



جامعة بنها
كلية الطب البشرى
قسم: الكبد والجهاز الهضمى والأمراض المعدية

توصيف برنامج الماجستير (عام 2013-2014)

PROGRAM SPECIFICATION

A) Basic information : معلومات أساسية

١ - اسم البرنامج : **Master degree of Hepatology, Gastroenterology and Infectious diseases.**

٢ - طبيعة البرنامج : (متعدد)

٣- الأقسام المسؤولة عن البرنامج: **Hepatology, Gastroenterology and Infectious diseases department.**

الأقسام المشتركة فى البرنامج: الفسيولوجيا والكيمياء الحيوية (نظري)، باكتريولوجيا وطفيليات بشرية (نظري وعملي)، باطنة عامه ، الباثولوجيا التطبيقية (نظري وعملي) ، الصحة العامة (نظري وعملي)

٤- تاريخ إقرار البرنامج فى مجلس القسم : 3 / 9 / 2013

5- تاريخ إقرار البرنامج فى مجلس القسم: 25 / 9 / 2013

٦. منسق البرنامج: أ.د/ صبري أنيس عبده

7-المراجع الداخلى: أ.د/ أشرف خميس نصار أستاذ الكبد والجهاز الهضمى بكلية طب بنها

8- المراجع الخارجى: أ.د/ زكريا يحيي مهران أستاذ طب المناطق الحارة بكلية طب عين شمس

B) Professional information:

ب) معلومات متخصصة:

١ - الأهداف العامة للبرنامج :



1- Overall Aims of the Program:

The overall goals of the program are to develop a graduate with the following characteristics:

1-1 Have the recent scientific knowledge essential for the master of Hepatology, Gastroenterology and Infectious diseases (HEGAID) according to the international standards.

1-2 Have the skills necessary for proper diagnosis and management of patients in the field of HEGAID including diagnostic, problem solving and decision making skills.

1-3 Know ethical principles related to medical practice in this specialty .

1-4 Participate actively in community needs assessment and problems identification.

1-5 Be concerned about new and recent guidelines in dealing with different medical problems.

1-6 Behave ethically and honorably in his medical practice.

1-7 Produce graduates well trained in laboratory and research skills.

1-8 Foster the ability to work independently and as part of a group, and to develop presentation skills, both written and oral.

1-9 Capable of performing and/or interpreting all procedures and diagnostic tests routinely done in the evaluation and treatment of gastroenterological patients, trainees have to gain experience under direct supervision.

1-10 An adequate number of routine endoscopic procedures have to be performed in order to reach the minimum standards.

Trainees should also be skilled in the principles of caring for, cleaning, handling, and maintaining endoscopic equipment.



1-11 Practice and research conducted by a gastroenterologist must be based on the highest principles of ethics, humaneness, and professionalism.

٢ - المخرجات التعليمية المستهدفة من البرنامج :

2-Intended Learning Outcomes (ILOS):

٢.أ - المعرفة والفهم :

2.a. Knowledge and Understanding

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

- 2.a.1. Identify the basic and recent principles in the field of hepatology and gastroenterology and infectious diseases and related fields.
- 2.a.2. Recognize the effect of his clinical practice on environment and principles of environmental development and saving.
- 2.a.3. Know the different scientific techniques and approaches available in gastroenterological and hepatological science.
- 2.a.4. Describe the basics of the structure and function of the GIT and liver in health and disease.
- 2.a.5. Identify the infective, inflammatory and immunological mechanisms involved in diseases of the GIT and liver.
- 2.a.6. Recognize the diagnosis and evaluation of patients with digestive diseases, taking into consideration all biological and psychosocial aspects.
- 2.a.7. Know the incidence and prevalence of common digestive disorders on the basis of locally available data.
- 2.a.8. Recognize the appropriate measures for the prevention of common digestive diseases and have basic knowledge about common communicable diseases, especially in the field of gastroenterology and hepatology, both for self protection and to foster public awareness.



2.a.9. Identify the indications for, contraindications against and complications of major endoscopic procedures.

2.a.10. Know the basic principles of disinfection of endoscopic instruments and ancillary devices.

٢. ب - القدرات الذهنية :

2.b. Intellectual Skills:-

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

2.b.1. Interpret data acquired through history taking to reach a provisional diagnosis for hepatic and GIT problems.

2.b.2. Analyze different diagnostic alternatives and select the ones that help reaching a final diagnosis for hepatic and GIT problems.

2.b.3. Assess risk in professional practices in the field of Tropical medicine and Gastroenterology

2.b.4. Assess the performance in the field of Tropical medicine and Gastroenterology and how to improve.

2.b.5. Solve hepatic and GIT problems.

2.b.6. Analyze and evaluate information.

2.b.7. Behave in accordance with professional principles, such as: altruism, accountability, excellence, duty, service, honor, integrity, and respect for others. serving the interests of the patient, rather than one's own interests.

2.b.8. Work effectively and efficiently with members of other specialties, such as cardiology, critical-care medicine, oncology, surgery, pathology, and radiology, as well as with nurses, pharmacists, social assistants, and psychologists.

٢. ج . مهارات مهنية وعملية :



2.c. Practical & Professional Skills:-

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

- 2.c.1. Perform the basic and modern professional skills in the area of Hepatology, Gastroenterology and Infectious Diseases.
- 2.c.2. Write and evaluate medical reports.
- 2.c.3. Recognize and develop methods and tools existing in the area of Hepatology, Gastroenterology and Infectious Diseases.
- 2.c.4. Perform endoscopic and imaging evaluation of gastrointestinal system.
- 2.c.5. Perform safely some laboratory based experiments.
- 2.c.6. Perform efficiently some Endoscopic skills.
- 2.c.7. Have experience in patient care.

٢. د . مهارات عامة و منتقلة :

2.d. General and transferable skills:-

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

- 2.d.1. Communicate clearly, sensitively and effectively.
- 2.d.2. Use scientific technology.
- 2.d.3. Use available resources to get data and knowledge.
- 2.d.4. Leading seminars and time management and directing.
- 2.d.5. Communicate effectively through oral presentations and written reports.
- 2.d.6. Work independently and as part of a team.
- 2.d.7. Integrate and evaluate information from a variety of sources.
- 2.d.8. Use Information and Communications Technology.

Standards:

٣ - المعايير الأكاديمية للبرنامج:



* **Academic Standards of Master program of Hepatology, Gastroenterology and Infectious Diseases, approved in department council date 3 /9 / 2013 and in faculty council no () date 15/9/2013.**

Academic Standards of the program are attached in appendix 1. (ملحق ١)

4) Reference Standards: العلامات المرجعية:

a) **Academic reference standards (ARS) of Master program (March 2009) which were issued by the National Authority for Quality Assurance & Accreditation of Education (NAQAAE). (ملحق ٢)**

b) **External references standards (Benchmarks): المعايير المرجعية الخارجية:**

External reference points/benchmarks are selected to confirm the appropriateness of the objectives, ILOs of the program, (ملحق ٣)

Imperial college London Medical Sciences with Gastroenterology and Hepatology 2010.

<https://education.med.imperial.ac.uk/Years/4-0910/gastrohep/index.htm>.

Academic reference standards of NAQAAE / Benchmarks are attached in appendix 2, 3.

5 - هيكل ومكونات البرنامج:

(٥): Curriculum structure and contents:

أ - مدة البرنامج: ٩٦ اسبوع

24 months to pass Master degree:

1st part: - One Semester (6 months).

2nd part: - Two Semester (12 months).

Thesis:- One Semester (6 months).



ب - هيكل البرنامج:

الساعات المعتمدة	الكود	المقررات	البند
٦ ساعات	UNIV 601	للجامعة والكلية	متطلبات
٧ ساعات		يشمل الآتي:	الجزء الأول
١ ساعة	HEGAID 601	الفسولوجيا والكيمياء الحيوية (نظري)	
٢ ساعة	HEGAID 602	باكتريولوجيا وطفيليات بشرية (نظري وعملي)	
١.٥ ساعة	HEGAID 603	الباثولوجيا التطبيقية (نظري وعملي)	
١.٥ ساعة	HEGAID 604	الصحة العامة (نظري وعملي)	
٥ ساعات		تسجل بها الأنشطة المختلفة مثل حضور الندوات العلمية والمؤتمرات والدورات التدريبية وإجراء أبحاث إضافية	كراسة الأنشطة
١٥ ساعة		يشمل الآتي:	الجزء الثاني:
٢ ساعة	HEGAID 605	أمراض الباطنة العامة (مقرر علمي وإكلينيكي)	
١٣ ساعة	HEGAID 606	الكبد والجهاز الهضمي والأمراض المعدية (مقرر علمي وإكلينيكي)	
٦ ساعات			رسالة ماجستير
٣٩ ساعة			الإجمالي

ج: خطة التدريس: Teaching plan

First part (24 weeks duration/ 6 months)

a- Compulsory courses:

Course Title	Course Code	NO. of hours per week			Total teaching hours/ weeks
		Theoretical	Laboratory /practical	Total	
		Lectures	Seminars		24



1- Physiology	HEGAID 601	1		1	24
2- Biochemistry	HEGAID 601	1		1	24
3- Bacteriology	HEGAID 602	1	1	2	48
4-Parasitology	HEGAID 602	1	1	2	48
5-Pathology	HEGAID 603	2	1	3	72
6- Community medicine	HEGAID 604	2	1		72
Total		8	4	12	288

b- Elective courses: none

Second part (48 weeks duration/ 12 months)

a- Compulsory courses:

Course Title	Course Code	NO. of hours per week			Total teaching hours /48 weeks
		Theoretical lectures	Laboratory /practical seminars	Total	
1-Internal Medicine	HEGAID 605	1	1	2	96
2- Hepatology, Gastroenterology & Infectious diseases,	HEGAID 606	10	3	13	624
Total:		11	4	15	720
Thesis					6 credit

b- Elective courses: none

Teaching methods:

1. Small group discussions.
2. Problem solving.
3. Self-learning.
4. Practical & clinical classes.

د : طرق التدريس:



Method	Evidence	ILOs
Small group discussions	- Seminars hand-outs	2.a.1.----- 2.a.10 2.b.1. -----2.b.8 2.d.1. ----- 2.d.8
Problem solving	- Case study	2.a.1.----- 2.a.10 2.b.1. -----2.b.8
Self-learning	- Researches - Presentation	2.a.1.----- 2.a.10 2.b.1. -----2.b.8
Practical & clinical classes	- log book	2.c.1.----- 2.c.8 2.d.1. ----- 2.d.8

6- توصيف المقررات : ملحق رقم (٧)

٧ - متطلبات الإلتحاق بالبرنامج : (طبقاً لما هو مذكور في اللائحة):

(٧): Program admission requirements:

مادة (٤): يشترط في قيد الطالب لدرجة الماجستير:

(١)

أ- أن يكون حاصلًا على درجة البكالوريوس في الطب والجراحة من إحدى جامعات ج.م.ع أو على درجة معادلة لها من معهد علمي معترف به من الجامعة بتقدير جيد على الأقل.

ب- يسمح للحصول على الدبلوم وفقاً لنظام هذه اللائحة وبتقدير جيد على الأقل بتسجيل رسالة لاستكمال درجة الماجستير بشرط ألا يكون قد مر أكثر من ثلاث سنوات على تاريخ حصوله على درجة الدبلوم وبغض النظر على تقديره في درجة البكالوريوس.

ت- يسمح للحصول على الدبلوم وعلى خلاف لنظام هذه اللائحة أن يسجل لدرجة الماجستير بشرط أن يكون تقديره في الدبلوم لا يقل عن جيد وبغض النظر عن تقديره في البكالوريوس.

(٢) أن يكون قد أمضى السنة التدريبية أو ما يعادلها (سنة الامتياز)

(٣) أن يتفرغ للدراسة لمدة سنة على الأقل في الجزء الثاني (فصلين دراسيين)

مادة (٥): يكون التقدم للقيود لدرجة الماجستير مرة واحدة في السنة خلال شهري يوليو وأغسطس من كل عام.

تبدأ الدراسة لدرجة الماجستير في شهر أكتوبر من كل عام.

٨ - القواعد المنظمة لإستكمال البرنامج :

مادة (٦): تتولى لجنة الدراسات العليا بالكلية عن طريق لجنة تشكل لكل تخصص من أعضاء مجلس القسم التابع له المادة والقسم المانح للدرجة وضع البرنامج التفصيلي للمقررات في حدود الساعات المعتمدة الواردة باللائحة وعند الاختلاف يتم الاسترشاد بمقررات جامعة القاهرة ومقررات الشهادات العالمية الأوربية والأمريكية يعتمدها



مجالس الأقسام ثم يقرها مجلس الكلية وتشمل هذه الساعات محاضرات نظرية ودروس عملية وتدريب اكلينيكي ومحاضرات وندوات مشتركة.

مادة (٧): يشترط في الطالب لنيل درجة ماجستير التخصص في أحد الفروع الاكلينيكية والعلوم الطبية الأساسية:

أ- حضور المقررات الدراسية والتدريبات الاكلينيكية والعملية والمعملية بصفة مرضية طبقا للساعات المعتمدة.

ب- أن يقوم بالعمل كطبيب مقيم أصلي أو زائر لمدة سنة على الأقل في قسم التخصص بالنسبة للعلوم الاكلينيكية.

ت- أن ينجح في امتحان القسمين الأول والثاني.

ث- اجتياز الطلب لثلاث دورات في الحاسب الآلي (دورة في مقدمة الحاسب – دورة تدريبية متوسطة – دورة في تطبيقات الحاسب الآلي) وذلك قبل مناقشة الرسالة.

ج- اجتياز اختبار التوفيل بمستوى لا يقل عن ٤٠٠ وحدة وذلك قبل مناقشة الرسالة.

