



Medical Parasitology Department Doctorate Degree Program Specification



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Benha University
Faculty of Medicine
Parasitology Department

Program Specification

MD Medical Parasitology (2013 -2014)

A) Basic information

(أ) معلومات أساسية

- 1- Program title:** MD degree of Medical Parasitology.
- 2- Nature of the program:** Single
- 3- Departments offering the program:** Medical Parasitology Department.
- 4-The date of adoption in the department council:** 2 / 9 / 2013
- 5- The date of adoption in faculty council 356:** 15/ 9 / 2013
- 6- Coordinator:** Prof. Dr.Amany El-Fakahany.
- 7- Internal evaluation of the program:** Dr Hassan Ahmed Hamadto.-Prof. of parasitology, Benha University
- 8- External evaluation of the program:** Dr. Nashaat Abd El-Monem Nasef –Prof. of parasitology, Menofia University.

B) Professional information

(ب) معلومات متخصصة

1-Overall aims of the program:

١-الأهداف العامة للبرنامج

The overall goals of the program are to:

- Provide the postgraduate with the detailed and advanced knowledge and skills of medical parasitology and research methodologies in the field of parasitology.
- Enable the postgraduate graduate to apply the analytical methods and critic the knowledge in the field of medical parasitology and related fields.

- Integrate specialized knowledge with relevant knowledge and develop bilateral relations.
- Show deep awareness of current problems and theories in the marginal area of medical parasitology
- Identify problems professionally and find innovative solutions to solve them.
- Be oriented towards the development of methods and new tools and techniques for professional practice.
- Use of appropriate technological means to serve the professional practice.
- Communicate effectively and lead the team in various professional contexts.
- Employ available resources efficiently, develop and work to find new resources.
- Have ongoing commitment to self-development and the transfer of knowledge and experience to others.

2. Intended Learning Outcomes (ILOs)

٢ - المخرجات التعليمية المستهدفة

2.a. Knowledge and Understanding:

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

2.a.1. Discuss emerging 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. Recognize advanced medically important vectors and snails and how to examine for parasites using recent techniques.

2.a.3. Understand how to collect parasitological specimens accurately and how to prepare permanent preparations.

2.a.4. Describe principles of direct methods of diagnosis as well as immunological methods of diagnosis and carry out them.

2.a.5. Explain the basis of advanced environmental parasitology.

2.a.6. Discuss 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.a.7. Illustrate hospital acquired parasitic infections, types, causative organisms, prevention and control.

2.a.8. Point out the details of recent anti-parasitic chemotherapy, side effects, chemoprophylaxis and resistance.

2.a.9. Know anti-parasitic vaccines.

2.a.10. Describe impact of molecular technology in Parasitology and immunology.

2.a.11. Explain details of proper ethical & legal practice.

2.a.12. Recognize basics and essentials of medical quality control.

2.a.13. Illustrate proper design, conduction & publishing of scientific research.

2.a.14. Demonstrate basis of scientific knowledge essential for following the rules of medical research ethics.

2.b. Intellectual skills:

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

2.b.1. Analyze, deduce, extrapolate & evaluate given parasitological problems.

2.b.2. Interpret parasitological, immunological and molecular reports.

2.b.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.

2.b.4. Evaluate according to evidence, the causal relationship of parasites and diseases.

2.b.5. Solve different parasitological problems (identification, diagnosis, treatment) in absence of adequate data.

2.b.6. Join different knowledge to help in solving difficult problems.

2.b.7. Design a research study that add to the existing specialty knowledge

2.b.9. Plan for development in the performance in diagnosis of parasitic disease and its application for community development.

2.b.8. Plan courses to improve practice and enhance performance of juniors.

2.b.10. Appreciate the danger of handling and use of infectious agents on community and environment as a part of their ethical heritage.

2.b.11. Add to the specialty field through creativity & innovation.

2.b.12. Make appropriate decisions in different situations.

2.c. Professional & Practical skills

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

2.c.1. Perform 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. Identify different diagnostic tests commonly used for parasitic infections.

2.c.4. Judge results of parasitological, serological and molecular tests and apply it.

2.c.5. Evaluate and improve methods and tools used in specialty.

2.c. 6. Use molecular technology to advance practice.

2.c.7 Publish scientific articles/ papers (in indexed journals).

2.d. General & transferable skills

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

2.d.1. Communicate effectively using all recent methods

2.d.2. Use advanced information technology to improve his/her professional practice

2.d.3. Educate and evaluate others.

2.d.4. Perform self-appraisal & seek continuous learning

2.d.5. Use new sources of information to obtain data

2.d.6. Work as team leader as well as a member in larger teams

2.d.7. Manage different scientific meetings and appropriately utilize time.

3. Academic Standards

٣- المعايير الأكاديمية

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 ١٦/٦/٢٠١٣)

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.

5. Program structure and contents:

٥. هيكل ومكونات البرنامج:

a. Program duration: ٦ semesters.

- 1st part: one semester

- 2nd part: three semesters.

- Thesis: 4 semesters (starts after success in the first part).

b. Program structure:

- Total hours of the program: 66 credit hours

- Theoretical: 25 credit hours.

- Practical: 11 credit hours.

- Log book: 15 credit hours.

- Thesis: 15 credits hours.

c. Program levels and courses:

ج- مستويات ومقررات البرنامج

	Course title	Code	Total credits
First part	- Microbiology	PARA 701	3 hours
	- Pathology	PARA 702	3 hours
	- Clinical pathology	PARA 703	3 hours
	- Biochemistry	PARA 704	3 hours
	- Genetics	PARA 705	3 hours
	- Community Medicine	PARA 706	3 hours
	- Tropical medicine	PARA 707	3 hours
	- Histology	PARA 708	3 hours
Log book	Includes activities as :- Participation and attendance of seminars, conferences and training courses. -Preparation of permanent prepared parasites specimens...etc.		15 hours
Second part:	- Advanced helminthology	PARA709	9 hours
	- Advanced protozoology	PARA710	9 hours
	- Advanced entomology.	PARA711	4.5 hours
	- Advanced immunology and molecular biology of parasitic diseases.	PARA712	3 hours
	- Advanced diagnostic techniques for parasitic infections and prevention methods.	PARA713	4.5 hours
Thesis			15 hours
Total			66 hours

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	
1-Microbiology	PARA 701	2	3	3	75
2- Pathology	PARA 702	2	3	3	75
3- Clinical pathology	PARA 703	2	3	3	75
4-Biochemistry	PARA 704	2	3	3	75
5-Genetics	PARA 705	3	-	3	45
6-Community medicine	PARA 706	3	-	3	45
7- Tropical medicine	PARA 707	2	3	3	75
8-Histology	PARA 708	2	3	3	75

b- Compulsory courses: none

c- Selective courses: none

Second part (3 semesters):

a- Compulsory course:

Course Title	Course Code	NO. of Teaching hours per week			Total teaching hours / 3 semesters
		Theoretical	Practical	Total/Week	
1- Advanced Helminthology	PARA 709	2	3	5	225
2- Advanced Protozoology	PARA710	2	3	5	225
3- Advanced Entomology	PARA 711	1	1.5	2.5	112.5
4-Advanced Immunology and Molecular Biology of Parasitic infections	PARA712	1	-	1	45
5- Advanced Diagnostic techniques for parasitic infections & prevention methods	PARA713	1	1.5	2.5	112.5
Total:		7	9	16	720

b- Elective courses: none

c- Selective courses: none

6. Courses contents

٦. محتويات المقررات (راجع توصيف المقررات ملحق ٦)

7. Program admission requirements:

٧- متطلبات الالتحاق بالبرنامج

- يشترط لقياد الطالب لدرجة الدكتوراه في العلوم الطبية الأساسية تخصص الطفيليات أن يكون حاصلًا على درجة الماجستير في الطفيليات بتقدير جيد على الأقل من إحدى جامعات ج. م. ع أو على درجة معادلة لها وذلك حسب القواعد المنظمة.

8. Progression in the program:

٨- القواعد المنظمة لاستكمال البرنامج

يشترط في الطالب لنيل درجة الدكتوراه في الطب أو الجراحة أو العلوم الطبية الأساسية ما يلي :

- حضور المقررات الدراسية بصفة مرضية طبقًا للساعات المعتمدة.
- أن يقوم ببحث في موضوع تقره الجامعة بعد موافقة مجلس الكلية والقسم لمدة ٤ فصول دراسية على الأقل.
- أن 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 والإكلينيكية والشفهية المقررة وفقا لما هو مبين باللائحة.
- على الطالب أن يقيد اسمه للامتحان قبل موعده بشهر على الأقل.
- يشترط لنجاح الطالب في امتحان الدكتوراه الحصول على الحد الأدنى للنجاح في جميع الاختبارات المقررة وفي كل جزء من أجزائها على حدة وذلك بأخذ المتوسط لتقديرات أعضاء اللجنة وإذا رسب الطالب في أي مقرر من المقررات يعيد الامتحان في جميع المقررات.

