumatology			Lectures 4.6% = 10
			Clinical 4.4% =16
Introduction of immunology & its disorders .	2	4	
Approach to the patient with locomotor disease & rheumatoid arthritis .	2	6	
Vasculitis & systemic lupus .	2	4	
Hyperuricemia, osteoarthritis , myositis .	2	2	
Dermatological disease	10	-	
Immunological diseases	10		

METHODS USED:

- Modified lectures.
- Small group discussions
- Clinical rounds.
- Problem solving .
- Self learning

Method	Evidence	ILOs
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Modified lectures	CDs of lectures including (video films)	2.a.1- 2.a.6 2.e.1-2.e.7
Clinical rounds	Pictures involved in the file of internal medicine	2.b.1- 2.b.6 2.d.1- 2.d.3 2.c.1-2.c.2 2.f.1-2.f.3
Small group discussions	Sheats of student groups	2.a.1- 2.a.6 2.e.1-2.e.7
Self learning	Case study sheets	2.a.1- 2.a.6
Problem solving	Case scenarios	2.e. 1 -2.e.7

TEACHING PLAN:Lectures: 2 hs /week .Practical classes: 1 hs/week .

Lectures		practical	Total
2hr/week		1hr /week	
Total	30	30	60

5- Students Assessment methods:5-A) **ATTENDANCE CRITERIA:** using log book

1. Practical attendance
2. Small group attendance
3. Lectures

5-B Students Assessment Methods

ما تقيسة من مخرجات التعلم المستهدفة	الطريقة	م
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To assess knowledge and understanding & intellectual skills: From 2.a.1.....2.a.6 . and 2.b.1.2.b.6 2.e.1....2.e.7.	Written examination including short essay case study, MCQ examination	1
To assess knowledge and understanding, intellectual skills & General & transferable skills From 2.a.1.....2.a.6 and 2.b.1. ....2.b.6 2.e.1....2.e.7 2.f.1....2.f.3	Oral examination	2
To assess knowledge and understanding, intellectual skills & practical and clinical skills and General & transferable skills: 2.a.1.....2.a.6., 2.b.1.....2.b.6 2.e.1.....2.e.7 2.c.1.....2.c.2	Practical & clinical examination	3

D) Weighting System: the first semester papers

Examination	% of Total Marks	Marks allocated
1- End-different branches examination : Define, complete, true & false , Enumerate, , MCQs,...)	20%	90
2- Final exam: a- Written b- Oral....c,clinical	40% 9 % 20%	180 40 90
Dermatology		50
Total		450

- **The minimum passing score is 200 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.

6- List of references:

6.1- Basic materials:

Hand out of lectures prepared by staff Collected in branches .

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:

- Department lectures halls:5
- skill lab room 1
- black and white boards
- library
- in patient rooms
- data show

Course coordinator: prof /dr fawzi megahid .

Head of department: prof /dr Atef I brahim

Date: 9/2013

Benha University
Faculty of Medicine
Department of Obstetrics and Gynecology

Course Specifications

Course title: *Obstetrics and Gynecology_1*
 (Code) :OBS 601

Academic Year (2013– 2014)

- 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 /9/2013.

A) Basic Information:

- Allocated marks: 250 marks
- Course duration: 9 weeks of teaching
- Teaching hours:

1- Theoretical	60
2- clinical	60

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.
- to provide essential practical, clinical, professional and communication skills about basic health care of females in different age groups (prepubertal, pubertal, childbearing, perimenopausal, and menopausal).

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. Mention** the basic physiological changes of pregnancy and the basic principles of antenatal care (A.N.C).
- 2.a.4. 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.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. Demonstrate** the normal labor appropriately and identify abnormal cases requiring referral, through clinical symptoms and signs and partograms.
- 2.b.3. Examine** the female model (skill lab) to be oriented with different changes during labour.

2.c. Professional Attitude and Behavioral skills:

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.d. Communication skills:

By the end of the program the graduate will 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. 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.2. 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- COURSE CONTENTS:

Subject
Gynecological history & exam.

Gynecological Anatomy

(vulva, vagina, uterus, tubes, ovary) Pelvic floor, perineum, anal canal, ureter
mutilation

Development & maleformation of the genital tract**Disorder of sex development**

congenital adrenal hyperplasia& androgen insensitivity syndrome

Disorder of growth and puberty**Menstrual cycle and its disorders**

physiology & Amenorrhoea & dysmenorrhea
& DUB & Premenstrual syndrome

Genital infections

vaginal discharge & Sexually transmitted disease &
PID& T.B& Pyometra& Pelvic pain acute chronic

Obstetric history& exam.**obstet Anatomy**

bony pelvis & fetal head Engagement of fetal head

placenta Liquor amni

development & circulation & Function

Physiology of pregnancy

endocrine hemodynamic cardiorespiratory genital tract breast

Preparing for pregnancy supplement advise general health advise**Diagnosis of pregnancy**

dating of pregnancy -U/ S assessment of fetal growth

Booking visit

antenatal care

Infections disease in pregnancy**labor**

Physiology & Mechanism & Management of normal labor fetal -surveillance
in labor

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: 1- Student researchs 2- Student power point presentations 3- Students case studies	2.a.1-----2.a.8 2.b.1.----2.b.4 2.e.1.----2.e.3

Assessment tools

Tool	Purpose (ILOs)
Written examination	To assess knowledge acquisition, including MCQs and problem solving
Oral examination	To assess understanding and stability of knowledge given, attitude and presentation.
Practical examination	To assess practical skills.

TEACHING PLAN:

Lectures : 60

I-B PRACTICAL CLASSES Time plan:

	Hours / week	Total hours
1- Lectures	6.5 hrs. /week for 9 weeks	60
2- clinical	6.5 hrs./week for 9 weeks	60
Total	6.5 hrs. /week for 9 weeks For both	120

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) TIME SCHEDULE:

Exam	Week
1- Assessment 1 (<i>end-round</i> formative exam)	Every 4wks.
2- Assessment 2 (<i>end round</i> summative exam)	Every 4 wks.
3- Power point presentation	Once/round
4- Research.	Once/round
5-Final exam.	

5-c) Weighting System:

Examination	Marks allocated	Description
1- Assessment 1 (<i>end-round</i> formative exam)	0	MCQs, complete, true & false, spots identification
2- Assessment 2 (<i>end round</i> summative exam) a- MCQ b- SKILL LAB c- X Ray, US,	45	MCQs, complete, true & false, spots identification

ENDOSCOPY IMAGES		
3-Power point presentation and Research.	5	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	75 75 25 25 25	Questions which demands short answers Select 1 session 1 session Spot identification and its related questions
Total	250	

• **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. Diao 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](http://UpToDate.com)

7- FACILITIES REQUIRED FOR TEACHING AND LEARNING:

- 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.
- Models

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 Obstetrics and Gynecology

Course Specifications

Course title: *Obstetrics and Gynecology_2*
 (Code) : OBS 602

Academic Year (2013– 2014)

- Department offering the course : *Obstetrics and Gynecology*
- academic year of M.B.& B.Ch. program 6th year
- Date of specification approval :
 - Department council, date: 15 /9/2013.

A) Basic Information:

- Allocated marks: 250 marks
- Course duration: 9 weeks of teaching
- Teaching hours:

1- Theoretical	60
2- clinical	60

B) Professional Information:

1- Overall Aim of the Course:

- 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. Explain** the magnitude of the infertility problem, management of AUB conditions, management of STDs and different contraceptive methods.
- 2.a.2. 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.3. List** 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.4. Describe** complications which may occur during labour (1st, 2nd and 3rd stage) or puerperium (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. 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.2. 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 skills:

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

- 2.c.1. Adopte** an emphatic and holistic approach to patients and their problems.

