



توصيف برنامج ماجستير الطفيليات الطبية



MEDICAL PARASITOLOGY DEPARTEMENT

Master Degree Program Specification



Benha University
Faculty of Medicine
Medical Parasitology Department

Program Specification of
Master Degree of Medical Parasitology
(2013-2014)

A. Basic informations:

(أ) معلومات أساسية:

- 1-Program title:** Master of Medical Parasitology
- 2-Program type:** Single
- 3-Responsible Departments:** Medical Parasitology Department.
- 4-Date of approval by Parasitology Department council:** 2 /9 /2013.
- 5- Date of approval by Faculty council:** 15 / 9/2013.
- 5-Program coordinator:** Prof. Dr Amany Farouk El Fakahany.
- 6-Internal evaluation of the program:** Prof .Dr. Hassan Ahmed Hamadto Prof. of parasitology, Benha university.
- 6-External evaluation of the program:** Prof. Dr Nashaat Abd El Monem Nasef. Professor of Parasitology, Menofia University.



B. Professional Informations:

(ب) معلومات تخصصية:

1. Overall Aims of the program

١-الأهداف العامة للبرنامج:

The overall goals of the program are to:

- Provide the postgraduate students with essential knowledge of medical parasitology.
- Acquire skills necessary for applying the scientific analytic methods in medical parasitology using available resources and saving the environment.
- Recognize ethical principles related to the practice in this specialty.
- Access active participation in community needs assessment.
- Reach active participation in problems identification and solving.
- Maintain learning abilities necessary for continuous medical education.
- Have the ability to teach and train others.
- Have the ability to develop themselves in the field of medical Parasitology.
- Upgrade self-learning.
- Use modern technological aids.
- Perform research abilities necessary for continuous professional development.

2- Intended Learning Outcomes (ILOs)

٢-مخرجات التعلم المستهدفة:

2.a. Knowledge and Understanding:

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

2.a.1. Assess basic concepts of parasitism; terminology, geographical distribution, morphology, life cycles, transmission, pathology, pathogenesis, clinical picture, host parasite relationship, treatment, prevention and control of parasitic diseases.



- 2.a.2. Differentiate medically important vectors and snails and how to examine for parasites.
- 2.a.3. Investigate different parasitological specimens and how to prepare permanent preparations.
- 2.a.4. Describe basic principles of direct methods of diagnosis as well as immunological methods of diagnosis and carry out them.
- 2.a.5. Discuss basis of environmental parasitology.
- 2.a.6. Illustrate details of right ethical & legal practice.
- 2.a.7. Recognize basics and essentials of medical quality control.
- 2.a.8. Explain basics of scientific knowledge essential for following the rules of medical research ethics.

2.b. Intellectual skills:

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

- 2.b.1. Analyze given parasitological information.
- 2.b.2. Investigate different parasitological problems (identification, diagnosis, treatment) in absence of adequate data.
- 2.b.3. Construct different knowledge to help in solving difficult problems.
- 2.b.4. Design a research study that add to the existing specialty knowledge.
- 2.b.5. Distinguish the danger of handling and use of infectious agents on community and environment as a part of their ethical heritage.
- 2.b.6. Plan for development in the performance in diagnosis of parasitic disease and its application for community development.
- 2.b.7. Apply appropriate professional decisions, in different situations.

2.c. Practical skills

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



- 2.c.1 apply direct diagnostic examination of specimens and carry out different staining methods.
- 2.c.2 Identify medically important parasites based on microscopic examination of stained preparations.
- 2.c.3 Differentiate diagnostic tests commonly used for parasitic infections.
- 2.c.4 Judge results of parasitological, serological and molecular tests and apply them .
- 2.c.5. Evaluate different parasitological tools and diagnostic methods.

2.d. General & transferable skills

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

- 2.d.1. Communicate effectively using all methods.
- 2.d.2. Use information technology to improve his/her professional practice.
- 2.d.3. Perform self-appraisal & seek continuous learning.
- 2.d.4. Use different sources of information to obtain data.
- 2.d.5. Teach and evaluate others.
- 2.d.6. Work as team leader as well as a member in larger teams.
- 2.d.7. Manage scientific meetings and appropriately utilize time.
- 2.d.8. Continue self-learning.

3. Academic Standards:

٣- المعايير الأكاديمية للبرنامج:

Academic standards for MD parasitology program in Benha Faculty of Medicine

المعايير الأكاديمية لبرنامج الدكتوراه في الطفيليات بكلية طب بنها (ملحق ١).
(اعتمد من مجلس قسم الطفيليات بتاريخ ٢٠١٣/٦، اعتماد مجلس الكلية ٣٥٤
بتاريخ ٢٠١٣/٦/١٦)



4. Reference standards (Benchmarks):

٤. المعايير المرجعية:

- a) Academic references standards(ARS) for MD program issued by the National Authority for Quality Assurance & Accreditation OF education (March 2009)
المعايير القياسية العامة لبرامج الدكتوراه الصادرة عن الهيئة القومية لضمان الجودة والاعتماد (مارس ٢٠٠٩) ملحق ٢.
- b) Academic Reference Standards for Accreditation council for Graduate Medical Education (CGME) and McGill University Msc and PhD Thesis Parasitology programs (Benchmarks)^٣ ملحق ٣.

5. Program structure and contents:

٥- هيكل ومكونات البرنامج:

a. Program duration: four semesters.

- 1st part: one semester
- 2nd part: two semesters.
- Thesis: two semesters (starts after 2nd semester).

b. Program structure:

- Total hours of the program: 41 credit hours
- Theoretical: 25 credit hours.
- Practical: 11 credit hours.
- Log book: 15 credit hours.
- Thesis: 15 credit hours.
- University and College requirements: 6 credit hours.



c. Level and courses of the program:

Item	Courses	Code	Credit hours
University requirements:	- 3 computer training courses.		3 hours
	- TOEFL exam		
Faculty requirements:	- A compulsory Course: Statistics, computer science and research methodology.	PARA 600	3 hours
First Part:	- Microbiology and Immunity	PARA601	3 hours
- 2 courses required	- Pathology	PARA602	3 hours
	- Clinical Pathology	PARA603	3 hours
	- Biochemistry	PARA604	3 hours
	- Public health & Community Medicine	PARA605	3 hours
	- Tropical Medicine	PARA606	3 hours
Log book	- Participation and attendance of seminars and training courses, conferences and Theses discussion.		6 hours
	- Preparation of permanent prepared parasites specimens.		
	- Handout illustrations booklet of practical lessons.		
Second part	1-Advanced Helminthology	PARA 607	17 hours
	2- Advanced Protozoology	PARA 608	
	3-Advanced Entomology	PARA 609	
	4- Advanced Immunology and Molecular Biology of Parasitic infections.	PARA 610	
	5-Advanced Diagnostic techniques for parasitic infections& prevention methods.	PARA 611	
Thesis			6 hours
Total			41 hours



Faculty requirement:

a- Compulsory course:

Course Title	Course Code	NO. of Teaching hours per week			Total teaching hours /semesters
		Theoretical	Practical	Total/Week	
- Statistics, computer science and research methodology.	PARA600	2	3	5	75

b. Elective courses: none

c. Selective courses: none

First part (one semester):

a- Elective courses: (choose 2 courses)

Course Title	Course Code	NO. of Teaching hours per week			Total teaching hours /semesters
		Theoretical	Practical	Total/Week	
- Microbiology and Immunity	PARA601	4	3	7	105
- Pathology	PARA602	4	3	7	105
- Clinical Pathology	PARA603	2	6	8	120
- Biochemistry	PARA604	4	3	7	105
- Public health & Community Medicine	PARA605	4	3	7	105
- Tropical Medicine	PARA606	4	3	7	105

b- Compulsory courses: none

c- Selective courses: none

Second part:

PARA607 units	Teaching of hours per week			Total teaching hours/2 semesters
	Theoretical	Laboratory /practical	Total credits	
1- Advanced Helminthology	1	3	4	120
2- Advanced Protozoology	1	3	4	120
3- Advanced Entomology	1	3	4	120
4- Advanced Immunology and Molecular Biology of Parasitic infections.	1	-	1	30
5- Advanced Diagnostic techniques for parasitic infections& prevention methods	1	1.5	2.5	75
Total	5	10.5	15.5	465



6. Courses contents: (راجع توصيف المقررات ملحق ٦)

7. Program admission requirements: ٧- متطلبات الالتحاق بالبرنامج:

يشترط لقياد الطالب لدرجة الماجستير:

- (أ) أن يكون حاصلًا على درجة البكالوريوس في الطب والجراحة من إحدى جامعات جمهورية مصر العربية أو على درجة معادلة لها من معهد معترف به بتقدير جيد على الأقل.
- (ب) أن يكون قد أمضى السنة التدريبية أو ما يعادلها (سنة الامتياز).
- (ج) أن يتفرغ للدراسة لمدة فصلين دراسيين على الأقل في الجزء الثاني.