٩. graduate s assessment methods

٩. طرق وقواعد تقييم المتحقيين 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	To assess knowledge, understanding, intellectual skills, practical &

توصيف برنامج دكتوراة الطفيليات الطبية

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	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	Thesis	4
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	Logbook	5

First part

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
١٥٠			٥٠	١٠٠	اختبار تحريري مدته ثلاث ساعات + اختبار شفهي	باثولوجيا إكلينيكية
٢٠٠			٦٠	١٤٠	اختبار تحريري مدته ثلاث ساعات + اختبار شفهي	كيمياء حيوية
١٥٠			٥٠	١٠٠	اختبار تحريري مدته ثلاث ساعات + اختبار شفهي	وراثة
١٥٠			٥٠	١٠٠	اختبار تحريري مدته ثلاث ساعات + اختبار شفهي	طب مجتمع
٢٠٠	٥٠		٥٠	١٠٠	اختبار تحريري مدته ثلاث ساعات + اختبار شفهي وإكلينيكي	طب المناطق الحارة
١٥٠		٢٥	٢٥	١٠٠	اختبار تحريري مدته ثلاث ساعات اختبار شفهي وعملي	علم الأنسجة

Second part

إجمالي الدرجة	اسم الاختبار والدرجة			المقرر
	عملي	شفوي	تحريري	
٣٠٠	٧٥	٧٥	١٥٠	1- Advanced Helminthology
+	+	+	+	2. Advanced Protozoology
٣٠٠	٧٥	٧٥	١٥٠	3. Advanced Entomology
+	+	+	+	
٢٠٠	٥٠	٥٠	١٠٠	
٢٠٠	-	١٠٠	١٠٠	4. Advanced Immunology and Molecular Biology of Parasitic infections
+	+	+	+	
٢٠٠	٥٠	٥٠	١٠٠	5. Advanced Diagnostic techniques for parasitic infections & prevention methods
١٢٠٠	٢٥٠	٣٥٠	٦٠٠	

كتاب الأنشطة (Log book):

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

10 -Evaluation of the program

١٠. طرق تقويم البرنامج:

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 NQAA .	1-2 reports
Senior graduate (s) طلاب السنة النهائية	Questionnaire meeting	جميع الطلبة
Alumni الخريجون	Questionnaire meeting	عينه تمثل ٥٠% من آخر ثلاث دفعات
Stakeholder (s) أصحاب العمل	Questionnaire meeting	عينه ممثله لجميع جهات العمل
Others طرق أخرى	None	

We certify that all information required to deliver this program is contained in the above specification and will be implemented. All course specification for this program are in place.

Program Coordinator:
Prof. Dr.Amany El-Fakahany

Signature & date:

الملاحق

ملحق ١:

المعايير الأكاديمية لبرنامج الدكتوراه في الطفيليات بكلية طب بنها

Academic standards for MD parasitology program in Benha Faculty of
Medicine

ملحق ٢:

المعايير القياسية العامة لبرامج الدكتوراه الصادرة عن الهيئة القومية لضمان الجودة والاعتماد .

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 الدكتوراه الصادرة عن الهيئة القومية لضمان

الجودة والاعتماد مع المعايير الأكاديمية لبرنامج دكتوراه الطفيليات لكلية طب بنها

ملحق ٥: مصفوفة مضاهاة مواصفات الخريج والمعايير الأكاديمية لبرنامج دكتوراه الطفيليات لكلية

طب بنها مع الأهداف العامة ونواتج التعلم المستهدفة للبرنامج

ملحق ٦: Program-Courses ILOs Matrix

ملحق ٧: توصيف المقررات

ملحق ١

Academic standards for MD parasitology program in Benha Faculty of Medicine

المعايير الأكاديمية لبرنامج الدكتوراه في الطفيليات بكلية طب بنها

1. Graduate specification:

- 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. Continuously working on addition to the current knowledge in the field of parasitology.
- 1.4. Competent to apply the analytical methods and critic the knowledge in the field of medical parasitology and related fields.
- 1.5. Proficiently integrate specialized parasitology knowledge with relevant knowledge and develop bilateral relations.
- 1.6. Show deep awareness of current problems and theories in the marginal area of medical parasitology.
- 1.7. Identify problems professionally and find innovative solutions to solve them.
- 1.8. Able to make decision according to the available information.
- 1.9. Oriented towards the development of methods and new tools and techniques for professional practice.
- 1.10. Use appropriate technological techniques to serve the professional practice in the field of clinical parasitology.
- 1.11. Communicate effectively and able to lead teamwork in various professional contexts.
- 1.12. Manage the available resources efficiently, develop and work to sustain the available and find new resources.
- 1.13. Have ongoing commitment to self-development and the transfer of knowledge and experience to others.
- 1.14. Aware of his role in community serving and preservation of the environment.
- 1.15. Behave with commitment, credibility, integrity and following the professional and ethical skills.

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. Describe 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. Outline basics of environmental parasitology.
- 2.6. Recognize 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 antiparasitic chemotherapy, side effects, chemoprophylaxis and resistance.
- 2.9. Define antiparasitic vaccines.
- 2.10. Discuss 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. Explain proper design, conduction & publishing of scientific research in parasitology.
- 2.14. Outline 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.
- 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 different situations 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 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. Add to the specialty field through creativity & innovation.

- 3.12. Make appropriate decisions, in different situations.
- 3.13. Publish scientific articles/ papers (in indexed journals).

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

- 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. Judge results of parasitological, serological and molecular tests and apply it.
- 4.5. Assess and improve methods and tools used in specialty.
- 4.6. Recommend up to date technology to advance practice in the field of parasitology.
- 4.7. Recommend plan for development of professional skills and enhance juniors' skills.
- 4.8. Prepare professional assessment reports.

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. Educate 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. Manage different scientific meetings and appropriately utilize time.

ملحق ٢

Academic standards 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)

١- مواصفات الخريج:

- خريج برنامج الدكتوراه في أي تخصص يجب ان يكون قادرا على
- ١-١ اتقان اساسيات ومنهجيات البحث العلمي
 - ٢-١ العمل المستمر على الاضافة للمعارف في مجال التخصص
 - ٣-١ تطبيق المنهج التحليلي والناقد للمعارف في مجال التخصص والمجالات ذات العلاقة
 - ٤-١ دمج المعارف المتخصصة مع المعارف ذات العلاقة مستنبطا ومطورا للعلاقات البينية بينها
 - ٥-١ اظهار وعيا عميقا بالمشاكل الجارية والنظريات الحديثة في مجال التخصص
 - ٦-١ تحديد المشكلات المهنية وايجاد حلول مبتكرة لحلها
 - ٧-١ اتقان نطاقا واسعا من المهارات المهنية في مجال التخصص
 - ٨-١ التوجه نحو تطوير طرق وادوات واساليب جديدة للمزاولة المهنية
 - ٩-١ استخدام الوسائل التكنولوجية المناسبة بما يخدم ممارسة المهنة
 - ١٠-١ التواصل بفاعلية وقيادة فريق عمل في سياقات مهنية مختلفة
 - ١١-١ اتخاذ القرار في ضل المعلومات المتاحة
 - ١٢-١ توظيف الموارد المتاحة بكفاءة وتنميتها والعمل على ايجاد موارد جديدة
 - ١٣-١ الوعي بدوره في تنمية المجتمع والحفاظ على البيئة
 - ١٤-١ التصرف بما يعكس الالتزام بالنزاهة والمصداقية وقواعد المهنة
 - ١٥-١ الالتزام بالتنمية الذاتية المستمرة ونقل علمه وخبراته للآخرين

٢- المعايير القياسية

١-٢ المعرفة والفهم

بانهاء دراسة برنامج الدكتوراه يجب ان يكون الخريج قادرا على الفهم والدراية بكل من

- ١-٢-١ النظريات والاساسيات والحديث من المعارف في مجال التخصص والمجالات ذات العلاقة
- ٢-١-٢ اساسيات ومنهجيات واخلاقيات البحث العلمي وأدواته المختلفة
- ٣-١-٢ المبادئ الاخلاقية والقانونية للممارسة المهنية في مجال التخصص
- ٤-١-٢ مبادئ واساسيات الجودة في الممارسة في مجال التخصص
- ٥-١-٢ المعارف المتعلقة بأثار ممارسته المهنية على البيئة وطرق تنمية البيئة وصيانتها

٢-٢ المهارات الذهنية

- بانتهاء دراسة برنامج الدكتوراه يجب ان يكون الخريج قادرا على
- ١-٢-٢ تحليل وتقييم المعلومات في مجال التخصص والقياس عليها والاستنباط منها
- ٢-٢-٢ حل المشاكل المتخصصة استنادا على المعطيات المتاحة.
- ٣-٢-٢ اجراء دراسات بحثية تضيف إلى المعارف.
- ٤-٢-٢ صياغة أوراق علمية.
- ٥-٢-٢ تقييم المخاطر في الممارسات المهنية.
- ٦-٢-٢ التخطيط لتطوير الأداء في مجال التخصص.
- ٧-٢-٢ اتخاذ القرارات المهنية في سياقات مهنية مختلفة.
- ٨-٢-٢ الابتكار والابداع.
- ٩-٢-٢ الحوار والنقاش المبني على براهين.