2.d. Communication skills:

By the end of the program the graduate will 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, Sonicaid, 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- COURSE CONTENTS:

Subject
<u>Subfertility and reproductive medicine</u> PCO & Hirsutism & Endometriosis Female Subfertility & Male Subfertility Assisted reproduction & Ovarian hyperstimulation syndrome & Female sexual dysfunction Male sexual dysfunction
Menopause
<u>Urogynecology</u> urinary symptom & Incontinence of urine & Genito-urinary fistulas, Recto-vaginal fistula
<u>Genital displacement</u> Genital prolapse & Retroversion and retroflexion, & inversion of uterus
<u>Benign Neoplasms of genital tract</u> vulva, vulval dermatosis vagina & cervix & uterine myoma & Adenomyosis & uterine polyps & ovary neoplasm
<u>Cancer screening in gynecology</u> <u>Malignant Neoplasms of genital tract</u> vulva, vagina cervix uterus ovary Choriocarcinoma pregnancy with Fibroid , ovarian tumour, cancer cervix
<u>Postmenopausal bleeding</u>
<u>Contraception</u> physiological, mechanical, and chemical) Hormonal contraception IUD emergency contraception, female sterilization
<u>OPERATIVE</u> urethric injury bladder urethral injury Old perineal tear Hysterectomy (abdominal), vaginal Myomectomy, D&C Laparoscopy, hysteroscopy
US in gyn HSG
Obstetric history & exam.
Minor symptom of pregnancy

Hyperemesis gravidarum**Bleeding in early preg**

Abortion Ectopic preg. V . Mole

○ **antepartum Hge**

P . Previa Accidental haemorrhage

Medical disorders with pregnancy**Hypertensive disorder with preg**

preeclampsia eclampsia Anemia renal tract infection cystitis Pyelitis DM

Intrauterine fetal death**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

Infections disease in pregnancy**Multiple preg .****Abnormal presentation &position**

O . P - Shoulder presentation -Face presentation & brow presentation- - Breech presentation

Obstructed . labor .

CPD Soft tissue obst .

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

Postnatal care Normal. puerperium .puerperal pyrexia

Fetal birth injuries

Neonatal asphyxia

Analgnesia& anaesthesia in obstet

. abdominal pain in pregnancy

. Uterus not corresponding to date of amaenorrhea

Maternal & perinatal mortality

Operative obstetrics

Induction of lab Instrumental deliveries episiotomy perineal tear C . S

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).
- 4- Outpatient & emergency visits.
- 5- 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: <ul style="list-style-type: none"> • Student researchs • Student power point presentations • Students case studies 	2.a.1-----2.a.8 2.b.1-----2.b.4 2.e.1-----2.e.3

Assessment tools

Tool	Purpose (ILOs)
Written examination	To assess knowledge acquisition, including MCQs and problem solving
Oral examination	To assess understanding and stability of knowledge given, attitude and presentation.
Practical examination	To assess practical skills.

TEACHING PLAN:**Lectures : 108****I-B PRACTICAL CLASSES Time plan:**

	Hours / week	Total hours
1- Lectures	6.5 hrs. /week for 9 weeks	60
2- clinical	6.5 hrs./week for 9 weeks	60
Total	6.5 hrs. /week for 9 weeks For both	120

5- STUDENTS ASSESSMENT METHODS:**5-A) Attendance criteria:**

4. Lectures (at least 50% attendance).
5. Practical (at least 75% attendance).
6. Small group attendance.

5-B) TIME SCHEDULE:

Exam	Week
1- Assessment 1 (<i>end-round</i> formative exam)	Every 4 wks.
2- Assessment 2 (<i>end round</i> summative exam)	Every 4 wks.
3- Power point presentation	Once/round
4- Research.	Once/round
5-Final exam.	

5-c) Weighting System:

Examination	Marks allocated	Description
1- Assessment 1 (<i>end-round</i> formative exam)	0	MCQs, complete, true & false, spots identification
2- Assessment 2 (<i>end round</i> summative exam) d- MCQ e- SKILL LAB f- X Ray, US, ENDOSCOPY IMAGES	45	MCQs, complete, true & false, spots identification
3-Power point presentation and Research.	5	Media for the power point and how to present and how to write?
4-Final exam: f. Short assay g. MCQs h. Oral i. Clinical j. OSCE	75 50 25 25 25	Questions which demands short answers Select 1 session 1 session Spot identification and its related questions
Total	250	

- **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:

2. 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. Diao El mowafi.
- 4.Operative Gynecology & obstetrics by Prof. Dr. Kamal Fahmy.

Recommended books:

2. 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.

9. Gynecology by ten teachers by Ashmonga, edition 18.

10. Obstetrics by ten teachers by Philip N. Baker, edition 18.

6.4- Periodicals, Web sites, etc:

- <http://www.medscape.com>.
- <http://www.pubmed.com>.
- <http://sciencedirect.com>.
- [http:// Up To date. com](http://UpToDate.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.
- Models

Course coordinator: Prof. Dr. Mahmoud Rezaq 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 I (General)

Code: Sur 603

Academic Year (2013 – 2014)

- **Department offering the course:** General surgery department.
- **Academic year of M.B. & B.Ch. program:** 6th year
- **Date of specification approval:**
 - Department council by date 1/10/2013.

A- Basic Information

- **Allocated marks:** 250 marks.
- **Course duration:** 3 weeks of teaching.
- **Teaching hours:**

1- Theoretical	30 hrs
2- Practical (clinical)	30 hrs

B- Professional Information

1 – Overall Aims of Course:

- To **Educate** students the basic knowledge in the field of the general surgery.
- To **provide** the students with practical , clinical and communication skills to reach the diagnosis and choose the best treatment.

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. mention the surgical developmental disorders associated with common clinical conditions.

2.a.3. 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 general surgical disease which may be met within common practice and the life threatening conditions.

2.a.5. Mention the indications, contraindications, the relative advantages and disadvantages of various therapeutic modalities 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.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. Perform routine technical procedures, diagnostic and therapeutic.

2.b.5. 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 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 & tutorial)
1	Vascular surgery including arterial, venous and lymphatic systems	12	6	6
2	Principles of plastic surgery	12	6	6
3	Principles of oncology	3	2	1
4	Hernia and inguino-scrotal conditions	10	5	5
5	Surgical infections Water and electrolyte imbalance	5	2	3
6	Swellings and cysts	12	6	6
7	Nutrition and obesity Imaging and LASER in surgery	3	2	1
8	Clinical audit and surgical ethics	3	1	2
	Total	60	30	30

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
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Modified lectures	CDs of lectures including (video films, brain storming, problem solving, etc.....)	2.a.1 ---- 2.a.6
Clinical classes	Clinical rounds on patients & x- rays Basic surgical skills	2.b.1----2.b.5
Small group discussions	Demonstration (photographs and Video films).	2.a.1----2.a.6
Problem solving	Case scenarios	2.e.1----2.e.5
Outpatient attendance	Attendance criteria	2.b.1----2.b.5 2.c.1----2.c.4 2.d.1----2.d.4 2.f.1-----2.f.4

4.2. Teaching plan:

Lectures: One group of students. 5 times /week, time from 12 p.m. to 2 p.m.

Tutorials: Division of the students into 3 groups.

5 times /week, time from 9 a.m. to 10 a.m.

Clinical classes: Division of the students into 3 groups.

5 times /week, time from 10:30 a.m. to 11:30 a.m.

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.6) & intellectual skills (2.e.1-----2.e.5)
Oral examination: • Oral cards system	To assess knowledge (2.a.1----- 2.a.6) , intellectual skills (2.e.1-----2.e.5) & general & transferable skills (2.f.1 -----2.f.4)

Practical & clinical examination OPSE & OSCE systems.	To assess Practical & clinical skills (2.b.1.---- 2.b.5) Professional skills & attitude (2.c.1----2.c.4) & Communication skills (2.d.1 ----2.d.4)

5.C. Time schedule:

Exam	Week
1- Mid-course exam	2 nd
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-course exam	37.5	15%
2- Final exam:		
a- Written:	125	50%
b- Practical:	50	20%
c- Oral:	25	10%
3- Assignment and other activities:	12.5	5%
Total	250	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-course exam	MCQs & true and false
2- Final exam:	
a- Written:	MCQs, short essay questions & problem solving
b- Practical:	Case study (1 long case & 2 short cases)
c- Oral:	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 & Sydney & 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.

Head of Department **Prof Dr Hassan Elsweny**

Date: 1-9-2013



Benha University
Faculty of Medicine
Department of General Surgery

Course Specification

Course title: General surgery II (Urology & Breast)

Code: Sur 604

Academic Year (2013 – 2014)

- **Department offering the course:** General surgery department.
- **Academic year of M.B. & B.Ch. program:** 6th year
- **Date of specification approval:**
 - Department council by date 1/9/2013.

A- Basic Information

- **Allocated marks:** 100 marks.
- **Course duration:** 3 weeks of teaching.
- **Teaching hours:**

1- Theoretical	30 hrs
2- Practical (clinical)	30 hrs

B- Professional Information

1 – Overall Aims of Course:

- To **Educate** students the basic knowldge in the field of the general surgery.
- To **provide** the students with practical , clinical and communication skills to reach the diagnosis and choose the best treatment.