ح- أن يقوم باعداد بحث في موضوع تقره الجامعة بعد موافقة مجلس القسم ومجلس الكلية ينتهي باعداد رسالة تقبلها لجنة التحكيم.

٩-- طرق وفوائد تقييم الملحقين بالبرنامج :

٩- Students Assessment Methods:

م	الوسيلة	مخرجات التعلم المستهدفة
	Written examination	To assess knowledge & intellectual skills.
	Oral examination	To assess knowledge, intellectual skills & General & transferable skills
	Practical & clinical examination	To assess knowledge, intellectual skills, professional General & transferable skills



Final exam:

First part

إجمالي	الدرجة				الاختبار	المقرر
	إكلينيكي	عملي	شفهي	تحريري		
200			100	100	اختبار تحريري مدته ثلاث ساعات + اختبار شفهي	الفسولوجيا والكيمياء الحيوية
300		100	50	150	اختبار تحريري مدته ثلاث ساعات + اختبار شفهي + اختبار عملي	البكتريولوجيا والطفيليات البشرية
300		100	50	150	اختبار تحريري مدته ثلاث ساعات + اختبار شفهي + اختبار عملي	الباثولوجيا التطبيقية
200			100	100	اختبار تحريري مدته ثلاث ساعات + اختبار شفهي	الصحة العامة
1000	إجمالي الدرجة					

Second part

إجمالي	الدرجة				الاختبار	المقرر
	عملي	إكلينيكي	شفهي	تحريري		
200		50	50	100	اختبار تحريري مدة ثلاث ساعات + اختبار شفهي + اختبار إكلينيكي	الباطنة العامة
600	50	150	100	150 + 150	اختباران تحريريان مدة كل منهما ثلاث ساعات + اختبار شفهي + اختبار إكلينيكي	الكبد والجهاز الهضمي والأمراض المعدية
800	إجمالي الدرجة					



10 - طرق تقييم البرنامج:

١٠ - Evaluation of Program:

Evaluator	Tools	Signature
Internal evaluator (s) مقيم داخلي	Report	
External Evaluator (s) مقيم خارجي	Report.	
Senior student (s) طلاب السنة النهائية	Questionnaire	
Alumni الخريجون	Questionnaire	
Stakeholder (s) أصحاب العمل	interview	
Others طرق أخرى	none	

المسئول عن البرنامج : التوقيع / / التاريخ :

Program Coordinator:

Name Dr Signature.....Date



الملحقات :

ملحق ١ : Academic standard of the program

ملحق ٢: المعايير القياسية العامة للدراسات العليا الصادرة عن الهيئة.

ملحق 3: Benchmarks (المعايير المرجعية الخارجية)

ملحق 4: مصفوفة المعايير الأكاديمية للبرنامج مع المعايير القياسية للدراسات العليا الصادرة عن الهيئة.

ملحق ٥ : مصفوفة البرنامج مع المعايير الأكاديمية للبرنامج.

ملحق ٦: مصفوفة المقررات مع البرنامج Program-Courses ILOs Matrix

ملحق 7: توصيف المقررات



ملحق ١: Academic standard of the program:

جامعة بنما

كلية الطب

قسم الطب والجهاز الهضمي والأمراض المعدية

وثيقة المعايير الأكاديمية المرجعية لبرنامج الماجستير

Academic Reference Standards (ARS) for Master Degree in Hepatology, Gastroenterology and Infectious diseases

1. Graduate Attributes:

The graduate of Master degree should be capable of:

- 1.1. Demonstrate excellence in the application of the principles and methodologies of scientific research and the use of its various tools.
- 1.2. Apply analytical methodology in Hepatology, Gastroenterology and Infectious diseases.
- 1.3. Apply specialized knowledge and integrate it with related knowledge in his/her professional practice.
- 1.4. Show awareness of current problems and new concepts in the field of Hepatology, Gastroenterology and Infectious diseases.
- 1.5. Determine professional problems and propose appropriate solutions.
- 1.6. Demonstrate proficiency in a significant range of specialized professional skills and use appropriate technological methods that serve his/her professional practice.
- 1.7. Communicate effectively and lead work teams.
- 1.8. Make informed decisions in various professional contexts.



- 1.9. Employ available resources wisely to achieve maximum benefit and their preservation.
- 1.10. Show awareness of his/her role in community development and environmental preservation in light of regional and global changes.
- 1.11. Conduct himself/herself in a manner that reflects integrity and sincerity, and follows the ethical code of practice.
- 1.12. Exercise autonomy in academic and professional self-development as well as continuous learning .

2. Academic Standards:

2.1. Knowledge and understanding:

By the end of Master program, the graduate should recognize and understand the followings:

- 2.1.1. The concepts and fundamentals in the field of Hepatology, Gastroenterology and Infectious diseases and in related disciplines.
- 2.1.2. The mutual influence between professional practice and its impact on the environment.
- 2.1.3. The scientific developments in the area of Hepatology, Gastroenterology and Infectious diseases.
- 2.1.4. The ethical and legal principles of professional practice in the field of Hepatology, Gastroenterology and Infectious diseases.
- 2.1.5. The principles and fundamentals of quality in professional practice in the field of Hepatology, Gastroenterology and Infectious diseases.



2.1.6. The fundamentals and ethics of scientific research.

2.2. Intellectual skills:

By the end of Master program, graduate should be able to recognize the followings:

2.2.1. Analyze and evaluate information in the field of Hepatology, Gastroenterology and Infectious diseases, and apply this information in problem solving.

2.2.2. Solve specialized problems in the absence of complete data.

2.2.3. Link between different knowledge to solve professional problems.

2.2.4. Conduct a research study and/or write a scientific study/thesis about a specific research problem.

2.2.5. Assess risks in professional practices in the field of Hepatology, Gastroenterology and Infectious diseases.

2.2.6. Plan for the development of performance in the field of Hepatology, Gastroenterology and Infectious diseases.

2.2.7. Make professional decisions in a variety of professional contexts.

2.3. Practical/Professional skills

By the end of Master program, graduate should accept the followings skills:

2.3.1. Show proficiency in basic and up to date professional skills in the field of Hepatology, Gastroenterology and Infectious diseases.

2.3.2. Write and evaluate professional reports.



2.3.3. Evaluate established methods and tools in the field of Hepatology, Gastroenterology and Infectious diseases.

2.4. Communication and transferable skills:

By the end of Master program, graduate should accept the following skills:

- 2.4.1. Communicate effectively using a variety of communication methods.
- 2.4.2. Use information technology in a manner that serves professional practice.
- 2.4.3. Exercise autonomy in self-evaluation and the identification of personal learning needs.
- 2.4.4. Use various resources for the retrieval of information and knowledge.
- 2.4.5. Develop standards and indicators for assessing the performance of others.
- 2.4.6. Work effectively in a team as leader or member in various professional situations.
- 2.4.7. Manage time effectively.
- 2.4.8. Demonstrate independent and continuous learning.

...../...../... بتاريخ (.....) ، اعتماد مجلس القسم

رئيس مجلس القسم

اعتماد مجلس الكلية



ملحق 2: المعايير القياسية العامة للدراسات العليا الصادرة عن الهيئة برنامج الماجستير

● مواصفات الخريج

خريج برنامج الماجستير في أي تخصص يجب أن يكون قادرا على :

- ١-١ إجادة تطبيق أساسيات ومنهجيات البحث العلمي واستخدام أدواته المختلفة
- ٢-١ تطبيق المنهج التحليلي واستخدامه في مجال التخصص
- ٣-١ تطبيق المعارف المتخصصة ودمجها مع المعارف ذات العلاقة في ممارسته المهنية
- ٤-١ إظهار وعيا بالمشاكل الجارية والرؤى الحديثة في مجال التخصص
- ٥-١ تحديد المشكلات المهنية وإيجاد حلول لها
- ٦-١ إتقان نطاق مناسب من المهارات المهنية المتخصصة واستخدام الوسائل التكنولوجية المناسبة بما يخدم ممارسته المهنية
- ٧-١ التوصل بفاعلية والقدرة على قيادة فرق العمل
- ٨-١ اتخاذ القرار في سياقات مهنية مختلفة
- ٩-١ توظيف الموارد المتاحة بما يحقق أعلى استفادة والحفاظ عليها
- ١٠-١ إظهار الوعي بدوره في تنمية المجتمع والحفاظ على البيئة في ضوء المتغيرات العالمية والاقليمية
- ١١-١ التصرف بما يعكس الالتزام بالنزهة والمصداقية والالتزام بقواعد المهنة
- ١٢-١ تنمية ذاته أكاديميا ومهنيا وقادرا على التعلم المستمر

2- - المعايير القياسية العامة

1-2 المعرفة والفهم :

بأنتهاء دراسة برنامج الماجستير يجب ان يكون الخريج على فهم ودراية بكل من :

1-1-2 النظريات والاساسيات المتعلقة بمجال التعلم وكذا في المجالات ذات العلاقة

2-1-2- التأثير المتبادل بين الممارسة المهنية وانعكاسها على البيئة



3-1-2 التطورات العلمية فى مجال التخصص

4-1-2 المبادئ الاخلاقية والقانونية للممارسة المهنية فى مجال التخصص

5-1-2 مبادئ واساسيات الجودة فى الممارسة المهنية فى مجال التخصص

6-1-2 اساسيات واخلاقيات البحث العلمى

2-2 المهارات الذهنية :

بانتهاى دراسة برنامج الماجستير يجب ان يكون الخريج قادرا على :

1-2-2 تحليل وتقييم المعلومات فى مجال التخصص والقياس عليها لحل المشاكل

2-2-2 حل المشاكل المتخصصة مع عدم توافر بعض المعطيات

3-2-2 الربط بين المعارف المختلفة لحل المشاكل المهنية

4-2-2 اجراء دراسة بحثية او كتابة دراسة علمية منهجية حول مشكلة بحثية

5-2-2 تقييم المخاطر فى الممارسات المهنية فى مجال التخصص

6-2-2 التخطيط لتطوير الاداء فى مجال التخصص

7-2-2 اتخاذ القرارات المهنية فى سياقات مهنية متنوعة

3-2 المهارات المهنية

بانتهاى دراسة برنامج الماجستير يجب ان يكون الخريج قادرا على :

1-3-2 اتقان المهارات المهنية الاساسية والحديثة فى مجال التخصص

2-3-2 كتابة وتقييم التقارير المهنية

3-3-2 تقييم الطرق والادوات القائمة فى مجال التخصص

4-2 المهارات العامة والمنتقلة :

بانتهاى دراسة برنامج الماجستير يجب ان يكون الخريج قادرا على :



1-4-2 التواصل الفعال بأنواعه المختلفة

2-4-2 استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية

3-4-2 التقييم الذاتي وتحديد احتياجاته التعليمية

4-4-2 استخدام المصادر المختلفة لحصول على المعلومات والمعارف

5-4-2 وضع قواعد ومؤشرات تقييم اداء الاخرين

6-4-2 العمل فى فريق سياقات مهنية مختلفة

7-4-2 ادارة الوقت بكفاءة

8-4-2 التعلم الذاتى والمستمر



ملحق 3: Benchmarks (المعايير /العلامات المرجعية)

Imperial college London Medical Sciences with Gastroenterology and Hepatology 2010.

<https://education.med.imperial.ac.uk/Years/4-0910/gastrohep/index.htm>.

Programme Specification for the BSc in Medical Sciences with Gastroenterology and Hepatology

PLEASE NOTE. This specification provides a **concise** summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. This specification provides a source of information for students and prospective students seeking an understanding of the nature of the programme and may be used by the College for review purposes and sent to external examiners. More detailed information on the learning outcomes, content and teaching, learning and assessment methods of each module can be found in the course handbook or on-line at <https://education.med.imperial.ac.uk/Years/4-0910/gastrohep/index.htm>. The accuracy of the information contained in this document is reviewed by the College and may be checked by the Quality Assurance Agency.

- 1. Awarding Institution:** Imperial College London
- 2. Teaching Institution:** Imperial College London
- 3. External Accreditation by Professional / Statutory Body:** Not applicable
- 4. Name of Final Award (BEng / BSc / MEng etc):** BSc (Honours)
- 5. Programme Title (e.g. Biochemistry with Management):**
Medical Sciences with Gastroenterology and Hepatology
- 6. Name of Department / Division:** Undergraduate Medicine
- 7. Name of Faculty:** Faculty of Medicine
- 8. UCAS Code (or other coding system if relevant):** A131
- 9. Relevant QAA Subject Benchmarking Group(s) and/or other external/internal reference points:**

<http://www.qaa.ac.uk/academicinfrastructure/benchmark/honours/medicine.pdf>

10. Level(s) of programme within the Framework for Higher Education Qualifications (FHEQ): Bachelor's (BSc, BEng, MBBS)	Level 6
Integrated Master's (MSci, MEng)	Levels 6 and 7
Master's (MSc, MRes)	Level 7

- 11. Mode of Study:** Full Time
- 12. Language of Study:** English
- 13. Date of production / revision of this programme specification (month/year):** January 2010
- 14. Educational aims/objectives of the programme:**



The programme aims/objectives are to:

attract motivated students and teach them in a way that encourages originality of thought and breadth of vision;

provide a supportive learning environment, underpinned by world class research;

provide distinctive modules at each level (Years 3 and 4 of the MBBS/BSc degree) within appropriate areas of Gastroenterology and Hepatology, drawing on the expertise and strengths of our academic staff;

produce graduates well trained in laboratory and research skills;

foster the ability to work independently and as part of a group, and to develop presentation skills, both written and oral;

ensure that students have a broad knowledge of the gastrointestinal tract (GIT) and the liver in health and disease;

ensure that students have an understanding of the scientific basis in the study of the GIT and liver in health and disease;

15. Programme Learning Outcomes (please list the programme learning outcomes under the headings that follow. Please also list the teaching/learning methods and strategies used to promote the programme learning outcomes. Module learning outcomes can be listed within Module Handbooks and are not required for this section):

Institutions have an obligation to respond to individual needs and must have due regard to the need to eliminate unlawful disability discrimination and to promote equality of opportunity. To meet the expectations of the Disability Equality Duty (DED), institutions should be proactive in anticipating the variety of possible requirements that disabled students may have, rather than making adjustments for students on an ad hoc basis. This document should list all the skills needed for students to meet the learning outcomes of the programme and may be used by the College's Disability Advisory Service when considering reasonable adjustments to assessment. You may find the following link to the College Disability Advisory Service useful when completing this section: <http://www3.imperial.ac.uk/disabilityadvisoryservice>

1. Knowledge and Understanding

Knowledge and Understanding of:

1. different scientific techniques and approaches available in gastroenterological and hepatological science;
2. how to formulate hypotheses, what constitutes good experimental design and developing a research plan;
3. critical evaluation of scientific papers;
4. have a basic understanding of the structure and function of the GIT and liver in health and disease
5. the role of new diagnostic and therapeutic techniques in the management of gastrointestinal/liver disease.
6. genetic abnormalities, and the interaction

Teaching/learning methods and strategies

Acquisition of 1. to 4. is through a foundation course in Year 3 of the MBBS course and 5. to 9. is through more advanced and specialist modules available in Years 4. Lectures are an integral part of all modules and are supported by a variety of other teaching and learning methods, including tutorials, seminars, laboratory work, clinical practicals, site visits and coursework. Throughout, students are encouraged to undertake independent reading both to supplement and consolidate what is being



between genes and the environment associated with diseases of the GIT and liver.