٣-٢ المهارات المهنية

- بانتهاء دراسة برنامج الدكتوراه يجب ان يكون الخريج قادرا على
- ١-٣-٢ اتقان المهارات الأساسية والحديثة في مجال التخصص
- ٢-٣-٢ كتابة وتقييم التقارير المهنية
- ٣-٣-٢ تقييم وتطوير الطرق والأدوات المستخدمة في مجال التخصص
- ٤-٣-٢ استخدام الوسائل التكنولوجية بما يخدم الممارسة المهنية
- ٥-٣-٢ التخطيط لتطوير الممارسة المهنية وتنمية أداء الآخرين

٤-٢ المهارات العامة والمنتقلة

- ١-٤-٢ التواصل الفعال بأنواعه المختلفة
- ٢-٤-٢ استخدام تكنولوجيا المعلومات بما يخدم تطوير الممارسات المهنية
- ٣-٤-٢ تعليم الآخرين وتقييم أدائهم
- ٤-٤-٢ التقييم الذاتي والتعليم المستمر
- ٥-٤-٢ استخدام المصادر المختلفة للحصول على المعلومات والمعارف
- ٦-٤-٢ العمل في فريق وقيادة فرق العمل
- ٧-٤-٢ إدارة اللقاءات العلمية والقدرة على إدارة الوقت

ملحق رقم ٤

مصنوفة مضاهاة المعايير الأكاديمية لبرنامج الدكتوراه الصادرة عن الهيئة القومية لضمان الجودة والاعتماد مع المعايير الأكاديمية لبرنامج دكتوراه الطفيليات لكلية طب بنها

المعايير الأكاديمية لبرنامج دكتوراه الطفيليات لكلية طب بنها					المعايير الصادرة عن الهيئة القومية لضمان الجودة والاعتماد	
٢,٤ المهارات العامة والمنقولة	٢,٣ المهارات المهنية	٢,٢ المهارات الذهنية	١,٢ المعارف والفهم	١ مواصفات الخريج		
				١-١ ٣-١ ٤-١ ٥-١ ٦-١ ٧-١ ٨-١ ٩-١ ١٠-١ ١١-١ ١٢-١ ١٤-١ ١٥-١ ١٣-١	١-١ ٢-١ ٣-١ ٤-١ ٥-١ ٦-١ ٧-١ ٨-١ ٩-١ ١٠-١ ١١-١ ١٢-١ ١٣-١ ١٤-١ ١٥-١	١-مواصفات الخريج
			١٠-١-٢ ١٤-١٣-٢ ١١-٢ ١٢-٢ ٥-٢		١-١-٢ ٢-١-٢ ٣-١-٢ ٤-١-٢ ٥-١-٢	١-٢ المعارف والفهم
		٣-١-٢ ٦-٥-٢ ٧-٢ ١٣-٢ ١٠-٢ ٩-٨-٢ ١٢-٢ ١١-٢ ٤-٢			١-٢-٢ ٢-٢-٢ ٣-٢-٢ ٤-٢-٢ ٥-٢-٢ ٦-٢-٢ ٧-٢-٢ ٨-٢-٢ ٩-٢-٢	٢-٢ المهارات الذهنية
	٤-١-٤ ٨-٤ ٥-٤ ٦-٤ ٧-٤				١-٣-٢ ٢-٣-٢ ٣-٣-٢ ٤-٣-٢ ٥-٣-٢	٣-٢ المهارات المهنية
١-٥ ٢-٥ ٣-٥ ٤-٥ ٥-٥ ٦-٥ ٧-٥					١-٤-٢ ٢-٤-٢ ٣-٤-٢ ٤-٤-٢ ٥-٤-٢ ٦-٤-٢ ٧-٤-٢	٤-٢ المهارات العامة والمنقولة

ملحق ٥: مصفوفة مضاهاة مواصفات الخريج والمعايير الأكاديمية لبرنامج دكتوراه الطفيليات لكلية طب بنها مع الأهداف العامة ونواتج التعلم المستهدفة للبرنامج

نواتج التعلم المستهدفة				أهداف البرنامج	مواصفات الخريج والمعايير الأكاديمية لبرنامج دكتوراه الطفيليات لكلية طب بنها	
2.d. المهارات العامة والمنقولة	2.c. المهارات المهنية	2.b. المهارات الذهنية	2.a. المعارف والفهم			
			2.a.1-10	Provide the postgraduate with the detailed and advanced knowledge and skills of medical parasitology and research methodologies in the field of parasitology.	1.1.	١. مواصفات الخريج
	2.c.1-7		2.a.13		1.2.	
		2.b.9. 2.b.10.	2.a.11		1.14.	
			2.a.14		1.15.	
		2.b.1 2.b.2		Enable the postgraduate graduate to apply the analytical methods and critic the knowledge in the field of medical parasitology and related fields.	1.4.	
		2.b.6	2.a.6	Integrate specialized knowledge with relevant knowledge and develop bilateral relations.	1.5.	
		2.b.5 2.b.10		Show deep awareness of current problems and theories in the marginal area of medical parasitology	1.6.	
		2.b.1-2, 2.b.4., 2.b.6	2.a.7 2.a.12	Identify problems professionally and find innovative solutions to solve them.	1.7.	
		2.b.3 2.b.5. 2.b.11 2.b.12			1.8.	
	2.c.5 2.c.6	2.b.7 2.b.9 2.b.11		Be oriented towards the development of methods and new tools and techniques for professional practice.	1.9.	
2.d.1 2.d.5	2.c.5 2.c.6			Use of appropriate technological means to serve the professional practice.	1.10	
2.d.1 2.d.6 2.d.7				Communicate effectively and lead the team in various professional contexts.	1.11	
		2.b.9		Employ available resources efficiently, develop and work to find new resources.	1.12.	
2.d.2 2.d.3 2.d.4	2.c.7	2.b.8		Have ongoing commitment to self-development and the transfer of knowledge and experience to others.	1.3.	
2.d.4	2.c.7	2.b.8			1.13.	

توصيف برنامج دكتوراه الطفيليات الطبية

نواتج التعلم المستهدفة				اهداف البرنامج	مواصفات الخريج والمعايير الأكاديمية	
2.d. المهارات العامة والمنقولة	2.c. المهارات المهنية	2.b. المهارات الذهنية	2.a. المعارف والفهم		دكتوراه الطفيليات لكلية طب بنها	
			٢.a.1 2.a.2 2.a.3 2.a.4 2.a.5 2.a.6 2.a.7 2.a.8 2.a.9 2.a.10 2.a.11 2.a.12 2.a.13 2.a.14		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.2 2.b.3 2.b.4 2.b.5 2.b.6 2.b.7 2.b.8 2.b.9 2.b.10 2.b.11 2.b.12			١.٣ ٢.٣ ٣.٣ ٤.٣ ٥.٣ ٦.٣ ٧.٣ ٨.٣ ٩.٣ ١٠.٣ ١١.٣ ١٢.٣ ١٣.٣	٣. المهارات الذهنية
	2.c.1 2.c.2 2.c.3 2.c.4 2.c.5 2.c.6 2.c.7				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.3 2.d.4 2.d.5 2.d.6 2.6.7					١.٥ ٢.٥ ٣.٥ ٤.٥ ٥.٥ ٦.٥ ٧.٥	٥. المهارات العامة والمنقولة