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 breast and urinary system.

2.a.2. state the surgical developmental disorders of breast and urinary system.

2.a.3. Classify the surgical problems as congenital, traumatic, inflammatory and neoplastic that belongs to breast and urinary system.

2.a.4. Identify the risk factors, clinical picture, differential diagnosis, complications and investigations of cancer breast.

2.a.5. Point out the indications, contraindications, the relative advantages and disadvantages of various therapeutic modalities for different breast diseases.

2.a.6. Identify proper methods of surgical intervention for managing breast and urinary disorders.

2.b.practical and clinical skills:

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

2.b.1. Formulate specific clinical sheets for breast and uro-surgical diseases

2.b.2. Perform surgical assessment (examination & evaluation) for a patient having breast and urinary disorders to reach the provisional diagnosis.

2.b.3. Demonstrate the routine and specific investigations of breast and urinary disorders to reach the final diagnosis.

2.b.4. Manage different breast and urinary diseases.

2.b.5. Write safe prescriptions of different types of drugs for different breast and urinary disorders.

2.c. Professional attitude and behavioral skills:

2.c.1. Demonstrate respect for patient's 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 breast and urinary disorders for healthy individuals, for patients as well as their families.

2.c.4. Select the most appropriate and cost effective therapeutic procedures for various breast and urinary disorders.

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 of breast and urinary disorders.

2.e.2. Generate a list of initial diagnostic hypotheses for breast and urinary disorders.

2.e.3. Design an initial course of management for stabilization of patients with breast and urinary disorders.

2.e.4. Classify factors that place individuals at risk for various breast and urinary disorders to determine strategies for appropriate response.

2.e.5. *Prioritize* the medical problems related to different breast and urinary disorders 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 & tutorial)
1	Anatomy of the breast Congenital anomalies of the breast	12	6	6
2	Breast neoplasms	12	6	6
3	Symptoms and investigations of urinary system	3	2	1
4	Urinary tract injuries and inflammation Urinary stones and obstructive uropathy	10	5	5
5	Breast trauma and inflammation	5	2	3
6	Tumors of urinary tract and prostate	12	6	6
7	Congenital anomalies of the urinary system	3	2	1
8	Management of different breast symptoms	3	1	2
	Total	60	30	30

4. Teaching and Learning Methods

4.1. Methods used:

- 1 Modified lectures and demonstrations.
- 2 Clinical rounds.
- 3 Small group discussion.

- 4 Outpatient clinics.
5 Problem solving.

Method	Evidence	ILOs
Modified lectures	CDs of lectures including (video films, brain storming, problem solving, etc.....)	2.a.1 ---- 2.a.6
Clinical classes	Clinical rounds on patients & x- rays Basic surgical skills	2.b.1----2.b.5
Small group discussions	Demonstration (photographs and Video films).	2.a.1----2.a.6
Problem solving	Case scenarios	2.e.1----2.e.5
Outpatient & emergency attendance	Attendance criteria	2.b.1----2.b.5 2.c.1----2.c.4 2.d.1----2.d.4 2.f.1-----2.f.4

4.2. Teaching plan:

Lectures: One group of students. 5 times /week, time from 12 p.m. to 2 p.m.

Tutorials: Division of the students into 3 groups.

5 times /week, time from 9 a.m. to 10 a.m.

Clinical classes: Division of the students into 3 groups.

5 times /week, time from 10:30 a.m. to 11:30 a.m.

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	To assess knowledge (2.a.1----- 2.a.6) & intellectual skills (2.e.1-----2.e.5)

studies and multiple choice questions	
Oral examination: • Oral cards system	To assess knowledge (2.a.1----- 2.a.6), intellectual skills (2.e.1.-----2.e.5) & general & transferable skills (2.f.1 -----2.f.4)
Practical & clinical examination OPSE & OSCE systems.	To assess Practical & clinical skills (2.b.1.---- 2.b.5) Professional skills & attitude (2.c.1----2.c.4) & Communication skills (2.d.1 ----2.d.4)

5.C. Time schedule:

Exam	Week
1- Mid-course exam	2 nd
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-course exam	15	15%
2- Final exam:		
a- Written:	50	50%
b- Practical:	20	20%
c- Oral:	10	10%
3- Assignment and other activities:	5	5%
Total	100	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-course exam	MCQs & true and false
2- Final exam:	
a- Written:	MCQs, short essay questions & problem solving
b- Practical:	Case study (1 long case & 2 short cases)
c- Oral:	2 sessions (oral and operative)

6- Assignment and other activities:	Student logbook.
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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 & Sydney & 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.

Head of Department **Prof Dr Hassan Elsweny**

Date: 1-9-2013



Benha University
Faculty of Medicine
Department of General Surgery

Course Specification

Course title: General surgery III (GIT 1)

Code: SUR 605

Academic Year (2013 – 2014)

- **Department offering the course:** General surgery department.
- **Academic year of M.B. & B.Ch. program:** 6th year
- **Date of specification approval:**
 - Department council by date 1/10/2013.

A- Basic Information

- **Allocated marks:** 150 marks.
- **Course duration:** 3 weeks of teaching.
- **Teaching hours:**

1- Theoretical	30 hrs
2- Practical (clinical)	30 hrs

B- Professional Information

1 – Overall Aims of Course:

- To **Educate** students the basic knowledge in the field of the general surgery.
- To **provide** the students with practical , clinical and communication skills to reach the diagnosis and choose the best treatment.

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 upper GIT.

2.a.2. list the surgical developmental disorders of upper GIT.

2.a.3. Classify the surgical problems as congenital, traumatic, inflammatory and neoplastic that belongs to upper GIT.

2.a.4. Identify the risk factors, clinical picture, differential diagnosis, complications and investigations of upper GIT disorders.

2.a.5. Point out the indications, contraindications, the relative advantages and disadvantages of various therapeutic modalities for different upper GIT diseases.

2.a.6. Identify proper methods of surgical intervention for managing upper GIT disorders.

2.b.practical and clinical skills:

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

2.b.1. Formulate specific clinical sheets for upper GIT diseases

2.b.2. Perform surgical assessment (examination & evaluation) for a patient having upper GIT disorders to reach the provisional diagnosis.

2.b.3. Demonstrate the routine and specific investigations of upper GIT disorders to reach the final diagnosis.

2.b.4. Manage different upper GIT diseases.

2.b.5. Write safe prescriptions of different types of drugs for different upper GIT disorders.

2.c. Professional attitude and behavioral skills:

2.c.1. Demonstrate respect for patient's 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 upper GIT disorders for healthy individuals, for patients as well as their families.

2.c.4. Select the most appropriate and cost effective therapeutic procedures for various upper GIT disorders.

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 of upper GIT disorders.

2.e.2. Generate a list of initial diagnostic hypotheses for upper GIT disorders.

2.e.3. Design an initial course of management for stabilization of patients with upper GIT diseases.

2.e.4. Classify factors that place individuals at risk for various upper GIT disorders to determine strategies for appropriate response.

2.e.5. *Prioritize* the medical problems related to different upper GIT disorders 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 & tutorial)
1	Anatomy of upper GIT	3	2	1
2	Physiology of upper GIT	3	2	1
3	Esophageal disorders	12	6	6
4	Salivary system disorders	10	5	5
5	Vermiform Appendix	5	2	3
6	Diseases of the stomach	12	6	6
7	Pancreas	12	6	6
8	Peritoneum	3	1	2
Total		60	30	30

4. Teaching and Learning Methods

4.1. Methods used:

- 1 Modified lectures and demonstrations.
- 2 Clinical rounds.
- 3 Small group discussion.
- 4 Outpatient clinics.
- 5 Problem solving.

Method	Evidence	ILOs
Modified lectures	CDs of lectures including (video films, brain storming, problem solving, etc.....)	2.a.1 ---- 2.a.6
Clinical classes	Clinical rounds on patients & x- rays Basic surgical skills	2.b.1----2.b.5

Small group discussions	Demonstration (photographs and Video films).	2.a.1----2.a.6
Problem solving	Case scenarios	2.e.1----2.e.5
Outpatient & emergency attendance	Attendance criteria	2.b.1----2.b.5 2.c.1----2.c.4 2.d.1----2.d.4 2.f.1-----2.f.4

4.2. Teaching plan:

Lectures: One group of students. 5 times /week, time from 12 p.m. to 2 p.m.