8. Progression in the program: ٨. القواعد المنظمة لاستكمال البرنامج

يشترط في الطالب لنيل درجة الماجستير في العلوم الطبية الأساسية تخصص الطفيليات الطبية ما يلي:

- حضور المقررات الدراسية بصفة مرضية طبقًا للساعات المعتمدة.
- أن يقوم ببحث في موضوع تقره الجامعة بعد موافقة مجلس الكلية والقسم لمدة فصلين دراسيين على الأقل. وأن يتقدم بنتائج البحث في رسالة تقبلها لجنة الحكم بعد مناقشة علنية للرسالة.
- اجتياز الطالب ثلاث دورات في الحاسب الآلي (دورة في مقدمة الحاسب الآلي - دورة تدريبية " متوسطة " - دورة في تطبيقات الحاسب الآلي) وذلك قبل مناقشة الرسالة.
- اجتياز الطالب اختبار التوفيل بمستوى لا يقل عن ٥٠٠ وحدة وذلك قبل مناقشة الرسالة.
- أن يجتاز بنجاح الاختبارات التحريرية والعملية والإكلينيكية والشفهية المقررة وفقا لما هو مبين باللائحة.

9. Assessment Methods: ٩. طرق وقواعد تقييم الملتحقين بالبرنامج:

م	الوسيلة	مخرجات التعلم المستهدفة
1	Written examination	To assess knowledge, understanding & intellectual skills. 2.a.1.....2.a.14& 2.b.1.....2.b.12
2	Oral examination	To assess knowledge, understanding, intellectual skills & General & transferable skills 2.a.1.....2.a.14& 2.b.1.....2.b.12& 2.d.1.....2.d.7
3	Practical examination	To assess knowledge, understanding, intellectual skills, practical & General & transferable skills 2.a.1.--2.a.14& 2.b.1.--2.b.12& 2.c.1.--2.c.7& 2.d.1.--2.d.7
4	Thesis discussion	To assess knowledge, understanding, intellectual skills, practical & General & transferable skills 2.a.1.--2.a.14& 2.b.1.--2.b.12& 2.c.1.--2.c.7& 2.d.1.--2.d.7
5	Logbook	To assess knowledge, understanding, intellectual skills, practical & General & transferable skills 2.a.1.--2.a.14& 2.b.1.--2.b.12& 2.c.1.--2.c.7& 2.d.1.--2.d.7



الجزء الأول

إجمالي	الدرجة			الاختبار	المقرر
	إكلينيكي/ عملي	شفهي	تحريري		
٢٥٠	٨٠	٥٠	١٢٠	اختبار تحريري مدته ثلاث ساعات + اختبار شفهي وعملي	ميكروبيولوجيا
٢٥٠	٨٠	٥٠	١٢٠	اختبار تحريري مدته ثلاث ساعات + اختبار شفهي وعملي	باثولوجي
٢٥٠	٨٠	٥٠	١٢٠	اختبار تحريري مدته ثلاث ساعات + اختبار شفهي	باثولوجيا إكلينيكية
٢٥٠	٨٠	٥٠	١٢٠	اختبار تحريري مدته ثلاث ساعات + اختبار شفهي	كيمياء حيوية
٢٥٠		٥٠	٢٠٠	اختبار تحريري مدته ثلاث ساعات + اختبار شفهي	طب مجتمع
٢٥٠	٨٠	٥٠	١٢٠	اختبار تحريري مدته ثلاث ساعات + اختبار شفهي وإكلينيكي	طب المناطق الحارة

Second part

إجمالي الدرجة	اسم الاختبار والدرجة			المقرر
	عملي	شفوي	تحريري	
١٥٠	٣٧,٥	٣٧,٥	٧٥	1- Advanced Helminthology
+	+	+	+	+
١٥٠	٣٧,٥	٣٧,٥	٧٥	2. Advanced Protozoology
١٠٠	٢٥	٢٥	٥٠	3. Advanced Entomology
+	+	+	+	
١٠٠	-	٥٠	٥٠	4. Advanced Immunology and Molecular Biology of Parasitic infections
+	+	+	+	
١٠٠	٢٥	٢٥	٥٠	5. Advanced Diagnostic techniques for parasitic infections & prevention methods
٦٠٠	١٢٥	١٧٥	٣٠٠	

كتاب الأنشطة: يشترط أن يستوفي الطالب الشروط والقواعد المنظمة والمعتمدة والمعلنة من مجلس قسم الطفيليات.



8. Evaluation of the program

Evaluator	Tools	Sample
Internal evaluator (s) مقيّم داخلي	Focus group discussion Meetings	1-2 reports
External Evaluator (s) مقيّم خارجي	Reviewing according to external evaluator checklist reporting.	1-2 reports
Senior student (s) طلاب السنة النهائية	Questionnaire meeting.	جميع الطلبة
Alumni الخريجون	Questionnaire meeting.	عينه تمثل ٥٠% من اخر ٣ دفعات
Stakeholder (s) أصحاب العمل	Questionnaire meeting .	عينه ممثله لجميع جهات العمل

Program coordinator:

Prof. Dr Amany Farouk El Fakahany.

Signature : Amany Farouk El Fakahany

date: 15/9/2013

الملحقات:

ملحق ١: المعايير الأكاديمية لبرنامج الماجستير في الطفيليات بكلية طب بنها

Academic standards for Msc. parasitology program in Benha Faculty of
Medicine

ملحق ٢: المعايير القياسية العامة لبرامج الماجستير الصادرة عن الهيئة القومية لضمان الجودة
والاعتماد (٢٠٠٩)

Generic academic standards ,which where issued by the National
Authority For Quality Assurance &Accreditation .

ملحق ٣: المعايير المرجعية الخارجيه (Benchmarks)

ملحق ٤: مصفوفة مضاهاة المعايير الأكاديمية لبرنامج الماجستير الصادرة عن الهيئة القومية
لضمان الجودة والاعتماد مع المعايير الأكاديمية لبرنامج دكتوراه الطفيليات لكلية طب بنها

ملحق ٥: مصفوفة مضاهاة المعايير الأكاديمية الماجستير الطفيليات لكلية طب بنها مع اهداف
ونواتج تعلم البرنامج

ملحق ٦: Program-Courses ILOs Matrix

ملحق ٧ توصيف المقررات



(ملحق ١)

Academic Standards for Master Parasitology Program in Benha Faculty of Medicine

المعايير الأكاديمية لبرنامج ماجستير الطفيليات بكلية طب بنها

1. Graduate specifications:

- 1.1. Mastering the detailed basic and advanced knowledge and research methodologies used in the field of parasitology.
- 1.2. Mastering professional skills essential for working in the field of parasitology.
- 1.3. Competent to apply the analytical methods and critic the knowledge in the field of medical parasitology and related fields.
- 1.4. Proficiently integrate specialized parasitology knowledge with relevant knowledge and develop bilateral relations.
- 1.5. Show deep awareness of current problems and theories in the marginal area of medical parasitology.
- 1.6. Identify problems professionally and find innovative solutions to solve them.
- 1.7. Able to make decision according to the available information.
- 1.8. Communicate effectively and able to lead teamwork in various professional contexts.
- 1.9. Manage the available resources efficiently, develop and work to sustain the available and find new resources.
- 1.10. Have ongoing commitment to self-development and continuous self-learning.
- 1.11. Aware of his role in community serving and preservation of the environment.
- 1.12. Behave with commitment, credibility, integrity and following the professional and ethical skills.

Standards:

2. **Knowledge and understanding:** By the end of the program, the candidate should be able to
 - 2.1. describe basic concepts of parasitism; terminology, geographical distribution, morphology, life cycles, transmission, pathology, pathogenesis, clinical picture, host parasite relationship, treatment, prevention and control of parasitic diseases.
 - 2.2. Differentiate medically important vectors and snails and how to examine for parasites.
 - 2.3. Recognize parasitological specimens and how to prepare permanent preparations.
 - 2.4. Define principles of direct methods of diagnosis as well as immunological methods of diagnosis and carry out them.
 - 2.5. Know basis of environmental parasitology.



- 2.6. Know the physiology of the immune system, its detailed components, function of each, its beneficial role, its interaction with tumors, its deficiency conditions, as well as its detrimental role in hypersensitivity, autoimmunity in different localities.
- 2.7. Recognize hospital acquired parasitic infections, types, causative organisms, prevention and control.
- 2.8. Study details of recent diagnostic methods and antiparasitic chemotherapy.
- 2.9. Define antiparasitic vaccines.
- 2.10. Know impact of molecular technology in Parasitology and immunology.
- 2.11. Define details of right ethical & legal practice.
- 2.12. Recognize basics and essentials of medical quality control.
- 2.13. Know proper design, conduction & publishing of scientific research.
- 2.14. Gain basis of scientific knowledge essential for following the rules of medical research ethics.