ملحق 6

Program-courses ILOs matrix:

Courses	2a-Knowledge and Understanding													
	2a1	2a2	2a3	2a4	2a5	2a 6	2a 7	2a 8	2a 9	2a 10	2a 11	2a 12	2a 13	2a14
PARA701				√		√	√		√	√				
PARA702	√		√											
PARA703				√		√	√			√				
PARA704				√		√	√			√				
PARA705						√			√	√				
PARA706	√				√		√				√	√	√	√
PARA707	√						√	√				√		
PARA708	√													
PARA709-713	√	√	√	√	√	√	√	√	√	√	√	√	√	√

Courses	2.b-Intellectual skills													
	2b1	2b2	2b3	2b4	2b5	2b6	2b7	2b8	2b9	2b10	2b11	2b12	13	14
PARA701			√							√				
PARA702				√										
PARA703			√							√				
PARA704			√							√				
PARA705									√		√			
PARA706	√				√		√	√						
PARA707		√		√	√	√				√	√			
PARA708				√										
PARA709-713	√	√	√	√	√	√	√	√	√	√	√	√	√	√

Courses	2.c. Professional & Practical skills							2.d. General & transferable skills						
	2c1	2c 2	2c3	2c 4	2c 5	2c 6	2c 7	2d1	2d2	2d3	2d4	2d5	2d6	2d7
PARA701			√			√			√			√		
PARA702					√			√	√					
PARA703			√			√			√			√		
PARA704			√			√			√			√		
PARA705	√					√			√			√		
PARA706			√				√				√		√	
PARA707				√			√	√					√	√
PARA708					√			√	√					
PARA709-713		√	√	√	√	√	√	√	√	√	√	√	√	√

توصيف المقررات التابعة للبرنامج

Benha University
Faculty of Medicine
Microbiology & Immunology Department

**Course Specifications of Medical Microbiology & Immunology in
MD Degree of Medical Parasitology**

١-بيانات المقرر		
المستوى: دكتوراه جزء أول	اسم المقرر: Medical Microbiology & Immunology	الرمز الكودي: Para701
عدد الوحدات الدراسية: - نظري: ٢ ساعة معتمدة - عملي: ١ ساعة معتمدة		التخصص: دكتوراه الطفيليات الطبية
By the end of the course the graduate should be efficiently able to: 1-Have the professional knowledge of the microorganisms affecting human beings all over the world and the relations between them and the parasites. 2. Recognize the pathology, clinical symptoms, complications and the perform the laboratory tests needed for diagnosis of each diseases. 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.		٢-أهداف المقرر
٣-المستهدف من تدريس المقرر:		
By the end of the course, the student should be able to:		
A1 identify the microorganisms affecting human beings allover the world particularly those related to parasites. A2- Describe the metabolism and genetics of organisms. A3- Describe the pathology, clinical symptoms and complications of each disease. A4- Summarize the laboratory tests needed for diagnosis of each case. A5- Name some of the drugs and instructions used for treatment of each case. A6- Describe some infection control methods. A7- Describe the structure and function of immune system.		أ-المعلومات والمفاهيم:
. b1- Differentiate between the different microorganisms (Bacteria, viruses		ب-المهارات الذهنية:

and fungi). b2- Differentiate between the different types of bacteria using staining and culturing methods. b3- Differentiate between organisms affecting the same body parts.																																	
c1 demonstrate micro-organisms on morphological bases. c2 Identify and perform the methods of staining, culturing and biochemical reactions. c3 perform some serological tests used in diagnosis. c4 Handle of samples.	ج-المهارات المهنية الخاصة بالمقرر:																																
d1- Use the computer and internet to gather scientific informations. d2- Practice group co-ordination	د-المهارات العامة:																																
<table border="1"> <thead> <tr> <th>Topic</th> <th>Lecture</th> <th>Practical</th> <th>Course ILO,s</th> </tr> </thead> <tbody> <tr> <td>General bacteriology</td> <td>4</td> <td>4</td> <td>a1,a2,b1</td> </tr> <tr> <td>Systemic bacteriology</td> <td>6</td> <td>6</td> <td>a3,a4,a5,b1,b2,b3,c1,c2,c4</td> </tr> <tr> <td>Mycology</td> <td>3</td> <td>3</td> <td>a3,a4,a5,a6, b1,b2,b3, c1,c2,c4</td> </tr> <tr> <td>Virology</td> <td>6</td> <td>6</td> <td>a3,a4,a5,a6, b1,b2,b3</td> </tr> <tr> <td>Nosocomiology</td> <td>4</td> <td>4</td> <td>a3,a4,a5,a6, b1,b2,b3, c1,c2,c4</td> </tr> <tr> <td>Immunology</td> <td>7</td> <td>7</td> <td>A7,c3,c4,d1,d2</td> </tr> <tr> <td>Total</td> <td>30</td> <td>30</td> <td></td> </tr> </tbody> </table>	Topic	Lecture	Practical	Course ILO,s	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		٤-محتوى المقرر:
Topic	Lecture	Practical	Course ILO,s																														
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																															
-1-lectures. 2-practical lessons. 3- Practical assignments and sample collection.	٥-أساليب التعليم والتعلم:																																
لا يوجد	٦-أساليب التعليم والتعلم لذوي القدرات المحدودة:																																
	٧-تقويم الطلاب:																																
- Written exam. - Oral exam. - Practical exam .	أ-الأساليب المستخدمة:																																
Final exam in May or November	ب-التوقيت:																																

توصيف برنامج دكتوراة الطفيليات الطبية

-Written exam.: 120 marks - Oral exam: 50 marks	-practical:80 marks	ج-توزيع الدرجات:
		٨-قائمة الكتب والمراجع:
- Course Notes: Post graduate Lecture notes prepared by the staff member in the department		ا-مذكرات:
. Medical Microbiology and Immunology by Ken S., 2009.		ب-كتب ملزمة:
- Problem based Microbiology by Swapan K., 2006. - A colored Atlas of Microbiology .		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:

Benha University
Faculty of Medicine
Pathology Department

Course Specification of Pathology in MD Degree in Medical Parasitology

١- بيانات المقرر		
المستوى: دكتوراه جزء أول	اسم المقرر: Medical Pathology	الرمز الكودي: Para702
عدد الوحدات الدراسية: نظري: ٢ ساعة معتمدة عملي: ١ ساعة معتمدة		التخصص: دكتوراه الطفيليات الطبية
By the end of this course the graduate should be able to gain the professional knowledge and understanding of general pathology and special pathology as related to the main field of medical Parasitology. And can accurately and independently interpret the gross and microscopic pathology specimens.		٢- أهداف المقرر
٣- المستهدف من تدريس المقرر:		
By the end of the course, the student should be able to:		أ- المعلومات والمفاهيم:
a1- explain the deviation or change in the normal structure and function of the body on the macro- and micro levels; general pathology. a2- describe Cellular injury reversible and irreversible, causes, effects e.g. degeneration, necrosis and apoptosis (programmed cell death). a3- discuss Inflammation; causes, classification, fate, complications, healing and repair. a4- identify Infectious diseases; viral, bacterial, fungal and parasitic and tissue response to these invaders. a5- discuss Immunity, factors affecting immune response, disorders of the immune system a6- explain Nutritional deficiencies and their effects on the body system a7- describe Cellular growth disturbances e.g. atrophy, hypertrophy, hyperplasia, metaplasia, and dysplasia.		