Tutorials: Division of the students into 3 groups.

5 times /week, time from 9 a.m. to 10 a.m.

Clinical classes: Division of the students into 3 groups.

5 times /week, time from 10:30 a.m. to 11:30 a.m.

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.6) & intellectual skills (2.e.1-----2.e.5)
Oral examination: • Oral cards system	To assess knowledge (2.a.1----- 2.a.6), intellectual skills (2.e.1-----2.e.5) & general & transferable skills (2.f.1 -----2.f.4)
Practical & clinical examination OPSE & OSCE systems.	To assess Practical & clinical skills (2.b.1.---- 2.b.5) Professional skills & attitude (2.c.1----2.c.4) & Communication skills (2.d.1 ----2.d.4)

5.C. Time schedule:

Exam	Week
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1- Mid-course exam	2 nd
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-course exam	22.5	15%
2- Final exam:		
a- Written:	75	50%
b- Practical:	30	20%
c- Oral:	15	10%
3- Assignment and other activities:	7.5	5%
Total	150	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-course exam	MCQs & true and false
2- Final exam:	
a- Written:	MCQs, short essay questions & problem solving
b- Practical:	Case study (1 long case & 2 short cases)
c- Oral:	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 & Sydney & 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.

Head of Department **Prof Dr Hassan Elsweny**

Date: 1-9-2013



Benha University
Faculty of Medicine
Department of General Surgery

Course Specification

Course title: General surgery IV (GIT 2)

Code: SUR 606

Academic Year (2013 – 2014)

- **Department offering the course:** General surgery department.
- **Academic year of M.B. & B.Ch. program:** 6th year
- **Date of specification approval:**
 - Department council by date 1/10/2013.

A- Basic Information

- **Allocated marks:** 150 marks.
- **Course duration:** 3 weeks of teaching.
- **Teaching hours:**

1- Theoretical	30 hrs
2- Practical (clinical)	30 hrs

B- Professional Information

1 – Overall Aims of Course:

- To **Educate** students the basic knowldge in the field of the general surgery.
- To **provide** the students with practical , clinical and communication skills to reach the diagnosis and choose the best treatment.

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 lower GIT and hepato-biliary systems.

2.a.2. state the surgical developmental disorders of lower GIT and hepato-biliary systems.

2.a.3. Classify the surgical problems as congenital, traumatic, inflammatory and neoplastic that belongs to lower GIT and hepato-biliary systems.

2.a.4. Identify the risk factors, clinical picture, differential diagnosis, complications and investigations of lower GIT and hepato-biliary disorders.

2.a.5. Point out the indications, contraindications, the relative advantages and disadvantages of various therapeutic modalities for different lower GIT and hepato-biliary diseases.

2.a.6. Identify proper methods of surgical intervention for managing lower GIT and hepato-biliary disorders.

2.b.practical and clinical skills:

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

2.b.1. Formulate specific clinical sheets for lower GIT and hepato-biliary diseases

2.b.2. Perform surgical assessment (examination & evaluation) for a patient having lower GIT and hepato-biliary disorders to reach the provisional diagnosis.

2.b.3. Demonstrate the routine and specific investigations of lower GIT and hepato-biliary disorders to reach the final diagnosis.

2.b.4. Manage different lower GIT and hepato-biliary diseases.

2.b.5. Write safe prescriptions of different types of drugs for different lower GIT and hepato-biliary disorders.

2.c. Professional attitude and behavioral skills:

2.c.1. Demonstrate respect for patient's 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 upper GIT disorders for healthy individuals, for patients as well as their families.

2.c.4. Select the most appropriate and cost effective therapeutic procedures for various lower GIT and hepato-biliary disorders.

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 of lower GIT and hepato-biliary disorders.

2.e.2. Generate a list of initial diagnostic hypotheses for lower GIT and hepato-biliary disorders.

2.e.3. Design an initial course of management for stabilization of patients with lower GIT and hepato-biliary diseases.

2.e.4. Classify factors that place individuals at risk for various lower GIT and hepato-biliary disorders to determine strategies for appropriate response.

2.e.5. *Prioritize* the medical problems related to different lower GIT and hepato-biliary disorders 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 & tutorial)
1	Gall bladder diseases	10	5	5
2	Liver diseases	10	5	5
3	Portal hypertension	5	2	3
4	Disorders of spleen	5	3	2
5	Small intestine	5	2	3
6	Intestinal obstruction	10	5	5
7	Large intestine	10	5	5
8	Anal canal	5	3	2
	Total	60	30	30

4. Teaching and Learning Methods**4.1. Methods used:**

- 1 Modified lectures and demonstrations.
- 2 Clinical rounds.
- 3 Small group discussion.
- 4 Outpatient clinics.
- 5 Problem solving.

Method	Evidence	ILOs
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Modified lectures	CDs of lectures including (video films, brain storming, problem solving, etc.....)	2.a.1 ---- 2.a.6
Clinical classes	Clinical rounds on patients & x- rays Basic surgical skills	2.b.1----2.b.5
Small group discussions	Demonstration (photographs and Video films).	2.a.1----2.a.6
Problem solving	Case scenarios	2.e.1----2.e.5
Outpatient & emergency attendance	Attendance criteria	2.b.1----2.b.5 2.c.1----2.c.4 2.d.1----2.d.4 2.f.1-----2.f.4

4.2. Teaching plan:

Lectures: One group of students. 5 times /week, time from 12 p.m. to 2 p.m.

Tutorials: Division of the students into 3 groups.

5 times /week, time from 9 a.m. to 10 a.m.

Clinical classes: Division of the students into 3 groups.

5 times /week, time from 10:30 a.m. to 11:30 a.m.

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.6) & intellectual skills (2.e.1-----2.e.5)
Oral examination: • Oral cards system	To assess knowledge (2.a.1----- 2.a.6) , intellectual skills (2.e.1-----2.e.5) & general & transferable skills (2.f.1 -----2.f.4)

Practical & clinical examination OPSE & OSCE systems.	To assess Practical & clinical skills (2.b.1.---- 2.b.5) Professional skills & attitude (2.c.1----2.c.4) & Communication skills (2.d.1 ----2.d.4)

5.C. Time schedule:

Exam	Week
1- Mid-course exam	2 nd
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-course exam	22.5	15%
2- Final exam:		
a- Written:	75	50%
b- Practical:	30	20%
c- Oral:	15	10%
3- Assignment and other activities:	7.5	5%
Total	150	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-course exam	MCQs & true and false
2- Final exam:	
a- Written:	MCQs, short essay questions & problem solving
b- Practical:	Case study (1 long case & 2 short cases)
c- Oral:	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.

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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.

Head of Department **Prof Dr Hassan Elsweny**

Date: 1-9-2013



Benha University
Faculty of Medicine
Department of General Surgery

Course Specification

Course title: General surgery V (Head and Neck)

Code: SUR 607

Academic Year (2013 – 2014)

- **Department offering the course:** General surgery department.
- **Academic year of M.B. & B.Ch. program:** 6th year
- **Date of specification approval:**
 - Department council by date 1/10/2013.

A- Basic Information

- **Allocated marks:** 100 marks.
- **Course duration:** 3 weeks of teaching.
- **Teaching hours:**

1- Theoretical	30 hrs
2- Practical (clinical)	30 hrs

B- Professional Information

1 – Overall Aims of Course:

- To **Educate** students the basic knowledge in the field of the general surgery.
- To **provide** the students with practical , clinical and communication skills to reach the diagnosis and choose the best treatment.

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 head and neck.

2.a.2. list the surgical developmental disorders of head and neck.

2.a.3. Classify the surgical problems as congenital, traumatic, inflammatory and neoplastic that belongs to head and neck.

2.a.4. Identify the risk factors, clinical picture, differential diagnosis, complications and investigations of head and neck disorders.

2.a.5. Point out the indications, contraindications, the relative advantages and disadvantages of various therapeutic modalities for different head and neck diseases.

2.a.6. Identify proper methods of surgical intervention for managing head and neck disorders.

2.b.practical and clinical skills:

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

2.b.1. Formulate specific clinical sheets for head and neck diseases

2.b.2. Perform surgical assessment (examination & evaluation) for a patient having head and neck disorders to reach the provisional diagnosis.

2.b.3. Demonstrate the routine and specific investigations of head and neck disorders to reach the final diagnosis.