3. Intellectual skills: *By the end of the program the candidate should be able to:*

- 3.1. Analyze, deduce, extrapolate & evaluate given parasitological problems and innovative solution for it.
- 3.2. Interpret parasitological, immunological and molecular reports.
- 3.3. Formulate a systematic approach for laboratory diagnosis of the infectious clinical conditions and select the most appropriate and cost-effective tool leading to the identification of the causative organism.
- 3.4. Evaluate according to evidence, the causal relationship of parasites and diseases.
- 3.5. Solve different parasitological problems (identification, diagnosis, treatment) in absence of adequate data.
- 3.6. Join different knowledge to help in solving difficult problems.
- 3.7. Design a research study that add to the existing specialty knowledge
- 3.8. Plan for development in the performance in diagnosis of parasitic disease and its application for community development.
- 3.9. Plan professional development courses to improve practice and enhance performance of juniors.
- 3.10. Appreciate the danger of handling and use of infectious agents on community and environment as a part of their ethical heritage.
- 3.11. Make appropriate professional decisions, in different situations.

4. Professional & Practical skills: *By the end of the program the candidate should be able to:*



توصيف برنامج ماجستير الطفيليات الطبية

- 4.1. Perform direct diagnostic examination of specimens and carry out different staining methods.
- 4.2. Identify medically important parasites based on microscopic examination of stained preparations.
- 4.3. Identify different diagnostic tests commonly used for parasitic infections.
- 4.4. Interpret, assess and evaluate results of parasitological, serological and molecular tests and apply it.
- 4.5. Write and evaluate reports about parasitological issues.
- 4.6. Evaluate and improve methods and tools used in specialty.
- 4.7. Use molecular technology to advance practice.

5. **General & transferable skills:** *By the end of the program the candidate should be able to:*

- 5.1. Communicate effectively using all recent methods
- 5.2. Use advanced information technology to improve his/her professional practice
- 5.3. Teach and evaluate others.
- 5.4. Perform self-appraisal & seek continuous learning
- 5.5. Use new sources of information to obtain data
- 5.6. Work as team leader as well as a member in larger teams
- 5.7. Establish rules and standards to evaluate others
- 5.8. Appropriately utilize time.



ملحق ٢

Academic standards for Master Program issued by the National Authority for Quality Assurance & Accreditation of education (March 2009)

المعايير القياسية العامة لبرامج الماجستير الصادرة عن الهيئة القومية لضمان الجودة والاعتماد (مارس ٢٠٠٩)

برامج الماجستير

١- -موصفات الخريج

خريج برنامج الماجستير فى أى تخصص يجب أن يكون قادرا على :

- ١-١ إجادة تطبيق أساسيات ومنهجيات البحث العلمى واستخدام أدواته المختلفة
- ٢-١ تطبيق المنهج التحليلى واستخدامه فى مجال التخصص
- ٣-١ تطبيق المعارف المتخصصة ودمجها مع المعارف ذات العلاقة فى ممارسته المهنية
- ٤-١ إظهار وعيا بالمشاكل الجارية والرؤى الحديثة فى 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 فى سياقات مهنية مختلفة
- ٩-١ توظيف الموارد المتاحة بما يحقق أعلى استفادة والحفاظ عليها
- ١٠-١ إظهار الوعى بدوره فى تنمية المجتمع والحفاظ على البيئة فى ضوء المتغيرات العالمية والإقليمية
- 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

١-٢ المعرفة والفهم :

- بأنتهاء دراسة برنامج الماجستير يجب ان يكون الخريج على فهم ودراية بكل من :
- ١-١-٢ النظريات والاساسيات المتعلقة بمجال التعلم وكذا فى المجالات ذات العلاقة
- ٢-١-٢-٢- التأثير المتبادل بين الممارسة المهنية وانعكاسها على البيئة
- ٣-١-٢-٢ التطورات العلمية فى مجال التخصص



توصيف برنامج ماجستير الطفيليات الطبية

- ٤-١-٢ المبادئ الاخلاقية والقانونية للممارسة المهنية في مجال التخصص
٥-١-٢ مبادئ واساسيات الجودة في الممارسة المهنية في مجال التخصص
٦-١-٢ اساسيات واخلاقيات البحث العلمي

٢-٢ المهارات الذهنية:

- بانتهاء دراسة برنامج الماجستير يجب ان يكون الخريج قادرا على :
١-٢-٢ تحليل وتقيم المعلومات في مجال التخصص والقياس عليها لحل المشاكل
٢-٢-٢ حل المشاكل المتخصصة مع عدم توافر بعض المعطيات
٣-٢-٢ الربط بين المعارف المختلفة لحل المشاكل المهنية
٤-٢-٢ اجراء دراسة بحثية او كتابة دراسة علمية منهجية حول مشكلة بحثية
٥-٢-٢ تقييم المخاطر في الممارسات المهنية في مجال التخصص
٦-٢-٢ التخطيط لتطوير الاداء في مجال التخصص
٧-٢-٢ اتخاذ القرارات المهنية في سياقات مهنية متنوعة

٣-٢ المهارات المهنية

- بانتهاء دراسة برنامج الماجستير يجب ان يكون الخريج قادرا على:
١-٣-٢ اتقان المهارات المهنية الاساسية والحديثة في مجال التخصص
٢-٣-٢ كتابة وتقييم التقارير المهنية
٣-٣-٢ تقييم الطرق والادوات القائمة في مجال التخصص

٤-٢ المهارات العامة والمنتقلة:

- بانتهاء دراسة برنامج الماجستير يجب ان يكون الخريج قادرا على:
١-٤-٢ التواصل الفعال بأنواعه المختلفة
٢-٤-٢ استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية
٣-٤-٢ التقييم الذاتي وتحديد احتياجاته التعليمية
٤-٤-٢ استخدام المصادر المختلفة لحصول على المعلومات والمعارف
٥-٤-٢ وضع قواعد ومؤشرات تقييم اداء الآخرين
٦-٤-٢ العمل في فريق سياقات كهنية مختلفة
٧-٤-٢ ادارة الوقت بكفاءة
٨-٤-٢ التعلم الذاتي والمستمر



توصيف برنامج ماجستير الطفيليات الطبية

ملحق رقم ٤

مصفوفة مضاهاة المعايير الأكاديمية لبرنامج الماجستير الصادرة عن الهيئة القومية لضمان الجودة والاعتماد مع المعايير الأكاديمية لبرنامج ماجستير الطفيليات لكلية طب بنها

المعايير الأكاديمية لبرنامج دكتوراه الطفيليات لكلية طب بنها				المعايير الصادرة عن الهيئة القومية لضمان الجودة والاعتماد	
المهارات العامة والمنقولة	المهارات المهنية	المهارات الذهنية	المعارف والفهم	مواصفات الخريج	
				١-١ ٣-١ ٤-١ ٥-١ ٦-١ ٧-١ ٨-١ ٩-١ ١١-١ ١٢-١ ١٠-١	١-١ ٢-١ ٣-١ ٤-١ ٥-١ ٦-١ ٧-١ ٨-١ ٩-١ ١٠-١ ١١-١ ١٢-١
			١٠-١-٢ ٧-٢+٥-٢ ٨-٢ ١١-٢ ١٢-٢ ١٣-٢		١-١-٢ ٢-١-٢ ٣-١-٢ ٤-١-٢ ٥-١-٢ ٦-١-٢
		٣-٢+٢-٢ ٤-٢ ٥-٢ ٦-٢ ٧-٢+٣-٢ ١٠-٢ ٩-٨-٢ ١١-٢			١-٢-٢ ٢-٢-٢ ٣-٢-٢ ٤-٢-٢ ٥-٢-٢ ٦-٢-٢ ٧-٢-٢
	٧+٤-١-٤ ٥-٤ ٦-٤				١-٣-٢ ٢-٣-٢ ٣-٣-٢
١-٥ ٢-٥ ٤-٥ ٥-٥ ٧-٥ ٦-٥ ٨-٥ ٣-٥					١-٤-٢ ٢-٤-٢ ٣-٤-٢ ٤-٤-٢ ٥-٤-٢ ٦-٤-٢ ٧-٤-٢ ٨-٤-٢



ملحق ٥

مصفوفة مضاهاة مواصفات الخريج والمعايير الأكاديمية لبرنامج ماجستير الطفيليات لكلية طب بنها مع الأهداف العامة ونواتج التعلم المستهدفة للبرنامج