<p>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>	<p>ب-المهارات الذهنية:</p>																																
<p>c1- demonstrate the gross pathology specimens kept in the jars and pictures taken for unavailable gross pathology in the museum, put a diagnosis or differential 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>	<p>ج-المهارات المهنية الخاصة بالمقرر:</p>																																
<p>d1- Use standard computer program effectively.</p> <p>d2- Utilize computers in conduction with other pathology departments via Teleconferences.</p> <p>d3- Use the computers in searching about resent data in the libraries via the internet.</p>	<p>د-المهارات العامة:</p>																																
<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>3</td> <td></td> <td>2</td> </tr> <tr> <td>1.5. Immunopathology</td> <td>2</td> <td>2</td> <td>1</td> </tr> <tr> <td colspan="4">2- Systematic pathology:</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	3		2	1.5. Immunopathology	2	2	1	2- Systematic pathology:				<p>ر:</p>
Topic	No. of hours	Lecture	Practical/ Museum																														
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1.2. Inflammation, Repair, Cell injury and cell death	3	2	1																														
1.3. Circulatory disturbances	2	2																															
1.4. Infectious diseases	3		2																														
1.5. Immunopathology	2	2	1																														
2- Systematic pathology:																																	

توصيف برنامج دكتوراة الطفيليات الطبية

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
2.8. Blood diseases, the lymph node and spleen		4	3	1
2.9. Immunohistopathology	4		2	1
2.10. Specimen preparation and examination	6		3	4
Total		45	30	15
-1- Lectures				٥-أساليب
.2- Practical sessions				التعليم
3- Discussions				والتعلم:
				٦-أساليب
				لا يوجد

توصيف برنامج دكتوراة الطفيليات الطبية

	التعليم والتعلم لذوي القدرات المحدودة:
٧-تقويم الطلاب:	
- Written exam. - Oral exam. - Practical exam .	أ-الأساليب المستخدمة:
Final exam in May or November	ب-التوقيت:
-Written exam.: 120 marks -practical :80 marks.	ج-توزيع الدرجات:
٨-قائمة الكتب والمراجع:	
- Course Notes: Post graduate Lecture notes prepared by the staff member in the department. -Department practical & Museum notes.	أ-مذكرات:
. - Robbins basic pathology, 2007. -Principals of general pathology. -Principals of special pathology.	ب-كتب ملزمة:
- Pathologic Basis of Disease, Kumar, Cotran, Robbins.	ج-كتب مقترحة:
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

Benha University
Faculty of Medicine
Clinical Pathology Department

**Course Specifications of Clinical Pathology for MD Degree in
 Medical Parasitology**

١- بيانات المقرر		
المستوى: دكتوراه جزء أول	اسم المقرر: Medical Clinical Pathology	الرمز الكودي: Para703
عدد الوحدات الدراسية: - نظري: ٢ ساعة معتمدة - عملي: ١ ساعة معتمدة		التخصص: دكتوراه الطفيليات الطبية
By the end of this course the graduate should have the professional knowledge and skills of haematology, immunology, clinical chemistry and microbiology to support his /her study of the main specialty.		٢- أهداف المقرر
٣- المستهدف من تدريس المقرر: By the end of the course, the student should be able to:		
a.1- discuss information about the physiology of blood cells (RBCs, WBCs and platelets) and homeostasis. a.2- explain information about the anatomy of the lymphatic and hematopoietic organs. a.3- discuss the important causes, presentation and management of various types of anemias. a.4- identify causes, manifestation and management of bleeding and coagulation disorders. a.5- discuss various parasitic diseases in different samples. a.6- describe chemical and immunological changes associated with various diseases especially parasitic diseases. a.7- identify recent advances in diagnosing various hematological disorders as bone marrow transplantation, immunological treatment.		أ-المعلومات والمفاهيم:
b.1-To interpret lab investigations as blood picture, bone marrow examination, results of lymph node, spleen biopsy and tests for coagulation disorders. b.2- differentiate between samples of parasitic infection and other samples.		ب-المهارات الذهنية:
c.1- Perform a complete hematological examination. c.2- Perfect different staining methods. c.3- Perform complete urinary, sputum and fecal examinations. c.4- Perform serological tests for detection of parasitic antibodies or antigens c.5 Examine lymph nodes, liver and spleen and to know causes and		ج-المهارات المهنية الخاصة بالمقرر:

management of lymphadenopathy, hepatomegaly, and splenomegaly.				
D1- Work in a team. d2-Communicate well with his colleagues, top managers and subordinates. d3- Use computers in conducting researches.				د-المهارات العامة:
				٤-محتوى المقرر:
Topics	Hours of lectures	Practical	Course ILO's	
Clinical haematology:	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	
1 – Lectures 2- practical lessons (in the University hospital lab.) 3-searches in the library for Text Books in case taking... 4-searches in computers.				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 دكتوراة الطفيليات الطبية

Final exam in May or November	ب-التوقيت:
-Written exam.: 100 marks - Oral exam: 50 marks	ج-توزيع الدرجات:
٨-قائمة الكتب والمراجع:	
- Post graduate Lecture notes prepared by the staff member of the department	أ-مذكرات:
- Manual of Medical Laboratory Techniques by Ramakrishnan S, Sulochana KN(2012). - Clinical Pathology, Haematology and Blood Banking by: Maheshwari Nanda(2008).	ب-كتب ملزمة:
- Monica(2004): District laboratory practice in Tropical countries.	ج-كتب مقترحة:
http://www.ncbi.nlm.gov http://www.google.com http://Freemedicaljournals.com	د-دوريات علمية أو نشرات ... الخ

رئيس مجلس القسم العلمي: : أ.د.

أستاذ المادة: : أ.د. محمود العزوني

Benha University
Faculty of Medicine
Biochemistry Department

Course Specifications of Biochemistry for MD Degree in Medical Parasitology

١- بيانات المقرر			
المستوى: دكتوراه جزء أول	اسم المقرر: Medical Biochemistry	الرمز الكودي: Para704	
عدد الوحدات الدراسية: - نظري: ٢ ساعة معتمدة - عملي: ١ ساعة معتمدة		التخصص: دكتوراه الطفيليات الطبية	
- By the end of the course the post graduate graduate s 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- discuss the biochemical importance of intermediary metabolism (Anabolic and catabolic) a2- identify the importance of clinical biochemistry a3- Explain the role of vitamin, Minerals a4- explain hormonal action		أ- المعلومات والمفاهيم:	
B1- 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. c. 3Diagnose the affected biochemical deficiency.		ج- المهارات المهنية الخاصة بالمقرر:	
D1- Acquire skills to use computer to enter biochemistry web sites and self learning. d2- work in a team for accurate diagnosing of diseases using internet.		د- المهارات العامة:	
٤- محتوى المقرر:			
Topics	Lectures	Practical	ILO's covered

توصيف برنامج دكتوراة الطفيليات الطبية

(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 heam biosynthesis 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	
4.1- Lectures 4.2- Searches in computers (assignments) 4.3- practical				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.: 140 marks - Oral exam: 60 marks				ج-توزيع الدرجات:
				٨-قائمة الكتب والمراجع:
- Postgraduate Lecture notes prepared by the staff members in the department.				أمذكرات:

توصيف برنامج دكتوراة الطفيليات الطبية

1. Text book of medical biochemistry by Rana Shinde(2011). 2. Essentials of Biochemistry by: Naik Pankaja (2012).	ب-كتب ملزمة:
1- Clinical biochemistry, by Vasudevan DM, S Sreekumari, Vaidyanathan Kannan, K Geetha Damodaran2011 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

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

أستاذ المادة: أ.د. امال ابو الفضل

Benha University
Faculty of Medicine
Microbiology & Immunology Department

Course Specifications of Medical Genetics in MD Degree in
Medical Parasitology

١- بيانات المقرر		
الرمز الكودي: Para 705	اسم المقرر: Medical Genetics	المستوى: دكتوراه جزء أول
التخصص: دكتوراه الطفيليات الطبية	عدد الوحدات الدراسية: - نظري: ٣ ساعات معتمدة	
٢- أهداف المقرر	By the end of this course the graduate should be able to: Have the basic knowledge about genes morphology, structure and function, - concepts of genetics and inheritance, genetic disorders and classification of genetic diseases and to prepare him/her for further studies later in the course of Modern Genetics	
٣- المستهدف من تدريس المقرر:		
By the end of the course, the student should be able to:		
أ- المعلومات والمفاهيم:	a.1: identify the stages of mitosis and meiosis, as well as the cell cycle, and explain the significance of each a.2: discuss the chemical nature of genetic material (DNA & RNA) a.3: describe how the DNA is organized to serve as genetic materials (gene and genome) a.4: describe the normal chromosome (structure & number). a.5: explain how the genetic information transferred to RNA during the process of transcription. a.6: Identify the genetic code. a.7: explain the translation of genetic information on mRNA into	