2.b.4. Manage different head and neck diseases.

2.b.5. Write safe prescriptions of different types of drugs for different head and neck disorders.

2.c. Professional attitude and behavioral skills:

2.c.1. Demonstrate respect for patient's 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 upper GIT disorders for healthy individuals, for patients as well as their families.

2.c.4. Select the most appropriate and cost effective therapeutic procedures for various head and neck disorders.

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 of head and neck disorders.

2.e.2. Generate a list of initial diagnostic hypotheses for head and neck disorders.

2.e.3. Design an initial course of management for stabilization of patients with head and neck diseases.

2.e.4. Classify factors that place individuals at risk for various head and neck disorders to determine strategies for appropriate response.

2.e.5. *Prioritize* the medical problems related to different head and neck disorders 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 & tutorial)
1	Thyroid gland	15	8	7
2	Parathyroid gland	5	3	2
3	Neck swellings	15	7	8
4	Head trauma	5	3	2
5	Brain tumors	5	3	2
6	Peripheral nerve injury	5	2	3
7	hydrocephalus	5	2	3
8	Spine disorders	5	2	3
	Total	60	30	30

4. Teaching and Learning Methods

4.1. Methods used:

- 1 Modified lectures and demonstrations.
- 2 Clinical rounds.
- 3 Small group discussion.
- 4 Outpatient clinics.
- 5 Problem solving.

Method	Evidence	ILOs
Modified lectures	CDs of lectures including (video films, brain storming, problem solving, etc.....)	2.a.1 ---- 2.a.6

Clinical classes	Clinical rounds on patients & x- rays Basic surgical skills	2.b.1----2.b.5
Small group discussions	Demonstration (photographs and Video films).	2.a.1----2.a.6
Problem solving	Case scenarios	2.e.1----2.e.5
Outpatient & emergency attendance	Attendance criteria	2.b.1----2.b.5 2.c.1----2.c.4 2.d.1----2.d.4 2.f.1----2.f.4

4.2. Teaching plan:

Lectures: One group of students. 5 times /week, time from 12 p.m. to 2 p.m.

Tutorials: Division of the students into 3 groups.

5 times /week, time from 9 a.m. to 10 a.m.

Clinical classes: Division of the students into 3 groups.

5 times /week, time from 10:30 a.m. to 11:30 a.m.

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.6) & intellectual skills (2.e.1-----2.e.5)
Oral examination: • Oral cards system	To assess knowledge (2.a.1----- 2.a.6), intellectual skills (2.e.1-----2.e.5) & general & transferable skills (2.f.1 -----2.f.4)
Practical & clinical examination OPSE & OSCE	To assess Practical & clinical skills (2.b.1.---- 2.b.5) Professional skills & attitude (2.c.1----2.c.4) & Communication skills (2.d.1 ----2.d.4)

systems.	
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5.C. Time schedule:

Exam	Week
1- Mid-course exam	2 nd
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-course exam	15	15%
2- Final exam:		
a- Written:	50	50%
b- Practical:	20	20%
c- Oral:	10	10%
3- Assignment and other activities:	5	5%
Total	100	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-course exam	MCQs & true and false
2- Final exam:	
a- Written:	MCQs, short essay questions & problem solving
b- Practical:	Case study (1 long case & 2 short cases)
c- Oral:	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 & Sydney & 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.

Head of Department **Prof Dr Hassan Elsweny**

Date: 1-9-2013



Benha University
Faculty of Medicine
Department of General Surgery

Course Specification

Course title: special surgery I (Traumatology)

Code: SUR 608

Academic Year (2013 – 2014)

- **Department offering the course:** General surgery department.
- **Academic year of M.B. & B.Ch. program:** 6th year
- **Date of specification approval:**
 - Department council by date 1/10/2013.

A- Basic Information

- **Allocated marks:** 50 marks.
- **Course duration:** 3 weeks of teaching.
- **Teaching hours:**

1- Theoretical	30 hrs
2- Practical (clinical)	30 hrs

B- Professional Information

1 – Overall Aims of Course:

- To **Educate** students the basic knowledge in the field of the general surgery.
- To **provide** the students with practical , clinical and communication skills to reach the diagnosis and choose the best treatment.

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 triage system.
- 2.a.2. mention the management of shock.
- 2.a.3. Classify the different types of shock.
- 2.a.4. Identify the different causative agents of trauma.
- 2.a.5. Point out the guidelines of ATLS system.
- 2.a.6. Identify the different types of wounds.

2.b.practical and clinical skills:

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

- 2.b.1. Formulate specific clinical sheets for urgent management of trauma
- 2.b.2. Perform full surgical assessment for a traumatized patient to reach a clear plan of management.
- 2.b.3. Demonstrate the specific investigations of trauma in Iry survey.
- 2.b.4. Manage different types of trauma.
- 2.b.5. perform a complete plan in a stepwise manner for managing a traumatized patient.

2.c. Professional attitude and behavioral skills:

- 2.c.1. Demonstrate respect for patient's rights during handling and blood transfusion
- 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 road traffic accidents for healthy individuals, for patients as well as their families.
- 2.c.4. Select the most appropriate and cost effective therapeutic procedures for managing trauma in mass casualties.

2.d. Communication skills:

2.d.1. Establish good relations with other trauma team professionals regardless their degrees or rank.

2.d.2. Cope up with difficult situations as mass casualties.

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 of trauma.

2.e.2. Generate a list of initial diagnostic hypotheses for trauma patients.

2.e.3. Design an initial course of management for stabilization of patients with trauma.

2.e.4. Classify factors that place individuals at risk for trauma to determine strategies for appropriate response.

2.e.5. *Prioritize* the steps of management related to different types of trauma

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 & tutorial)

1	Triage system and mass casualties	5	3	2
2	Pathophysiology of trauma	5	3	2
3	Advanced trauma life supports systems	10	5	5
4	Wounds and wound healing	10	5	5
5	Blood transfusion	5	2	3
6	Shock and hemorrhage	10	5	5
7	Chest trauma	10	5	5
8	Cardiac arrest and	5	2	3
	Total	60	30	30

4. Teaching and Learning Methods

4.1. Methods used:

- 1 Modified lectures and demonstrations.
- 2 Clinical rounds.
- 3 Small group discussion.
- 4 Outpatient clinics.
- 5 Problem solving.

Method	Evidence	ILOs
Modified lectures	CDs of lectures including (video films, brain storming, problem solving, etc.....)	2.a.1 ---- 2.a.6
Clinical classes	Clinical rounds on patients & x- rays Basic surgical skills	2.b.1----2.b.5
Small group discussions	Demonstration (photographs and Video films).	2.a.1----2.a.6
Problem solving	Case scenarios	2.e.1----2.e.5
Outpatient & emergency attendance	Attendance criteria	2.b.1----2.b.5 2.c.1----2.c.4

		2.d.1----2.d.4 2.f.1-----2.f.4
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4.2. Teaching plan:

Lectures: One group of students. 5 times /week, time from 12 p.m. to 2 p.m.

Tutorials: Division of the students into 3 groups.

5 times /week, time from 9 a.m. to 10 a.m.

Clinical classes: Division of the students into 3 groups.

5 times /week, time from 10:30 a.m. to 11:30 a.m.

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.6) & intellectual skills (2.e.1-----2.e.5)
Oral examination: • Oral cards system	To assess knowledge (2.a.1----- 2.a.6), intellectual skills (2.e.1-----2.e.5) & general & transferable skills (2.f.1 ----2.f.4)
Practical & clinical examination OPSE & OSCE systems.	To assess Practical & clinical skills (2.b.1.---- 2.b.5) Professional skills & attitude (2.c.1----2.c.4) & Communication skills (2.d.1 ----2.d.4)

5.C. Time schedule:

Exam	Week
1- Mid-course exam	2 nd
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-course exam	7.5	15%
2- Final exam:		
a- Written:	25	50%
b- Practical:	10	20%
c- Oral:	5	10%
3- Assignment and other activities:	2.5	5%
Total	50	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-course exam	MCQs & true and false
2- Final exam:	
a- Written:	MCQs, short essay questions & problem solving
b- Practical:	Case study (1 long case & 2 short cases)
c- Oral:	2 sessions (oral and operative)
6- Assignment and other activities:	Student logbook.

6- List of References:**6.1- Basic materials:**

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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.