نواتج التعلم المستهدفة				اهداف البرنامج	مواصفات الخريج والمعايير الأكاديمية لبرنامج ماجستير الطفيليات لكلية طب بنها	
2.d. المهارات العامة والمنقولة	2.c. المهارات المهنية	2.b. المهارات الذهنية	2.a. المعارف والفهم			
	2.c.1-5		2.a.1-5	Provide the postgraduate with the detailed knowledge and skills of medical parasitology research methodologies.	1.1. ٢-١	١-١ مواصفات الخريج
	2.c.1-5	3.c.1-5		Enable the postgraduate student to apply the analytical methods and critic the knowledge in the field of medical parasitology and related fields.	٣-١	
2.d.4		2.b.3-4		Integrate specialized knowledge with relevant knowledge and develop bilateral relations.	٤-١	
		2.b.3 2.b.5	2.a.1 2.a.5 2.a.7	Show deep awareness of current problems and theories in the marginal area of medical parasitology	٥-١	
		2.b.1-5		Identify problems professionally and find innovative solutions to solve them to improve community and maintain the environment	٦-١ ١١-١	
	2.c.4	2.b.2 2.b.6 2.b.7		Able to make decision according to the available information and behave with commitment, credibility, integrity and following the professional and ethical skills	1-7 1-12	
2.d.2 2.d.3 2.d.8				Use of appropriate technological means to serve the professional practice.	1.10	
2.d.1 2.d.5-7				Communicate effectively and lead the team in various professional contexts.	٨-١	
		2.b.4		Employ available resources efficiently, develop and work to find new resources.	٩-١	
		2.b.7		Have ongoing commitment to self-development and the transfer of knowledge and experience to others.	١٠-١	



توصيف برنامج ماجستير الطفيليات الطبية

نواتج التعلم المستهدفة			اهداف البرنامج	مواصفات الخريج	
		٢.a.1 2.a.2 2.a.3 2.a.4 2.a.5 2.a.4 2.a.5+7 2.a.1 2.a.1 2.a.4 2.a.6 2.a.7 2.a.8 2.a.8		١.٢ ٢.٢ ٣.٢ ٤.٢ ٥.٢ ٦.٢ ٧.٢ ٨.٢ ٩.٢ ١٠.٢ ١١.٢ ١٢.٢ ١٣.٢ ١٤.٢	٢ المعارف والفهم
		2.b.1 2.b.1 2.b.2 2.b.3 2.b.3 2.b.3 2.b.4 2.b.6 2.b.3 2.b.6 2.b.5 2.b.7		١.٣ ٢.٣ ٣.٣ ٤.٣ ٥.٣ ٦.٣ ٧.٣ ٨.٣ ٩.٣ ١٠.٣ ١١.٣	٣ المهارات الذهنية
	2.c.1 2.c.2 2.c.3 2.c.4 2.c.4 2.c.1-5 2.c.4-5			١.٤ ٢.٤ ٣.٤ ٤.٤ ٥.٤ ٦.٤ ٧.٤	٤ المهارات المهنية
2.d.1 2.d.2 2.d.5 2.d.3 2.d.8 2.d.2 2.d.4 2.d.6 2.d.5 2.d.7				١.٥ ٢.٥ ٣.٥ ٤.٥ ٥.٥ ٦.٥ ٧.٥ ٨.٥	٥ المهارات العامّة والمنقولة



ملحق ٦

Master Program-courses ILOs matrix:

Courses	A-Knowledge and Understanding								
	A1	A2	A3	A4	A5	A6	A7	A8	A9
PARA601				√		√	√		√
PARA602	√								
PARA603			√	√		√	√		
PARA604				√		√	√		
PARA605	√				√		√		
PARA606	√						√	√	
PARA607	√	√	√		√	√	√		√

B-Intellectual skills:

courses	B-Intellectual skills:						
	B1	B2	B3	B4	B5	B6	B7
PARA601			√		√	√	√
PARA602			√		√		
PARA603			√				
PARA604			√				
PARA605			√				
PARA606			√			√	
PARA607	√	√	√	√	√	√	√



C.a. Professional & Practical skills C.b. General & transferable skills

Courses	C.a Professional & Practical skills					C.b. General & transferable skills									
	Ca1	Ca 2	Ca3	Ca 4	Ca 5			Cb1	Cb2	Cb3	Cb4	Cb5	Cb6	Cb7	Cb8
PARA601	√		√	√				√			√				
PARA602	√						√	√			√				
PARA603			√		√			√			√				
PARA604			√		√			√			√				
PARA605			√		√					√		√			
PARA606				√	√		√					√	√		
PARA607		√	√	√	√		√	√	√	√	√	√	√	√	√

D. general skills

Courses	D. general skills							
	D1	D2	D3	D4	D 5	D6	D7	D8
PARA601	√	√						√
PARA602				√	√	√		
PARA603	√	√						√
PARA604	√	√						√
PARA605			√	√	√			√
PARA606				√		√	√	
PARA607	√	√	√	√	√	√	√	√

توصيف المقررات ملحق ٧



Course Specifications of Clinical Pathology for Master Degree in Medical Parasitology

١-بيانات المقرر	
الرمز الكودي: Para603	اسم المقرر: Medical Clinical Pathology
التخصص: ماجستير الطفيليات الطبية	عدد الوحدات الدراسية: - نظري: ١ - عملي: ٢
٢-أهداف المقرر	By the end of this course the student should have the professional knowledge and skills of hematology, immunology, clinical chemistry and microbiology to support his /her study of the main specialty.
٣-المستهدف من تدريس المقرر:	
By the end of the course, the student should be able to:	
أ-المعلومات والمفاهيم:	<p>a.1- identify information about the physiology of blood cells (RBCs, WBCs and platelets) and homeostasis.</p> <p>a.2- state information about the anatomy of the lymphatic and hematopoietic organs.</p> <p>a.3-explain the important causes, presentation and management of various types of anemias.</p> <p>a.4- discuss causes, manifestation and management of bleeding and coagulation disorders.</p> <p>a.5- discuss various parasitic diseases in different samples.</p> <p>a.6- demonstrate chemical and immunological changes associated with various diseases especially parasitic diseases.</p> <p>a.7- identify recent advances in diagnosing various hematological disorders as bone marrow transplantation, immunological treatment.</p>
ب-المهارات الذهنية:	<p>b.1- Interpret lab investigations as blood picture, bone marrow examination, results of lymph node, spleen biopsy and tests for coagulation disorders.</p> <p>b.2- differentiate between samples of parasitic infection and other samples.</p>
ج-المهارات المهنية الخاصة بالمقرر:	<p>c.1- Perform a complete hematological examination.</p> <p>c.2- Perfect different staining methods.</p> <p>c.3- Perform complete urinary, sputum and fecal examinations.</p> <p>c.4- Perform serological tests for detection of parasitic antibodies or antigens</p> <p>c.5- Examine lymph nodes, liver and spleen and to know causes and management of lymphadenopathy, hepatomegaly, and splenomegaly.</p>
د-المهارات العامة:	<p>d1- Work in a team.</p> <p>d2-Communicate well with his colleagues, top managers and subordinates.</p> <p>d3- Use computers in conducting researches.</p>



				٤-محتوى المقرر:
Topics	Hours of lectures	Practical	Course ILO's	
Clinical hematology:	2	2	a1, a2, a3,a5, b1, b2, b3, c1	
- Parasites in blood.	2	2	a1, a2, a3,a5, b1, b2, b3, c1	
-Anemias:	2	2	a1, a2, a3,a5, b1, b2, b3, c1	
- ERS.	1	1		
- WBCs	2	2	a1, a2, a3,a5, b1, b2,b3, c1	
Normal haemostasis. Disorders of coagulation and thrombosis	2	2	a4,a6	
Clinical Chemistry: Carbohydrates.	1	1	a6, a7, b3	
- Body fluids - Plasma proteins and liverdisorders.	4	4	a6, a7, b3	
- Kidney function	2	2	a6, a7, b3,c2, c4	
Clinical microbiology:	2	2	a5,a7,b3,c2	
- Parasites in urine and stools	2	2	a5,b3,c2	
- Medically important cases:	2	2	a7,b2, d1,d2,d3	
Clinical immunology:	2	2	a6,a7	
- Diagnosis of infectious diseases	2	2	a5,a6,a7,b1, b2	
- Immunological aspects of parasitic diseases	2	2	a6,a7,c4, d1,d2,d3	
<ul style="list-style-type: none">• Small group discussions• Seminars, case study.• Practical classes				٥-أساليب التعليم والتعلم:
لا يوجد				٦-أساليب التعليم والتعلم لذوي القدرات المحدودة:
				٧-تقويم الطلاب:
<ul style="list-style-type: none">- Written exam.- Oral exam.- Practical exam.				أ-الأساليب المستخدمة:
Final exam in May or November				ب-التوقيت:
-Written exam.: 120 marks - Oral exam: 50 marks - Practical exam: 80				ج-توزيع الدرجات:
				٨-قائمة الكتب والمراجع:



توصيف برنامج ماجستير الطفيليات الطبية

- Post graduate Lecture notes prepared by the staff member of the department	أ-مذكرات:
6. Basic Clinical Laboratory Techniques, 5th Edition by Barbara H. Estridge and Anna P. Reynolds (Jul 10, 2007)	ب-كتب ملزمة:
- Monica(2004): District laboratory practice in Tropical countries. - Manual of Medical Laboratory Techniques by Ramakrishnan S, Sulochana KN(2012).	ج-كتب مقترحة:
http://www.ncbi.nlm.gov http://www.google.com http://Freemedicaljournals.com	د-دوريات علمية أو نشرات ...الخ

أستاذ المادة: أ.د. محمود العزوني رئيس مجلس القسم العلمي:



Course Specifications of Biochemistry for MD Degree in Medical Parasitology

١- بيانات المقرر		
المستوى: ماجستير جزء أول	اسم المقرر: Medical Biochemistry	الرمز الكودي: Para 604
عدد الوحدات الدراسية: نظري: ٢ - عملي: ١		التخصص: ماجستير الطفيليات الطبية
- By the end of the course, the postgraduate students should be able to have the professional knowledge of the biochemistry that serves in the field of parasitology diseases.		٢- أهداف المقرر
٣- المستهدف من تدريس المقرر: By the end of the course, the student should be able to:		
a1- explain the biochemical importance of intermediary metabolism (Anabolic and catabolic) a2- discuss the importance of clinical biochemistry a3- demonstrate the role of vitamin, Minerals a4- explain hormonal action		أ- المعلومات والمفاهيم:
b1-Diagnose the affected biochemical deficiency. b2- Integrate basic biochemical and physiological facts with clinical data		ب- المهارات الذهنية:
c1- identify the biochemical defect c2- perform some laboratory tests for early diagnosis. C3 diagnose and treat as early as possible		ج- المهارات المهنية الخاصة بالمقرر:
d1- use computer to enter biochemistry web sites and self-learning, in conducting research and to Collect scientific data. d2- Work in Team for accurate diagnosis of diseases using internet. d3- manage time.		د- المهارات العامة:



Topics	Lectures	Practical	ILO's covered	٤-محتوى المقرر:
(1)Biological oxidations	3		a1,a2	
(2) Glycolysis and citric acid cycle:	4	2	a1,a2	
3) Other Pathways	5	2	a1,a2,d2	
(4) Fat metabolism)	5	2	a1,a2,d2,d4	
(5)Protein metabolism:	4	2	a1,a2,b1,b2,b3,c1,c2, d2	
6) Integration of metabolism:- Mechanisms and regulation	2		a1,a2, b1, b2,b3, c1,c2	
7) Metabolism of nucleotides:	3		a1,a2, b1, b2,b3, c1,c2,d1	
8) Porphyrin metabolism and hemoglobin synthesis and catabolism	3		a1,a2, a3, b1, b2,b3, c1,c2,d5	
(9) Mineral metabolism Tissue chemistry				
10) Eukaryotic chromosomes	3	2	a1,a2, b1, b2,b3, c1,c2	
(11)Hormones	3		a1,a2,a4. b1, b2, c1	
<ul style="list-style-type: none"> • Small group discussions • Seminars, case study. • Practical classes 				٥-أساليب التعليم والتعلم:
لا يوجد				٦-أساليب التعليم والتعلم لذوي القدرات المحدودة:
٧-تقويم الطلاب:				
- Written exam. Oral exam.				أ-الأساليب المستخدمة:
Final exam in May or November				ب-التوقيت:
-Written exam.: 120 marks - Practical exam: 80 marks - Oral exam: 50 marks				ج-توزيع الدرجات:
٨-قائمة الكتب والمراجع:				
Postgraduate Lecture notes prepared by the staff members in the department.				أمذكرات:
1. Biochemistry, Seventh Edition by Jeremy M. Berg, John L. Tymoczko and Lubert Stryer (Dec 24, 2010) 2. Harper's biochemistry, Murray, RK 2005				ب-كتب ملزمة:



توصيف برنامج ماجستير الطفيليات الطبية

1. Lehninger Principles of Biochemistry by David L. Nelson and Michael M. Cox (Feb 1, 2008) 2. Lippincott's illustrated reviews biochemistry, Champe, PC, Harvey, RA, 2005	ج-كتب مقترحة:
- http://www.ncbi.nlm.gov/ , http://www.vlib.org/ - www.genome.ad.jp/kegg/regulation .	د-دوريات علمية أو نشرات ... الخ

أستاذ المادة: أ.د. امال ابو الفضل رئيس مجلس القسم العلمي : أ.د. امال ابو الفضل



Course Specifications of Pathology for MD Degree in Medical Parasitology

١- بيانات المقرر		
الرمز الكودي: Para 602	اسم المقرر: Medical Pathology	المستوى: ماجستير جزء أول
التخصص: ماجستير الطفيليات الطبية	عدد الوحدات الدراسية: - نظري: ٢ - عملي: ١	
٢- أهداف المقرر	- By the end of this course the student should be able to gain the professional knowledge and understanding of general pathology, special pathology and genetics as related to the main field of medical Parasitology and can accurately and independently interpret the gross and microscopic pathology specimens.	
٣- المستهدف من تدريس المقرر: By the end of the course, the student should be able to:		
أ- المعلومات والمفاهيم:	<p>a1- explain the deviation or change in the normal structure and function of the body on the macro- and micro levels; general pathology.</p> <p>a2- describe Cellular injury reversible and irreversible, causes, effects e.g. degeneration, necrosis and apoptosis (programmed cell death).</p> <p>a3- discuss Inflammation; causes, classification, fate, complications, healing and repair.</p> <p>a4- identify Infectious diseases; viral, bacterial, fungal and parasitic and tissue response to these invaders.</p> <p>a5- discuss Immunity, factors affecting immune response, disorders of the immune system</p> <p>a6- explain Nutritional deficiencies and their effects on the body system</p> <p>a7- describe Cellular growth disturbances e.g. atrophy, hypertrophy, hyperplasia, metaplasia, and dysplasia.</p>	
ب- المهارات الذهنية:	. b1- Interpret the data through reading the reports reaching to the pathology	



laboratory along with the biopsies and excised specimens, including history, clinical examination, radiological and laboratory investigations other than the histopathology																																																																
<p>c1- demonstrate the gross pathology specimens kept in the jars and pictures taken for unavailable gross pathology in the museum, put a diagnosis ordifferential diagnosis.</p> <p>c2- Describe the gross picture of the specimens and deviation of normal regarding the size, site, shape, color localized abnormality</p> <p>c3- deal with the specimens, fixation, trimming, processing, tissue sectioning, hematoxylin and eosin staining</p> <p>c4- Prepare and examining the slides by the bright field microscope and putting a diagnosis or differential diagnosis</p> <p>c5- Use the microscope monitor system in discussing the slides in groups to reach a result</p>				ج-المهارات المهنية الخاصة بالمقرر:																																																												
<p>d1- Use standard computer program effectively.</p> <p>d2- work in a team.</p> <p>d3- Use the information technology in searching about resent data in the libraries via the internet.</p>				د-المهارات العامة:																																																												
<table border="1"> <thead> <tr> <th>Topic</th> <th>No. of hours</th> <th>Lecture</th> <th>Practical/ Museum</th> </tr> </thead> <tbody> <tr> <td colspan="4">1-General pathology:</td> </tr> <tr> <td>1 1. Introduction</td> <td>1</td> <td>1</td> <td></td> </tr> <tr> <td>1.2. Inflammation, Repair, Cell injury and cell death</td> <td>3</td> <td>2</td> <td>1</td> </tr> <tr> <td>1.3. Circulatory disturbances</td> <td>2</td> <td>2</td> <td></td> </tr> <tr> <td>1.4. Infectious diseases</td> <td>2</td> <td>2</td> <td>1</td> </tr> <tr> <td>1.5. Immunopathology</td> <td>2</td> <td>2</td> <td></td> </tr> <tr> <td colspan="4">2- Systematic pathology:</td> </tr> <tr> <td>2.1. Cardiovascular diseases</td> <td>3</td> <td>2</td> <td>1</td> </tr> <tr> <td>2.2. Respiratory diseases</td> <td>2</td> <td>1</td> <td>1</td> </tr> <tr> <td>2.3. Gastrointestinal diseases</td> <td>3</td> <td>2</td> <td>1</td> </tr> <tr> <td>2.4. Diseases of hepatobiliary system</td> <td>3</td> <td>2</td> <td>1</td> </tr> <tr> <td>2.5. Diseases of exocrine pancreas and peritoneum</td> <td>3</td> <td>2</td> <td>1</td> </tr> <tr> <td>2.6. Diseases of the urinary system and male and female genital systems</td> <td>3</td> <td>2</td> <td>1</td> </tr> <tr> <td>2.7. Diseases of the musculoskeletal system and nervous system</td> <td>3</td> <td>2</td> <td>1</td> </tr> </tbody> </table>				Topic	No. of hours	Lecture	Practical/ Museum	1-General pathology:				1 1. Introduction	1	1		1.2. Inflammation, Repair, Cell injury and cell death	3	2	1	1.3. Circulatory disturbances	2	2		1.4. Infectious diseases	2	2	1	1.5. Immunopathology	2	2		2- Systematic pathology:				2.1. Cardiovascular diseases	3	2	1	2.2. Respiratory diseases	2	1	1	2.3. Gastrointestinal diseases	3	2	1	2.4. Diseases of hepatobiliary system	3	2	1	2.5. Diseases of exocrine pancreas and peritoneum	3	2	1	2.6. Diseases of the urinary system and male and female genital systems	3	2	1	2.7. Diseases of the musculoskeletal system and nervous system	3	2	1	٤-محتوى المقرر:
Topic	No. of hours	Lecture	Practical/ Museum																																																													
1-General pathology:																																																																
1 1. Introduction	1	1																																																														
1.2. Inflammation, Repair, Cell injury and cell death	3	2	1																																																													
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2- Systematic pathology:																																																																
2.1. Cardiovascular diseases	3	2	1																																																													
2.2. Respiratory diseases	2	1	1																																																													
2.3. Gastrointestinal diseases	3	2	1																																																													
2.4. Diseases of hepatobiliary system	3	2	1																																																													
2.5. Diseases of exocrine pancreas and peritoneum	3	2	1																																																													
2.6. Diseases of the urinary system and male and female genital systems	3	2	1																																																													
2.7. Diseases of the musculoskeletal system and nervous system	3	2	1																																																													