<p>polypeptide chains.</p> <p>a.8: discuss gene mutation and DNA repair on the molecular levels.</p> <p>a.9: Identify chromosomal numerical and structural aberrations.</p> <p>a.10: illustrate the basic concepts of Mendelian and non Mendelian inheritance.</p> <p>a.11: Identify the various types of chromosomal disorders and biochemical genetics.</p> <p>a.12: identify the new concepts of DNA technology.</p> <p>a.13: Gain the knowledge of the use of this technology in the advances disease</p>																												
<p>B1-Integrate and evaluate genetic information and data from a variety of sources in order to gain a coherent understanding of theory and practice.</p> <p>b2- Find and evaluate new solutions to many kinds of Genetic problems.</p>	<p>ب-المهارات الذهنية:</p>																											
<p>c-1 diagnose gene disorders</p>	<p>ج-المهارات المهنية الخاصة بالمقرر:</p>																											
<p>D1- work in a team.</p> <p>d3- Think scientifically.</p> <p>d4- Create the tendency to apply the knowledge in the clinical fields.</p>	<p>د-المهارات العامة:</p>																											
<table border="1"> <thead> <tr> <th data-bbox="230 1180 727 1213">Topic</th> <th data-bbox="727 1180 971 1213">Lectures</th> <th data-bbox="971 1180 1208 1213">Practical</th> </tr> </thead> <tbody> <tr> <td data-bbox="230 1285 727 1318">Introduction (from gene to genome)</td> <td data-bbox="727 1285 971 1318">2</td> <td data-bbox="971 1285 1208 1318"></td> </tr> <tr> <td data-bbox="230 1339 727 1486">Patterns of inheritance Mendelian, non Mendelian, Multifactorial</td> <td data-bbox="727 1339 971 1486">2</td> <td data-bbox="971 1339 1208 1486">1</td> </tr> <tr> <td data-bbox="230 1507 727 1541">Update in medical genetics</td> <td data-bbox="727 1507 971 1541">2</td> <td data-bbox="971 1507 1208 1541">2</td> </tr> <tr> <td data-bbox="230 1562 727 1596">Chemistry of nitrogenous Bases DNA replication</td> <td data-bbox="727 1562 971 1596">3</td> <td data-bbox="971 1562 1208 1596">2</td> </tr> <tr> <td data-bbox="230 1667 727 1701">RNA synthesis</td> <td data-bbox="727 1667 971 1701"></td> <td data-bbox="971 1667 1208 1701"></td> </tr> <tr> <td data-bbox="230 1722 727 1755">Genetic code</td> <td data-bbox="727 1722 971 1755"></td> <td data-bbox="971 1722 1208 1755"></td> </tr> <tr> <td data-bbox="230 1776 727 1810">Protein synthesis</td> <td data-bbox="727 1776 971 1810"></td> <td data-bbox="971 1776 1208 1810"></td> </tr> <tr> <td data-bbox="230 1831 727 1864">Regulation of gene expression</td> <td data-bbox="727 1831 971 1864"></td> <td data-bbox="971 1831 1208 1864"></td> </tr> </tbody> </table>	Topic	Lectures	Practical	Introduction (from gene to genome)	2		Patterns of inheritance Mendelian, non Mendelian, Multifactorial	2	1	Update in medical genetics	2	2	Chemistry of nitrogenous Bases DNA replication	3	2	RNA synthesis			Genetic code			Protein synthesis			Regulation of gene expression			<p>٤-محتوى المقرر:</p>
Topic	Lectures	Practical																										
Introduction (from gene to genome)	2																											
Patterns of inheritance Mendelian, non Mendelian, Multifactorial	2	1																										
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Genetic code																												
Protein synthesis																												
Regulation of gene expression																												

DNA alteration			
Molecular biology and Parasitology	2	2	
Nuclear contents	3	2	
Cell divisions (miosis and mitosis)			
Chromosome structure and function			
Mutations	3		
Mendalian disorders			
Transmission pattern of Single gene disorders			
Disorders associated with defects in structural proteins	4	2	
Disorders associated with defects in receptor protein			
Disorders associated with enzyme defects			
Disorders associated with defects in proteins that regulate cell growth			
Disorders of multi-factorial Inheretence	2		
Cytogentic disorders	2	2	
Single gene disorder with non classic inheritance			
Genetics and cancer	1		
Immunogenetics	2	2	
Genetic engineering	2		
4.1-lecture (data show, video-clip)			٥-أساليب التعليم والتعلم:
4.2-class discussion			
4.3-graduate 's group-project			
4.4-CDs/ slide projector.			

توصيف برنامج دكتوراة الطفيليات الطبية

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.: 100 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- An Introduction to Genetics and Fetal Medicine by Deepika Deka, Narendra Malhotra, 2010 2- Review of genetics, by Kumaran S Senthil, 2010	ب-كتب ملزمة:
1) Discovering Genomics, Proteomics and Bioinformatics 2nd edition - by A.Malcolm Campbell and Laurie J. Heyer. (ISBN 0-8053-4722-4; published by Cold Spring Harbor Laboratory Press and Benjamin Cummings: 28, February, 2006). 2) Essentials of Medical Genetics 13th edition-by AlanE.H.Emery. ChurchillLivingstone, 2007.	ج-كتب مقترحة:
BMC Genetics ; Current genetics ; Journal of Genetics	د-دوريات علمية أو نشرات ... الخ

رئيس مجلس القسم العلمي: أستاذ المادة:

Benha University
Faculty of Medicine
Community Medicine Department

**Course Specifications of Community Medicine for MD degree in
 Medical parasitology**

١-بيانات المقرر		
المستوى: دكتوراه جزء أول	اسم المقرر: Medical Community Medicine	الرمز الكودي: Para706
عدد الوحدات الدراسية: - نظري: 3 ساعات معتمدة		التخصص: دكتوراه الطفيليات الطبية
By the end of the course the graduate should be efficiently 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 graduate should be able to: By the end of this course the graduate 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.		أ-المعلومات والمفاهيم:

<p>a.6- List at least four uses for health indicators in Parasitology.</p> <p>a.7- Describe the public health surveillance system and its use in the community setting</p> <p>a.8- Define data sources for vital statistics.</p> <p>a.9- Define the screening tests pertinent to selected diseases and the at- risk approach in the application of screening tests.</p> <p>a.10- List at least four types of study designs.</p> <p>a.11- Describe the study design, uses, and limitations</p> <p>a.12- Explain the usefulness of screening tests, and calculate sensitivity, specificity, and predictive values.</p>	
<p>. b.1- Evaluate indicators of health and disease.</p> <p>b.2- Identify prevalent health problems in a community, using various epidemiological strategies.</p> <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- select 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>ب-المهارات الذهنية:</p>
<p>C1- Perform community diagnosis for health problems (of parasitic origin) in the locality.</p>	<p>ج-المهارات المهنية الخاصة بالمقرر:</p>

c.2- Participate in conducting public health surveillance.				
c.3- Advocate appropriately in the health care setting.				
D1- Communicate well with his colleagues.				د-المهارات العامة:
d2- work in a team for accurate diagnosing of diseases .				
d3- Use standard computer programs effectively (window, office programs).				
d4- Utilize computers in conducting research and to Collect scientific data.				
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, b1,b2,b3,b4, b5,b6,b7, c1,c2,c3	
-Arthropode born	2	1	a1,a2,a3,	

parasitic diseases			a4,a5,a6, b1,b2,b3,b4, b5,b6,b7, c1,c2,c3	
-Emerging and remerging 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	5	2	a8, a9, a9	
Data collection Types of data Tabulation of data Graphical presentation of data Measures of dispersion Normal distribution curves			a7,a8,a9, b3, b9, b10, b11, c1, c2, d1, d2, d3, d4	
-International classification of diseases.	2	1	a3,a4,b1 a3,a4,b1	
-International death certificate.	1	1		
-Study design Cross sectional study and the prevalence rate cohort study,	2	1	a10,a11, a12, b9, c1, d1,d2, d3, d4	

توصيف برنامج دكتوراة الطفيليات الطبية

incidence rate, Odd ratio.	
Sampling	3 1 a7, b9,c2
1- Lectures 2- Computers searches (assignments). 3- Tutorial	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.: 100 marks - Oral exam: 50 marks	ج-توزيع الدرجات:
	٨-قائمة الكتب والمراجع:
- Department notes, lectures and handouts	أ-مذكرات:
. 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.	ج-كتب مقترحة:
1- American Journal of Epidemiology. 2- British Journal of Epidemiology and Community Health. 3- WWW. CDC and WHO sites.	د-دوريات علمية أو نشرات ... الخ

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

أستاذ المادة: أ.د. محمود فوزي

Benha University
Faculty of Medicine
Hepatology and Gastroenterology Department

Course Specifications of Hepatology and gastroenterology in MD
Degree of Medical Parasitology

١-بيانات المقرر		
المستوى: دكتوراه جزء أول	اسم المقرر: Hepatology and gastroenterology	الرمز الكودي: Para707
عدد الوحدات الدراسية: - نظري: ٢ ساعه معتمدة - عملي: ١ ساعه معتمدة		التخصص: دكتوراه الطفيليات الطبية
By the end of this course, the graduate should be able to have basic knowledge about fevers and its common causes. Also, the etiology, pathogenesis, clinical picture, complications and management of the most common infectious diseases. And to understand the most common gastrointestinal and hepatic diseases especially those prevalent in our country and be able to diagnose and manage them in an efficient degree to help him/her as a future medical parasitologist.		٢-أهداف المقرر
٣-المستهدف من تدريس المقرر:		
By the end of the course, the student should be able to:		أ-المعلومات والمفاهيم:
By the end of the course, the graduate is expected to practice the following:		
a1- identify 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-identify 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.		