7. disorders of nutrition and metabolism at the organ, cellular and molecular level.
8. infective, inflammatory and immunological mechanisms involved in diseases of the GIT and liver.
9. the development of neoplasia in the GIT and liver, and the rationale for various therapies.

taught/learnt and to broaden their individual knowledge and understanding of the subject. Directed learning in the form of small group project work and presentations will be used to foster team work and develop transferable skills. Independent assignments include written and oral presentations, and the research project/dissertation.

Assessment of the knowledge base is through a combination of unseen written examinations, assessed coursework in the form of essays, reports, dissertations and presentations, and the individual research project report and presentation.

1. Skills and other Attributes

Intellectual Skills (lateral and critical thinking, logic):

Be able to:

1. integrate and evaluate information;
2. formulate and test hypotheses using appropriate experimental design and statistical analysis of data;
3. plan, conduct and write-up a programme of original research

Teaching/learning methods and strategies

Intellectual skills are developed through the teaching and learning methods outlined above and in section 17. Information sifting and sorting, analysis and problem solving skills are promoted through the use of group exercises.

Experimental design skills are developed in lectures and coursework in the foundation and core courses and subsequently in project work. Individual, formative and summative feedback is given to students on all work produced including oral presentations.

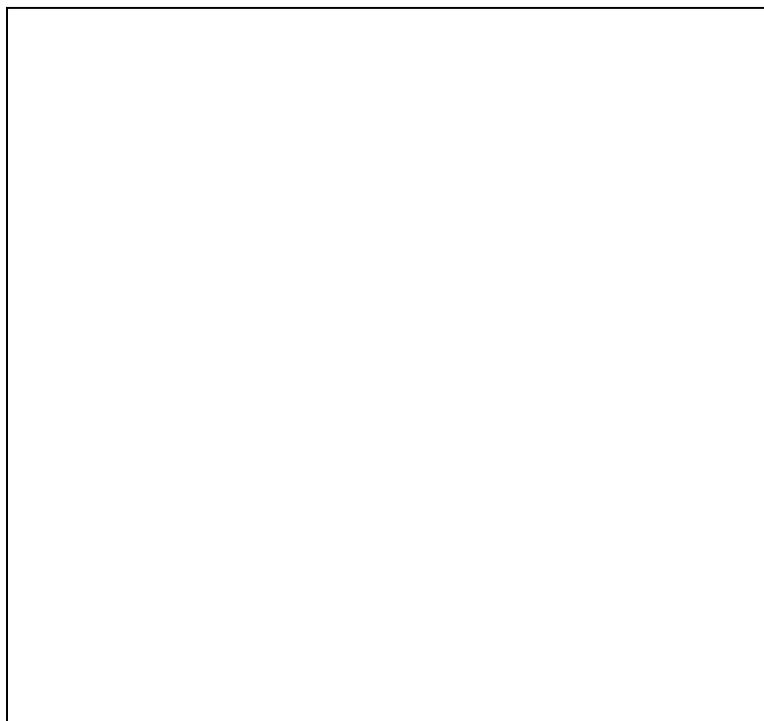
Assessment is through coursework, unseen written examinations and project work.

1. **learn effectively for the purpose of continuing professional development.**

group project work.

3. is developed through tutored dissertation and the research project.

4. is taught during the Foundation course and developed during projects and other



coursework activities and individual learning.

5. is developed throughout the course within a framework of staged coursework deadlines and examination system.

Although not explicitly taught, skills 6. and 7. are encouraged and developed throughout the course, which is structured and delivered in such a way as to promote this.

1. is assessed through coursework, presentations and written examinations.

2. to 4. are assessed through coursework, including project work.

3. is also assessed through written examinations.

Term Two:

Term Three:

Year Three (if applicable):

Term one:

2-week BSc Foundation course in Gastroenterology and Hepatology with the following aims and objectives:

Analyse and interpret data, using relevant statistics where appropriate

Understand the concept of developing and testing a hypothesis

Understand the principles of experimental design

Understand the concept of plagiarism and how to avoid it

Have had experience of written scientific communication

Understand the fundamental principles and practice of scientific research

Appreciate the legal and ethical issues surrounding scientific research

Critically review scientific literature

Term Two: Not applicable

Term Three: Not applicable

Year Four (if applicable):

Term One: Students commence with **Gene Environmental Interactions: Metabolic, Genetic and Nutritional Disorders of Gut and Liver** (Module 1) in the autumn term. The module introduces the ways in which genetic and environmental factors contribute to GI and liver diseases and outlines the principles that link metabolic, genetic and nutritional factors to GI function and disorders. This is followed with Module 2, '**Diagnostic and Therapeutic Principles in Gastrointestinal and Liver Disease (with Emphasis on the Science Underlying Imaging and on Neoplasia)**', which provides broad knowledge of the diagnostic and therapeutic principles relevant to the GI tract and liver on one hand, and on the other it develops an understanding of the development and diagnosis neoplasia in the GI



tract and liver. The module provides also an understanding of the rationale for various therapeutic approaches.

Term Two: The spring term begins with Module 3, ‘**Infective, Immunological and Inflammatory Mechanisms in Gut and Liver Disease**’, which teaches about the interactions between pathogenic infectious agents and the host immune response in the liver and gastro-intestinal tract.

After completing the 1-3 taught modules, the students are examined on each of the modules 1 – 3. Following these examinations, students commence either a research project or a specialist course.

Term Three: The summer term continues the research project or specialist course. At the end of the research project or specialist course, students are assessed by an oral presentation of their studies and a project write-up of approximately 5000 words or a mini-project write-up respectively.

18. Support provided to students to assist learning (including collaborative students, where appropriate). (The description should include information about the induction programme, welfare and pastoral support, library and other facilities available to students, personal tutoring, and access to teaching and learning support services, English language support, feedback to students and dissemination of actions taken as a result):

A course guide provides more detailed information (also published electronically).

The Medicine Undergraduate Teaching Intranet.

Additional information provided on Faculty/Division Intranet.

Extensive library (7-day, 24h opening in term time) and other learning resources and facilities at campus.

Dedicated computing, printing and copying facilities (including scanning) with extended daily access, and providing e-mail, on-line journals, journal databases (e.g. Web of Science, Medline). Log-on facility (VPN) from outside College.

Modern teaching laboratories and access where appropriate to adjacent research facilities.

A staff - student liaison group.

Research Seminar Series, which run weekly.

In addition to the Course Director and Module Leaders, all students are allocated personal tutors whose role is both pastoral and academic.

Student email and open personal access to tutorial staff including the Course Director, Module Leaders and the Deputy Head of Division (Teaching).

Access to the Officers of the Medics Student Union (based in the Sir Alexander Fleming Building).

Access to the Senior Welfare Tutor for Year 4 (BSc), Faculty of Medicine.

The Head of Undergraduate Medicine.

The Undergraduate Medicine Office (UMO) who provide a first point of contact for all matters concerning students.

Access to student counsellors on the South Kensington site.

Access to Teaching and Learning Support Services, which provide assistance and guidance, e.g. on careers.

Opportunities for students to conduct their Final Year Research Projects in other Departments/Centres within Imperial College.



19. Criteria for admission:

All students will have met the minimum entrance requirements for the School of Medicine MBBS/BSc programme and have successfully completed years 1 and 2 and the BSc Foundation Course (Part A) of the course.

20. Processes used to select students:

The selection of students for the BSc operates via student BSc choice submission and allocation of the students to BSc based on their submitted choices and academic performance in Years 1 and 2. A BSc Appeals procedure is in place to ensure that students unsatisfied with their original BSc choice and allocation can be considered for re-allocation to another course, subject to available places and satisfactory academic performance.

21. Methods for evaluating and improving the quality and standards of teaching and learning *Information regarding College-level practices is outlined below. Please amend this as appropriate to incorporate details of departmental activity.*

Methods for review and evaluation of teaching, learning, assessment, the curriculum and outcome standards:

The external examiner system and Boards of Examiners are central to the process by which the College monitors the reliability and validity of its assessment procedures and academic standards. Boards of Examiners comment on the assessment procedures within the College and may suggest improvements for action by relevant departmental teaching Committees.

The Faculty Studies Committees review and consider the reports of external examiners and accrediting bodies and conduct periodic (normally quinquennial) and internal reviews of teaching provision. Regular reviews ensure that there is opportunity to highlight examples of good practice and ensure that recommendations for improvement can be made.

At programme level, the Head of Department/Division has overall responsibility for academic standards and the quality of the educational experience delivered within the department or division.

Most of the College's undergraduate programmes are accredited by professional engineering and science bodies or by the General Medical Council. Accreditation provides the College with additional assurance that its programmes are of an appropriate standard and relevant to the requirement of industry and the professions. **Mechanisms for evaluation of teaching, learning, assessment, the curriculum and outcome standards**

Annual course review undertaken by the Faculty of Medicine BSc Quality Assurance group of the Education Sub-committee Year 4 – BSc. The review will be considered by the Education Sub-committee Year 4 – BSc and will cover all aspects of the course including progression and degree statistics, External Examiner Reports, student feedback and peer review [see below], feedback from module leaders and other staff.

Staff – Student Liaison Group.

College *Student On-Line Lecturer Evaluation* (SOLE) and in-house course questionnaires organised by module convenors.

Biennial staff appraisals by Section Heads, reviewed by the Head of Department.

Peer teaching observations, which are monitored by the Deputy Head of Division (Teaching).

External Examiner reports.

Division Executive Committee.



Review by the Quality Assurance Agency.
Reviews by the GMC.

Committees with responsibility for monitoring and evaluating quality and standards:

The **Senate** oversees the quality assurance and regulation of degrees offered by the College. It is charged with promoting the academic work of the College, both in teaching and research, and with regulating and supervising the education and discipline of the students of the College. It has responsibility for approval of changes to the Academic Regulations, major changes to degree programmes and approval of new programmes.

The **Quality Assurance Advisory Committee (QAAC)** is the main forum for discussion of QA policy and the regulation of degree programmes at College level. QAAC develops and advises the Senate on the implementation of codes of practice and procedures relating to quality assurance and audit of quality and arrangements necessary to ensure compliance with national and international standards. QAAC also considers amendments to the Academic Regulations before making recommendations for change to the Senate. It also maintains an overview of the statistics on completion rates, withdrawals, examination irregularities (including cases of plagiarism), student appeals and disciplinaries.

The **Faculty Studies Committees** are the major vehicle for the quality assurance of undergraduate courses. Their remit includes: setting the standards and framework, and overseeing the processes of quality assurance, for the areas within their remit; monitoring the provision and quality of e-learning; undertaking reviews of new and existing courses; noting minor changes in existing programme curricula approved by Departments; approving new modules, changes in module titles, major changes in examination structure and programme specifications for existing programmes; and reviewing proposals for new programmes, and the discontinuation of existing programmes, and making recommendations to Senate as appropriate.

The **Faculty Teaching Committees** maintain and develop teaching strategies and promote inter-departmental and inter-faculty teaching activities to enhance the efficiency of teaching within Faculties. They also identify and disseminate examples of good practice in teaching.

Departmental Teaching Committees have responsibility for the approval of minor changes to course curricula and examination structures and approve arrangements for course work. They also consider the details of entrance requirements and determine departmental postgraduate student numbers. The Faculty Studies Committees receive regular reports from the Departmental Teaching Committees.

Committees with responsibility for monitoring and evaluating quality and standards

Staff – Student Liaison Group.

Faculty of Medicine BSc Quality Assurance group.

Faculty of Medicine Education Sub-committee Year 4 – BSc.

Medical Studies Committee.

Divisional Executive Committee.

Board and Sub-Board of Examiners – meets to consider final degrees.

Examinations and Assessments Committee.

College Undergraduate Studies Committee.



College Quality Assurance Committee (with student representation).
Imperial College, Senate

c) Mechanisms for providing prompt feedback to students on their performance in course work and examinations and processes for monitoring that these named processes are effective:

The following regulations and guidelines for feedback on student performance apply:

There is no definitive College ruling on the means of providing assessment results for coursework other than that that marks should be released to students after confirmation by the Board of Examiners. Course tutors should ensure that the students are given appropriate feedback on their work by issuing marks indicative of the boundaries within which the actual marks fall (i.e. first class; upper second; lower second; third; pass; fail) according to the following criteria:

Marks should only be given for coursework which contributes to the assessment of a discrete course element, e.g. practical write-ups, coursework essays.