توصيف برنامج ماجستير الطفيليات الطبية



2.8. Blood diseases, the lymph node and spleen	4	3	1	
2.9. Immunohistopathology	3	2	1	
2.10. Medical genetics	3	3		
2.11. Specimen preparation and examination	4		4	
Total	45	30	15	
Small group discussions: museum specimens, Seminars, case study. Practical classes				٥-أساليب التعليم والتعلم:
لا يوجد				٦-أساليب التعليم والتعلم لذوي القدرات المحدودة:
				٧-تقويم الطلاب:
<ul style="list-style-type: none"> - Written exam. - Oral exam. - Practical exam. 				أ-الأساليب المستخدمة:
Final exam in May or November				ب-التوقيت:
<ul style="list-style-type: none"> -Written exam.: 120 marks - Practical exam: 80 marks - Oral exam: 50 marks 				ج-توزيع الدرجات:
				٨-قائمة الكتب والمراجع:
<ul style="list-style-type: none"> - Postgraduate Lecture notes prepared by the staff members in the department. - Department practical & Museum notes. 				أ-مذكرات:
<ul style="list-style-type: none"> - Robbins and Cotran Review of Pathology, 3rd Edition by Edward C. Klatt MD and Vinay Kumar MBBS MD FRCPATH (Jul 28, 2009). - Color Atlas of Pathology: Pathologic Principles, Associated Diseases, Sequelae by Ursus-Nikolaus Riede and Martin Werner (Jul 14, 2004). 				ب-كتب ملزمة:
Pathologic Basis of Disease, Kumar, Cotran, Robbins.				ج-كتب مفترحة:
http://www.humpath.com/Websites-Pathology http://peir2.path.uab.edu/reslinks/Pathology_Education_Websites/index.html http://library.med.utah.edu/WebPath/webpath.html				د-دوريات علمية أو نشرات... الخ

رئيس مجلس القسم العلمي: أ.د. عبد اللطيف البلشي

أستاذ المادة: أ.د. سامية يوسف



Course Specifications of Medical Microbiology & Immunology for Master Degree in Medical Parasitology

١-بيانات المقرر		
المستوى: ماجستير جزء أول	اسم المقرر: Medical Microbiology & Immunology	الرمز الكودي: Para 601
عدد الوحدات الدراسية: - نظري: ٢ - عملي: ١		التخصص: ماجستير الطفيليات الطبية
<p>By the end of the course the student should be efficiently able to:</p> <p>1-Have the professional knowledge of the microorganisms affecting human beings all over the world and the relations between them and the parasites.</p> <p>2.Recognize the pathology, clinical symptoms, complications and perform the laboratory tests needed for diagnosis of each disease.</p> <p>3. Gain the professional knowledge about the structure and function of the immune system so as to perform immunological studies needed in his/her main specialty.</p>		٢-أهداف المقرر
٣-المستهدف من تدريس المقرر:		
By the end of the course, the student should be able to:		
<p>A1- identify the microorganisms affecting human beings all over the world particularly those related to parasites.</p> <p>A2- Describe the metabolism and genetics of organisms.</p> <p>A3- Describe the pathology, clinical symptoms and complications of each disease.</p> <p>A4- Summarize the laboratory tests needed for diagnosis of each case.</p> <p>A5- identify some of the drugs and instructions used for treatment of each case.</p> <p>A6- Describe some infection control methods.</p> <p>A7- Describe the structure and function of immune system.</p>		أ-المعلومات والمفاهيم:
<p>b1- Differentiate between the different microorganisms (Bacteria, viruses and fungi).</p> <p>b2- Differentiate between the different types of bacteria using staining and culturing methods.</p> <p>b3- Differentiate between organisms affecting the same body parts.</p>		ب-المهارات الذهنية:
<p>c1- identify micro-organisms on morphological bases.</p> <p>c2- perform the methods of staining, culturing and biochemical reactions.</p> <p>c3- perform some serological tests used in diagnosis.</p>		ج-المهارات المهنية الخاصة بالمقرر:



c4- Handle of samples.				
d1- Use the computer and internet to gather scientific information.				د-المهارات العامة:
d2- Practice group co-ordination.				
Topic	Lecture	Practical	Course ILO,s	٤-محتوى المقرر:
General bacteriology	4	4	a1,a2,b1	
Systemic bacteriology	6	6	a3,a4,a5,b1,b2,b3,c1,c2,c4	
Mycology	3	3	a3,a4,a5,a6, b1,b2,b3, c1,c2,c4	
Virology	6	6	a3,a4,a5,a6, b1,b2,b3	
Nosocomiology	4	4	a3,a4,a5,a6, b1,b2,b3, c1,c2,c4	
Immunology	7	7	A7,c3,c4,d1,d2	
Total	30	30		
<ul style="list-style-type: none"> • Small group discussions • Seminars, case study. • Practical classes 				٥-أساليب التعليم والتعلم:
لا يوجد				٦-أساليب التعليم والتعلم لذوي القدرات المحدودة:
				٧-تقويم الطلاب:
<ul style="list-style-type: none"> - Written exam. - Practical exam. - Oral exam. 				أ-الأساليب المستخدمة:
Final exam in May or November				ب-التوقيت:
<ul style="list-style-type: none"> -Written exam.: 120 marks - Practical exam: 80 marks - Oral exam: 50 marks 				ج-توزيع الدرجات:
				٨-قائمة الكتب والمراجع:
<ul style="list-style-type: none"> - Postgraduate Lecture notes prepared by the staff members in the department. 				أ-مذكرات:
<ul style="list-style-type: none"> - Medical Microbiology (Flexibook) by F. H. Kayser, K. A. Bienz, J. Eckert and R. M. Zinkernagel (Oct 20, 2004). - Medical Microbiology: The Big Picture (LANGE The Big Picture) by Neal Chamberlain (Aug 5, 2008) - Roitt's Essential Immunology (Essentials) by Peter Delves, Seamus Martin, Dennis Burton and Ivan Roitt (Aug 14, 2006). 				ب-كتب ملزمة:



توصيف برنامج ماجستير الطفيليات الطبية

- Problem based Microbiology by Swapan K., 2006.	ج-كتب مقترحة:
http://mic.sgmjournals.org/ http://www.microbes.info/ http://mansvu.mans.edu.eg/moodle/course/category.php?id=64 -	د-دوريات علمية أو نشرات ... الخ

رئيس مجلس القسم العلمي:

أستاذ المادة: أ.د.



Course Specifications of Community Medicine for MSC degree in Medical parasitology

١-بيانات المقرر		
المستوى: ماجستير جزء أول	اسم المقرر: Community Medicine	الرمز الكودي: Para 605
عدد الوحدات الدراسية: - نظري: ٢ - عملي: ١	التخصص: ماجستير الطفيليات الطبية	
By the end of the course the post graduate students should be able to: a- Have the professional knowledge of a community-oriented physician capable of –skillfully anticipating and responding to community health needs. b- Apply the knowledge and skills learned, and to take leadership in motivating the community served as regards the preventive aspects concerning parasites and its relation to Medicine.		٢-أهداف المقرر
٣-المستهدف من تدريس المقرر: By the end of the course, the student should be able to:		
a1- Describe the spectrum of parasitic diseases. a.2- Explain the three interacting ecological factors—agent, host, and environment—affecting the occurrence of disease. a.3- Describe the determinants of health on the individual, the family, and the community levels. a.4- Describe the epidemiology and public health importance of human parasitic infections on the individual, the family and community levels. a.5- Define patterns of care as preventive and curative, and describe the levels of preventive care. a.6- List at least four uses for health indicators in Parasitology. a.7- Describe the public health surveillance system and its use in the community setting a.8- Define data sources for vital statistics. a.9- Define the screening tests pertinent to selected diseases and the at-risk approach in the application of screening tests. a.10- List at least four types of study designs. a.11- Describe the study design, uses, and limitations a.12- Explain the usefulness of screening tests, and calculate sensitivity, specificity, and predictive values.		أ-المعلومات والمفاهيم:
b.1- Evaluate indicators of health and disease. b.2- Identify prevalent health problems in a community, using various epidemiological strategies.		ب-المهارات الذهنية:



<p>b.3- Anticipate and participate in investigation of an epidemic/ outbreak as part of a health team.</p> <p>b.4- Identify trends in health and disease.</p> <p>b.5- select appropriate health promotion, disease prevention, and control measures.</p> <p>b.6- choose disease prevention and control measures to identified priority communicable and noncommunicable diseases.</p> <p>b.7- select health behavior theories to different community health problems.</p> <p>b.8- Identify behavioral and social variables impacting health and disease.</p> <p>b.9- design appropriate communication strategies for use with clients, the health care team, and the community.</p> <p>b.10- Select and use appropriate health education methods and materials.</p> <p>b.11- Counsel effectively in the health care environment and prevention of parasitic diseases.</p>				
<p>c1- Perform community diagnosis for health problems (of parasitic origin) in the locality.</p> <p>c.2- Participate in conducting public health surveillance.</p> <p>c.3- Advocate appropriately in the health care setting.</p>				ج-المهارات المهنية الخاصة بالمقرر:
<p>d1- Communicate well with his colleagues.</p> <p>d2- Team working for accurate diagnosing of diseases .</p> <p>d3- Use standard computer programs effectively (window, office programs).</p> <p>d4- Utilize computers in conducting research and to Collect scientific data</p>				د-المهارات العامة:
Topic	Lectures	Tutorial	Course ILO's	٤-محتوى المقرر:
-Epidemiology of selected parasitic diseases.	1	1	a1,a2,a3, a4,a5,a6, b1,b2,b3,b4,	
-Situations in Egypt and globally - Importance and methods of prevention	2	1	b5,b6,b7, c1,c2,c3	
-Parasitic infections; Risk factors	5	1	a1,a2,a3, a4,a5,a6, b1,b2,b3,b4, b5,b6,b7, c1,c2,c3	
-Parasitic zoonotic and occupational diseases.	2	1	a1,a2,a3, a4,a5,a6,	



توصيف برنامج ماجستير الطفيليات الطبية



			b1,b2,b3,b4, b5,b6,b7, c1,c2,c3	
-Arthropod born parasitic diseases	2	1	a1,a2,a3, a4,a5,a6, b1,b2,b3,b4, b5,b6,b7, c1,c2,c3	
-Emerging and reemerging parasites	1	1	a4,a5,a6, b2, c2	
-Investigations of a parasitic epidemic, the attack rates	1	1	a4,a5,a6, a7, b8,b9, d1,d2,d3, d4,	
-Methodology	3	2	a10,a11, a12, b10,d2,d3, d4	
-Statistics Terminology and rationale			a8, a9, a9	
Data collection Types of data Tabulation of data Graphical presentation of data Measures of dispersion Normal distribution curves	5	2	a7,a8,a9, b3, b9, b10, b11, c1, c2, d1, d2,d3, d4	
-International classification of diseases.	2	1	a3,a4,b1	
-International death certificate.	1	1	a3,a4,b1	
-Study design Cross sectional study and the prevalence rate cohort study, Incidence rate, Odd ratio.	2	1	a10,a11, a12, b9, c1, d1,d2, d3, d4	
Sampling	3	1	a7, b9,c2	
<ul style="list-style-type: none">• Small group discussions• Seminars, case study.				٥-أساليب التعليم والتعلم:
لا يوجد				٦-أساليب التعليم والتعلم لذوي القدرات المحدودة:
٧-تقويم الطلاب:				
- Written exam. - Oral exam.				أ-الأساليب المستخدمة:



توصيف برنامج ماجستير الطفيليات الطبية



Final exam in May or November	ب-التوقيت:
-Written exam.: 200 marks - Oral exam: 50 marks	ج-توزيع الدرجات:
٨-قائمة الكتب والمراجع:	
- Postgraduate Lecture notes prepared by the staff members in the department.	أ-مذكرات:
1-Maxy-Rosenau Public health and preventive medicine, Prentice – Hall International Inc.	ب-كتب ملزمة:
1- Dimensions of Community Health, Boston Burr Ridge Dubuque. 2- Short Textbook of preventive and social Medicine. Prentice-Hall International Inc. 3- Epidemiology in medical practice, 5th edition. Churchill Livingstone. New York, London and Tokyo. 4- Textbook of Community Medicine (Preventive & Social Medicine) by Sunderlal (Jan 1, 2007)	ج-كتب مقترحة:
1-American Journal of Epidemiology. 2-British Journal of Epidemiology and Community Health.	د-دوريات علمية أو نشرات ...الخ

رئيس مجلس القسم العلمي: أ.د. عبد المنعم ضوه

أستاذ المادة: أ.د. محمود فوزي



Course Specifications of Hepatology & Gastroenterology for Master Degree of Parasitology

١- بيانات المقرر		
المستوى: ماجستير جزء أول	اسم المقرر: Hepatology & Gastroenterology	الرمز الكودي: Para 606
عدد الوحدات الدراسية: - نظري: ٢ - عملي: ١		التخصص: ماجستير الطفيليات الطبية
1. To have basic knowledge about fevers and its common causes. 2. To have basic knowledge about etiology, pathogenesis, clinical picture, complications and management of the most common infectious diseases. 3. To understand the most common gastrointestinal and hepatic diseases especially those prevalent in our country and be able to diagnose and manage them. 4. To be able to take a complete medical history from patients 5. To know the symptomatology of gastrointestinal system and how to analyze them to reach a provisional diagnosis 6. To have a basic knowledge about different methods of clinical examinations of patients and details of abdominal examination 7. To be able to link clinical to laboratory data		٢- أهداف المقرر
٣- المستهدف من تدريس المقرر: By the end of the course, the student should be able to:		
a1- discuss the common infectious, hepatic and gastrointestinal diseases Worldwide and the most common diseases and public health problems in our country. a2- explain the causation of diseases and new concepts in their pathogenesis. a3- describe the clinical picture, complications and differential diagnosis of common infections. a4- explain the importance of good history taking as a first step to solve a medical problem. A5- identify the common diagnostic, laboratory, radiological and other techniques a8- describe the various therapeutic methods/ alternatives used for common diseases (supportive therapy, nutrition, pharmacotherapy, surgical treatment). a9- discuss general methods for health promotion and disease prevention.		أ- المعلومات والمفاهيم:
b1- Interpret data acquired through history taking to reach a provisional diagnosis		ب- المهارات الذهنية:



<p>b2- Interpret physical findings and correlate them with patient's symptoms. B3- analyze problems and find solutions. B4- Select from different diagnostic techniques the ones that help to reach a final diagnosis. B5- Select the most helpful laboratory investigation to confirm the diagnosis. B6- innovate nontraditional solutions to problems.</p>																					
<p>c1- Perform general and abdominal examination of patients . c2- Interpret, conclude and discuss data collected from history and examination c3 Diagnose common infectious diseases(parasitic, bacterial and viral) and be able to differentiate them clinically and laboratory. c4- Perform basic diagnostic and therapeutic techniques and measures (pulse, temperature, giving injections and intravenous fluids, taking aspirations from pathological body fluids). c5- identify patients with life threatening conditions and initiate the proper management and change it according to patient's needs. c6-learn how to look for physical signs and how to interpret them. C7 Take a thorough medical history.</p>	<p>ج-المهارات المهنية الخاصة بالمقرر:</p>																				
<p>d1- Work in a team d2-Communicate well with his colleagues, top managers and subordinates. d3- Establish a good patient-physician relationship. d4- Use computers in conducting researches</p>	<p>د-المهارات العامة:</p>																				
<table border="1"> <tr> <td>Diagnosis of a case of fever Ascariasis</td> <td>Pyrexia of unknown origin</td> </tr> <tr> <td>Nosocomial infections Strongyloidiasis</td> <td>Helminthic Diseases Tissue larva migrans</td> </tr> <tr> <td>Schistosomiasis Cappilariasis Trichinosis</td> <td>Paragonimus westermani Filariasis</td> </tr> <tr> <td>Fascioliasis Loasis</td> <td>Clonorchis sinensis Onchocerciasis</td> </tr> <tr> <td>Heterophyes heterophyes Dracanculus medinensis</td> <td>Taeniasis Treatment of helminthic infections</td> </tr> <tr> <td>Hymenolepis nana, diminuta Hydatid disease</td> <td>Diphylobothrium latum Enterobiasis, Ancylostomiasis</td> </tr> <tr> <td>Protozoal Diseases</td> <td>Malaria</td> </tr> <tr> <td>Babesiosis Balantidiasis Giardiasis Amaebiasis</td> <td>African Tripanosomiasis Toxoplasmosis American Leshmaniasis Trypanosomiasis</td> </tr> <tr> <td>Cardiovascular Diseases in the Tropics</td> <td>Neurological Manifestations of Tropical Diseases</td> </tr> <tr> <td>Tropical Liver Diseases</td> <td>Zoonoses</td> </tr> </table>	Diagnosis of a case of fever Ascariasis	Pyrexia of unknown origin	Nosocomial infections Strongyloidiasis	Helminthic Diseases Tissue larva migrans	Schistosomiasis Cappilariasis Trichinosis	Paragonimus westermani Filariasis	Fascioliasis Loasis	Clonorchis sinensis Onchocerciasis	Heterophyes heterophyes Dracanculus medinensis	Taeniasis Treatment of helminthic infections	Hymenolepis nana, diminuta Hydatid disease	Diphylobothrium latum Enterobiasis, Ancylostomiasis	Protozoal Diseases	Malaria	Babesiosis Balantidiasis Giardiasis Amaebiasis	African Tripanosomiasis Toxoplasmosis American Leshmaniasis Trypanosomiasis	Cardiovascular Diseases in the Tropics	Neurological Manifestations of Tropical Diseases	Tropical Liver Diseases	Zoonoses	<p>٤-محتوى المقرر:</p>
Diagnosis of a case of fever Ascariasis	Pyrexia of unknown origin																				
Nosocomial infections Strongyloidiasis	Helminthic Diseases Tissue larva migrans																				
Schistosomiasis Cappilariasis Trichinosis	Paragonimus westermani Filariasis																				
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Protozoal Diseases	Malaria																				
Babesiosis Balantidiasis Giardiasis Amaebiasis	African Tripanosomiasis Toxoplasmosis American Leshmaniasis Trypanosomiasis																				
Cardiovascular Diseases in the Tropics	Neurological Manifestations of Tropical Diseases																				
Tropical Liver Diseases	Zoonoses																				



Haematological Disorders in the Tropics	Emergencies in Fevers	
Infections in immunocompromized host	Infection and immunity interaction	
Malnutrition and infection inter-relations	Arthropod borne infections Infectious and non-infectious diarrhea	
Salmonella infections Immunizations	Brucellosis Precautions taken by travelers to tropical areas	
Shigellosis Cholera	Tuberculosis of the GIT Cholestasis	
<ul style="list-style-type: none"> • Small group discussions • Seminars, case study. • Practical classes 		٥-أساليب التعليم والتعلم:
لا يوجد		٦-أساليب التعليم والتعلم لذوي القدرات المحدودة:
٧-تقويم الطلاب:		
<ul style="list-style-type: none"> - Written exam. - Clinical exam. - Oral exam. 		أ-الأساليب المستخدمة:
Final exam in May or November		ب-التوقيت:
<ul style="list-style-type: none"> -Written exam.: 120 marks - Practical/clinical exam: 80 marks - Oral exam: 50 marks 		ج-توزيع الدرجات:
٨-قائمة الكتب والمراجع:		
<ul style="list-style-type: none"> -Davidson text Book of Medicine. -Hutchison Book for case taking. 		أ-كتب ملزمة
<ul style="list-style-type: none"> - Hunter's Tropical Medicine - CURRENT Diagnosis & Treatment Gastroenterology, Hepatology, & Endoscopy (LANGE CURRENT Series) by Norton Greenberger, Richard Blumberg and Robert Burakoff (Apr 23, 2009) - Sheilla Sherlock (Text Book) of Hepatology 		ب-كتب مقترحة:
http://www.ncbi.nlm.gov http://www.google.com http://Freemedicaljournals.com		د-دوريات علمية أو نشرات... الخ

رئيس مجلس القسم العلمي: أستاذ المادة: أ.د. يحيى صادق



Course Specifications of Medical Parasitology for MSc. Medical Parasitology Degree (second part)

١-بيانات المقرر		
الرمز الكودي: Para 607-610	اسم المقرر: Medical Parasitology (second part)	المستوى: ماجستير جزء ثاني
التخصص: ماجستير الطفيليات الطبية	عدد الوحدات الدراسية: - نظري: ١٠ - عملي: ٧	
٢-أهداف المقرر	By the end of the course the student must have sufficient knowledge & understanding of the parasites affecting human beings all over the world and particularly in Egypt, so to be able to efficiently diagnose and teach medical Parasitology to undergraduates.	
٣-المستهدف من تدريس المقرر: By the end of the course, the student should be able to:		
أ-المعلومات والمفاهيم:	2.a.1. identify sufficient knowledge of the parasites affecting human beings all over the world and zoonoses. 2.a.2. describe the geographical distribution and life cycle of parasites and vectors. 2.a.3. describe the pathology, clinical symptoms and complications of each parasite. 2.a.64. identify the knowledge of some of the drugs and instructions used for treating each case. 2.a.7. discuss the knowledge about control methods used against parasites and vectors. 2.a.8. identify sufficient knowledge about snails and their medical importance, especially of Egypt. 2.a.9. Discuss the knowledge of parasitic immunity basis.	
ب-المهارات الذهنية:	2.b.1. Differentiate between parasites affecting the same organ. 2.b.2. Differentiate between parasites present in the same sample. 2.b.3. Differentiate between parasites inhabiting the same geographical location. 2.ab.3. Differentiate between parasites or vectors on morphological bases.	
ج-المهارات المهنية الخاصة بالمقرر:	2.c.1 Identify the infective and the diagnostic stages of the parasites 2.c.2. Identify some stages of the parasites. 2.c.3. Identify some of the medically important intermediate host and vectors especially those present in Egypt. 2.c.4. Perform some laboratory tests available in the department lab. 2.c.5. Perform available immunological tests. 2.c.6. Deal with lab animals: infecting, sacrifice, dissecting and examining.	



2.c.7. Collecting and rearing of snails or medically important arthropods. 2. c.58. Recommend laboratory tests needed for diagnosis of each case.			
2.d.1. Use the computer to enter parasitological web sites. 2.d.2. communicate with others. 2.d.3. work in groups, as a leader or as a college. 2.d.4. collect data from medical centers and patients. 2.d.5. compile a review article about a specific subject.			د-المهارات العامة:
Contents of Medical Parasitology (PARA607-611).			٤-محتوى المقرر:
PARA612 units	Credits/unit	Total teaching hours/30 weeks	
1-Advanced Helminthology	2	150	
2- Advanced Protozoology	2	150	
3- Advanced Entomology	1.5	105	
4- Advanced Immunology and Molecular Biology of Parasitic infections.	1	60	
5- Advanced Diagnostic techniques for parasitic infections& prevention methods	1.5	105	
Total	8	525	
<ul style="list-style-type: none"> • Small group discussions • Seminars, case study. • Practical classes 			٥-أساليب التعليم والتعلم:
لا يوجد			٦-أساليب التعليم والتعلم لذوي القدرات المحدودة:
			٧-تقويم الطلاب:
<ul style="list-style-type: none"> - Written exam. - Practical - Oral exam. 			أ-الأساليب المستخدمة:
Final exam in May or November			ب-التوقيت:
-Written exam.: 300 marks			ج-توزيع الدرجات:



توصيف برنامج ماجستير الطفيليات الطبية



- Practical exam: 150 marks - Oral exam: 150 marks	
٨- قائمة الكتب والمراجع:	
- Lecture notes prepared by the staff members in the department.	أمذكرات:
- Foundations of Parasitology by Larry Roberts and John Janovy Jr. (Oct 13, 2008) - Medical Parasitology: A Self-Instructional Text by Ruth Leventhal and Russell F. Cheadle (Jan 15, 2002)	ب- كتب ملزمة:
- A Color Atlas of Parasitology by John T. Sullivan (2009) <u>Introduction to Infectious and Parasitic Diseases, Including Their Cause and Manner of Transmission</u> by Millard Langfeld(2010)	ج- كتب مقترحة:
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