Head of Department **Prof Dr Hassan Elsweny**

Date: 1-9-3



Benha University
Faculty of Medicine
Department of General Surgery

Course Specification

Course title: special surgery II (Orthopedic)

Code: SUR 609

Academic Year (2013 – 2014)

- **Department offering the course:** General surgery department.
- **Academic year of M.B. & B.Ch. program:** 6th year
- **Date of specification approval:**
 - Department council by date 1/10/2013.

A- Basic Information

- **Allocated marks:** 50 marks.
- **Course duration:** 3 weeks of teaching.
- **Teaching hours:**

1- Theoretical	30 hrs
2- Practical (clinical)	30 hrs

B- Professional Information

1 – Overall Aims of Course:

- To **Educate** students the basic knowledge in the field of the general surgery.
- To **provide** the students with practical , clinical and communication skills to reach the diagnosis and choose the best treatment.

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 presentation of bone fractures and tumors.

2.a.2. list the management of different orthopedic disorders.

2.a.3. Classify the different types of bone fractures and tumors.

2.a.4. Identify the different bone deformities.

2.a.5. Point out the complications of bone fractures.

2.a.6. Identify the different modalities of treating bone fractures and tumors.

2.b.practical and clinical skills:

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

2.b.1. Formulate specific clinical sheets for orthopedic diseases

2.b.2. Perform full surgical assessment for the patients having bone diseases to reach a clear plan of management.

2.b.3. Demonstrate the specific investigations needed to be done for assessing bone tumors and different fractures.

2.b.4. Manage different types of bone fractures.

2.b.5. perform a complete plan in a stepwise manner for managing bone neoplasms.

2.c. Professional attitude and behavioral skills:

2.c.1. Demonstrate respect for patient's rights during examination and transfer

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 road traffic accidents for healthy individuals, for patients as well as their families.

2.c.4. Select the most appropriate and cost effective therapeutic procedures for managing bone fractures and tumors.

2.d. Communication skills:

2.d.1. Establish good relations with other trauma team professionals in cases of managing an orthopedic problem in a polytraumatized patient regardless their degrees or rank.

2.d.2. Cope up with difficult situations as crushed limbs.

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 of orthopedic disorders.

2.e.2. Generate a list of initial diagnostic hypotheses for bone fractures and tumors.

2.e.3. Design an initial course of management for stabilization of patients with bone diseases.

2.e.4. Classify factors that place individuals at risk for bone neoplasms to determine strategies for appropriate response.

2.e.5. *Prioritize* the steps of management related to different types of bone diseases

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 & tutorial)

1	Classification and complications of bone fractures	5	3	2
2	Treatment of bone fractures	5	3	2
3	Bone tumors	10	5	5
4	Bone inflammation	10	5	5
5	Open fractures	5	2	3
6	Fractures and dislocations of upper limb	10	5	5
7	Fractures and dislocations of upper limb	10	5	5
8	Deformities of bone and joints	5	2	3
	Total	60	30	30

4. Teaching and Learning Methods

4.1. Methods used:

- 1 Modified lectures and demonstrations.
- 2 Clinical rounds.
- 3 Small group discussion.
- 4 Outpatient clinics.
- 5 Problem solving.

Method	Evidence	ILOs
Modified lectures	CDs of lectures including (video films, brain storming, problem solving, etc.....)	2.a.1 ---- 2.a.6
Clinical classes	Clinical rounds on patients & x- rays Basic surgical skills	2.b.1----2.b.5
Small group discussions	Demonstration (photographs and Video films).	2.a.1----2.a.6
Problem solving	Case scenarios	2.e.1----2.e.5

Outpatient & emergency attendance	Attendance criteria	2.b.1----2.b.5 2.c.1----2.c.4 2.d.1----2.d.4 2.f.1-----2.f.4
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4.2. Teaching plan:

Lectures: One group of students. 5 times /week, time from 12 p.m. to 2 p.m.

Tutorials: Division of the students into 3 groups.

5 times /week, time from 9 a.m. to 10 a.m.

Clinical classes: Division of the students into 3 groups.

5 times /week, time from 10:30 a.m. to 11:30 a.m.

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.6) & intellectual skills (2.e.1.-----2.e.5)
Oral examination: • Oral cards system	To assess knowledge (2.a.1----- 2.a.6), intellectual skills (2.e.1.-----2.e.5) & general & transferable skills (2.f.1 -----2.f.4)
Practical & clinical examination OPSE & OSCE systems.	To assess Practical & clinical skills (2.b.1.---- 2.b.5) Professional skills & attitude (2.c.1----2.c.4) & Communication skills (2.d.1 ----2.d.4)

5.C. Time schedule:

Exam	Week
1- Mid-course exam	2 nd
2- Practical exam	At end of the course

3- Final exam	At end of the course
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5.D. Weighting of Assessments:

Examination	Marks allocated	% of total marks
1- Mid-course exam	7.5	15%
2- Final exam:		
a- Written:	25	50%
b- Practical:	10	20%
c- Oral:	5	10%
3- Assignment and other activities:	2.5	5%
Total	50	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-course exam	MCQs & true and false
2- Final exam:	
a- Written:	MCQs, short essay questions & problem solving
b- Practical:	Case study (1 long case & 2 short cases)
c- Oral:	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).
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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.

Head of Department **Prof Dr Hassan Elsweny**

Date: 1-9-2013



Benha University
Faculty of Medicine
Department of General Surgery

Course Specification

Course title: special surgery III (Operative)

Code: SUR 610

Academic Year (2013 – 2014)

- **Department offering the course:** General surgery department.
- **Academic year of M.B. & B.Ch. program:** 6th year
- **Date of specification approval:**
 - Department council by date 1/10/2013.

A- Basic Information

- **Allocated marks:** 50 marks.
- **Course duration:** 3 weeks of teaching.
- **Teaching hours:**

1- Theoretical	30 hrs
2- Practical (clinical)	30 hrs

B- Professional Information

1 – Overall Aims of Course:

- To **Educate** students the basic knowldge in the field of the general surgery.
- To **provide** the students with practical , clinical and communication skills to reach the diagnosis and choose the best treatment.

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 operative theatre components.

2.a.2. list the perioperative concerns and complications.

2.a.3. Describe the normal surgical anatomy of the human body

2.a.4. Discuss the basics of pre- and postoperative care.

2.a.5. Point out the complications and types of anesthesia.

2.a.6. 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 a simple draw of different operations

2.b.2. Observe the patient in the post-operative period.

2.b.3. Demonstrate the care of surgical drains and wound dressing.

2.b.4. Employe the patient in the pre-operative period (general and specific).

2.b.5. perform steps in different operative procedures.

2.c. Professional attitude and behavioral skills:

2.c.1. Demonstrate respect for patient's rights during perioperative period

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 infection and control.

2.c.4. Select the most appropriate and cost effective operative procedures for different surgical problems.

2.d. Communication skills:

2.d.1. Establish good relations with other operative team professionals regardless their degrees or rank.

2.d.2. Cope up with difficult situations as operative theatre accidents.

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 the operation, 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 managing common surgical diseases by the proper operative choice.

2.e.2. Generate a list of operative theatre safety measures.

2.e.3. Design a draw foe the components of the operative theatre.

2.e.4. Classify factors that place individuals at risk for perioperative complications.

2.e.5. *Prioritize* the steps of sterilization and operative safety

2.f. General and transferable skills:

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

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3. Course contents:

Topic		No. of hours		
		Total	Lectures	Practical (clinical & tutorial)
1	Surgical anatomy	10	5	5

2	Gastrointestinal procedures	10	5	5
3	Other abdomino-pelvic operations	10	5	5
4	Vascular and additional procedures	10	5	5
5	Anesthesia and pain management	5	2	3
6	Perioperative complications	5	2	3
7	Organ transplantation	5	3	2
8	Surgical drains	5	2	3
	Total	60	30	30

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-  Operating rooms.

Head of Department **Prof Dr Hassan Elsweny**

Date: 1-9-2013

Annexe, "2"

National Academic Reference Standards (NARS)

Medicine

January 2009 1st Edition

Table of Contents

Preface

Acknowledgements

Methodology

Introduction to Medical Education

National Academic Reference Standards

Glossary

References

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

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.