Marks should not be issued for major discrete course elements, e.g. final year projects and dissertations prior to the meeting of the Board of Examiners. Detailed information of marks for elements of formal examinations (Part B) can only be released to a student after he/she had submitted a request under the Freedom of Information Act to Registry that is liable to a fee. Granted requests allow the student access to his/her script under supervision by a member of the UMO. The granted requests do not allow copying of documents or subsequent discussion of assigned marks with examiners.

Marks for any element of work should be released simultaneously to the entire cohort of students after undergoing departmental moderation procedure

Students must be informed that all marks released are provisional until confirmed by the Board of Examiners. Any noted justifications for issued marks should be maintained for at least a year.

Coursework should normally be marked and returned to provide feedback within two weeks of the deadline for submission.

As good practice, it is recommended that the BSc courses use an approved In-course Assessment Feedback form for feedback on student performance in the in-course assessment of the Part B modules and the BSc Foundation course.

d) Mechanisms for gaining student feedback on the quality of teaching and their learning experience and how students are provided with feedback as to actions taken as a result of their comments:

Staff – Student Liaison Group.

Faculty of Medicine Education Sub-committee Year 4 – BSc - student representative.

Feedback sessions for each module and SOLE

Undergraduate Medical Office, Personal Tutors, Head of Pastoral Care (FoM), Course Directors and Module Leaders.

Vivas with External Examiners.

e) Mechanisms for monitoring the effectiveness of the personal tutoring system:

The BSc Welfare Tutoring system, introduced from 2009/10, is designed to cater for the welfare needs of BSc students coming off the clinical Year 3. In Year 4, the BSc students will retain their clinical tutor but will also have an allocated BSc course tutor. The BSc



Welfare tutoring system will be overseen by the Senior Welfare Tutor for the BSc in the Faculty of Medicine, the Head of Undergraduate Medicine, and the established committee structure for the BSc, beginning with the Staff-Student Liaison Group - Year 4 (SSLG 4).

Mechanisms for recognising and rewarding excellence in teaching and in pastoral care:

Staff are encouraged to reflect on their teaching, in order to introduce enhancements and develop innovative teaching methods. Each year College awards are presented to academic staff for outstanding contributions to teaching, pastoral care or research supervision. A special award for Teaching Innovation, available each year, is presented to a member of staff who has demonstrated an original and innovative approach to teaching. Nominations for these awards come from across the College and students are invited both to nominate staff and to sit on the deciding panels.

g) Staff development priorities for this programme include:

- College and Faculty of Medicine Staff Development Courses;
- staff appraisal scheme and institutional staff development courses;
- active encouragement of membership of the ILTHE; new Lecturers are encouraged to take the Certificate of Advanced Study in Learning and Teaching [CASLAT] run by the Imperial College Centre for Educational Development;
- College Teaching Development and Teaching Research Grant Schemes to fund the development of, and research into, new teaching and appraisal methods;
- Updating professional and IT/computing developments.

22. Regulation of Assessment (you may find the following link useful when completing this section:

<http://www3.imperial.ac.uk/registry/information/academicregulations>)

Assessment Rules and Degree Classification:

For **undergraduate programmes** classification of degrees will be according to the following range of marks:

First class 70 - 100%

Second class (upper division) 60 - 69.9%

Second class (lower division) 50 - 59.9%

Third class 40 - 49.9%

For **postgraduate taught programmes**: The Pass Mark for postgraduate taught courses is 50%. In order to be awarded a result of merit, a candidate must obtain an aggregate mark of 60% or greater; a result of distinction requires an aggregate mark of 70% or greater.

Where appropriate, a Board of Examiners may award a result of merit where a candidate has achieved an aggregate mark of 60% or greater across the programme as a whole AND has obtained a mark of 60% or greater in each element with the exception of one element AND has obtained a mark of 50% or greater in this latter element.

Where appropriate, a Board of Examiners may award a result of distinction where a candidate has achieved an aggregate mark of 70% or greater across the programme as a whole AND has obtained a mark of 70% or greater in each element with the exception of one element AND has obtained a mark of 60% or greater in this latter element.



Assessment in the BSc in Medical Sciences with Cardiovascular Sciences

The BSc Foundation course in Year 3 is assessed via course work only. The in-course assessment will comprise one compulsory piece, the type of which will be at the discretion of the course organiser.

The BSc, Part B, is assessed via in-course assessment – 2 compulsory pieces for each of the three Part B modules, contributing a total of 30% of the module's mark, and a written examination paper, part of the Part B examination, contributing 70% of the overall module mark.

Part C of the BSc is assessed 1) for students undertaking a BSc Project: via a project write-up, contributing 80% to the overall Part C mark, and an oral presentation of the project, contributing 20% of the overall Part C mark; 2) for students undertaking a specialist course: via in-course assessment – two pieces contributing a total of 40% (20% each) of the overall Part C mark, a mini-project write-up, contributing 40% of the overall Part C mark, and an oral presentation of the mini-project, contributing 20% of the overall Part C mark.

Marking Schemes for undergraduate taught programmes:

The Pass Mark for all **undergraduate** modules is 40%. From October 2008 entry all undergraduates are required to pass all their course units to progress to the next year.

Processes for dealing with mitigating circumstances:

For undergraduate programmes: Candidates with mitigating circumstances are not subject to the borderline restrictions but should be considered individually. However, as a general principle, candidates whose marks are more than 5% below the borderline should not normally be raised to the next higher classification. Where the Board of Examiners determines that a higher classification should be awarded extra marks should be applied to bring the final marks into the higher range.

Processes for determining degree classification for borderline candidates:

For undergraduate programmes: Candidates who fall no more than 2.5% below the minimum mark for a higher honours classification shall be eligible for review of their final classification; this review could include an oral examination or practical test or other mechanism appropriate to the discipline. Candidates whose marks are below the 2.5% borderline may be considered for a higher honours classification where certain provisions apply. Where the Board of Examiners determines that a candidate should be awarded a higher honours classification extra marks should be applied to bring their final marks into the higher range. Detailed records of all decisions should be recorded in the minutes of the meeting of the Board.

Role of external examiners:

The primary duty of external examiners is to ensure that the degrees awarded by the College are consistent with that of the national university system. External examiners are also responsible for approval of draft question papers, assessment of examination scripts, projects and coursework (where appropriate) and in some cases will attend *viva voce* and clinical examinations. Although external examiners do not have power of veto their views carry considerable weight and will be treated accordingly. External examiners are required to



attend each meeting of the Board of Examiners where recommendations on the results of individual examinations are considered. External examiners are required to write an annual report to the Rector of Imperial College which may include observations on teaching, course structure and course content as well as the examination process as a whole. The College provides feedback to external examiners in response to recommendations made within their reports.

23. Indicators of Quality and Standards (e.g. accreditation reports):

Favourable comments by External Examiners.

High proportion of students achieving a First Class or Upper Second Class Honours Degree.

Independent review of the quality of the educational provision of the Department by the Quality Assurance Agency subject review and by the GMC.

24. Key sources of information about the programme can be found in (links to course handbook, prospectus, departmental website, syllabus etc):

<https://education.med.imperial.ac.uk/Years/4-0910/gastrohep/index.htm>

ملحق 4: مصفوفة المعايير الأكاديمية للبرنامج مع المعايير القياسية للدراسات العليا
الصادرة عن الهيئة

- مواصفات الخريج:

مواصفات الخريج بالمعايير الأكاديمية للبرنامج	مواصفات الخريج بالمعايير القياسية للدراسات العليا (درجة الماجستير)
<i>The graduate of Master degree should be capable of:</i>	خريج برنامج الماجستير في أي تخصص يجب أن يكون قادراً على :
1-1 Demonstrate excellence in the application of the principles and methodologies of scientific research and use of its various tools.	١-١ إجادة تطبيق أساسيات ومنهجيات البحث العلمي واستخدام أدواته المختلفة
1-2 Apply analytical methodology in Hepatology, Gastroenterology and Infectious diseases.	١-٢ تطبيق المنهج التحليلي واستخدامه في مجال التخصص
1-3 Apply specialized knowledge and integrate it with related knowledge in his/her professional practice.	١-٣ تطبيق المعارف المتخصصة ودمجها مع المعارف ذات العلاقة في ممارسته المهنية
1-4 Show awareness of current problems and new concepts in the field of Hepatology, Gastroenterology and Infectious diseases.	١-٤ إظهار وعياً بالمشاكل الجارية والرؤى الحديثة في مجال التخصص
1-5 Determine professional problems and propose appropriate solutions.	١-٥ تحديد المشكلات المهنية وإيجاد حلول لها
1-6 Demonstrate proficiency in a significant range of specialized professional skills and use appropriate technological methods that serve his/her professional practice.	١-٦ إتقان نطاق مناسب من المهارات المهنية المتخصصة واستخدام الوسائل التكنولوجية المناسبة بما يخدم ممارسته المهنية

1-7 Communicate effectively and lead work teams.	٧-١ التوصل بفاعلية والقدرة على قيادة فرق العمل
1-8 Make informed decisions in various professional contexts.	٨-١ اتخاذ القرار في سياقات مهنية مختلفة
1-9 Employ available resources wisely to achieve maximum benefit and their preservation.	٩-١ توظيف الموارد المتاحة بما يحقق أعلى استفادة والحفاظ عليها
1-10 Show awareness of his/her role in community development and environmental preservation in light of regional and global changes.	١٠-١ إظهار الوعي بدوره في تنمية المجتمع والحفاظ على البيئة في ضوء المتغيرات العالمية والاقليمية
1-11 Conduct himself/herself in a manner that reflects integrity and sincerity, and follows the ethical code of practice.	١١-١ التصرف بما يعكس الالتزام بالنزاهة والمصداقية والالتزام بقواعد المهنة
1-12 Exercise autonomy in academic and professional self-development as well as continuous learning .	١٢-١ تنمية ذاته أكاديميا ومهنيا وقادرا على التعلم المستمر

أ - المعرفة والفهم:

المعايير الأكاديمية للبرنامج	المعايير القياسية العامة (Generic) للدراسات العليا (درجة الماجستير)
<i>By the end of Master program, the graduate should recognize and understand the followings.</i>	بأنتهاء دراسة برنامج الماجستير يجب ان يكون الخريج على فهم ودراية بكل من :
2-1-1 The concepts and fundamentals in the field of Hepatology, Gastroenterology and	1-1-2 النظريات والاساسيات المتعلقة بمجال التعلم وكذا في المجالات ذات العلاقة

Infectious diseases and in related disciplines.	
2-1-2 The mutual influence between professional practice and its impact on the environment.	2-1-2- التآثير المتبادل بين الممارسة المهنية وانعكاسها على البيئة
2-1-3 The scientific developments in the area of Hepatology, Gastroenterology and Infectious diseases.	3-1-2 التطورات العلمية في مجال التخصص
2-1-4 The ethical and legal principles of professional practice in the field of Hepatology, Gastroenterology and Infectious diseases.	4-1-2 المبادئ الاخلاقية والقانونية للممارسة المهنية في مجال التخصص
2-1-5 The principles and fundamentals of quality in professional practice in the field of Hepatology, Gastroenterology and Infectious diseases.	5-1-2 مبادئ واساسيات الجودة في الممارسة المهنية في مجال التخصص
2-1-6 The fundamentals and ethics of scientific research.	6-1-2 اساسيات واخلاقيات البحث العلمى

ب - القدرات الذهنية :

المعايير الأكاديمية للبرنامج	المعايير القياسية العامة (Generic) للدراسات العليا (درجة الماجستير)
<i>By the end of Master program, graduate should be able to recognize the followings:</i>	بانتهاء دراسة برنامج الماجستير يجب ان يكون الخريج قادرا على :
2-2-1 Analyze and evaluate information in the field of Hepatology, Gastroenterology and Infectious diseases, and apply this information in problem solving.	1-2-2 تحليل وتقييم المعلومات في مجال التخصص والقياس عليها لحل المشاكل
2-2-2 Solve specialized problems in the absence of complete data.	2-2-2 حل المشاكل المتخصصة مع عدم توافر بعض المعطيات
2-2-3 Link between different knowledge to solve professional problems.	3-2-2 الربط بين المعارف المختلفة لحل المشاكل المهنية
2-2-4 Conduct a research study and/or write a scientific study/thesis about a specific research problem.	4-2-2 اجراء دراسة بحثية او كتابة دراسة علمية منهجية حول مشكلة بحثية
2-2-5 Assess risks in professional practices in the field of Hepatology, Gastroenterology and Infectious	5-2-2 تقييم المخاطر في الممارسات المهنية في مجال التخصص

diseases.	
2-2-6 Plan for the development of performance in the field of Hepatology, Gastroenterology and Infectious diseases.	6-2-2 التخطيط لتطوير الاداء فى مجال التخصص
2-2-7 Make professional decisions in a variety of professional contexts.	7-2-2 اتخاذ القرارات المهنية فى سياقات مهنية متنوعة

ج. مهارات مهنية وعملية :

المعايير الأكاديمية للبرنامج	المعايير القياسية العامة (Generic) للدراسات العليا (درجة الماجستير)
<i>By the end of Master program, graduate should accept the followings skills.</i>	بانتهاء دراسة برنامج الماجستير يجب ان يكون الخريج قادرا على :
2-3-1 Show proficiency in basic and up to date professional skills in the field of Hepatology, Gastroenterology and Infectious diseases.	1-3-2 اتقان المهارات المهنية الاساسية والحديثة فى مجال التخصص
2-3-2 Write and evaluate professional reports.	2-3-2 كتابة وتقييم التقارير المهنية
2-3-3 Evaluate established methods and tools in the field of Hepatology, Gastroenterology and Infectious diseases.	3-3-2 تقييم الطرق والادوات القائمة فى مجال التخصص

د . مهارات عامة و منتقلة :

المعايير الأكاديمية للبرنامج	المعايير القياسية العامة (Generic) للدراسات العليا (درجة الماجستير)
<i>By the end of Master program, graduate should accept the following skills:</i>	بانتهاء دراسة برنامج الماجستير يجب ان يكون الخريج قادرا على :
2-4-1 Communicate effectively using a variety of communication methods.	1-4-2 التواصل الفعال بأنواعه المختلفة
2-4-2 Use information technology in a manner that serves professional practice.	2-4-2 استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية
2-4-3 Exercise autonomy in self-evaluation and the identification of personal learning needs.	3-4-2 التقييم الذاتى وتحديد احتياجاته التعليمية
2-4-4 Use various resources for the retrieval of information and knowledge.	4-4-2 استخدام المصادر المختلفة لحصول على المعلومات والمعارف
2-4-5 Develop standards and indicators for assessing the performance of others.	5-4-2 وضع قواعد ومؤشرات تقييم اداء الاخرين
2-4-6 Work effectively in a team as leader or member in various professional situations.	6-4-2 العمل فى فريق سياقات كهنية مختلفة

2-4-7 Manage time effectively.	7-4-2 ادارة الوقت بكفاءة
2-4-8 Demonstrate independent and continuous learning.	8-4-2 التعلم الذاتى والمستمر

ملحق ٥: مصفوفة مضاهاة المعايير الأكاديمية للبرنامج و أهداف و نواتج تعلم البرنامج

أهداف البرنامج	المعايير الأكاديمية للبرنامج (مواصفات الخريج):
1-1	1-1 Demonstrate excellence in the application of the principles and methodologies of scientific research and the use of its various tools.
1-2	1-2 Apply analytical methodology in Hepatology, Gastroenterology and Infectious diseases.
1-3	1-3 Apply specialized knowledge and integrate it with related knowledge in his/her professional practice.
1-4	1-4 Show awareness of current problems and new concepts in the field of Hepatology, Gastroenterology and Infectious diseases.
1-5	1-5 Determine professional problems and propose appropriate solutions.
1-6	1-6 Demonstrate proficiency in a significant range of specialized professional skills and use appropriate technological methods that serve his/her professional practice.

	practice.
1-7	1-7 Communicate effectively and lead work teams.
1-8	1-8 Make informed decisions in various professional contexts.
1-9	1-9 Employ available resources wisely to achieve maximum benefit and the preservation.
1-10	1-10 Show awareness of his/her role in community development and environmental preservation in light of regional and global changes.
1-11	1-11 Conduct himself/herself in a manner that reflects integrity and sincerity and follows the ethical code of practice.
1-12	1-12 Exercise autonomy in academic and professional self-development as well as continuous learning .

نواتج تعلم البرنامج										المعايير الأكاديمية للبرنامج	
المعرفة و الفهم											
	2.a.10	2.a.9	2.a.8	2.a.7	2.a.6	2.a.5	2.a.4	2.a.3	2.a.2.		2.a.1.
						√	√	√	√	√	2-1-2 The concepts and fundamentals in the field of Hepatology, Gastroenterology and Infectious diseases and in related disciplines.

			√		√		√				2-1-2 The mutual influence between professional practice and its impact on the environment.
		√			√		√				2-1-3 The scientific developments in the area of Hepatology, Gastroenterology and Infectious diseases.
			√	√	√						2-1-4 The ethical and legal principles of professional practice in the field of Hepatology, Gastroenterology and Infectious diseases.
					√	√	√				2-1-5 The principles and fundamentals of quality in professional practice in the field of Hepatology, Gastroenterology and Infectious diseases.
			√	√			√	√			2-1-6 The fundamentals and ethics of scientific research.

نواتج تعلم البرنامج										المعايير الأكاديمية للبرنامج المهارات الذهنية
Intellectual skills										
		2.b.8	2.b.7	2.b.6	2.b.5	2.b.4	2.b.3	2.b.2.	2.b.1.	
							√	√	√	2-2-1 Analyze and evaluate information in the field of Hepatology, Gastroenterology and Infectious diseases, and apply this information in problem solving.
		√					√	√		2-2-2 Solve specialized problems in the absence of complete data.
			√		√	√				2-2-3 Link between different knowledge to solve professional problems.
		√			√	√				2-2-4 Conduct a research study and/or write a scientific study/thesis about a specific research problem.
			√	√						2-2-5 Assess risks in professional practices in the field of Hepatology, Gastroenterology and Infectious diseases.
		√			√	√				2-2-6 Plan for the development of performance in the field of Hepatology, Gastroenterology and Infectious diseases.
				√	√					2-2-7 Make professional decisions in a variety

of professional contexts.

نواتج تعلم البرنامج										المعايير الأكاديمية للبرنامج المهارات المهنية		
Practical/Professional skills												
										2.c.1.	√	2-3-1 Show proficiency in basic and up to date professional skills in the field of Hepatology, Gastroenterology and Infectious diseases.
										2.c.2.		2-3-2 Write and evaluate professional reports.
										2.c.3	√	
										2.c.4	√	
										2.c.5	√	
										2.c.6	√	
										2.c.7	√	
												2-3-3 Evaluate established methods and tools in the field of Hepatology, Gastroenterology and Infectious diseases.

نواتج تعلم البرنامج										المعايير الأكاديمية للبرنامج المهارات العامة والمنتقلة	
General and transferable skill											
										2.d.1.	
										2.d.2.	
										2.d.3	
										2.d.4	
										2.d.5	
										2.d.6	
										2.d.7	
										2.d.8	

						√	√	√				2-4-1 Communicate effectively using a variety of communication methods.
									√	√		2-4-2 Use information technology in a manner that serves professional practice.
					√		√		√			2-4-3 Exercise autonomy in self-evaluation and the identification of personal learning needs.
								√			√	2-4-4 Use various resources for the retrieval of information and knowledge.
					√		√		√			2-4-5 Develop standards and indicators for assessing the performance of others.
				√			√	√				2-4-6 Work effectively in a team as leader or member in various professional situations.
				√			√					2-4-7 Manage time effectively.
				√	√			√				2-4-8 Demonstrate independent and continuous learning.

ملحق (6) مصفوفة المعارف والمهارات للبرنامج الدراسي

مهارات ذهنية								المعارف								المحتويات الرئيسية للبرنامج		
2. b. 8.	2. b. 7.	2. b. 6.	2. b. 5.	2. b. 4.	2. b. 3.	2. b. 2.	2 b 1	2. a. 10.	2. a. 9.	2. a. 8.	2. a. 7.	2. a. 6.	2. a. 5.	2.a. 4.	2.a. 3.		2.a. 2.	2a1
												√		√				Physiology&Biochemistry
			√	√				√					√					Bacteriology&Parasitology
													√	√				Pathology
					√					√	√					√		Community medicine
√						√						√						Internal Medicine
√	√	√	√	√		√	√	√							√		√	Hepatology, Gastroenterology &infectious diseases

مهارات عامة								مهارات مهنية							المحتويات الرئيسية للبرنامج
2d 8	2d 7	2 . d . 6 .	2. d. 5.	2.d .4.	2.d .3.	2.d. 2.	2d 1	2.c.7.	2.c. 6.	2.c. 5.	2.c. 4.	2.c. 3.	2.c. 2.	2c1	
√										√					Physiology&Biochemistry
										√					Bacteriology&Parasitology
										√					Pathology
√					√	√									Community medicine

				√			√				√			√		Internal Medicine	
√		√	√	√	√	√	√	√		√	√		√	√	√	√	Hepatology, Gastroenterology &infectious diseases

ملحق (٧)

توصيف المقررات Program courses

First part
1- Physiology
2-Biochemistry
3- Bacteriology
4-Parasitology
5-Pathology
6- Community medicine

Second part
1- Internal Medicine
2- Hepatology, Gastroenterology and infectious diseases

Course Specifications

Course title: _____ Master of Hepatology and Gastroenterology and Infectious diseases.

HEGAID 606 _____ (Code)

Academic Year (2013 – 2014)

- Department offering the course Hepatology and Gastroenterology and Infectious diseases.

.academic year of Master of Hepatology and Gastroenterology and Infectious diseases

Date of specification approval Faculty Council number --319-----, dated 20/6/2013

A) Basic Information:

- Allocated marks: 600 marks
- Course duration: 48 weeks of teaching
- Teaching hours: 13 hours/week = 624 total teaching hours

B) Professional Information:

1- Overall Aims of the Program:

The overall goals of the program are to develop a student with the following characteristics:

1.1. Have the recent scientific knowledge essential for the mastery of HEGAIDical medicine and gastroenterology according to the international standards.

1.2. Have the skills necessary for proper diagnosis and management of patients in the field of HEGAIDical medicine and gastroenterology including diagnostic, problem solving and decision making skills.

1.3. Know ethical principles related to medical practice in this specialty .

1.4. Participate actively in community needs assessment and problems identification.

1.5. Be concerned about new and recent guidelines in dealing with different medical problems.

1.6. Behave ethically and honorably in his medical practice.

1.7. Produce graduates well trained in laboratory and research skills.

1.8. Foster the ability to work independently and as part of a group, and to develop presentation skills, both written and oral.

1.9. Capable of performing and/or interpreting all procedures and diagnostic tests routinely done in the evaluation and treatment of gastroenterological patients, trainees have to gain experience under direct supervision.

1.10. An adequate number of routine endoscopic procedures have to be performed in order to reach the minimum standards. Trainees should also be skilled in the principles of caring for, cleaning, handling, and maintaining endoscopic equipment.

2-Intended Learning Outcomes (ILOS):

2.a. Knowledge and Understanding

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

- 2.a.1. Define the basic and recent principles in the field of hepatology and gastroenterology and infectious diseases and related fields.
- 2.a.2. Recognize the effect of his clinical practice on environment and principles of environmental development and saving.
- 2.a.3. List the different scientific techniques and approaches available in gastroenterological and hepatological science.
- 2.a.4. Describe the basics of the structure and function of the GIT and liver in health and disease.
- 2.a.5. List infective, inflammatory and immunological mechanisms involved in diseases of the GIT and liver.
- 2.a.6. Recognize the diagnosis and evaluation of patients with digestive diseases, taking into consideration all biological and psychosocial aspects.
- 2.a.7. Define the incidence and prevalence of common digestive disorders on the basis of locally available data.
- 2.a.8. List the appropriate measures for the prevention of common digestive diseases and have basic knowledge about common communicable diseases, especially in the field of gastroenterology and hepatology, both for self protection and to foster public awareness.
- 2.a.9. List the indications for, contraindications against and complications of major endoscopic procedures.

2.a.10. Define the basic principles of disinfection of endoscopic instruments and ancillary devices.

2.b. Intellectual Skills:-

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

2.b.1. Interpret data acquired through history taking to reach a provisional diagnosis for hepatic and GIT problems.

2.b.2. Analyze different diagnostic alternatives and select the ones that help reaching a final diagnosis for hepatic and GIT problems.
problems.

2.b.3. Assess risk in professional practices in the field of HEGAIDical medicine and Gastroenterology

2.b.4. Assess the performance in the field of HEGAIDical medicine and Gastroenterology and how to improve.

2.b.5. Solve hepatic and GIT problems.

2.b.6. Analyze and evaluate information.

2.b.7. Have the ability to behave in accordance with professional principles, such as: altruism, accountability, excellence, duty, service, honor, integrity, and respect for others. serving the interests of the patient, rather than one's own interests.

2.b.8. Have the ability to work effectively and efficiently with members of other specialties, such as cardiology, critical-care medicine, oncology, surgery, pathology, and radiology, as well as with nurses, pharmacists, social assistants, and psychologists.

2.c. Practical & Clinical Skills:-

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

2.c.1. Perform the basic and modern professional skills in the area of HEGAIDical medicine and Gastroenterology.

2.c.2. Write and evaluate medical reports.

2.c.3. Recognize and develop methods and tools existing in the area of HEGAIDical medicine and Gastroenterology

2.c.4. Perform endoscopic and imaging evaluation of gastrointestinal system.

2.c.5. Perform safely some laboratory based experiments.

2.c.6. Perform efficiently some Endoscopic skills.

2.c.7. Experience in patient care

- Caring for a sufficiently large number of patients should provide broad experience in different types of digestive diseases.

- Caring for a sufficient number of new patients (about 150 per year, to ensure adequate exposure to inpatients and outpatients) and follow-up patients—e.g., pregnant, adolescent, geriatric patients of both genders.
- Training in the inpatient and outpatient departments, in order to enable trainees to diagnose and manage a wide range of digestive diseases. The AGA Task Force proposal has very high requirements, and we would therefore suggest that the training program should cover all of the fields and not be so demanding.
- It should be ensured that 30% of this experience consists of clinical training in acute and chronic liver diseases.

2.d. General and transferable skills:-

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

- 2.d.1. Communicate clearly, sensitively and effectively.
- 2.d.2. Use scientific technology.
- 2.d.3. Use available resources to get data and knowledge.
- 2.d.4. Leading seminars and time management and directing.
- 2.d.5. Communicate effectively through oral presentations and written reports.
- 2.d.6. Work independently and as part of a team.
- 2.d.7. Integrate and evaluate information from a variety of sources.