<p>a6- describe the common diagnostic, laboratory, radiological and other techniques.</p> <p>a8- discuss the various therapeutic methods/ alternatives used for common diseases (supportive therapy, nutrition, pharmacotherapy, surgical treatment)</p> <p>a9- identify general methods for health promotion and disease prevention.</p>	
<p>. By the end of the course, the student should be able to:</p> <p>b1- Interpret, conclude and discuss data collected from history and examination.</p> <p>b2- interpret data acquired through history taking to reach a provisional diagnosis.</p> <p>B3- interpret physical findings and correlate them with patient's symptoms.</p> <p>B4- Identify problems and find solutions.</p> <p>B5- Select from different diagnostic techniques the ones that help to reach a final diagnosis.</p> <p>B6- Select the most helpful laboratory investigation to confirm the diagnosis.</p> <p>B7- innovate nontraditional solutions to problems.</p>	<p>ب-المهارات الذهنية:</p>
<p>C1- Perform general and abdominal examination of patients .</p> <p>c2- Diagnose common infectious diseases(parasitic, bacterial and viral) and be able to differentiate them clinically and laboratory.</p> <p>C3- Perform basic diagnostic and therapeutic techniques and measures (pulse,temperature, giving injections and intravenous fluids, taking aspirations from pathological body fluids).</p> <p>C4- identify patients with life threatening conditions and initiate the proper management and change it according to patient's needs.</p> <p>c.5look for physical signs and how to interpret them.</p> <p>c.6 take a thorough medical history.</p>	<p>ج-المهارات المهنية الخاصة بالمقرر:</p>
<p>D1- Work in a team.</p> <p>d2-Communicate well with his colleagues, top management and subordinates</p>	<p>د-المهارات العامة:</p>

d3- Establish a good patient-physician relationship.		
D4- Use computers in conducting researches..		
Diagnosis of a case of fever Ascariasis Nosocomial infections Strongyloidiasis Schistosomiasis Cappilariasis Trichinosis Fascioliasis Loaisis Heterophyes heterophyes Dracanculus medinensis Hymenolepis nana, diminuta Hydatid disease Protozoal Diseases	Pyrexia of unknown origin Helminthic Diseases Tissue larva migrans Paragonimus westermani Filariasis Clonorchis sinensis Onchocerciasis Taeniasis Treatment of helminthic infections Diphylobothrium latum Enterobiasis, Ancylostomiasis Malaria	٤-محتوى المقرر:
1- Lectures. .2-practical lessons (ward and class rounds). 3-searches in the library for Text Books in case taking. 4- Assignments.		٥-أساليب التعليم والتعلم:
لا يوجد		٦-أساليب التعليم والتعلم لذوي القدرات المحدودة:
		٧-تقويم الطلاب:
- Written exam. - Practical exam . - Oral exam.		٨-الأساليب المستخدمة:
Final exam in May or November		ب-التوقيت:
-Written exam.: 100 marks - Oral exam: 50 marks	-practical exam:50 marks	ج-توزيع الدرجات:
		٨-قائمة الكتب والمراجع:
- Post graduate Lecture notes prepared by the staff members in the department.		أ-مذكرات:
. 1.Davidson text Book of Medicine By Nicki R. Colledge, BSc, FRCP(Ed), Brian R. Walker, BSc, MD, FRCP(Ed) and Stuart H. Ralston, MD, FRCP, FMedSci, FRSE(2010). 2.Hutchison Book for case taking		ب-كتب ملزمة:

توصيف برنامج دكتوراة الطفيليات الطبية

-1.Hunter's Tropical Medicine 2.Current diagnosis & Treatment in Gastroenterology.. 3.Sheilla Sherlock (Text Book) of Hepatology.	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. يحيى صادق رئيس مجلس القسم العلمي:

Benha University
Faculty of Medicine
Histology Department

Course Specification of Histology in MD Degree in Medical
Parasitolog-

بيانات المقرر	
الرمز الكودي: Para708	اسم المقرر: Medical Histology
المستوى: دكتوراه جزء أول	
التخصص: دكتوراه الطفيليات الطبية	عدد الوحدات الدراسية: - نظري: ٢ ساعة معتمدة - عملي: ١ ساعة معتمدة
٢-أهداف المقرر	By the end of this course the graduate should be able to have the Professional knowledge about: 1.The Structure of different types of the normal human tissues and cells. 2.The basic concepts in Molecular biology and medical genetics. 3.The practical skills of handling, staining and examining different types of specimens for the benefit of the main field of specialty: Medical Parasitology.
٣-المستهدف من تدريس المقرر:	By the end of the course, the student should be able to:
أ-المعلومات والمفاهيم:	By the end of the program, the graduate is expected to a1. describe different types and structure of normal human cells and tissues. a2- discuss the knowledge of arrangements of cells. a3- explain the bases of medical genetics. a4- explain the bases of molecular biology.
ب-المهارات الذهنية:	. b1-Correlate the structure with the function of different cells in tissues and organs. b2-differentiate between normal structure of any given histological slide.
ج-المهارات المهنية	c.1- Obtain information from histological slides.

<p>c.2- Identify the structural components of cells at the light and electron microscopic levels.</p> <p>c.3- Identify and draw tissues and organs by examining stained sections with the light microscope and by examining electron- micrographs.</p> <p>c.4- Properly handle a specimen and prepare a stained slide from it</p> <p>c5- Perform further in depth study in human histology.</p> <p>c.6- Apply the histology and specific techniques in his/her field of study.</p>	<p>الخاصة بالمقرر:</p>																																																						
<p>d.1 work in a team</p> <p>d2 use information technology</p> <p>d3 communicate effectively</p>	<p>د-المهارات العامة:</p>																																																						
<table border="1"> <thead> <tr> <th data-bbox="232 751 565 783">Topic</th> <th data-bbox="565 751 873 783">Lectures(30)</th> <th data-bbox="873 751 1190 783">Practical(15)</th> </tr> </thead> <tbody> <tr><td data-bbox="232 783 565 814">The cell</td><td data-bbox="565 783 873 814">1</td><td data-bbox="873 783 1190 814"></td></tr> <tr><td data-bbox="232 814 565 846">Epithelium</td><td data-bbox="565 814 873 846">1</td><td data-bbox="873 814 1190 846">1</td></tr> <tr><td data-bbox="232 846 565 877">Connective tissue</td><td data-bbox="565 846 873 877">1</td><td data-bbox="873 846 1190 877">1</td></tr> <tr><td data-bbox="232 877 565 909">Muscular tissue</td><td data-bbox="565 877 873 909">1</td><td data-bbox="873 877 1190 909">1</td></tr> <tr><td data-bbox="232 909 565 940">Nervous tissue</td><td data-bbox="565 909 873 940">2</td><td data-bbox="873 909 1190 940">1</td></tr> <tr><td data-bbox="232 940 565 972">Vascular system</td><td data-bbox="565 940 873 972">2</td><td data-bbox="873 940 1190 972">1</td></tr> <tr><td data-bbox="232 972 565 1003">Lymphatic system</td><td data-bbox="565 972 873 1003">2</td><td data-bbox="873 972 1190 1003">1</td></tr> <tr><td data-bbox="232 1003 565 1035">Skin</td><td data-bbox="565 1003 873 1035">1</td><td data-bbox="873 1003 1190 1035">1</td></tr> <tr><td data-bbox="232 1035 565 1066">Respiratory system</td><td data-bbox="565 1035 873 1066">2</td><td data-bbox="873 1035 1190 1066">1</td></tr> <tr><td data-bbox="232 1066 565 1098">Gut</td><td data-bbox="565 1066 873 1098">2</td><td data-bbox="873 1066 1190 1098">1</td></tr> <tr><td data-bbox="232 1098 565 1129">Urinary system</td><td data-bbox="565 1098 873 1129">1</td><td data-bbox="873 1098 1190 1129">1</td></tr> <tr><td data-bbox="232 1129 565 1161">Male reproductive system</td><td data-bbox="565 1129 873 1161">1</td><td data-bbox="873 1129 1190 1161"></td></tr> <tr><td data-bbox="232 1161 565 1192">Female reproductive system</td><td data-bbox="565 1161 873 1192">1</td><td data-bbox="873 1161 1190 1192"></td></tr> <tr><td data-bbox="232 1192 565 1224">Endocrine system</td><td data-bbox="565 1192 873 1224">1</td><td data-bbox="873 1192 1190 1224">1</td></tr> <tr><td data-bbox="232 1224 565 1255">Molecular biology and its significance in histology</td><td data-bbox="565 1224 873 1255">4</td><td data-bbox="873 1224 1190 1255">1</td></tr> <tr><td data-bbox="232 1255 565 1287">Principles of medical genetics</td><td data-bbox="565 1255 873 1287">4</td><td data-bbox="873 1255 1190 1287">1</td></tr> <tr><td data-bbox="232 1287 565 1318">Microtechnique Staining</td><td data-bbox="565 1287 873 1318">3</td><td data-bbox="873 1287 1190 1318">2</td></tr> </tbody> </table>	Topic	Lectures(30)	Practical(15)	The cell	1		Epithelium	1	1	Connective tissue	1	1	Muscular tissue	1	1	Nervous tissue	2	1	Vascular system	2	1	Lymphatic system	2	1	Skin	1	1	Respiratory system	2	1	Gut	2	1	Urinary system	1	1	Male reproductive system	1		Female reproductive system	1		Endocrine system	1	1	Molecular biology and its significance in histology	4	1	Principles of medical genetics	4	1	Microtechnique Staining	3	2	<p>٤-محتوى المقرر:</p>
Topic	Lectures(30)	Practical(15)																																																					
The cell	1																																																						
Epithelium	1	1																																																					
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<p>-Lectures</p> <p>- Practical sessions, supported by academic staff.</p>	<p>٥-أساليب التعليم والتعلم:</p>																																																						
<p>لا يوجد</p>	<p>٦-أساليب التعليم والتعلم لذوي القدرات المحدودة:</p>																																																						