III. References

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Annexe,"3" :Program Courses vs Program ILOs matrix

2.a. Knowledge and Understanding

Program Courses		Program ILOs														
		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		
Anatomy I	ANT 101	x	x													
Anatomy II	ANT 102															
Anatomy III	ANT 103															
Anatomy IV	ANT 104															
Anatomy V	ANT 201															
Anatomy VI	ANT 202															
Anatomy VII	ANT 203															
Anatomy VIII	ANT 204															
Histology I	HIT 109	x														
Histology II	HIT 110															
Histology III	HIT209															
Histology IV	HIT210															
Physiology I	PSL 105	x														
Physiology II	PSL 106															
Physiology III	PSL 107															
Physiology IV	PSL 108															
Physiology V	PSL 205															
Physiology VI	PSL 206															
Physiology VII	PSL 207															
Physiology VIII	PSL 208															
Biochemistry I	BIC 111	x			x											
Biochemistry II	BIC 112															
Biochemistry III	BIC 211															
Biochemistry IV	BIC212															
English	ENG 114															x
Social Study I	SOC 213		x													
Social Study II	SOC 214															
Pathology I	PAT 301			x	x											
Pathology II	PAT 302															
Pharmacology I	PCL 303					x										
Pharmacology II	PCL 304															

Microbiology I Microbiology II	MIC 305 MIC 306				X								X				
Parasitology I Parasitology II	PAS 307 PAS 308				x												
Human Rights I Human Rights II	HR 309 HR 310												X				
Forensic med I Forensic med II	FNS 307 FNS 308								X				X				
Community med I Community med II Community med III Community med IV	COM401 COM402 COM403 COM404										X	X		X			
Ophthalmology I Ophthalmology II	OPIL 305 OPIL 306			x	x												
Ear,nose & throati Ear,nose &thraotII	ENT 309 ENT 310			x	x				x								
General med I General med II General med III General med IV General med V General medV I General med VII General med VIII	MED 503 MED 504 MED 505 MED 506 MED 507 MED 508 MED 509 MED 510			x	x			x	X								x
Pediatrics I Pediatrics II	PED 501 PED 502		x	x	x				x								x
Obs. & Gynecology I Obs. & Gynecology I I	OBS 601 OBS 602			x	x				X								x
General surgery I General surgery II General surgery III General surgery IV General surgery V General surgery VI General surgery VII General surgery VIII	SUR 603 SUR 604 SUR 605 SUR 606 SUR 607 SUR 608 SUR 609 SUR 610			x	X			x	X								X

2.b. Practical and Clinical Skills

Program ILOs		2.b.1	2.b.2	2.b.3	2.b.4	2.b.5	2.b.6	2.b.7	2.b.8
Program Courses									
Anatomy I Anatomy II Anatomy III Anatomy IV Anatomy V Anatomy VI Anatomy VII Anatomy VIII	ANT 101 ANT 102 ANT 103 ANT 104 ANT 201 ANT 202 ANT 203 ANT 204	X							
Histology I Histology II Histology III Histology IV	HIT 109 HIT 110 HIT209 HIT210	X							
Physiology I Physiology II Physiology III Physiology IV Physiology V Physiology VI Physiology VII Physiology VIII	PSL 105 PSL 106 PSL 107 PSL 108 PSL 205 PSL 206 PSL 207 PSL 208	X							
Biochemistry I Biochemistry II Biochemistry III Biochemistry IV	BIC 111 BIC 112 BIC 211 BIC212	X							
English	ENG 114								
Social Study I Social Study II	SOC 213 SOC 214								
Pathology I Pathology II	PAT 301 PAT 302	X							
Pharmacology I Pharmacology II	PCL 303 PCL 304	x						x	
Microbiology I Microbiology II	MIC 305 MIC 306	x							
Parasitology I	PAS 307 PAS 308	x							

Parasitology II								
Human Rights I Human Rights II	HR 309 HR 310							
Forensic med I Forensic med II	FNS 307 FNS 308					x		x
Community med I Community med II Community med III Community med IV	COM401 COM402 COM403 COM404	x						
Ophthalmology I Ophthalmology II	OPIL 305 OPIL 306					x		x
Ear,nose & throatI Ear,nose &thraotII	ENT 309 ENT 310					x		X
General med I General med II General med III General med IV General med V General medV I General med VII General med VIII	MED 503 MED 504 MED 505 MED 506 MED 507 MED 508 MED 509 MED 510		x	x	X	x		x
Pediatrics I Pediatrics II	PED 501 PED 502		X	X	X	X		X
Obs. & Gynecology I Obs. & Gynecology II	OBS 601 OBS 602		X	X	X	X		X
General surgery I General surgery II General surgery III General surgery IV General surgery V General surgery VI General surgery VII General surgery VIII	SUR 603 SUR 604 SUR 605 SUR 606 SUR 607 SUR 608 SUR 609 SUR 610		X	X	X	X		X

2.c. Professional Attitude and Behavioral Skills

Program ILOs		2.c.1	2.c.2	2.c.3	2.c.4	2.c.5
Program Courses						
Anatomy I Anatomy II Anatomy III Anatomy IV Anatomy V Anatomy VI Anatomy VII Anatomy VIII	ANT 101 ANT 102 ANT 103 ANT 104 ANT 201 ANT 202 ANT 203 ANT 204		x			
Histology I Histology II Histology III Histology IV	HIT 109 HIT 110 HIT209 HIT210		x			
Physiology I Physiology II Physiology III Physiology IV Physiology V Physiology VI Physiology VII Physiology VIII	PSL 105 PSL 106 PSL 107 PSL 108 PSL 205 PSL 206 PSL 207 PSL 208		x			
Biochemistry I Biochemistry II Biochemistry III Biochemistry IV	BIC 111 BIC 112 BIC 211 BIC212		x			
English	ENG 114		x			
Social Study I Social Study II	SOC 213 SOC 214		x			
Pathology I Pathology II	PAT 301 PAT 302		x			
Pharmacology I Pharmacology II	PCL 303 PCL 304		x			
Microbiology I Microbiology II	MIC 305 MIC 306		x			
Parasitology I Parasitology II	PAS 307 PAS 308		x			

Human Rights I	HR 309		X			
Human Rights II	HR 310					
Forensic med I	FNS 307	X	X	X	X	
Forensic med II	FNS 308					
Community med I	COM401					
Community med II	COM402					
Community med III	COM403	X	X			
Community med IV	COM404					
Ophthalmology I	OPIL 305					
Ophthalmology II	OPIL 306	X	X			
Ear,nose & throatI	ENT 309					
Ear,nose &thraotII	ENT 310	X	X			
General med I	MED 503					
General med II	MED 504					
General med III	MED 505					
General med IV	MED 506					
General med V	MED 507	X	X	X		X
General medV I	MED 508					
General med VII	MED 509					
General med VIII	MED 510					
Pediatrics I	PED 501					
Pediatrics II	PED 502	X	X	X		X
Obs. & Gynecology I	OBS 601					
Obs. & Gynecology I I	OBS 602	X	X	X		X
General surgery I	SUR 603					
General surgery II	SUR 604					
General surgery III	SUR 605					
General surgery IV	SUR 606					
General surgery V	SUR 607	X	X	X		X
General surgery VI	SUR 608					
General surgery VII	SUR 609					
General surgery VIII	SUR 610					

2.d. Communication skills

Program Courses	2.d.1	2.d.2	2.d.3	2.d.4	2.d.5	2.d.6
Program ILOs						

Anatomy I Anatomy II Anatomy III Anatomy IV Anatomy V Anatomy VI Anatomy VII Anatomy VIII	ANT 101 ANT 102 ANT 103 ANT 104 ANT 201 ANT 202 ANT 203 ANT 204	X	X				
Histology I Histology II Histology III Histology IV	HIT 109 HIT 110 HIT209 HIT210	X	X				
Physiology I Physiology II Physiology III Physiology IV Physiology V Physiology VI Physiology VII Physiology VIII	PSL 105 PSL 106 PSL 107 PSL 108 PSL 205 PSL 206 PSL 207 PSL 208	X	X				
Biochemistry I Biochemistry II Biochemistry III Biochemistry IV	BIC 111 BIC 112 BIC 211 BIC212	X	X				
English	ENG 114	X	X				
Social Study I Social Study II	SOC 213 SOC 214	X	X				
Pathology I Pathology II	PAT 301 PAT 302	X	X				
Pharmacology I Pharmacology II	PCL 303 PCL 304	X	X				
Microbiology I Microbiology II	MIC 305 MIC 306	X	X				
Parasitology I Parasitology II	PAS 307 PAS 308	X	X				
Human Rights I Human Rights II	HR 309 HR 310	X	X				
Forensic med I Forensic med II	FNS 307 FNS 308	X	X				

Community med I Community med II Community med III Community med IV	COM401 COM402 COM403 COM404	X		X			
Ophthalmology I Ophthalmology II	OPIL 305 OPIL 306	X		X			
Ear,nose & throatl Ear,nose &thraotII	ENT 309 ENT 310	X		X			
General med I General med II General med III General med IV General med V General medV I General med VII General med VIII	MED 503 MED 504 MED 505 MED 506 MED 507 MED 508 MED 509 MED 510	X	X	X	X	X	X
Pediatrics I Pediatrics II	PED 501 PED 502	X	X	X	X	X	X
Obs. & Gynecology I Obs. & Gynecology I I	OBS 601 OBS 602	X	X	X	X	X	X
General surgery I General surgery II General surgery III General surgery IV General surgery V General surgery VI General surgery VII General surgery VIII	SUR 603 SUR 604 SUR 605 SUR 606 SUR 607 SUR 608 SUR 609 SUR 610	X	X	X	X	X	X

2.e. Intellectual Skills

Program ILOs			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
Program Courses															
Anatomy I	ANT 101	x										x			
Anatomy II	ANT 102														
Anatomy III	ANT 103														
Anatomy IV	ANT 104														
Anatomy V	ANT 201														
Anatomy VI	ANT 202														
Anatomy VII	ANT 203														
Anatomy VIII	ANT 204														
Histology I	HIT 109	x										x			
Histology II	HIT 110														
Histology III	HIT209														
Histology IV	HIT210														
Physiology I	PSL 105	x										x			
Physiology II	PSL 106														
Physiology III	PSL 107														
Physiology IV	PSL 108														
Physiology V	PSL 205														
Physiology VI	PSL 206														
Physiology VII	PSL 207														
Physiology VIII	PSL 208														
Biochemistry I	BIC 111	x					x					x			
Biochemistry II	BIC 112														
Biochemistry III	BIC 211														
Biochemistry IV	BIC212														
English	ENG 114											x			
Social Study I	SOC 213											x			
Social Study II	SOC 214														
Pathology I	PAT 301	x										x			
Pathology II	PAT 302														
Pharmacology I	PCL 303	x										x			
Pharmacology II	PCL 304														
Microbiology I	MIC 305	x					x					x			
Microbiology II	MIC 306														
Parasitology I	PAS 307	x					x					x			

Parasitology II	PAS 308													
Human Rights I Human Rights II	HR 309 HR 310										X			
Forensic med I Forensic med II	FNS 307 FNS 308				X	X	X		X		X			X
Community med I Community med II Community med III Community med IV	COM401 COM402 COM403 COM404							X			X	X	X	
Ophthalmology I Ophthalmology II	OPIL 305 OPIL 306				X	X	X		X	X	X			X
Ear,nose & throatl Ear,nose &thraotII	ENT 309 ENT 310				X		X		X	X	X			X
General med I General med II General med III General med IV General med V General medV I General med VII General med VIII	MED 503 MED 504 MED 505 MED 506 MED 507 MED 508 MED 509 MED 510		X	X	X	X	X		X	X	X			X
Pediatrics I Pediatrics II	PED 501 PED 502		X	X	X	X	X		X	X	X			X
Obs. & Gynecology I Obs. & Gynecology II	OBS 601 OBS 602		X	X	X	X	X		X	X	X			X
General surgery I General surgery II General surgery III General surgery IV General surgery V General surgery VI General surgery VII General surgery VIII	SUR 603 SUR 604 SUR 605 SUR 606 SUR 607 SUR 608 SUR 609 SUR 610		X	X	X	X	X		X	X	X			X

2.f. General and Transferable Skills

Program ILOs		2.f.1	2.f.2	2.f.3	2.f.4	2.f.5	2.f.6
Program Courses							
Anatomy I Anatomy II Anatomy III Anatomy IV Anatomy V Anatomy VI Anatomy VII Anatomy VIII	ANT 101 ANT 102 ANT 103 ANT 104 ANT 201 ANT 202 ANT 203 ANT 204	x	x	x	x	x	
Histology I Histology II Histology III Histology IV	HIT 109 HIT 110 HIT209 HIT210	x	x	x	x	x	
Physiology I Physiology II Physiology III Physiology IV Physiology V Physiology VI Physiology VII Physiology VIII	PSL 105 PSL 106 PSL 107 PSL 108 PSL 205 PSL 206 PSL 207 PSL 208	x	x	x	x	x	
Biochemistry I Biochemistry II Biochemistry III Biochemistry IV	BIC 111 BIC 112 BIC 211 BIC212	x	x	x	x	x	
English	ENG 114	x	x	x	x	x	
Social Study I Social Study II	SOC 213 SOC 214	x	x	x	x	x	
Pathology I Pathology II	PAT 301 PAT 302	x	x	x	x	x	
Pharmacology I Pharmacology II	PCL 303 PCL 304	x	x	x	x	x	
Microbiology I Microbiology II	MIC 305 MIC 306	x	x	x	x	x	
Parasitology I	PAS 307	x	x	x	x	x	

Parasitology II	PAS 308						
Human Rights I Human Rights II	HR 309 HR 310	X	X	X	X	X	
Forensic med I Forensic med II	FNS 307 FNS 308	X	X	X	X	X	
Community med I Community med II Community med III Community med IV	COM401 COM402 COM403 COM404	X	X	X	X	X	X
Ophthalmology I Ophthalmology II	OPIL 305 OPIL 306		X	X	X	X	
Ear,nose & throatl Ear,nose &thraotII	ENT 309 ENT 310	X	X	X	X	X	
General med I General med II General med III General med IV General med V General medV I General med VII General med VIII	MED 503 MED 504 MED 505 MED 506 MED 507 MED 508 MED 509 MED 510	X	X	X	X	X	
Pediatrics I Pediatrics II	PED 501 PED 502	X	X	X	X	X	
Obs. & Gynecology I Obs. & Gynecology I I	OBS 601 OBS 602	X	X	X	X	X	
General surgery I General surgery II General surgery III General surgery IV General surgery V General surgery VI General surgery VII General surgery VIII	SUR 603 SUR 604 SUR 605 SUR 606 SUR 607 SUR 608 SUR 609 SUR 610	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

	<p>community health problems.</p> <p>b. Principle and organization of National Health Care System.</p> <p>c. Epidemiological principles of demography and biological variability.</p> <p>d. Principles of disease surveillance and screening.</p> <p>e. Communicable disease control and health promotion.</p> <p>f. Population-based approaches to health care services and their role in improving medical practice.</p>
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.	<p>Procedures and technical skills acquired under appropriate supervision during undergraduate and house officer training:</p> <p>3.9. Perform venipuncture and collect blood samples.</p> <p>3.10. Insert a cannula into peripheral veins.</p> <p>3.11. Give intramuscular, subcutaneous, intradermal and intravenous injections.</p> <p>3.12. Perform suturing of superficial wounds.</p> <p>3.13. Demonstrate competency in cardiopulmonary resuscitation and basic life-support.</p> <p>3.14. Administer compulsory childhood vaccines.</p> <p>3.15. Perform and interpret basic bedside laboratory tests.</p> <p>3.16. Perform and interpret ECG.</p> <p>3.17. Administer basic oxygen therapy.</p> <p>3.18. Perform and interpret basic respiratory function tests.</p> <p>3.19. Use a nebulizer for administration of inhalation therapy.</p> <p>3.20. Insert a nasogastric tube.</p> <p>3.21. Perform bladder catheterization.</p> <p>3.22. Perform procedure of normal labor.</p> <p>3.23. Adopt suitable measures for infection control.</p>

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 آداب لائحة المهنة (الأطباء نقابة من الصادرة).
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.	<p>House Officers should be able, under appropriate supervision, to:</p> <p>4.8. Ensure confidentiality and privacy of patients' information.</p> <p>4.9. Treat all patients equally, and avoid stigmatizing any category regardless of beliefs, culture, and behaviors.</p> <p>4.10. Demonstrate respect and work cooperatively with other health care professions for effective patient management.</p> <p>4.11. Be willing to share in all types of inter-professional activities including collaborative and shared learning</p> <p>4.12. Ensure the cost effectiveness of health care management.</p> <p>4.13. Notify/report about any physical or mental conditions related to himself, colleagues or any other person that might jeopardize patients safety.</p>

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.