3- Course contents:

Subject	Lectures (hrs)	Tutorial / Small group discussion (hrs)	Practical (hrs)	Total (hrs)	% of Total
1- Hepatic disorders	2			45	12.5
2- GIT disorders	2			45	12.5
3- Infectious diseases	3			90	25
4- Clinical	2	2		180	25
5- Applied Research	1	1		180	25

III-A) TOPICS: Diseases of the GIT, Liver, Pancreas and Biliary System:

A: Gastrointestinal&Hepatobiliary

1. Esophagus
2. Swallowing disorders and dysphagia.

3. Gastroesophageal reflux disease.
4. Achalasia.
5. Esophageal cancer.
6. Barrett's esophagus..
7. Stomach
8. Gastritis
9. Gastric cancer.
10. Helicobacter pylori and peptic ulcer disease.
11. Liver And Billiard Tract Disorders
12. Evaluation of abnormal livers tests.
13. Viral hepatitis.
14. Antiviral therapy for hepatitis C infection.
15. Antiviral therapy for hepatitis B.
16. Autoimmune hepatitis: diagnosis and pathogenesis.
17. Autoimmune hepatitis: treatment.
18. Primary biliray cirrhosis and primary sclerosing cholangitis.
19. Hepatitis vaccines and immunoprophylaxis.
20. Pregnancy and liver disease..
21. Evaluation of focal liver disease.
22. Drug-induced liver disease.
23. Alcoholic liver disease.
24. Vascular liver disease.
25. Nonalcoholic fatty liver disease.
26. liver transplantation.
27. Ascites.
28. Liver abscess.
29. inheritable forms of liver disease.
30. Gallbladder: Stones, Sludge, and polyps.
31. .Panceratic Disorders
32. Acute pancreatitis.
33. Chronic pancreatitis.
34. Pancreatic cancer..
35. Small And Large Boewel Disorders.
36. Crohn's disease.
37. Ulcerative colitis.
38. Eosinophilic gastroentertitis.
39. Colon Disorders

40. Colorectal cancer and colon cancer screening.
41. Constipation and fecal incontinence.
42. Diverticulitis..
43. Genral Symptoms And Conditions
44. Upper gastrointestinal tract hemorrhage.
45. Lower gastrointestinal tract bleeding.
46. Occult and obscure gastrointestinal bleeding.
47. Evaluation of acute abdominal pain.
48. Evaluation of acute diarrhea.
49. Chronic diarrhea.
50. Aids and gastrointestinal tract...
51. 13. Endoscopic cancer screening and surveillance..
52. Gastrointestinal Radiology
53. Endoscopic ultrasound.
54. Advanced therapeutic endoscopy.

B: Infectious diseases

1. Introduction to microbial diseases.
2. The febrile patient
3. The pathogenesis of fever
4. The acute phase response
5. The compromised host
6. Prevention and control of hospital-acquired infections
7. Advice to travelers
8. Introduction to bacterial diseases
9. Antibacterial therapy
10. Pneumococcal pneumonia
11. Streptococcal infections
12. Rheumatic fever
13. Infective endocarditic
14. Staphylococcal infections
15. Bacterial meningitis
16. Meningococcal infections
17. Whooping cough (pertussis)
18. Diphtheria
19. Botulism
20. Tetanus
21. Introduction to enteric infections

22. Typhoid fever
23. Salmonella infections other than typhoid fever
24. Shigellosis
25. Cholera
26. The diarrhea of travelers
27. yersinia infections
28. Tularemia
29. Anthrax
30. Action mycosis
31. Nocardiosis
32. Brucellosis
33. Tuberculosis
34. Leprosy (hansen's disease)
35. Gonococcal infections
36. Relapsing fever
37. Lyme disease
38. Leptospirosis
39. Rickettsioses
40. Zoonosis
41. Introduction to viral diseases
42. Influenza
43. Adenovirus diseases
44. Measles
45. Rubella (german measles)
46. Varicella (chickenpox, shingles)
47. Mumps
48. Herpes simplex virus infections
49. Infections associated with human cytomegalovirus
50. Infectious mononucleosis: epstein-barr virus infection
51. Retroviruses other than hiv
52. Enteroviruses
53. Viral gastroenteritis
54. Introduction to hemorrhagic fever viruses
55. Candidiasis
56. Aspergillosis
57. Pneumocystis carinii pneumonia
58. Introduction to protozoan and helminthic diseases

59. Malaria
60. African trypanosomiasis (sleeping sickness)
61. American trypanosomiasis (chagas' disease)
62. Leishmaniasis
63. Toxoplasmosis
64. Cryptosporidiosis
65. Giardiasis
66. Amebiasis
67. Other protozoan diseases
68. Cestode infections
69. Schistosomiasis (bilharziasis)
70. Liver, intestinal, and lung fluke infections
71. Nematode infections
72. Filariasis

C: Practical Topics

1. Imaging of G.I.T.
2. Abdominal U/S.
3. Principles of endoscopy.
4. Principles of G.I.T motility study.
5. Liver function tests.
6. Pancreatic tests

TEACHING PLAN:

Lectures: Division of students into 3 groups
twice /week, Time from 10 to 1:30.

Tutorials:

Practical classes

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	<u>2</u> times/week; One and half hour each between 12 to 1:00	2	2
Practical	<u>3</u> hours / week	3	3
Tutorial	<u>1</u> hours / <u>1</u> week	1	1
Total			

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA: Faculty bylaws

5-B) Assessment TOOLS:

Tool	Purpose (ILOs)
Written examination	To assess knowledge, attitudes and skills
Oral examination	To assess knowledge and attitudes
Practical examination	To assess attitudes and skills

5-C) TIME SCHEDULE: Faculty bylaws

Exam	Week
1- End of acadmic sciences year exam	27
2- Final written exam	106
3- Final clinical exam	107
4- Thesis dissertation submission	132 -135

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- Shock exams		
2- First half		
3- Mid-year		
4- Second half		
5- Final exam:	300	
a- Written	200	
b- Practical	100	
c- Oral		
6- Assignments & other activities		
Total	600	

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

FORMATIVE ASSESSMENT:

Student knows his marks after the Formative exams.

5-E) Examinassions description:

Examination	Description
1- Shock exams	
2- First half	Objectively structured questions
3- Mid-year	
4- Second half	
5- Final exam:	
a- Written	e.g. select (MCQs) & Supply (Short essay) questions

b- Practical c- Oral	e.g. Do, identify e.g. How many sessions
6- Assignments & other activities	e.g. Assignments, projects, practical books etc
Total	

6- List of references:

6.1- Basic materials.

6.2- Essential books (text books):sheilla Sherlock,cecil , Manson

6.3- Recommended books:Manuals, Secrets

6.4- Periodicals, Web sites, ... etc:

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Lecture halls:
- Small group classes
- Laboratory
- Information technology / AV aids
- Models etc

Course Specification

Course title: General medicine for master degree of HEGAID

Code: Med 0713

Academic Year (2013 – 2014)

- Department offering the course: Internal Medicine department
- Academic year of. program: master degree of HEGAID

A) Basic Information:

- Allocated marks: marks.
- Course duration: weeks of teaching.
- Teaching hours: hours / week = total teaching hours

	Hours / week	Total hours
1- Lectures	6h/w	216h
2- clinical	(15h/w) for 24 weeks	360h
Total	21 / week	576 hours

Professional Information:

1-Overall aims of the course:

- To provide good basic scientific knowledge about common medical diseases in studied medical branches (cardiovascular-respiratory-gastrointestinal-renal-endocrine-CNS....)
- To learn the student how to deal ethically with the patient and how to protect him self of infection
- To accept sufficient clinical skills how to take history of the patient how to examine different systems of the body with stress on data help in diagnosis.
- To explain how to use this collected data in diagnose the case, use approach schedules ,determine drugs can be used with know its complication.avoid drugs interaction
- 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. Recognizethe genetic bases and its association with medical diseases its discover and possible prevention or therapy .by gene therapy

2.a.2 Identify the helpful terms and details of anatomy, physiology, and pathophysiology of different medical diseases

2.a.3 Identify incidence ,prevalence ,racial,environmental effect on the medical disease

2.a.4. Explain the relation between age and medical diseases (diseases common in each age/how age may effect progression of certain diseases

2.a.5 . Explain causes ;clinical picture of different medical diseases in different medical branches

Cardiovascular ,Respiratory ,Gastrointestinal ,Rheumatology.,Endocrine,infection Neurological ,chest.

2.a.6 Identify the microbiological bases for medical diseases especially infectious diseases routes of infection methods of transfer

2.a.7 Recognise the general and special method of prevention and control

2.a.8 Recognise different investigation that can be done for each symptom to reach the cause

2.a.9 Identify the approach schedule of possible symptoms and how to make differential diagnosis.

2.a.10 Explain the different line s of treatment for eash disease the sequence of treatment /doses to begin with /determine the time to add other drugs

2.a.11 Recognise pharmacological bases for diferrent drugs

2.a.12 Explain side effects and drugs interaction which may harm the patient more than the disease its self

2.a.13. Recognise the principles of oncology medicine how to stabilize the patient and refer him to appropriate site to start treatment .

2.a.14 Explain common drugs which have narrow therapeutic range and explain how to deal if the toxicity occur and their anti dotes.

2.b.- practical and clinical skills : .

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

2.b.1 perform methods ,technique to assess vital signs how get benefit in diagnosis .

2.b.2 Demonstrate the steps of clinical assestment to the patient (history taking – general examination – regional examination).

2.b.3 Demonstrate the general principles of taking history how to analysis different symptoms in way help the physician to diagnose

2.b.4 Perform appropriate sterile technique,

2.b.5 Demonstrate samples taking technique and its useful in diagnosis

- 2.b.6 Demonstrate different signs that may help in diagnosis
- 2.b.7 Recognize the effect of different diseases and variability occur in general examination
- 2.b.8 perform inspection –palpation –percussion-ascultation to different system in the body (cardiovascular system –respiratory- gastroenterology –hepatic-endocrine- kidney –rheumatology-neurology).
- 2.b.9 Recognize urgent life threatening diseases and how deal with it rapidly.
- 2.b.10 Recognize the changes in the body vital signs may occur in association with different drugs toxic level or poison taking
- 2.c. Professional Attitude and Behavioral skills

2.c.1 Respects to all patients irrespective of their socioeconomic levels, culture or religious believes.

2.c.2 Respects appropriate language to establish good patient-physician relationship.

2.c.3 Reflect critically on their own performance , to recognize personal limitations regarding skills and knowledge to refer patients to appropriate health facility at the appropriate stage.

2.c.4 Demonstrate respects for the rights of patients and their families to full understanding, and involve them in management decision.

2.d. Communication skills:

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

- 2.d.1. Communicate clearly, sensitively and effectively with patients and their relatives.
- 2.d.2. Establish good relations with other health care professionals regardless their degrees or rank.
- 2.d.3. Communicate effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.
- 2.d.4. Cope up with difficult situations as breaking news.

2.e -Intellectual skills:

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

2.e.1.-Analyze symptoms & signs and construct a differential diagnosis for common presenting complaints.

2.e.2.- Recognize an appropriate diagnostic plan for evaluation of common presenting complaints

2e.3 Interpret the results of commonly used diagnostic procedures.

2.e.4. Analyze risk factors for disease processes and injury the appropriate diagnostic, preventive, and therapeutic interventions

2.e.5 Analyze the indications and logistics of referring patients to higher levels of experience or specialization as a principle for the family doctor(GP)

2.e.6. Interpret scenario of treatment plan, incorporating his knowledge , best available evidence , and patient's preferences in a cost effective manner

2.f - General and transferable skills

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

2.f.1- Establish rapport and trust with the patient

2.f.2- Explain to the patients and their relative the nature of illness ,m the diagnostic and therapeutic options

2.f.3 Present fully the patients history and examination findings, list the clinical problems and present relevant material clearly, , and legably , to use when need .

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

3- Contents:

Blood

Anemia

bleeding disorder

platelet disorder

D.V.T

DIC

Chest

bronchial asthma

Pleural effusion

pulmonary embolism

suppurative lung diseases

Cardiology:-

Heart failure

Pericardial effusion

Hypertension

arterial fibrillation

valvular heart disease
 Endocrine
 Diabetes mellitus
 thyroid disease
 panhypopituitarism
 Kidney
 Hematuria
 Nephrotic
 Proteinuria
 Renal failure
 acid base balance
 Medical medicine
 Typhoid
 Brucella
 fever of unknown origin
 Collagen disorder
 systemic lupus
 anti phospholipid

4- Teaching and learning methods:

METHODS USED:

5. Modified lectures.
6. Small group discussions: models, case study.
7. Self-learning.
8. Clinical rounds.

TEACHING PLAN:

Lectures: 6hs/week

Practical classes: 15hs/week .

Time plan:

Item	Time schedule	Teaching hours	Total hours

Lectures	5 Times/ week (each time 1.25 hour)	6 hours	216
Clinical classes	5 Times/ week (each time 3 hour)	15 hours	360
Total		21 hours	576

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA:

1. Practical attendance
2. Small group attendance
3. Lectures

5-B) Assessment TOOLS:

Tool	Purpose (ILOs)	Evidence
1. Written examination	To assess knowledge acquisition including MCQs case solving. True or false Short essays 2.a.1-----2.a2..----- 2.a.3.---- 2.a4. ---- 2.a.5 2.a.6 2.a.7 2.a.8 2.a.9 2.a.10 2.a.11 2.a.12 2.a.13 2.a.14 2.e. 1 2.e.2 2.e.3 2.e.4 2.e.5 2.e.6	Attached module of examination

2. Oral examination	To assess understanding and stability of knowledge given, attitude , presentation and how to express his knowledge. 2.a.1-----2.a2..---- 2.a.3.---- 2.a4. ---- 2.a.5 2.a.6 2.a.7 2.a.8 2.a.9 2.a.10 2.a.11 2.a.12 2.a.13 2.a.14 2.e. 1 2.e.2 2.e.3 2.e.4 2.e.5 2.e.6	Viva cards
3.practical examination	To assess clinical skills , how to examine the patient and how to reach the diagnosis as easy and accurate as 2.b.1.----2.b.2 2.b 3.....2.b.4 2.c.1 2.c.2 2.c.3 2.c.4 2.d.1 2.d.2 2.d.3 2.d.4 2.e. 1 2.e.2 2.e.3 2.e.4 2.e.5 2.e.6 2.f.1 2.f.2 2.f 3 2.f.4	Practical report

5-C) Assessment schedule

Assessment 1 20% examination ...Hold on December 2013

D) Weighting System:

2- Final exam: a- Written b- Oralc,clinical		
---	--	--

- The minimum passing score is 540 marks, provided that at least 30%%marks are obtained in the final written examination.
- Passing grades are:
 1. Excellent: > 85%
 2. Very good: 75-85%
 3. Good: 65-75%
 4. Fair: 60-65%
 - 5.

FORMATIVE ASSESSMENT:

- Student knows his marks after the Formative exams.

5-E) Examination description:

Examination	Description
1- End-round exam: Written	To assess knowledge acquisition including MCQs case solving. True or false Short essays
b- Practical	To assess clinical skills , how to examine the patient and how to reach the diagnosis easy and accurate To assess ability of the student to use ProfessionalAttitude and Behavioral skills ,general skills, communication skills

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
faculty library
in patient rooms
data show

Course Specification:

Medical Parasitology for Master degree of Hepatology, Gastroentrology and infectious diseases.

- Programm on which the course is given:

Master degree of Hepatology, Gastroentrology and infectious diseases.

-Major or Minor element of programmes: Subsidiary

- Department offering the program

Hepatology, Gastroentrology and infectious diseases Department.

- Department offering the course:

Medical Parasitology Department.

- Level: First Part Master Degree

- Date of specification approval: 4 / 1 /2013

A- Basic Information

- Title: Medical Parasitology .

-Code:HEGAID602.

-Credit hours: One credit hour (15hrs):الساعات المعتمدة:

Lectures: 10hrs

Practical: 10 hrs

Total: 15hr

B) Professional Information:

1- Overall Aim of the Course:

1.a Achieve national and international standing in education in the field of Medical Parasitology.

1.b Focus on: applied clinical Parasitology, diagnosis, prevention and control of the different parasitic infections.

1.c Be aware of basic epidemiological and environmental factors in relation to parasitic infections with special emphasis on local endemicity.

1.d Able to collect and update knowledge about parasites using the internet access.

1.e Share in campaigns to solve any emerging problem in the community.

2- Intended Learning Outcomes of Course (ILOs)

a. Knowledge and understanding:

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

a.1. Describe parasite nomenclature, geographical distribution different host and parasitic zoonosis.

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

a.3. Recognize pathology, pathogenesis, clinical picture and host parasite relationship of different parasite.

a.4. Illustrate morphology, life cycles of different parasites.

a.5. Classify different parasitic infections.

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

a.7. Follow the main scientific advances in the field of practice.

a.8. Understand the fundamentals of ethical & legal practice .

a.9. Know the Quality standards of the practice.

a.10. Follow the Basics and ethics of scientific research.

ب - المهارات الذهنية :

b. Intellectual Skills:

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

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

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

b.3. Integrate different information to solve parasitological problems

b.4. Conduct a scientific research &/Or write scientific systematic approach to a research problem (hypothesis)

b.5. Evaluate risks imposed during practice.

b.6. Plan for professional improvement in field of parasitology .

b.7. Take professional decisions in wide range of parasitological situations.

c. Professional and practical skills:

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

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

C.2. Handle laboratory equipments safely and carefully.

C.3. Illustrate different parasitic stages, preserve fresh specimens, identify infected snails and apply safety precautions.

C.4. Write and appraise reports

C.5. Evaluate methods and tools used in specialty.

d. General and transferable skills:

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

d.1. Communicate in group working and problem solving

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

d.3. Computing skills for research work.

d.4. Practice self appraisal and determines his learning needs.

d.5. Share in determination of standards for evaluation of others (e.g.: subordinates/ trainees etc.).

d.6. Use different sources of information to obtain data.

d.6. Work in teams .

d.7. Manage time effectively.

d.8. Work as team leader in situations comparable to his work level.

d.9. Learn independently and seek continuous learning.

3- Course contents:

Subject	Lecture	Hours/week	Practical
HELMINTHOLOGY	3	1x3	3

PROTZOLOGY	3	1x3	3
MEDICAL ENTOMOLOGY	2	1x2	2
Immunoparasitology	1	1x1	----
Diagnostic techniques	--	1x1	2
Applied parasitology	1	1x1	-----
Total	10	10	10(5hrs)

4- Teaching and Learning Methods:

4.1- Modified lectures.

4.2- Practical course includes: Demonstration of microscopic slides and gross specimens including jars for helminthic parasites and boxes for different arthropods and snails. Specimens are real, projector slides and graphic specimens.

4.3- Tutorials: as small group discussion of problem based learning (PBL) allowing for integration between Parasitology and other subjects. Also, for self directed learning (SDL) to encourage the graduate to read textbooks and to acquire computing skills for continuous learning.

4.4- Seminars: For recent subjects of special importance e.g. molecular biology, relevant biochemical and geno-typing of parasites, and emerging parasitic problems.

5- Student Assessment Methods:

Final assessment includes:

i) Written examination: composed of one paper (11/2hours), in the form of:

- 1- Short essay questions
- 2- Drawing & labeling
- 3- Multiple choice questions
- 4- Case report

To assess knowledge , understanding and intellectual skills

ii) Practical assessment by OSPE .To assess knowledge, professional& practical skills and attitude.

iii) Oral assessment using viva cards by 2 examiners in one session. To assess knowledge, intellectual skills and attitude.

Assessment table:

Assessment	Examination	Week
1	Final written	24
2	Final oral	24

3	Final practical	24
---	-----------------	----

Assessment percent:

Final written 50%

Final oral 25 %

Final practical 25%

6- List of references:

6.1- Basic Materials

- Medical Parasitology-Lecture Notes, authorized by the Department.
- Parasitology Atlas.
- CD for practical course.
- Electronic book by staff members.(under publication).

6.2- Recommended books:

- Manson's HEGAIDical Diseases, Cook GC (ed), 21st edition. London: WB Saunders, 2003.
- Introduction to Infectious and Parasitic Diseases, Including Their Cause and Manner of Transmission by Millard Langfeld(2010)
- Immunity to Parasites. How Parasitic Infections are Controlled
2nd Edition Derek Wakelin University of Nottingham, 1996.

6.3- 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.
- Binocular microscopes with planachromate lenses 6x, 10x, 40x and 100x.
- Sets of microscopic slides for demonstration.
- 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.

Course Specification

- Course title Master degree of HEGAID
- Code: (HEGAID603)
 - Academic Year (2013– 2014)
 - Department offering the course: Human Pathology Department
 - Academic year of (, MSc), program: master degree program (2013-2014)_.....
 - Major or minor elements of the program:
 - Academic level:
 - Date of specification approval:
 - Department council no....., date 14/2/2013
 - Faculty council no, date21/2/2013

A) Basic Information:

- Allocated marks: 300 marks
- Course duration: 24 weeks of teaching
- Teaching hours: 1 hours/week = 37.5 total teaching hours

	Hours / week	Total hours
1- Lectures		7.5
3- Practical		30
Total		37.5

B) Professional Information:

1- Overall Aim of the Course:

The overall goals of the course are

- 1.1. Good application of basic pathological knowledge essential for the practice of hepatobiliary medicine
- 1.2. providing basic and specialized services in relation with biopsy diagnosis in the practice of medicine and investigations.
- 1.3. Application of special knowledge & its integration with others that have relation with the special practice
- 1.4. Awareness of the running problems as early tumor detection and diagnosis of hepatobiliary system and related systems
- 1.5. Diagnosis of practical problems as cases study and clinical assessments
- 1.6. Having fundamental knowledge of medical disciplines related to their clinical applications & able to use different technological tools as computer in the field of hepatobiliary medicine
- 1.7. Having acquired competency to be teacher, trainer, researcher and leader in the field.
- 1.8. Diagnosis, problem solving and decision making skills necessary for proper evaluation and management.
- 1.9. development of recent tools & ways essential for medical practice.
- 1.10. Awareness of his role in the progress of society and govern the environment in the light of international & local changes.
- 1.11. honesty and respect the practical rules.
- 1.12. Lifelong learning 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:

- 2.1.1. describe the dissection of different biopsies of hepatobiliary system
- 2.1.2. list the laws in relation to the practical work, medical practice and be acquainted with related relevant amendments and also related judgments passed by constitutional courts .
- 2.1.3 Describe the clinical manifestations and differential diagnosis of common pathological cases.
- 2.1.4. Recognize the scientific basis and interpretation of various diagnostic modalities essential for hepatobiliary medicine
- 2.1.5. mention the principles that govern ethical decision making in clinical practice as well as the pathological aspect of medical malpractice.
- 2.1.6. discuss ethics of medical research.
- 2.1.7. list basic knowledge & theories needed to support literature retrieval and further research capabilities.
- 2.1.8. Recognize the importance of life-long self-learning required for continuous professional development.
- 2.1.9. Discuss the scope and impact of human rights law on persons and groups.

2.b. Intellectual Skills:

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

- 2.2.1. Diagnose, solve problem and make decision skills necessary for proper evaluation and management.
- 2.2.2. Evaluate the risky problems that could be met during taking biopsies .
- 2.2.3. Combine the clinical and investigational database to be proficient in clinical problem solving.
- 2.2.4. Plan for performance development in his practice.
- 2.2.5. Select the most appropriate and cost effective diagnostic procedures for each problem..
- 2.2.7. Formulate of research hypothesis & questions.
- 2.2.8. Adopt the questioning approach to own work & that of others to solve clinical problems

2.c. Practical and Clinical Skills:

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

- 2.3.1. assess, diagnose and evaluate of cases and investigation.
- 2.3.2. interpret all important pathological aspects for early cancer detection and assessment.

2.3.3. Perform the gross examination and able to describe the findings of gastrointestinal system and related systems efficiently

2.3.4. Diagnose and manage different hepatobiliary cases

2.3.5. interpret reports like cancer assessment report, cytological report and immunohistochemical report.

2.3.6. Apply different technical skills in his special practice.

2.d. General and transferable Skills:

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

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

2.4.2. Able to put rules & regularities for evaluation of performance of others.

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

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

2.4.5. Do self criticism. .

2.4.6. Retrieve, manage, and manipulate information by all means, including electronic means.

3- Course contents:

Topic	Total	Lectures	Practical/ small	%
General Pathology	12Hrs	2hrs	10 hrs	
Cell response to injury, Stem cells and repair, Tissue deposits	2-1/2	1/2	2	
Inflammation ,Granulomas ,Viral diseases	2-3/4	3/4	2	
Disturbance of growth Neoplasia, Developmental and genetic diseases	2-3/4	3/4	2	
Circulatory disturbances, Radiation Basic imunopathology	2-1/2	1/2	2	
Diagnostic methods in pathology	2-3/4	1/4	2	

Special Pathology	16hrs	5 -1/2h	20 hrs	
Diseases of the Cardiovascular system	1-1/2	1/2	1	
Diseases of the respiratory system	1-1/2	1/2	1	
Diseases of the urinary system :	1-1/2	1/2	1	
Diseases of the gastrointestinal tract	7	1-	6	
Diseases of the Liver , gall bladder, pancreas	10-1/2	1-1/2	9	
Diseases of the lymphatic system, spleen , blood	1-1/2	1/2	1	
Diseases of the endocrine	1-1/2	1/2	1	
Types of biopsies. Diagnostic methods	1/2	1/2	0	
Total	37-1/2hrs	7-1/2hr	30hs	

4- Teaching and learning methods:

METHODS USED:

- 4.1-General lectures & interactive learning.
- 4.2-Small group discussions and case studies
- 4.3-Practical sessions
 - a- Histopathology slide lab
 - b- Museum of pathology.

TEACHING PLAN:

Lectures: Division of students into 1 groups
one /week, Time from 9 to 10.

Tutorials:

Practical classes

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	<u>one</u> times/week; one hour each between 9 to 10		

Practical	___ hours / ___ week		
Tutorial	___ hours / ___ week		
Total			

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA: Faculty bylaws

5-B) Assessment Tools:

Tool	Purpose (ILOs)
Written examination	to assess knowledge, understanding & intellectual skills ...
Oral examination	to assess professional and practical skills
Practical examination	to assess knowledge understanding & attitudes

5-C) TIME SCHEDULE: Faculty bylaws

Exam	Week
1- First part:	
- written	24week
- oral	24week
- practical & clinical	24week
4- Assignments & other activities	

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- First part:		
a- Written	150	50%
b- Practical	75	25%
c- Oral	75	25%
4- Assignments & other		
Total		

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

FORMATIVE ASSESSMENT:

Student knows his marks after the Formative exams.

5-E) Examinations description:

Examination	Description
1- <u>First part:</u> a- Written	e.g. MCQs, shorts assay, long essay, case reports, problem solving
b- Practical	Slides 2hrs: histopath., cytology and immuno-stained slides with questions Gross 1 hour: gross samples for cutting & description. Autopsy 2 hours: Performing an autopsy & discussion with examiner to assess knowledge understanding & attitudes
c- Oral	
6- Assignments & other activities	e.g. Assignments, projects, practical books etc
Total	

6.1- Course notes

- 1- Departmental books of General and Special histopathology, available in secretary office.
- 2- Handouts updated, administered by staff members
- 3- Museum notebook.
- 4- CDs for histopathological slides and museum specimens are available at the department.

6.2- Essential books (text books)

- Rosai and Ackerman's Surgical Pathology Juan Rosai, Mosby 2004
- Sternberg's Diagnostic surgical Pathology 4^{U1} edition, Lippincott Williams and Wilkins
- Kumar V ,Abbas AK ,Fausto N:Robbins and Cotran Pathologic Basis of Disease ,7th ed.;2005, Elsevier Saunders. Available at faculty bookshops & main library.

6.3- Periodicals, Web sites, ... etc

<http://www.pathmax.com/>
<http://www-medlib.med.utah.edu/WebPath/LABS/LABMENU.html#2>
<http://www.med.uiuc.edu/PathAtlasf/titlePage.html>
<http://www.medscape.com/pathologyhome>
<http://www.gw> hyperlink <http://umc.edu/dept/path/2>
umc.edu/dept/path/2F

7- Facilities required for teaching and learning

1. Data show
2. Overhead projector
3. Museum specimens
4. Projector slides covering available slides in slide box
5. surgical specimens

Course Specifications

Course title:	PHYSIOLOGY	FOR	HEGAIDICAL
master.....			
Code:	HEGAID 601		
Academic Year	(2013 – 2014)		

- Department offering the course: PHYSIOLOGY HEGAID master (2013 – 2014).
- Date of specification approval: department council No. , date .

Faculty council No., date .../.../2013

Date of specification approval: faculty council

number : date :

A- Basic Information

- Allocated marks: 200 marks.
- Course duration: 15 weeks of teaching.

Teaching hours: 1 credit hour with biochemistry .

- credit hours / week = 45hrs total teaching hours.

	Hours / week	Total hours
1- Lectures	3hr/week for 15 weeks	45 hrs

B- Professional Information

1 – Overall Aims of Course

1.1. Physiology course aims at approaching to the detailed knowledge of human physiology.

1.2. facilitate understanding the clinical data for the student in the clinical practice.

1.3. develop skills associated with improved health care and health care services.

1.4. activation and improvement of the role of staff members in research projects in collaboration with research centers and other organizations.

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

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

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

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

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

1.10. Life long learning competencies necessary for continuous professional development.

1.11. Research education as related to medical practice & post graduation development

1.12. Basic administrative skills necessary for delivery of health service.

– Intended learning outcomes of course (ILOs)

2.1- Knowledge and understanding:

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

2.1- List according to priority the main functions of systems, organs and cells.

2.2- Explain and describe the basic and detailed physiological processes in correct medical terms and in correct order.

2.3- Memorize important physiological definitions and laws.

2.4- understand the different mechanisms of homeostasis and how to use it in applied physiology.

2.5- provide excellence in medical education , research

2.6- approaching to the detailed knowledge of physiology in relation of Anesthesia.

2.2- Intellectual skills:

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

2.2.1- Identify deviations from the normal physiology and its effects.

2.2.2- Translate the consequences of physiological disorders into clinical manifestations and vice versa (interpret clinical manifestations into physiological data).

2.2.3- Illustrate physiological information in the form of simplified diagrams with complete data on it.

2.2.4- Interconnect different branches of physiology to each other and to other branches of medicine.

2.2.5- Analyze any physiological curve.

2.2.6- Compare homologous physiological structures and processes.

2.2.7- The ability to search, analyze and summarize updated physiological information.

2.2.8-. Describe the normal structure and function of the human body and mind at the level of its system.

2.2.9- Describe the normal structure and function of the human body and mind at the molecular, biochemical, cellular, levels (including the principles of genetics),to maintain the body homeostasis .

2.3- Professional and practical skills:

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

2.3.1- Perform efficiently the appropriate steps and procedures in measuring pulse , respiratory rate and arterial blood pressure.

2.3.2- Perform simple experimental blood tests and the use of this data in problem solving.

2.3.3- Read a normal ECG paper.

2.3.4- interpret different laboratory tests as isolated perfused heart

2.3.5- asses pulmonary function tests

2.3.6- record cardiovascular parameters in animals under various conditions.

2.3.7- asses skeletal and smooth muscle contraction

2.3.8- perform and study platelet aggregation.

2.4.- General and transferable skills

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

2.4.1- show discipline and appropriate manners when working in a lab and cooperation with his colleges and respect towards general property and how to handle learning facilities with care.

2.4.2- deal properly and cautiously in a lab.

2.4.3- Use the sources of biomedical information to remain current with the advances in knowledge & practice.

2.4.4-participate in community development and in drawing up and implementing development policies and plans.

2.4.5- Perform tests showing the molecular, biochemical, and cellular mechanisms that are important in maintaining the body's homeostasis.

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

2.4.7- Perform routine technical procedures; diagnostic and therapeutic (including life support).

2.4.8- Apply the principles of disease surveillance and screening, communicable disease control, health promotion and health needs assessment as well as counseling practices.

3- Physiology course for postgraduates (HEGAIDical)

- Arterial blood pressure and its regulation.
- Capillary circulation.
- C.O.P.
- Venous circulation.
- E.C.G.
- Hemorrhage and shock.
- Edema.
- Respiratory function of the blood.
- Exchange of gases across the pulmonary membrane.
- Regulation of respiration.
- Hypoxia and cyanosis.
- Gastrointestinal digestion and absorption.
- Biliary secretion.
- Jaundice.
- Anemias.

- Hemostasis.
- Erythropoiesis.

4- Teaching and learning methods:

4.1.methods used

4.1-1.General lectures

4,1.2.-seminares

4,1.3-confrences

4-2-teaching plan

Time plain:

Item	Time schedule	Teaching hours
Lectures	1Time/week (each time 3hours)	45hours

5- Student assessment methods:

5-a) 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.

5-b) TIME SCHEDULE:

Exam	Week
5- Final exam	at end of second term (May-June)

5-c-Assessment time schedule

Assessment 1... Written and oral

5-d-weighting system (formative or summative).

D) Weighting System:

Examination	Marks allocated	% of Total Marks
2- Final exam:		
a- Written	100	50%
b- Oral	100	50%
Total	200	100%

- 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
Final Examination	1. Written	written paper composed of short essay-type questions, long assay.
	3. Oral	One oral examination station with 2 staff members (10-15 minutes: 4-5 questions)

6- List of references

6.1- Course notes

Theoretical and practical books are available from faculty bookshops.

6.2- Essential books (text books)

Poul-Erik Paulev(2000): Medical Physiology And Pathophysiology Essentials and clinical problems.

6.3- Recommended books

Poul-Erik Paulev (2002):): Medical Physiology Textbook

6.3- Periodicals, Web sites, ... etc

www.jap.physiology.org.

www.physiologyonline.physiology.org/cgi/content

asmnews@asmusa.org

7- Facilities required for teaching and learning

1. Data show.
2. Overhead projector.
3. postgraduate laboratories with their equipments.

• Course Specification of Community Medicine

• For Hepatology, Gastroenterology and Infectious diseases Master and diploma

- Program on which the course is given: Master & Diploma Degree in Hepatology, Gastroenterology and Infectious diseases.
- Major or minor element of the program: Minor.
- Department offering the program: Hepatology, Gastroenterology and Infectious diseases department.
- Department offering the course: Community Medicine department.
- Academic Year/Level: First Part.
- Date of specification approval: department council No. 208, date 29-8-2012.
Revised & approved By Prof.Dr. Mahmoud Fawzy El Gendy 1/6/2014 .

A) Basic Information

- Course title: Community Medicine
- Code: HEGAID 604
- Credit hours: 2.5 credit hours for one semester

B) Professional Information

1. Overall Aims of the Course:

- Identification the most important community health problems related to Gastroenterology, Hepatology and Infectious disease.
- Application all administrative components (plan, implement and evaluate) to solve these problems according to their priorities throughout effective programs and health services.
- Prepare the student to follow proper research methods, to use statistical tools and considering medical & research ethics in this field.

2- Intended Learning Outcomes (ILOs):

A- Knowledge and understanding:

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

- Identify the prevalent health problems in the community that related to Gastroenterology and Hepatology , using various epidemiological strategies.
- Discuss appropriate programs and health services needed for prevention and control of these health problems.
- Describe the characters of outbreak /epidemic for infectious diseases related to G.I.T and liver.
- know principles of research methods, explain its tools for scientifically research health problems in the area of gastroenterology and Hepatology.
- Understand principles of medical statistics to collect, organize, manage, analyze and interpret data.
- Define the priority in solving health problems throughout course of medical administration and disease management by optimal use of available resources.
- Describe appropriate health education methods and materials.
- Identify environmental health hazards related to water, food, food-handlers and wastes in the community.
- Describe the micro- ¯o-nutrients needs, sources, deficiency and common nutritional disorders in Egyptian communities.

B-Intellectual skills:

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

- Apply appropriate programs and health services needed for prevention and control these health problems.
- Select and use appropriate health education methods and materials.
- Counsel effectively the health care environment.

- Investigate an outbreak /epidemic for infectious diseases related to G.I.T and liver.

C-Professional and practical skills:

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

- Rank the prevalent health problems in the community that related to gastroenterology and hepatology , according to their priorities.
- Plan and evaluate appropriate programs and health services needed for prevention and control these health problems.
- Formulates proper objectives for provided health services.
- Conduct epidemiological outbreak /epidemic investigation for infectious diseases related to G.I.T and liver.
- Trace a source of infection during outbreaks/epidemics.
- Plot and interpret epidemic curve.
- Formulate and test hypothesis.
- Collect, organize, present& illustrate, analyze and interpret data.
- Prepare conduct and end health education session.
- Work as a member /leader of a team (staff management)

D -General and transferable skills:

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

- Apply appropriate communication strategies for use with clients, the health care team, and the community.
- Acquire the proper ethics in medical and research areas.
- Acquire some of statistical and administrative skills.
- Acquire some of health education, communication and life skills.

3- Course contents

ILOs	Practical/Tutorial	Hours of Lectures	Topics
------	--------------------	-------------------	--------

A1,A2,A3,B4 C1,C4,C5,C6	-	5	<ul style="list-style-type: none"> • General epidemiology: <ul style="list-style-type: none"> • Epidemiology (definition, scope and uses & application). • Infectious process (3 links). • Prevention and control of infectious diseases. • Pattern of spread of infectious diseases. • Out-break/epidemic investigation. • Surveillance (definition, cycle & types). • Epidemiology of communicable diseases: <ul style="list-style-type: none"> • Food borne infection (viral, bacterial and parasitic infection) • Arthropod borne parasitic infection (malaria, filarial and leishmaniasis). • Contact parasitic infection (schistosomiasis). • Epidemiology of non-communicable diseases <ul style="list-style-type: none"> • Cancer (liver, stomach and colon).
A1,A2,A3	-	5	<ul style="list-style-type: none"> • Arthropod borne parasitic infection (malaria, filarial and leishmaniasis). • Contact parasitic infection (schistosomiasis).
A1, A2,A3	-	5	<ul style="list-style-type: none"> • Epidemiology of non-communicable diseases <ul style="list-style-type: none"> • Cancer (liver, stomach and colon).
A7,B2,C9,D1, D2 D4	-	3	<ul style="list-style-type: none"> • Health education, communication and life skills <ul style="list-style-type: none"> • Definition and methods • Audio-visual aids • Planning for health educational program
A4,A5,C7,C8, D3	4	8	<ul style="list-style-type: none"> • Medical statistic

			<ul style="list-style-type: none"> • Research methodology. • Biostatistics
A8,B3	-	5	<ul style="list-style-type: none"> • Environmental Health: <ul style="list-style-type: none"> • Water sanitation and standard of potable water& investigation of water pollution. • Food sanitation& food-handlers regulation and management. • Character of water, milk, meat, fish and egg borne outbreak. • Waste health hazards and disposal. • Insect & rodent control. • Nutrition: <ul style="list-style-type: none"> • Macro- and micro-nutrients & fibers (sources and roles in physiological body function). • Nutritional disorders& food additives. . • Antioxidants and free radicals. • Therapeutics nutrition.
A9	-	3	
A6,C2,C3,C10	-	2	<ul style="list-style-type: none"> • Medical administration <ul style="list-style-type: none"> • Health services administration and programming. • The research team management. • Primary health care & health service <ul style="list-style-type: none"> • Conception, components and
A6,B2,C2,C3	-	5	

			elements of primary health care.
			<ul style="list-style-type: none"> • School health services. • Rural health services.
	4	41	Total

4- Teaching and learning methods:

- Lectures.
- Practical classes
- Small group discussion with case study and problem solving.

5- Students Assessment methods:

- Assessment tools

Purpose (ILOs)	Tool
To assess knowledge acquisition, including problem solving	Written examination
To assess understanding and stability of knowledge given, attitude and presentation.	Oral examination

- Assessment schedule

Time	Exam
After 6 months of registration of the degree.	Written exam
After the written exam.	Oral exam

- Weighting System

% of Total Marks	Marks allocated	Examination
50%	100	Written
50%	100	Oral
100%	200	Total

- Examination description

Description	Examination
<ul style="list-style-type: none"> • Written paper composed of short essay-type questions. • One oral examination station with 2 staff members (10-15 minutes: 4-5 	<ul style="list-style-type: none"> • Written

questions).

- Oral

6- List of references:

6.1- Basic materials like Department notebook: Handouts of the staff member in the department

6.2- Essential books (text books) like Khalil IF, 1999: Biostatistics, Cairo University

6.3- Recommended books like Maxcy RL, 2008: Public health and preventive medicine.

6.4- Periodicals, Web sites, etc:

- WHO.int.com
- Pub. Med
- Google

7- Facilities required for teaching and learning:

7.1 Adequate infrastructure: including teaching places (teaching class & teaching hall) provided with comfortable desks, fans, air condition, adequate sources of lighting both natural and artificial and security tools.

7.2 Teaching tools: including screens, black board, white board, data show, computers, laser printer, scanner & copier.

7.3 Computer program: for statistical analysis of data.