توصيف برنامج دكتوراة الطفيليات الطبية

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.: 100 marks -practical exam: 25 marks	ج-توزيع الدرجات:
٨-قائمة الكتب والمراجع:	
- Course Notes :Lecture notes prepared by the staff member in the department. -Laboratory manual authorized by the department	أ-مذكرات:
Histology and cell biology by Abraham L. 2012. - Functional Histology by Jeffrey B. 2010.	ب-كتب ملزمة:
- - Human Histology by Alan Stevens, 2005	ج-كتب مقترحة:
: www.yahoo.com www.pubmed.com	د-دوريات علمية أو نشرات ...الخ

رئيس مجلس القسم العلمي: أ.د. محمد مجدي زكي أستاذ المادة: أ.د. محمد مجدي زكي

Benha University
Faculty of Medicine
Medical Parasitology Department

Course Specification of Medical Parasitology in MD Degree in
Medical Parasitology

١- بيانات المقرر	
الرمز الكودي: Para714	اسم المقرر: Medical Parasitology
المستوى: دكتوراه جزء ثاني	
التخصص: دكتوراه الطفيليات الطبية	عدد الوحدات الدراسية: - نظري: ٧ ساعات معتمدة - عملي: ٣ ساعات معتمدة
٢- أهداف المقرر	By the end of the course, the graduate should be able to have the perfect creative knowledge of the parasites affecting human beings all over the world and, so to be able to efficiently diagnose and teach medical parasitology to undergraduates and ready to develop her/his level by self-learning to add knowledge in the specialty.
٣- المستهدف من تدريس المقرر:	
By the end of the course, the student should be able to:	
أ-المعلومات والمفاهيم:	<p>2.a.1. identify sufficient knowledge of the parasites affecting human beings all over the world and zoonosis.</p> <p>2.a.2. discuss the geographical distribution and life cycle of parasites and vectors, inside and outside the body.</p> <p>2.a.3. describe the pathology, clinical symptoms and complications of each parasite.</p> <p>2.a.5. identify the recommended laboratory tests needed for diagnosis of each case.</p> <p>2.a.6. discuss the drugs and instructions used for treating each case.</p> <p>2.a.7. identify control methods used against parasites and vectors.</p>

<p>2.a.8. describe snails and their medical importance, especially of Egypt.</p> <p>2.a.9. identify advanced immunology and molecular biology of parasitic infections.</p>	
<p>2.b.1 Interpret parasitological, immunological and molecular reports.</p> <p>2.b.2 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.</p> <p>2.b.3. Evaluate according to evidence, the causal relationship of parasites and diseases.</p> <p>2.b.4. Solve different parasitological problems (identification, diagnosis, treatment) in absence of adequate data.</p> <p>2.b.5. Join different knowledge to help in solving difficult problems.</p> <p>2.b.6 Differentiate between parasites or vectors on morphological bases.</p>	<p>ب-المهارات الذهنية:</p>
<p>2.c.1. Identify the infective and the diagnostic stages of the parasites.</p> <p>2.c.2. Identify different stages of the parasites and vectors of diseases.</p> <p>2.c.3. Identify some of the medically important intermediate host especially those present in Egypt.</p> <p>2.c.4. Perform some laboratory tests available in the department lab.</p> <p>2.c.5. Perform available immunological tests.</p> <p>2.c.6. Deal with lab animals: infecting, sacrifice, dissecting and examining.</p>	<p>ج-المهارات المهنية الخاصة بالمقرر:</p>
<p>2.d.1. Use the computer to enter parasitological web sites.</p> <p>2.d.2. Collect scientific data from the computer.</p>	<p>د-المهارات العامة:</p>

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.						
Course Title	Course Code	NO. of Teaching hours per week			٤-محتوى المقرر:	
		Theoretical	Practical	Total/Week		
1- Advanced Helminthology	PARA 709	2	3	5		
2- Advanced Protozoology	PARA710	2	3	5		
3- Advanced Entomology	PARA 711	1	1.5	2.5		
4-Advanced Immunology and Molecular Biology of Parasitic infections	PARA712	1	-	1		
5- Advanced Diagnostic techniques for parasitic infections & prevention methods	PARA713	1	1.5	2.5		
Total:		7	9	16		
<p>٥-أساليب التعليم والتعلم:</p> <ul style="list-style-type: none"> - Lectures. - Practical lessons. -Assignments. -Attending and participating in scientific conferences, workshops and thesis discussion to acquire the general and transferable skills needed. 						
لا يوجد						٦-أساليب التعليم والتعلم لذوي القدرات المحدودة:
					٧-تقويم الطلاب:	
<ul style="list-style-type: none"> - Written exam - Practical exam . - Oral exam. 					٨-الأساليب المستخدمة:	
Final exam in May or November					ب-التوقيت:	
<ul style="list-style-type: none"> -Written exam.:600 marks -practical exam: 250 marks 					ج-توزيع الدرجات:	
<ul style="list-style-type: none"> - Oral exam: 350 marks 						
					٨-قائمة الكتب والمراجع:	

توصيف برنامج دكتوراة الطفيليات الطبية

<p>- Postgraduate Lecture notes prepared by the staff member in the department.</p>	<p>أ-مذكرات:</p>
<p>. - Textbook of Medical Parasitology by Janpath (2009). - Textbook of Medical Parasitology by McDreamy, 2012. - Manson's Tropical Diseases, Cook GC (ed), 21st edition. London: WB Saunders, 2003. - Introduction to infectious and parasitic diseases, by Millard Langfeld, 2010. - Immunity to Parasites. How Parasitic Infections are Controlled 2nd Edition <u>Derek Wakelin</u> University of Nottingham, 1996.</p>	<p>ب-كتب ملزمة:</p>
<p>- A colored Atlas of tropical Medicine and Parasitology.</p>	<p>ج-كتب مقترحة:</p>
<p>-www.dpd.cdc.gov/dpdx/html/Frames/OtherDocs/body -www.hon.ch/HONselect/Selection/C03. -www.mic.stacken.kth.se/Diseases/C03. -www.wellsphere.com/ -www.cdc.gov/ http://www.intute.ac.uk/cgi-bin/fullrecord.pl?handle=4032600 -www.intute.ac.uk/cgi-bin/ -www.ellisonfoundation.org/ -www.npr.org/templates/story -Infectious Diseases</p>	<p>د-دوريات علمية أو نشرات ... الخ</p>

أستاذ المادة: أ.د. محمد حسين رئيس مجلس القسم العلمي: