



كلية الطب
جامعة أسيوط



Faculty of Medicine
Quality Assurance Unit

Master (MSc) Degree Program and Courses Specifications for **Medical Parasitology**

(According to currently applied **Credit point bylaws**)

Medical Parasitology
Faculty of medicine
Assiut University
2022-2023

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Assiut University
Faculty of Medicine
Quality Assurance Unit (QAU)



كلية الطب
وحدة ضمان الجودة

Master degree of Medical Parasitology

A. Basic Information

- + Program Title: Master degree of Medical Parasitology**
- + Nature of the program: Single.**
- + Department (s) responsible:**
Department of Medical Parasitology, Faculty of Medicine,
Assiut University
- + Program Academic director: head of the department:**
+ Prof. Dr/ Doaa Abdel Hafeez Younes
- + Coordinator (s):**
 - Principle coordinator: Dr/ Doaa Abdel Hafeez Yones**
 - Assistants coordinator: Dr/ Nahed Ahmed Elossily**
- + Internal evaluators:**
 - Prof Dr/ Amany Ibraheem Hamza**
 - Prof Dr/ Salma Mohamed Abdel Rahman**
- + External evaluator:**
 - 1 – Prof. Dr. Nabil Shokrany Gabr, Minia University**
- + Date of Approval by the Faculty of Medicine Council of Assiut University: 23-9-2014**
- + Date of most recent approval of program specification by the Faculty of Medicine Council of Assiut University: 27-11-2022**
- + Total number of courses: 3 courses + one elective course**

B. Professional Information

1- Program aims

- 1- Develop a critical evaluation of techniques used in medical parasitology and for the diagnosis and monitoring of diseases and acquire the ability to provide specialist opinion in parasitology and competency in diagnosis of parasitic diseases.
- 2- Demonstrate a core understanding of concepts associated with the scientific basis of human parasitology.
- 3- Develop within the context of Biomedical Sciences, a comprehensive understanding of communication, research and scientific methods.
- 4- Enable candidates to start professional careers as specialists not only in Egypt but recognized abroad.
- 5- To introduce candidates to the basics of scientific medical research.
- 6- Acquire the ability to communicate effectively in verbal and written form with clinical colleagues, administrative personnel, and technical personnel and demonstrate respectful and caring behavior when interacting with patients and their families.
- 7- Acquire life-long habits of reading, literature searches, and consultation with colleagues, attendance at scientific meetings, and the presentation of scientific work that is essential for continuing professional development.

2- Intended learning outcomes (ILOs) for the whole program:

2- Intended learning outcomes (ILOs) *for the whole program*:

2/1 Knowledge and understanding:

- A- Explain essential facts and principles of relevant basic sciences related to medical parasitology.
- B. Mention essential facts of clinical supportive sciences related to Parasitology.
- C. Demonstrate sufficient knowledge of the main subjects related to medical parasitology.
- D- Give the recent and update developments in the most important themes related to medical parasitology.
- E- Mention the basic ethical and medicolegal principles that should be applied in practice and are relevant to medical parasitology.
- F- Mention the basics and standards of quality assurance to ensure good practice in the field of Parasitology.
- G- Mention the ethical and scientific principles of medical research methodology.
- H- State the impact of common problems related to the field of medical parasitology on the society and how good practice can improve these problems.

2/2 Intellectual outcomes

- A- Correlate the relevant facts of relevant basic and clinically supportive sciences with reasoning, diagnosis and management of common problems of parasitological practice
- B- Demonstrate an investigatory and analytic thinking approach (problem solving) to common clinical or practical situations related to parasitology.
- C- Design and /or present a case or review (through seminars/journal clubs.) in one or more of common themes or problems relevant to parasitology
- D- Formulate management plans and alternative decisions in different situations in the field of parasitology.

2/3 Skills

2/3/1 Practical skills

- A. Demonstrate competently relevant laboratory skills related to Parasitology.
- B. Use the up to date technology for the conditions related to Parasitology.
- C. Develop plans for performing experiments related to Parasitology.
- D. Carry out common experiments related to Parasitology.
- E. Counsel and educate students, technicians and junior staff, in the lab about conditions related to Parasitology; including handling of samples, devices, safety and maintenance of laboratory equipments.
- F. Use information technology in some of the situations related to Parasitology.
- G. Share in providing health care services aimed supporting patient care, solving health problems and better understanding of the normal structure and function.
- H. Write competently all forms of professional reports related to the parasitological diagnosis (lab reports, experiments reports).

2/3/2 General skills

- Practice-based Learning and Improvement
- Interpersonal and Communication Skills
- Professionalism/
- Systems-based Practice

Practice-Based Learning and Improvement

- A. Perform practice-based improvement activities using a systematic methodology (share in audits and risk management activities and use logbooks).
- B. Appraises evidence from scientific studies.
- C. Conduct epidemiological Studies and surveys
- D. Perform data management including data entry and analysis and using information technology to manage information, access on-line medical information; and support their own education.
- E. Facilitate learning of students, lab technical staff and other health care professionals including their evaluation and assessment.

Interpersonal and Communication Skills

- F- Maintain therapeutic and ethically sound relationship with patients, their families, lab technical staff and other health professionals.
- G- Elicit information using effective nonverbal, explanatory, questioning, and writing skills.
- H- Provide information using effective nonverbal, explanatory, questioning, and writing skills.
- I- Work effectively with others as a member of a team or other professional group.

Professionalism Intended learning outcomes

- J- Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society.
- K- Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.
- L- Demonstrate sensitivity and responsiveness to others' culture, age, gender, and disabilities.

Systems-Based Practice Intended learning outcomes

- M- Work effectively in relevant academic and health care delivery settings and systems including good administrative and time management.
- N- Adopt cost-effective practice and resource allocation that does not compromise quality of services.
- O- Assist patients in dealing with system complexities.

3- Program Academic Reference Standards (ARS) (Annex 2)

Academic standards for master degree in Medical Parasitology

Assiut Faculty of Medicine developed master degree programs' academic standards for different academic specialties.

In preparing these standards, the General Academic Reference Standards for post graduate programs (GARS) were adopted. These standards set out the graduate attributes and academic characteristics that are expected to be achieved by the end of the program.

These standards were approved by the Faculty Council on 17-6- 2009. These standards were revised and approved without changes by the Faculty Council on 23-9-2014. These standards were recently revised and reapproved without changes by the Faculty Council on 27-11-2022.

4- Program External References (Benchmarks)

1. ACGME (Accreditation Council for Graduate Medical Education).
http://www.acgme.org/acWebsite/navPages/nav_Public.asp
2. West Virginia university residency program for Parasitology
<http://www.hsc.wvu.edu/som/parasitology/residency/>
- 3- University of Alberta www.ualberta.ca
- 4- Collage of American parasitologists (CAP)

5. Program Structure and Contents

A. Duration of program: 3-5 years

B. Structure of the program:

Total number of points: 180 (20 out of them for the thesis)

Didactic 32 (17.8%), practical 126 (70 %) thesis 20 (11.1%) elective courses 2 (1.1)

Total 180

First part

Didactic 10 (25 %), practical 30 (75%). total 40

Second part

Didactic 24 (20%) practical 96 (80%). total 120

According the currently applied bylaws:

Total courses 160 CP

Compulsory courses: 98.9%

Elective course: 2 credit point: 1.1%

Courses	Points	% from total
▪ Basic science courses	18	10
Humanity and social courses	2	1.1%
▪ Speciality courses	140	77.8
▪ Others (Computer, ...)		
▪ Field training	106	58.9%
Thesis	20	11.1%

C. Program Time Table

A. Duration of program 3 years maximally 5 years divided into

○ Part 1: (One year)

Program-related basic science courses and ILOs + elective courses

Students are allowed to sit the exams of these courses after 12 months from applying to the M Sc degree.

One elective course can be set during either the 1st or 2nd parts.

○ Thesis

For the M Sc thesis;

MSc thesis subject should be officially registered within 6 months from application to the MSc degree,

Discussion and acceptance of the thesis could be set after 12 months from registering the MSc subject;

It should be discussed and accepted before passing the second part of examination)

○ Part 2 (2 years)

Program –related speciality courses and ILOs

Students are not allowed to sit the exams of these courses before 3 years from applying to the MSc degree.

The students pass if they get 50% from the written exams and 60% from oral and clinical/practical exams of each course and 60% of summation of the written exams, oral and clinical/practical exams of each course

Total degrees 1900 marks.

700 marks for first part

1200 for second part

Written exam 40% - 70%.

Practical and oral exams 30% - 60%.

D. Curriculum Structure: (Courses): Courses of the program:

Modules/ Units delivering courses and student work load list	Course Code	Core Credit points		
		Didactics	training	total
First Part				
Basic Course (8 CP) 1) Course 1: methodology of research 2) Any basic course	PAR209A PAR209B	4 4		8
Elective courses*		2 CP		
Practical training and scientific activities				
A. Practical training in compulsory academic Basic science courses (10 CP) 1) Course 1: methodology of research 2) Any basic course	PAR209A PAR209B	4 6		10
B. Practical training in Speciality course (20 CP)	PAR208A	20		20
Total of the first part		40		
Second Part		Speciality courses Speciality Clinical Work		
Speciality Courses 3) Course 3 Medical Parasitology (advanced)	PAR208A	24		24
Training and practical activities in Medical Parasitology (96 CP)	PAR208A	96		96
Total of the second part		24	96	120
Thesis		20		
Total of the degree		180		

Didactic (lectures, seminars, tutorial)

* Elective courses can be taken during either the 1st or 2nd parts.

Student work load calculation:

Work load hours are scheduled depending on the type of activities and targeted competences and skills in different courses

Elective Courses#:

- Medical statistics.
- Evidence based medicine.

- Medicolegal Aspects and Ethics in Medical Practice and Scientific Research
- Quality assurance of medical education
- Quality assurance of clinical practice.
- Hospital management

One of the above mentioned courses are prerequisites for fulfillment of the degree.

Thesis:

20 CP are appointed to the completion and acceptance of the thesis.

Units	Level (Year)	Credit points		
		Didactic	Training	Total
Unit(module)1: Medical Parasitic Helminthology	2,3	5	17	22
Unit(module) 2: Medical Parasitic Protozoology	2,3	5	17	22
Unit(module) 3: Medical Entomology	2,3	5	15	20
Unit(module)4: Immunoparasitology.	2,3	5	13	18
Unit(module) 5 : Laboratory Techniques	2,3	4	34	38
Total		24	96	120

6. Courses Contents (Annex 1)

The competency based objectives for each course/module/rotation are specified in conjunction with teaching/training methods, requirements for achieving these objectives and assessment methods.

See Annex 1 for detailed specifications for each course/ module

Annex 6 II: Program Matrix

7-Admission requirements

Admission Requirements (prerequisites) if any :

I. General Requirements:

- a. MBBS Degree from any Egyptian Faculties of Medicine
- b. Equivalent Degree from medical schools abroad approved by the Ministry of Higher Education
- c. One year appointment within responsible department (for non Assiut University based registrars)

II. Specific Requirements:

- Fluent in English (study language)





VACATIONS AND STUDY LEAVE

The current departmental policy is to give working candidate 2 week leave prior to first/ second part exams

FEES:

As regulated by the postgraduate studies rules and approved by the faculty vice dean of post graduate studies and the faculty and university councils.

8-Progression and completion requirements

-  Examinations of the first part could be set at 12 months from registering to the MSc degree.
-  Examination of the second part cannot be set before 3 years from registering to the degree.
-  Discussion of the MSc thesis could be set after 1 year from officially registering the MSc subject before setting the second part exams.
-  The minimum duration of the program is 3 years.

The students are offered the degree when:

1. Passing the exams of all basic science, elective and speciality courses of this program as regulated by the post graduates approved rules by the faculty council.
2. Completing all scheduled CP and log book (minimum 80%).
3. Discussion and acceptance of the MSc_thesis.

9- Program assessment methods and rules (Annex IV)

Method	ILOs measured
Written examinations: Structured essay questions Objective questions MCQ Problem solving	K & I
Clinical: Long/short cases OSPE	K ,I, P &G skills
Structured oral	K ,I &G skills
Logbook assessment	All
Research assignment	I &G skills

9-Program assessment methods and rules

Method	ILOs measured
Written examinations: Structured essay questions Objective questions, MCQ, Problem solving	K & I
Practical: OSPE	K ,I, P &G skills
Structured oral	K ,I &G skills
Logbook assessment	All
Research assignment	I &G skills

Weighting of assessments:

Courses		Degrees			
First Part					
	Course code	Written Exam	Oral Exam	Practical Exam	Total
Basic science courses: research methodology + any basic course	PAR209A	100	50	50	200
		100	50	50	200
Elective course		50	50		100
Second Part					
Speciality Courses:		written	oral	Practical	Total
Medical Parasitology 3	PAR208A				
Paper 1		125	60	60	245
Paper 2		125	60	60	245
Paper 3		125	60	60	245
Paper 4		125	60	60	245
Paper 5		100	60	60	220
Total of the degree		600	300	300	1200

*** 25% of the oral exam for assessment of logbook**

Total degree 1900

700 marks for first part

1200 for second part

Written exam 50 % (850 marks).

Practical and oral exams 50 % (850 marks)

Examination system: according to the bylaw

➤ **First part:**

- Written exam one papers 3 hours in methodology of research and any basic courses according to the bylaw + oral & Practical examination.

➤ **Second part:**

- Written exam five papers 3 hours for first four papers and 2 hours for last paper in Parasitology + oral & Practical examination

➤ **Elective courses**

- Written exam one paper 1 hour in Elective course + Oral exam

10-Program evaluation

By Whom	Method	Sample
Quality Assurance Unit	Reports Field visits	#
Internal evaluators	Report	1
External Evaluator (s):According to department council External Examiner (s): According to department council	Reports Field visits	#
holders	Reports Field visits Questionnaires	#
Senior students	Questionnaires	#
Alumni	Questionnaires	#

#Annex 5 contains evaluation templates and reports (joined in the departmental folder)

11-Declaration

We certify that all of the information required to deliver this program is contained in the above specification and will be implemented.

All course specifications for this program are in place.

Contributor Name	Signature	Date
Program Principle Coordinator: Dr/ Doaa Abdel Hafeez Yones		
Head of the Responsible Department (Program Academic Director): Prof. Dr/ Doaa Abdel Hafeez Yones		

Annex 1, Specifications for Courses / Modules

Course 1: Methodology of Research











Name of department: Medical Parasitology

Faculty of medicine

Assiut University

2022-2023

1. Course data

-  **Course Title: Methodology of Research**
-  **Course code: PAR209A**
-  **Speciality: Medical Parasitology**
-  **Number of credit points: 4 credit points for didactic (50%) 4 credit points for training(50%) total: 8 (100%)**
-  **Department (s) delivering the course: Department of public health**
-  **Coordinator (s):**
 - **Course coordinator: Prof. Mahmoud Attia**
 - **Assistant coordinator (s): Prof. Mohamed H. Qayed**
Prof. Omaila El-Gibaly
-  **Date last reviewed: 9-2022**
-  **Admission Requirements:**
-  **General requirements (prerequisites) if any : None**
-  **Requirements from the students to achieve course ILOs are clarified in the joining log book**

2. Course Aims

To provide graduate students with the skills of:

- Research proposal,
- Writing planning and implementing rigorous research,
- Writing and publishing scientific papers.

3. Intended learning outcomes (ILOs): To be able to write a rigorous research proposal

A knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Explain differences between different study designs	Lecture and discussion	Written examination
B. Identify sources and types of bias in research		
C. Describe the different sampling strategies, and compute sample size		
D. Select and design valid measurement tools for research		
E. Explain ethical issues in conducting research on human subjects		
F. describe the rules of authorship in scientific writing		
G. List the steps involved in proposal writing		
H. Identify a research problem within a conceptual framework	Lecture on Criteria to Consider to identify a research problem	discussion
I. Use the web sources to do a literature search	Practical tutorial on web	assignment

J. Select the appropriate study design for the research question	Lecture on various study designs	Written examination
K. Minimize bias in designing research	Lecture on the different types of bias	Written examination
L. Screening & theoretical background	Lectures on criteria for successful screening program& criteria for evaluation a screening test.	Written examination

B. intellectual

Competency and Skills	Methods of teaching/ learning	Methods of Evaluation
A. Apply basic science & knowledge for appraising scientific literature	Discussions & seminars	Written examination

C. Practical skills

Competency and Skills	Methods of teaching/ learning	Methods of Evaluation
A. Develop a budget and time line for the research	Tutorial	Assignments
B. Design a data entry file	Tutorial on Epi-info or Excel	Assignments Written exam
C. Identify steps required in fielding the study	Lecture	Assignments Written exam
D. Identify steps required for calculation Sensitivity, Specificity, positive predictive value, negative predictive value, Accuracy of a screening test	Lecture	Assignments Written exam

D general skills

Practice based learning improvement & professionalism

(Scientific Paper writing skills)

Competency and Skills	Methods of teaching/ learning	Methods of Evaluation
A. To be able to write an abstract	Tutorial	Written examination case study for critique
B. Write the introduction	Tutorial	Written examination
C. Write the methodology section	Tutorial	Written examination
D. Present the results	Tutorial	Written examination
E. Perform Discussion section	Tutorial	Written examination
F. Learn Authorship ethical rules	Tutorial	Written examination

4. Course contents (topic s/modules/rotation Course Matrix

Time Schedule: First Part

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skills	General Skills
	A	B	C	D
Introduction & proposal writing	G	A	A	A-F
Epidemiological Study designs	A,J	A	B,C	-
Screening & theoretical background	L	A	-	-
Screening practical	L	A	D	-
Sample size calculation	B	A	B,C	-
Research bias	H	A	C	F
Ethics in research	E,F	A	C	F

5. Course Methods of teaching/learning:

1. Lectures
2. Assignments
3. Discussion
4. Exercises

6. Course assessment methods:

i. Assessment tools:

1. Written examination
2. Attendance and active participation
3. Class
4. Assignments

ii. Time schedule: After 6 months from applying to the MSc degree.

iii. Marks: 200 (100 for written exam, 50 for practical and 50 for oral exams).

7. List of references

i. Lectures notes

- Department lecture notes

ii. Essential books

- An epidemiologic Approach to Reproductive Health, CDC, FHI, and WHO Phyllis A. wingo, James E. Higgins, Goerge L. Rubin, and S. Christine Zahniser, 2011.
- Practical Guide to Diagnostic Parasitology by Lynne Shore Garcia . Asm Press. 2020

iii. Recommended books

- Evidence Based Medicine How to practice and teach by David Sachett, Sharon E. Straus, W. Scott Richardson , William Rosenberg R. Brain Haynes, 2013.
- Diagnostic Medical Parasitology (6th edition) by Lynne S. Garcia. Published by Asm Press, 2016.
- Essentials of Medical Parasitology (2nd Edition) by Sastry Apurba Sankar , Mishra Debadutta and Lynne S. Garcia. Published by Jp Medical Ltd, 2018.

iv. Periodicals, Web sites, ... etc

- Dissertation workshop open courseware JHSPH

8. Signatures

Course Coordinator:	Head of the Department:
Date:	Date:

Course 2: Public Health & Community Medicine

Department of Parasitology

Faculty of Medicine

Assiut University

2022-2023

1. Course data

 **Course Title: Public Health & Community Medicine**

 **Course code: PAR209B**

 **Speciality: Parasitology**

 **Number of credit points: 4 credit points for didactic (40%)**

6 credit points for training (60%) total: 10 (100%)

 **Department (s) responsible: Public Health & Community Medicine-
in conjunction with Medical Parasitology**


- **Coordinator (s): Course coordinator: according to approval
of departmental councils**
- **Assistant coordinator (s):**


Prof. Mohamed H. Qayed

Prof. Omaila El-Gibaly

 **Date last reviewed: 9-2022**

 **Admission Requirements:**

 **General requirements (prerequisites) if any : None**

 **Requirements from the students to achieve course ILOs are clarified
in the joining log book**

2-Course Aims

- 1- To enable candidates to get sufficient Knowledge of the general epidemiology and distribution of different parasitic diseases especially those endemic in Egypt such as schistosomiasis, filariasis, amoebiasis ..., etc..
- 2- Ensure students become proficient in the field of measurement of health, medical statistics and Health systems and health services in Egypt.
- 3- Enable candidates to differentiate between different types of parasitic diseases distribution and importance
- 4- Acquire life-long habits of reading, literature searches, and consultation with colleagues, attendance at scientific meetings, and the presentation of scientific work that is essential for continuing professional development (CPD).
- 5- Enable candidates to work effectively, in partnership with other health professionals, support staff and service users.
- 6-The student should acquire then facts of Public health necessary for Chest diseases and tuberculosis.
- 7-The student should be community-oriented and capable of responding to community health needs within the primary health care (PHC) setting according to the guidelines of the Ministry of Health (MOH) .

3. Course intending learning outcomes (ILOs)

A. Knowledge and understanding

ILOs	Methods of teaching/earning	Methods of Evaluation
<p>A- Describe the General epidemiology of parasitic infections including :</p> <ul style="list-style-type: none"> • schistosomiasis, • filariasis, • amoebiasis • Medical statistics 	<p>--Didactic (lectures, seminars, tutorial)</p> <ul style="list-style-type: none"> - journal club, - All students are allocated personal tutors whose role is to assist them with personal problems and to advice on pastoral and academic issues. are assigned a member of the Public Health & Community Medicine academic staff to oversee progress and advise on the project dissertation. Where practical, students will be visited by College staff during their project. 	<ul style="list-style-type: none"> - Spot diagnosis of different types of tissues in the practical exam - Log book - Oral exam - Written exam - The Course evaluation prepared by the Course Director and considered by the Course Committee and the Assiut College, Departmental Teaching Committee. MSc Staff – Student Committee, held each term, with report to Departmental Teaching Committee and the Divisional Postgraduate Teaching Committee
<p>A- Mention the following factual basics and principles essential to the course topics in Public Health & Community Medicine.</p>	<p>--Didactic (lectures, seminars, tutorial)</p> <ul style="list-style-type: none"> - journal club, 	<p>practical exam</p> <ul style="list-style-type: none"> - Log book - Oral exam - Written Exam
<p>B- State update and evidence based Knowledge related to the course.</p>		
<p>C- Memorize the facts and principles of the other relevant basic and clinically supportive sciences related to the course topics:</p>		

B-Intellectual outcomes

<i>ILOs</i>	<i>Methods of teaching/ learning</i>	<i>Methods of Evaluation</i>
A. Correlates the facts of relevant basic and clinically supportive sciences with conditions and diseases of relevance to public health.	- Routine work: The most important learning experience will be day-to-day work. Trainees will be closely supervised during training. This close supervision allows for frequent short episodes of teaching.	Logbook
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to conditions relevance to parasitology		
C. Design and present audits, cases, seminars in common problems related to course topics.	Seminars and case presentation	Logbook

C. Practical skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
A- Perform the following basic lab skills essential to the course I- Basics of epidemiological studies. II- medical statistics III- Health systems and health services in Egypt	- Lecture - seminar Differentiation between different types of tissues by light microscope after staining by different types of histochemical, Immunohistochemical stains. -Identification and Differentiation of different tissues after examination	- log book - Objective structure -Check list on the different item that were written in the comment on different stains and / or tissues
B. use questionnaires and devices in evaluation of spread of different parasitic diseases.	Observation post graduate teaching	Logbook
C. Interpret the following noninvasive/ procedures/ experiments in public health of parasitic diseases.	Didactic observation	Logbook
D. Perform the following noninvasive/ procedures/ experiments public health of parasitic diseases.	Observation post graduate teaching	Logbook
E. Write and evaluate of the following following reports: about parasitic infections		
F. Perform basic experiments in related basic sciences to be utilized in the research work.		

D General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ Learning	Methods of Evaluation
A. Perform practice-based improvement activities using a systematic methodology(audit, logbook)	Different slides and photoes Observation -Practical experimental and diagnostic skills are developed through laboratory and project work	-Written essays, dissertations, oral presentation in seminars, team working skills through collaborative projects, students representative work, social and cultural activities - log book requirement
B. Appraises evidence from scientific studies.	- Written & oral communications	Log book
C. participate in one audit or survey related to the course	- Written & oral communications	Log book
D. Perform data management including data entry and analysis.	Senior staff experience	Log book
E. Facilitate learning of junior students and other health care professionals.	- Written & oral communications	Log book

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Maintain ethically sound relationship with others.	Senior staff experience	Logbook
G. Elicit information using effective nonverbal, explanatory, questioning, and writing skills.	Senior staff experience	Logbook
H. Provide information using effective nonverbal, explanatory, questioning, and writing skills.	Senior staff experience	Logbook
I. Work effectively with others as a member of a health care team or other professional group.	- Written & oral communications	Logbook
J. Present a case in one of course topics	Seminars	Logbook
K. Write a report in description of normal structures	Written communication	Logbook

Professionalism

<i>ILOs</i>	<i>Methods of teaching/ learning</i>	<i>Methods of Evaluation</i>
L- Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society	Observation & supervision	team working skills through collaborative projects, students representative work, - log book requirement
M-Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices	Observation & supervision	Log Book
N-Demonstrate sensitivity and responsiveness to others' culture, age, gender, and disabilities	Observation & supervision	Log Book

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
O- Work effectively in relevant health care delivery settings and systems.	1-structured practical examination 2.student survey 3-social and cultural activities -logbook requirement	team working skills through collaborative projects, students representative work, - log book requirement
P-Practice cost-effective health care and resource allocation that does not compromise quality of care.		
Q-Assist patients in dealing with system complexities.		

4. Course contents (topic s/modules/rotation Course Matrix

Time Schedule: First Part

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skill	General Skills
General epidemiology	A-E	A-C	A-F	A-O
epidemiology of schistosoma	A-E	A-C	A-F	A-Q
epidemiology of filaria	A-E	A-C	A-F	A-Q
epidemiology of plasmodium (malaria)	A-E	A-C	A-F	A-O
epidemiology of food transmitted parasites	A-E	A-C	A-F	A-O
epidemiology of water transmitted parasites	A-E	A-C	A-F	A-O
epidemiology of other parasitic diseases	A-E	A-C	A-F	A-O
Other sources of parasitic diseases	A-E	A-C	A-F	A-O

5. Course Methods of teaching/learning:

- A. Routine work
- B. Lectures
- C. Computer works...
- D. Scientific meetings
- E. text books
- F. Private study

6. Course Methods of teaching/learning: for students with poor achievements

1. Didactic (lectures, seminars, tutorial) according to their needs
2. Training including Computer works sessions.

7. Course assessment methods:

i. **Assessment tools:** Log book evaluation

Written exam

Oral Exam

Practical Exam

ii. **Time schedule:** At the end of the first part

iii. **Marks:** 200

8. List of references

i. Lectures notes

Course notes

Staff members print out of lectures and/or CD copies

ii. Essential books

Parasitic and Infectious Diseases: Epidemiology and Ecology 1st Edition
by Marilyn E. Scott, Gary Smith 1994.

iii. Recommended books

Infectious Diseases—Epidemiology and Control **by Nuno Lunet, 2012.**

iv. Periodicals, Web sites, ... etc

- Journal of Tropical Med and Parasitology
- Journal of Parasitology
- Journal of Parasite Immunology.
- Journal of Egyptian Society of parasitology

9-Signatures

Course Coordinator:	Head of the Department:
Date	Date

Course 2: Biochemistry











Name of department: *Medical Parasitology*

Faculty of medicine

Assiut University

2022-2023

1. Course data

-  **Course Title: Biochemistry**
-  **Course code: PAR204**
-  **Speciality is Medical Parasitology**
-  **Number of credit points: 4 credit points for didactic (40%) 6 credit points for training(60%) total: 10 (100%)**
-  **Department (s) delivering the course: Biochemistry in conjunction with Medical Parasitology**
-  **Coordinator (s): Course coordinator:**
Prof . Abdel-Raheim M. A. Meki
-  **Assistant coordinator (s)**
Dr. Amany Osama
-  **Date last reviewed: 9 -2022**
-  **Requirements (prerequisites) if any :**
 - **None**
-  **Requirements from the students to achieve course ILOs are clarified in the joining log book.**

2. Course aims

The student should acquire the facts of biochemistry necessary for parasitic diseases

3. Course intended learning outcomes (ILOs):

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
<p>A. Mention Principles of General Biochemistry and</p> <ul style="list-style-type: none"> - Identify the recent advanced knowledge in Medical biochemistry and Molecular Biology -Identify the interaction between medical biochemistry, molecular biology, parasitology and surrounding environment 	<p>-Didactic (lectures, seminars, tutorial)</p>	<ul style="list-style-type: none"> - Written and oral examination - Log book
<p>B. <i>Describe</i> biochemical reactions of different parasitic diseases and Interpret Biochemical parasitological results for different clinical cases</p> <p>Correlate the relevant facts of relevant basic and clinically supportive sciences with reasoning, diagnosis and management of common problems of the biochemistry , molecular biology and parasitology</p> <p>Point-out the etiology of metabolic disturbance in parasitic infection</p> <p>principals of immunological testes used in diagnosis</p>		

B- Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of Biochemistry with clinical reasoning, diagnosis and management of common diseases related to Medical Parasitology.	-Didactic (lectures, seminars, tutorial)	-Written and oral examination - Log book

C- Practical skills

Practical: 6 credit point

ILOs	Methods of teaching/ learning	Methods of Evaluation
A- Perform the following basic lab skills essential to the course I- Basics of biochemical features of Cardiovascular Parasitic diseases - Parasitic Diseases of respiratory system - Parasitic Diseases of digestive system. - Parasitic Diseases of female genital system -Parasitic Diseases of nervous system. -Parasitic Disease of kidney. - Parasitic Disease of Musculoskeletal system	- Lecture - seminar	- log book - Objective structure exams -
B. <u>Order the following non invasive and invasive diagnostic procedures</u> • Routine appropriate Lab investigations related to conditions mentioned in A.A Different parasitic diseases.	Observation post graduate teaching	Logbook
C. <u>Interpret the different noninvasive and invasive diagnostic procedures</u> • Routine appropriate Lab investigations related to conditions mentioned in A.A	Didactic observation	Logbook
D-Perform different noninvasive/ procedures/ experiments related to conditions mentioned in A.A	Observation post graduate teaching	Logbook
E-Write and evaluate of the following reports: about parasitic infections		
F-Perform basic experiments in related basic sciences to be utilized in the research work.		

D-General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ Learning	Methods of Evaluation
A. Use information technology to manage information, access on-line medical information; and support their own education.	-Observation and supervision -Written & oral communication	- Oral Exam - Logbook

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
B. Write a report in the conditions mentioned in A.A &A.B	-Observation and supervision -Written & oral communication	- Oral Exam - Logbook - Check list

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
C. Demonstrate a commitment to ethical principles.	-Observation -Senior staff experience	- Oral Exam - Logbook

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
D. Work effectively in relevant health care delivery settings and systems.	-Observation -Senior staff experience	-360o global rating

4. Course contents (topic s/modules/rotation Course (Course 2) Matrix

Time Schedule: First Part

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skills	General Skills
	A	B	C	D
Biochemical analysis of :				
Cardiovascular Parasitic diseases	A	A	A-F	A-D
- Parasitic Diseases of respiratory system	A	A	A-F	A-D
- Parasitic Diseases of digestive system.	A	A	A-F	A-D
- Parasitic Diseases of female genital system	A	A	A-F	A-D
-Parasitic Diseases of nervous system.	A	A	A-F	A-D
-Parasitic Disease of kidney.	A	A	A-F	A-D
- Parasitic Disease of Musculoskeletal system	A	A	A-F	A-D

5. Course methods of teaching/learning:

1. Didactic (lectures, seminars, tutorial)
2. Observation and supervision
3. Written & practical & oral communication
4. Senior staff experience

6. Course methods of teaching/learning: for students with poor achievements

Extra didactic (lectures, seminars, tutorial

7. Course assessment methods:

i. Assessment tools:

1. Written, practical and oral examination
2. Log book

ii. Time schedule: At the end of the first part

iii. Marks: 200

8. List of references

i. Lectures notes

- Course notes
- Staff members print out of lectures and/or CD copies

ii. Essential books

- Laboratory parasitology 5th ed., 2000
- Harper's Illustrated Biochemistry, 28th Edition 2011.

iii. Recommended books

- Diagnostic medical parasitology 4th edition, Lippincott Illustrated
Reviews: Biochemistry, Fourth Edition, 2005

iv. Periodicals, Web sites, ... etc

➤ **Periodicals,**

- Biochemistry and molecular biology education journal.
- Physiology and Biochemistry journal

➤ **Web sites:** <http://www.ncbi.nlm.nih.gov/pubmed/>

- <http://www.ncbi.nlm.gov/>
- <http://www.vlib.org/>
- <http://www.genome.ad.jp/kegg/regulation>.

v. others : None

9. Signatures

Course Coordinator:	Head of the Department:
Date:	Date:

Course 2: Pathology










Name of department: *Medical Parasitology*

Faculty of medicine

Assiut University

2022-2023

1. Course data

-  **Course Title: Pathology**
-  **Course code: PAR205**
-  **Speciality is Medical Parasitology**
-  **Number of credit points: 4 credit points for didactic (40%) 6 credit points for training (60%) total: 10 (100%)**
-  **Department (s) delivering the course: Pathology in conjunction with Medical Parasitology**
-  **Coordinator (s): Staff members of Pathology Department in conjunction with Medical Parasitology Department as annually approved by both departments councils**
-  **Date last reviewed: 9-2022**
-  **Requirements (prerequisites) if any :**
 - **None**
-  **Requirements from the students to achieve course ILOs are clarified in the joining log book.**

2. Course aims

- To make the students able to be familiar with the diagnosis parasitic problems that may be encountered with Medical Parasitology
- To make the students able to deal with parasitic cases safely and effectively as regard their investigations and management.

3. Course intended learning outcomes (ILOs):

A- Knowledge and understanding

ILOs	Methods of teaching/ learning	<i>Methods of Evaluation</i>
<p>A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions:</p> <ul style="list-style-type: none"> - routine examination of stool sample - routine examination of urine sample - routine examination of blood sample - advanced immunological diagnostic techniques - flow cytometry in parasitic diseases - different techniques of PCR - parasites detected in urine samples - parasites detected in stool samples - parasites detected in blood samples - report writing - Biosafety in laboratories - equipments in laboratories 	<p>-Clinical round</p> <p>-Didactic (lectures, seminars, tutorial)</p> <p>-Case presentation</p> <p>-Hand on workshops,</p> <p>Unit</p>	<p>-Written and oral examination</p> <p>-Log book</p>
B. Mention the principles of basics of Pathology		
C. State update and evidence based Knowledge of		

Diffèrent techniques related to parasitic infections		
D. Memorize the facts and principles of the relevant basic supportive sciences related to Pathology.		
E. Mention the basic ethical and medicolegal principles relevant to the Pathology.		
F. Mention the basics of quality assurance to ensure good clinical care in his field		
G. Mention the ethical and scientific principles of medical research		
H. State the impact of common health problems in the field of Pathology on the society.		

B- Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of relevant basic and clinically supportive sciences with clinical reasoning, diagnosis of common diseases related to Pathology.	-Clinical rounds -Senior staff experience	-Procedure & case presentation -log book & portfolio
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to common clinical situations related to Pathology.		
C. Design and present cases, seminars in common problem.		
D-Formulate management plans and alternative decisions in different situations in the field of the Pathology.		

C- Practical skills (Patient Care)

ILOs	Methods of teaching/ learning	Methods of Evaluation
<p>A. Obtain proper history and examine patient's samples in caring and respectful behaviors.</p>	<p>-Clinical round -Seminars -Lectures -Tutorial -Case presentation -Hand on workshops, -Clinical rotation in the general medical emergency Unit</p>	<p>-OSCE -log book & portfolio -Clinical exam in Pathology</p>
<p>B. Order the following noninvasive and invasive diagnostic procedures</p> <ul style="list-style-type: none"> • Routine appropriate Lab investigations related to conditions mentioned in A.A 	<p>-Clinical round with senior staff -Observation Post graduate teaching -Hand on workshops</p>	<p>-OSCE -log book & portfolio -Clinical exam in Pathology</p>
<p>C. Interpret the following noninvasive and invasive diagnostic procedures</p> <ul style="list-style-type: none"> • Routine appropriate Lab investigations related to conditions mentioned in A.A • Blood picture • Blood chemistry 	<p>-Clinical round with senior staff -Observation Post graduate teaching -Hand on</p>	

	workshops	
D. Perform the noninvasive and invasive diagnostic procedures	-Clinical round with senior staff -Observation Post graduate teaching -Hand on workshops	
E. Prescribe the following noninvasive and invasive therapeutic procedures : • proper diagnosis for conditions mentioned in A.A	- Clinical round with senior staff -Perform under supervision of senior staff	- Procedure presentation - Log book - Chick list
F. Carry out patient management plans for common conditions related to Pathology mentioned in A.A.	- Clinical round with senior staff - Perform under supervision of senior staff	
G. Use information technology to support patient care decisions and patient education in common clinical situations related to Pathology.		
H. Provide health care services aimed at preventing health problems related to Pathology.		
I. Provide patient-focused care in common conditions related to Pathology, while working with health care professionals, including those from other disciplines like: Conditions mentioned in A.A		

D-General Skills
Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Perform practice-based improvement activities using a systematic methodology (audit, logbook)	-Case log -Observation and supervision -Written & oral communication	--Log book & portfolio -Procedure & case presentation
B. Appraises evidence from scientific studies (journal club)	- Case log - Observation and supervision - Written & oral communication - Journal clubs - Discussions in seminars and clinical rounds	--Log book & portfolio -Procedure & case presentation
C. Conduct epidemiological Studies and surveys.		
D. Perform data management including data entry and analysis.		
E. Facilitate learning of junior students and other health care professionals.	-Clinical rounds -Senior staff experience	

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Maintain therapeutic and ethically sound relationship with patients.	-Simulations -Clinical round -Seminars -Lectures -Case presentation -Hand on workshops	-Global rating -Procedure & case presentation -Log book & portfolio -Chick list
G. Elicit information using effective nonverbal, explanatory, questioning, and writing skills.		
H. Provide information using effective nonverbal, explanatory, questioning, and writing skills.		
I. Work effectively with others as a member of a health care team or other professional group.		
J. Present a case in <ul style="list-style-type: none"> Common problems of Pathology. 		
K. Write a report <ul style="list-style-type: none"> Patients' medical reports 	-Senior staff experience	
L. Council patients and families about <ul style="list-style-type: none"> Conditions mentioned in A.A 	-Perform under supervision of senior staff	

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
M. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society	-Observation Senior staff experience -Case taking	-Objective structured clinical examination -Patient survey
N. Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices		- 360o global rating
O. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities		-Objective structured clinical examination -360o global rating

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
P. Work effectively in relevant health care delivery settings and systems.	-Observation -Senior staff experience	-360o global rating
Q. Practice cost-effective health care and resource allocation that does not compromise quality of care.		-Check list evaluation of live or recorded performance
R. Assist patients in dealing with system complexities.		-360o global rating - Patient survey

4. Course contents (topic s/modules/rotation Course Matrix

Time Schedule: First part

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skills	General Skills
	A	B	C	D
Basics of Pathology	B	A	-	A-E
routine examination of stool sample	A, D-H	A-D	A-I	A-O
-routine examination of urine sample	A, D-H	A-D	A-I	A-O
- routine examination of blood sample	A, D-H	A-D	A-I	A-O
- advanced immunological diagnostic techniques	A, D-H	A-D	A-I	A-O
- flow cytometry in parasitic diseases	A,C-H	A-D	A-I	A-O
- different techniques of PCR				
- parasites detected in urine samples	A, D-H	A-D	A-I	A-R

5. Course methods of teaching/learning:

1. Didactic (lectures, seminars, tutorial)
2. Seminars
3. Post graduate teaching
4. Observation and supervision
5. Written, practical & oral communication

6. Course methods of teaching/learning: for students with poor achievements

1. Extra Didactic (lectures, seminars, tutorial) according to their needs
2. Extra training according to their needs

7. Course assessment methods:

i. Assessment tools:

1. Written and oral examination
2. Check list
3. log book & portfolio

4. Objective structured clinical examination
ii. Time schedule: At the end of the second part

iii. Marks: 200

8. List of references

i. Lectures notes

- Course notes
- Staff members print out of lectures and/or CD copies

➤ ii. Essential books

- KUMAR, V., COTRAN, R.S., and ROBBINS, S.L. Robbins Basic Pathology. 7th ed. Saunders Publisher, 2012.
- Histology for Pathologists by Stacey E. Mills, 2007
- iii. Recommended books
 - Rosai and Ackerman's Surgical Pathology Juan Rosai, Mosby 2004
 - Sternberg's Diagnostic surgical Pathology 4th edition, Lippincott Williams and Wilkins - 2005
- iv. Periodicals, Web sites, ... etc
 - Human pathology
 - Histopathology
 - American Journal of surgical pathology
 - Web sites
 - www.pubmed. Com

9. Signatures

Course Coordinator: -	Head of the Department:
Date:	Date:

Course 2: Pharmacology









Name of department: *Medical Parasitology*

Faculty of medicine

Assiut University

2022-2023

1. Course data

-  **Unit Title: Pharmacology**
-  **Unit code: PAR206**
-  **Speciality is Medical Parasitology**
-  **Number of credit points: 4 credit points for didactic (40%) 6 credit points for training(60%) total: 10 (100%)**
-  **Department (s) delivering the course: Pharmacology in conjunction with Medical Parasitology**
-  **Coordinator (s): Staff members of Pharmacology
Department in conjunction with Medical Parasitology
Department as annually approved by both departments councils**
-  **Date last reviewed: 9-2022**
 - **Requirements (prerequisites) if any :None**
-  **Requirements from the students to achieve unit ILOs are clarified in the joining log book.**

2. Course aims

The student should acquire the professional knowledge and facts of pharmacology necessary for parasitic diseases.

3. Course intended learning outcomes (ILOs):

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Illustrate Pharmacological principles of: <ul style="list-style-type: none"> • General pharmacology • Anthelmintic drugs • antiprotozoan drugs • Antifilarial drugs • Anti-malarial drugs • Replant drugs • Anti-schistosomal drugs • Drugs used in treatment of different arthropods 	-Didactic (lectures, seminars, tutorial)	- Written and oral examination - Log book
B. Describe Pharmacological <i>details</i> of <ul style="list-style-type: none"> ○ Anthelmintic drugs ○ antiprotozoan drugs ○ Antifilarial drugs ○ Anti-malarial drugs ○ Replant drugs ○ Anti-schistosomal drugs ○ Drugs used in treatment of different arthropods 		

B- Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of pharmacology with clinical reasoning, diagnosis and management of common diseases related to parasitic diseases.	-Didactic (lectures, seminars, tutorial)	-Written and oral examination - Log book

C- Practical skills

Practical: 6 credit point

ILOs	Methods of teaching/ learning	Methods of Evaluation
A- Perform the following basic lab skills essential to the course I- Basics of pharmacological features of <ul style="list-style-type: none"> ○ Antihelminthic drugs ○ antiprotozoan drugs ○ Antifilarial drugs ○ Anti-malarial drugs ○ Replant drugs ○ Anti-schistosomal drugs ○ Drugs used in treatment of different arthropods 	- Lecture - seminar	- log book - Objective structure -Check list on the different treatments
B. <u>Order the following non invasive and invasive procedures</u> <ul style="list-style-type: none"> • Routine appropriate Lab investigations related to conditions mentioned in A.A Different parasitic diseases treatments.	Observation post graduate teaching	Logbook
C. <u>Interpret the different noninvasive and invasive procedures</u> <ul style="list-style-type: none"> • Routine appropriate Lab investigations related to conditions mentioned in A.A 	Didactic observation	Logbook
D-Perform different noninvasive/ procedures/ experiments related to conditions mentioned in A.A	Observation post graduate teaching	Logbook
E-Write and evaluate of the following reports: about parasitic infections treatments		
F-Perform basic experiments in related basic sciences to be utilized in the research work.		

D- General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ Learning	Methods of Evaluation
A. Use information technology to manage information, access on-line medical information; and support their own education.	-Observation and supervision -Written & oral communication	- Oral Exam - Logbook

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
B. Write a report in the conditions mentioned in A.A &A.B	-Observation and supervision -Written & oral communication	- Oral Exam - Logbook - Check list

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
C. Demonstrate a commitment to ethical principles.	-Observation -Senior staff experience	- Oral Exam - Logbook

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
D. Work effectively in relevant health care delivery settings and systems.	-Observation -Senior staff experience	-360o global rating

4. Course contents (topics/modules/rotation)

Course 2 Matrix

Time Schedule: First Part

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skills	General Skills
	A	B	C	D
General pharmacology	A	A	-	A-D
• Anthelmintic drugs	A	A	A-F	A-D
• antiprotozoan drugs	A	A	A-F	A-D
• Antifilarial drugs	A	A	A-D	A-D
• Anti-malarial drugs	A	A	A-F	A-D
• Replant drugs	A	A	A-F	A-D
• Anti-schistosomal drugs	A	A	A-F	A-D
• Drugs used in treatment of different arthropods	B	A	A-F	A-D

5. Course methods of teaching/learning:

1. Didactic (lectures, seminars, tutorial)
2. Observation and supervision
3. Written, practical & oral communication
4. Senior staff experience

6. Course methods of teaching/learning: for students with poor achievements

1. Extra didactic (lectures, seminars, tutorial)

7. Course assessment methods:

i. Assessment tools:

1. Written , practical and oral examination
2. Log book

ii. **Time schedule:** At the end of the first part

iii. **Marks:** 200

8. List of references

i. Lectures notes

- Course notes
- Staff members print out of lectures and/or CD copies

ii. Essential books

- Basic & Clinical Pharmacology, 11th Edition. By Bertram Katzung, Anthony Trevor, Susan Masters. Publisher: McGraw-Hill 2011.

iii. Recommended books

- Godman Gilman. The pharmacological therapeutics. 11th Ed 2009.

iv. Periodicals, Web sites, ... etc

➤ Periodicals,

- British journal of pharmacology
- Pharmacological review

➤ **Web sites:** <http://mic.sgmjournals.org/>

v. **others** : None

9. Signatures

Course Coordinator:	Head of the Department:
Date:	Date:

Course 2: Microbiology









Name of department: *Medical Parasitology*

Faculty of medicine

Assiut University

2022-2023

1. Course data

-  **Course Title: Microbiology**
-  **Course code: PAR207**
-  **Speciality is Medical Parasitology**
-  **Number of credit points: 4 credit points for didactic (40%) 6 credit points for training(60%) total: 10 (100%)**
-  **Department (s) delivering the Course: Microbiology in conjunction with Medical Parasitology**
-  **Coordinator (s): Staff members of Microbiology
Department in conjunction with Medical Parasitology
Department as annually approved by both departments councils**
-  **Date last reviewed: 9-2022**
 - **Requirements (prerequisites) if any :None**
-  **Requirements from the students to achieve unit ILOs are clarified in the joining log book.**

2. Course aims

The student should acquire the professional knowledge and facts of microbiology necessary for parasitic diseases.

3. Course intended learning outcomes (ILOs):

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
<p>A. Illustrate Principles of Microbiology of:</p> <p>-General bacteriology</p> <ul style="list-style-type: none"> • Bacterial structure, growth and metabolism • Bacterial genetics • Antimicrobial agents • Pathogenecity of microorganism • Diagnostic microbiology <p><u>- Immunology</u></p> <ul style="list-style-type: none"> • Basic immunology • Immunologic diagnostic test and serology • Hypersensitivity • parasites immunology • Immunogenetics of parasites <p><u>- General virology</u></p> <ul style="list-style-type: none"> • Pathogenesis of viral diseases 	<p>-Didactic (lectures, seminars, tutorial)</p>	<p>- Written and oral examination</p> <p>- Log book</p>
<p>B. Describe details of Microbiology of microorganism encountered</p> <ul style="list-style-type: none"> • in relation to parasitic diseases • secondary bacterial infections 		

B- Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of Microbiology with clinical reasoning, diagnosis and management of common diseases related to parasitic diseases.	-Didactic (lectures, seminars, tutorial)	-Written and oral examination - Log book

C-Practical skills

Practical: 6 credit point

ILOs	Methods of teaching/ learning	Methods of Evaluation
A- Perform the following basic lab skills essential to the course General bacteriology <ul style="list-style-type: none"> • Bacterial structure, growth and metabolism • Bacterial genetics • Antimicrobial agents • Pathogenicity of microorganism • Diagnostic microbiology <u>- Immunology</u> <ul style="list-style-type: none"> • Basic immunology • Immunologic diagnostic test and serology • Hypersensitivity • parasites immunology • Immunogenetics of parasites 	- Lecture - seminar	- log book - Objective structure -Check list on the different treatments
B. <u>Order the following non invasive and invasive procedures</u> <ul style="list-style-type: none"> • Routine appropriate Lab investigations related to conditions mentioned in A.A Different parasitic diseases treatments.	Observation post graduate teaching	Logbook

C. <u>Interpret the different noninvasive and invasive procedures</u> <ul style="list-style-type: none"> Routine appropriate Lab investigations related to conditions mentioned in A.A 	Didactic observation	Logbook
D-Perform different noninvasive/ procedures/ experiments related to conditions mentioned in A.A	Observation post graduate teaching	Logbook
E-Write and evaluate of the following reports: about parasitic infections treatments		
F-Perform basic experiments in related basic sciences to be utilized in the research work.		

D-General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ Learning	Methods of Evaluation
A. Use information technology to manage information, access on-line medical information; and support their own education.	-Observation and supervision -Written & oral communication	- Oral Exam - Logbook

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
B. Write a report in the conditions mentioned in A.A &A.B	-Observation and supervision -Written & oral communication	- Oral Exam - Logbook - Check list

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
C. Demonstrate a commitment to ethical principles.	-Observation -Senior staff experience	- Oral Exam - Logbook

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
D. Work effectively in relevant health care delivery settings and systems.	-Observation -Senior staff experience	-360o global rating

4. Course contents (topics/modules/rotation)

Course 2 Matrix

Time Schedule: First Part

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skills	General Skills
	A	B	C	D
General bacteriology	A	A	-A-F	A-D
General virology	A	A	- A-F	A-D
Immunology	A	A	-	A-D

5. Course methods of teaching/learning:

1. Didactic (lectures, seminars, tutorial)
2. Observation and supervision
3. Written, practical & oral communication
4. Senior staff experience

6. Course methods of teaching/learning: for students with poor achievements

- 1-Extra didactic (lectures, seminars, tutorial)

7. Course assessment methods:

i. Assessment tools:

3. Written , practical and oral examination
4. Log book

ii. Time schedule: At the end of the first part

iii. Marks: 200

8. List of references

i. Lectures notes

- Course notes
- Staff members print out of lectures and/or CD copies

ii. Essential books

- Basic & Clinical Microbiology, 11th Edition. By Bertram Katzung, Anthony Trevor, Susan Masters. Publisher: McGraw-Hill 2002

iii. Recommended books

- Godman Gilman. The Microbiology therapeutics. 11th Ed 2012.

iv. Periodicals, Web sites, ... etc

➤ Periodicals,

- British journal of Microbiology
- Microbiology review

➤ **Web sites:** <http://mic.sgmjournals.org/>

v. others : None

9. Signatures

Course Coordinator:	Head of the Department:
Date:	Date:

Course 2 Internal Medicine









Name of department: Medical Parasitology

Faculty of medicine

Assiut University

2022-2023

1. Course data

-  **Course Title: Internal Medicine**
-  **Course code: PAR218**
-  **Speciality is Medical Parasitology**
-  **Number of credit points: 4 credit points for didactic (40%) 6 credit points for training (60%) total: 10 (100%)**
-  **Department (s) delivering the course: Internal Medicine in conjunction with Medical Parasitology**
-  **Coordinator (s): Staff members of Internal Medicine Department in conjunction with Medical Parasitology Department as annually approved by both departments councils**
-  **Date last reviewed: 9-2022**
 - **Requirements (prerequisites) if any :None**
-  **Requirements from the students to achieve course ILOs are clarified in the joining log book.**

2. Course aims

- To make the students able to be familiar with the diagnosis and management of common medical problems that may be encountered with Medical Parasitology
- To make the students able to deal with medical emergencies safely and effectively as regard their investigations and management.
-

3. Course intended learning outcomes (ILOs):

A- Knowledge and understanding

ILOs	Methods of teaching/ learning	<i>Methods of Evaluation</i>
<p>A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions:</p> <ul style="list-style-type: none"> - classify parasites of the GIT and internal organs -outline the routes of infection of each parasite(To revise their life cycles - outline the complications of each parasite -Protozoan GIT and internal organs Infection - Helminthic GIT and internal organs Infection - Parasitic Infection of immunocompromized patients - outline the Drugs used in the medical treatment of each parasite 	<ul style="list-style-type: none"> -Clinical round -Didactic (lectures, seminars, tutorial) -Case presentation -Hand on workshops, Unit 	<ul style="list-style-type: none"> -Written and oral examination -Log book
B. Mention the principles of basics of general medicine		
C. State update and evidence based Knowledge of Diffèrent diseases related to parasitic infections		
D. Memorize the facts and principles of the relevant basic supportive sciences related to Internal Medicine.		

E. Mention the basic ethical and medicolegal principles relevant to the Internal Medicine.		
F. Mention the basics of quality assurance to ensure good clinical care in his field		
G. Mention the ethical and scientific principles of medical research		
H. State the impact of common health problems in the field of Internal Medicine on the society.		

B- Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of relevant basic and clinically supportive sciences with clinical reasoning, diagnosis and management of common diseases related to Internal Medicine.	-Clinical rounds -Senior staff experience	-Procedure & case presentation -log book & portfolio
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to common clinical situations related to Internal Medicine.		
C. Design and present cases, seminars in common problem.		
D-Formulate management plans and alternative decisions in different situations in the field of the Internal Medicine.		

C- Practical skills (Patient Care)

ILOs	Methods of teaching/ learning	Methods of Evaluation
<p>A. Obtain proper history and examine patients in caring and respectful behaviors.</p>	<p>-Clinical round -Seminars -Lectures -Tutorial -Case presentation -Hand on workshops, -Clinical rotation in the general medical emergency Unit</p>	<p>-OSCE -log book & portfolio -Clinical exam in internal medicine</p>
<p>B. Order the following non invasive and invasive diagnostic procedures</p> <ul style="list-style-type: none"> • Routine appropriate Lab investigations related to conditions mentioned in A.A 	<p>-Clinical round with senior staff -Observation Post graduate teaching -Hand on workshops</p>	<p>-OSCE -log book & portfolio -Clinical exam in internal medicine</p>
<p>C. Interpret the following non invasive and invasive diagnostic procedures</p> <ul style="list-style-type: none"> • Routine appropriate Lab investigations related to conditions mentioned in A.A • Blood picture • Blood chemistry 	<p>-Clinical round with senior staff -Observation Post graduate teaching -Hand on workshops</p>	
<p>D. Perform the following non invasive and invasive diagnostic and therapeutic procedures</p>	<p>-Clinical round with senior staff</p>	

• ECG	-Observation Post graduate teaching -Hand on workshops	
E. Prescribe the following non invasive and invasive therapeutic procedures : • proper treatment for conditions mentioned in A.A	- Clinical round with senior staff -Perform under supervision of senior staff	- Procedure presentation - Log book - Chick list
F. Carry out patient management plans for common conditions related to Internal Medicine mentioned in A.A.	- Clinical round with senior staff - Perform under supervision of senior staff	
G. Use information technology to support patient care decisions and patient education in common clinical situations related to Internal Medicine.		
H. Provide health care services aimed at preventing health problems related to Internal Medicine.		
I. Provide patient-focused care in common conditions related to Internal Medicine, while working with health care professionals, including those from other disciplines like: Conditions mentioned in A.A		

D-General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Perform practice-based improvement activities using a systematic methodology(audit, logbook)	-Case log -Observation and supervision -Written & oral communication	--Log book & portfolio -Procedure & case presentation
B. Appraises evidence from scientific studies(journal club)	- Case log - Observation and supervision - Written & oral communication - Journal clubs - Discussions in seminars and clinical rounds	--Log book & portfolio -Procedure & case presentation
C. Conduct epidemiological Studies and surveys.		
D. Perform data management including data entry and analysis.		
E. Facilitate learning of junior students and other health care professionals.	-Clinical rounds -Senior staff experience	

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Maintain therapeutic and ethically sound relationship with patients.	-Simulations -Clinical round -Seminars -Lectures -Case presentation -Hand on workshops	-Global rating -Procedure & case presentation -Log book & portfolio -Chick list
G. Elicit information using effective nonverbal, explanatory, questioning, and writing skills.		
H. Provide information using effective nonverbal, explanatory, questioning, and writing skills.		
I. Work effectively with others as a member of a health care team or other professional group.		
J. Present a case in <ul style="list-style-type: none"> Common problems of Internal Medicine. 		
K. Write a report <ul style="list-style-type: none"> Patients' medical reports 	-Senior staff experience	
L. Council patients and families about <ul style="list-style-type: none"> Conditions mentioned in A.A 	-Perform under supervision of senior staff	

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
M. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society	-Observation Senior staff experience -Case taking	-Objective structured clinical examination -Patient survey
N. Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices		- 360o global rating
O. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities		-Objective structured clinical examination -360o global rating

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
P. Work effectively in relevant health care delivery settings and systems.	-Observation -Senior staff experience	-360o global rating
Q. Practice cost-effective health care and resource allocation that does not compromise quality of care.		-Check list evaluation of live or recorded performance
R. Assist patients in dealing with system complexities.		-360o global rating - Patient survey

4. Course contents (topic s/modules/rotation Course Matrix

Time Schedule: First part

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skills	General Skills
	A	B	C	D
Basics of Internal Medicine	B	A	-	-
classify parasites of the GIT and internal organs	A, D-H	A-D	A-I	A-O
-outline the routes of infection of each parasite(To revise their life cycles	A, D-H	A-D	A-I	A-O
- outline the complications of each parasite	A, D-H	A-D	A-I	A-O
Protozoan GIT and internal -organs Infection	A, D-H	A-D	A-I	A-O
- Helminthic GIT and internal organs Infection	A,C-H	A-D	A-I	A-O
Parasitic Infection of immunocompromized patients	A, D-H	A-D	A-I	A-O
- outline the Drugs used in the medical treatment of each parasite	A, D-H	A-D	A-I	A-O

5. Course methods of teaching/learning:

1. Didactic (lectures, seminars, tutorial)
2. Seminars Clinical rotations
3. Post graduate teaching
4. Observation and supervision
5. Written, practical & oral communication

6. Course methods of teaching/learning: for students with poor achievements

1. Extra Didactic (lectures, seminars, tutorial) according to their needs
2. Extra training according to their needs

7. Course assessment methods:

i. Assessment tools:

1. Written and oral examination
2. Check list
3. log book & portfolio
4. Objective structured clinical examination

iii. Marks: 200

8. List of references

i. Lectures notes

- Course notes
- Staff members print out of lectures and/or CD copies

ii. Essential books

- Davidson's Principles and Practice of Medicine - 20th Edition - 2006-07
- Hutchison's Clinical Methods; Robert Hutchison; Harry Rainy; 21st edition; 2003

iii. Recommended books

- Harrison's Principles of Internal Medicine, 17th Edition by Anthony Fauci, Eugene Braunwald, Dennis Kasper, and Stephen Hauser (Hardcover - Mar 6 2008)

iv. Periodicals, Web sites, ... etc

➤ Periodicals

- Internal medicine journal
- Annals of Internal medicine journal
- Journal of General Internal Medicine

➤ Web sites

- www.pubmed. Com

V. others

- None

9. Signatures

Course Coordinator:	Head of the Department:
Date:	Date:

Course 2 Dermatology









Name of department: *Medical Parasitology*

Faculty of medicine

Assiut University

2022-2023

1. Course data

-  **Course Title: Dermatology**
-  **Course code: PAR221**
-  **Speciality is Medical Parasitology**
-  **Number of credit points: 4 credit points for didactic (40%) 6 credit points for training (60%) total: 10 (100%)**
-  **Department (s) delivering the course: Dermatology in conjunction with Medical Parasitology**
-  **Coordinator (s): Staff members of Dermatology
Department in conjunction with Medical Parasitology
Department as annually approved by both departments councils**
-  **Date last reviewed: 9-2022**
 - **Requirements (prerequisites) if any :None**
-  **Requirements from the students to achieve course ILOs are clarified in the joining log book.**

2. Course aims

- To make the students able to be familiar with the diagnosis and management of common medical problems that may be encountered with Medical Parasitology
- To make the students able to deal with medical emergencies safely and effectively as regard their investigations and management.

3. Course intended learning outcomes (ILOs):

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	<i>Methods of Evaluation</i>
<p>A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions:</p> <ul style="list-style-type: none"> - classify parasites infecting the skin - outline the routes of infection of each parasite (To revise their life cycles) - scabies - lice - demodex folliculorum - creeping eruptions - other Arthropods bites - Other parasite related skin diseases 	<ul style="list-style-type: none"> -Clinical round -Didactic (lectures, seminars, tutorial) -Case presentation -Hand on workshops, Unit 	<ul style="list-style-type: none"> -Written and oral examination -Log book
B. Mention the principles of basics of general dermatology		
C. State update and evidence based Knowledge of Different skin diseases related to parasitic infections		
D. Memorize the facts and principles of the relevant basic supportive sciences related to Dermatology.		
E. Mention the basic ethical and medicolegal principles relevant to the Dermatology.		

F. Mention the basics of quality assurance to ensure good clinical care in his field		
G. Mention the ethical and scientific principles of medical research		
H. State the impact of common health problems in the field of Dermatology on the society.		

B-Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of relevant basic and clinically supportive sciences with clinical reasoning, diagnosis and management of common diseases related to Dermatology.	-Clinical rounds -Senior staff experience	-Procedure & case presentation -log book & portfolio
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to common clinical situations related to Dermatology.		
C. Design and present cases, seminars in common problem.		
D-Formulate management plans and alternative decisions in different situations in the field of the Dermatology.		

C-Practical skills (Patient Care)

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Obtain proper history and examine patients in caring and respectful behaviors.	-Clinical round -Seminars -Lectures -Tutorial -Case presentation -Hand on workshops, -Clinical rotation in the general medical emergency Unit	-OSCE -log book & portfolio -Clinical exam in Dermatology
B. Order the following non invasive and invasive diagnostic procedures • Routine appropriate Lab investigations related to conditions mentioned in A.A	-Clinical round with senior staff -Observation Post graduate teaching -Hand on workshops	-OSCE -log book & portfolio -Clinical exam in Dermatology
C. Interpret the following non invasive and invasive diagnostic procedures • Routine appropriate Lab investigations related to conditions mentioned in A.A • Skin biopsy	-Clinical round with senior staff -Observation Post graduate teaching -Hand on workshops	
D. Perform the following non invasive and invasive diagnostic and therapeutic procedures	-Clinical round with senior staff -Observation Post graduate	

	teaching -Hand on workshops	
E. Prescribe the following non invasive and invasive therapeutic procedures : • proper treatment for conditions mentioned in A.A	- Clinical round with senior staff -Perform under supervision of senior staff	- Procedure presentation - Log book - Chick list
F. Carry out patient management plans for common conditions related to Dermatology mentioned in A.A.	- Clinical round with senior staff - Perform under supervision of senior staff	
G. Use information technology to support patient care decisions and patient education in common clinical situations related to Dermatology.		
H-Provide health care services aimed at preventing health problems related to Dermatology.		
I-Provide patient-focused care in common conditions related to Dermatology, while working with health care professionals, including those from other disciplines like: Conditions mentioned in A.A		

D-General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Perform practice-based improvement activities using a systematic methodology(audit, logbook)	-Case log -Observation and supervision -Written & oral communication	--Log book & portfolio -Procedure & case presentation
B. Appraises evidence from scientific studies(journal club)	- Case log - Observation and supervision - Written & oral communication - Journal clubs - Discussions in seminars and clinical rounds	--Log book & portfolio -Procedure & case presentation
C. Conduct epidemiological Studies and surveys.		
D. Perform data management including data entry and analysis.		
E. Facilitate learning of junior students and other health care professionals.	-Clinical rounds -Senior staff experience	

E-Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Maintain therapeutic and ethically sound relationship with patients.	-Simulations -Clinical round -Seminars -Lectures -Case presentation -Hand on workshops	-Global rating -Procedure & case presentation -Log book & portfolio -Chick list
G. Elicit information using effective nonverbal, explanatory, questioning, and writing skills.		
H. Provide information using effective nonverbal, explanatory, questioning, and writing skills.		
I. Work effectively with others as a member of a health care team or other professional group.		
J. Present a case in <ul style="list-style-type: none"> Common problems of Dermatology. 		
K. Write a report <ul style="list-style-type: none"> Patients' medical reports 	-Senior staff experience	
L. Council patients and families about <ul style="list-style-type: none"> Conditions mentioned in A.A 	-Perform under supervision of senior staff	

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
M. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society	- Observation Senior staff experience -Case taking	-Objective structured clinical examination -Patient survey
N. Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices		- 360o global rating
O. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities		-Objective structured clinical examination -360o global rating

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
P. Work effectively in relevant health care delivery settings and systems.	-Observation -Senior staff experience	-360o global rating
Q. Practice cost-effective health care and resource allocation that does not compromise quality of care.		-Check list evaluation of live or recorded performance
R. Assist patients in dealing with system complexities.		-360o global rating - Patient survey

4. Course contents (topic s/modules/rotation)

Course Matrix

Time Schedule: First part

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skills	General Skills
	A	B	C	D
Basics of Dermatology	B	A	-	-
classify parasites infecting the skin	A, D-H	A-D	A-I	A-O
- outline the routes if infection of each parasite(To revise their life cycles	A, D-H	A-D	A-I	A-O
scabis	A, D-H	A-D	A-I	A-O
lice	A, D-H	A-D	A-I	A-O
- demodex folliculorum	A,C-H	A-D	A-I	A-O
- creeping eruptions				
-- other Arthropods bites	A, D-H	A-D	A-I	A-O
- Other parasite retated skin diseases	A, D-H	A-D	A-I	A-O

5. Course methods of teaching/learning:-

1. Didactic (lectures, seminars, tutorial)
2. Seminars Clinical rotations
3. Post graduate teaching
4. Observation and supervision
5. Written, practical & oral communication

6. Course methods of teaching/learning: for students with poor achievements

1. Extra Didactic (lectures, seminars, tutorial) according to their needs
2. Extra training according to their needs

7. Course assessment methods:

i. Assessment tools:

5. Written and oral examination
6. Chick list
7. log book & portfolio
8. Objective structured clinical examination

ii. Time schedule: At the end of the second part

iii. Marks: 200

8. List of references

i. Lectures notes

- Course notes
- Staff members print out of lectures and/or CD copies

ii. Essential books

- Davidson's Principles and Practice of Medicine - 20th Edition - 2016-17
- Hutchison's Clinical Methods; Robert Hutchison; Harry Rainy; 21st edition;2013

iii. Recommended books

- Harrison's Principles of Dermatology, 17th Edition by Anthony Fauci, Eugene Braunwald, Dennis Kasper, and Stephen Hauser (Hardcover - Mar 6 2008)

iv. Periodicals, Web sites, ... etc

➤ Periodicals

- Dermatology journal
- Annals of Dermatology journal
- Journal of Dermatology

➤ Web sites

- www.pubmed. Com

V. others

- None

9. Signatures

Course Coordinator:	Head of the Department:
Date:	Date:

Course 2: General surgery

Name of department: *Medical Parasitology*

Faculty of medicine

Assiut University

2022-2023

1. Course data

- + Course Title: General surgery
- + Course code: PAR211
- + Speciality is Medical Parasitology
- + Number of credit points: 4 credit points for didactic (40%) 6 credit points for training (60%) total: 10 (100%)
- + Department (s) delivering the course: General surgery in conjunction with Medical Parasitology
- + Coordinator (s): Staff members of General surgery
Department in conjunction with Medical Parasitology
Department as annually approved by both departments councils
- + Date last reviewed: 9-2022
 - Requirements (prerequisites) if any :None
- + Requirements from the students to achieve course ILOs are clarified in the joining log book.

2. Course aims

- To make the students able to be familiar with the diagnosis and management of common surgical problems that may be encountered with Medical Parasitology
- To make the students able to deal with surgical emergencies safely and effectively as regard their investigations and management.

3. Course intended learning outcomes (ILOs):

A- Knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
<p>A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions:</p> <ul style="list-style-type: none"> - classify parasites of surgical importance -outline the routes if infection of each parasite(To revise their life cycles -outline the Surgical complications of each parasite - outline the Drugs used in the medical treatment of each parasite - Outline Surgical treatment of complications of each parasite - parasitic diseases causing cholecystitis -parasites caused of appendicitis - hydatid disease 	<ul style="list-style-type: none"> -Clinical round -Didactic (lectures, seminars, tutorial) -Case presentation -Hand on workshops, Unit 	<ul style="list-style-type: none"> -Written and oral examination -Log book
B. Mention the principles of basics of general surgery		
C. State update and evidence based Knowledge of Diffèrent surgical diseases related to parasitic infections		
D. Memorize the facts and principles of the relevant basic supportive sciences related to General surgery.		
E. Mention the basic ethical and medicolegal principles		

relevant to the General surgery.		
F. Mention the basics of quality assurance to ensure good clinical care in his field		
G. Mention the ethical and scientific principles of medical research		
H. State the impact of common health problems in the field of General surgery on the society.		

B-Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of relevant basic and clinically supportive sciences with clinical reasoning, diagnosis and management of common diseases related to General surgery.	-Clinical rounds -Senior staff experience	-Procedure & case presentation -log book & portfolio
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to common clinical situations related to General surgery.		
C. Design and present cases, seminars in common problem.		
D-Formulate management plans and alternative decisions in different situations in the field of the General surgery.		

C-Practical skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
<p>A. Obtain proper history and examine patients in caring and respectful behaviors.</p>	<p>-Clinical round -Seminars -Lectures -Tutorial -Case presentation -Hand on workshops, -Clinical rotation in the general medical emergency Unit</p>	<p>-OSCE -log book & portfolio -Clinical exam in General surgery</p>
<p>B. Order the following non invasive and invasive diagnostic procedures</p> <ul style="list-style-type: none"> • Routine appropriate Lab investigations related to conditions mentioned in A.A 	<p>-Clinical round with senior staff -Observation Post graduate teaching -Hand on workshops</p>	<p>-OSCE -log book & portfolio -Clinical exam in General surgery</p>
<p>C. Interpret the following non invasive and invasive diagnostic procedures</p> <ul style="list-style-type: none"> • Routine appropriate Lab investigations related to conditions mentioned in A.A • Blood picture • Blood chemistry 	<p>-Clinical round with senior staff -Observation Post graduate teaching -Hand on workshops</p>	
<p>D. Perform the non invasive and invasive</p>	<p>-Clinical round with</p>	

diagnostic and therapeutic procedures	senior staff -Observation Post graduate teaching -Hand on workshops	
E. Prescribe the following non invasive and invasive therapeutic procedures : • proper treatment for conditions mentioned in A.A	- Clinical round with senior staff -Perform under supervision of senior staff	- Procedure presentation - Log book - Chick list
F. Carry out patient management plans for common conditions related to General surgery mentioned in A.A.	- Clinical round with senior staff - Perform under supervision of senior staff	
G. Use information technology to support patient care decisions and patient education in common clinical situations related to General surgery.		
J. Provide health care services aimed at preventing health problems related to General surgery.		
K. Provide patient-focused care in common conditions related to General surgery, while working with health care professionals, including those from other disciplines like: Conditions mentioned in A.A		

D-General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Perform practice-based improvement activities using a systematic methodology(audit, logbook)	-Case log -Observation and supervision -Written & oral communication	--Log book & portfolio -Procedure & case presentation
B. Appraises evidence from scientific studies(journal club)	- Case log - Observation and supervision - Written & oral communication - Journal clubs - Discussions in seminars and clinical rounds	--Log book & portfolio -Procedure & case presentation
C. Conduct epidemiological Studies and surveys.		
D. Perform data management including data entry and analysis.		
E. Facilitate learning of junior students and other health care professionals.	-Clinical rounds -Senior staff experience	

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Maintain therapeutic and ethically sound relationship with patients.	-Simulations -Clinical round -Seminars -Lectures -Case presentation -Hand on workshops	-Global rating -Procedure & case presentation -Log book & portfolio -Chick list
G. Elicit information using effective nonverbal, explanatory, questioning, and writing skills.		
H. Provide information using effective nonverbal, explanatory, questioning, and writing skills.		
I. Work effectively with others as a member of a health care team or other professional group.		
J. Present a case in <ul style="list-style-type: none"> Common problems of General surgery. 		
K. Write a report <ul style="list-style-type: none"> Patients' medical reports 	-Senior staff experience	
L. Council patients and families about <ul style="list-style-type: none"> Conditions mentioned in A.A 	-Perform under supervision of senior staff	

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
M. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society	-Observation Senior staff experience -Case taking	-Objective structured clinical examination -Patient survey
N. Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices		- 360o global rating
O. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities		-Objective structured clinical examination -360o global rating

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
P. Work effectively in relevant health care delivery settings and systems.	-Observation -Senior staff experience	-360o global rating
Q. Practice cost-effective health care and resource allocation that does not compromise quality of care.		-Check list evaluation of live or recorded performance
R. Assist patients in dealing with system complexities.		-360o global rating - Patient survey

4. Course contents (topic s/modules/rotation Course Matrix

Time Schedule: First part

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skills	General Skills
	A	B	C	D
Basics of General surgery	B	A	-	-
classify parasites of surgical importance	A, D-H	A-D	A-I	A-O
-outline the routes if infection of each parasite(To revise their life cycles	A, D-H	A-D	A-I	A-O
-outline the Surgical complications of each parasite - outline the Drugs used in the medical treatment of each parasite	A, D-H	A-D	A-I	A-O
- Outline Surgical treatment of complications of each parasite	A, D-H	A-D	A-I	A-O
- parasitic diseases causing cholecystitis	A,C-H	A-D	A-I	A-R
-parasites caused of appendicitis				
- hydatid disease	A, D-H	A-D	A-I	A-O

5. Course methods of teaching/learning:

1. Didactic (lectures, seminars, tutorial)
2. Seminars Clinical rotations
3. Post graduate teaching
4. Observation and supervision
5. Written, practical & oral communication

6. Course methods of teaching/learning: for students with poor achievements

1. Extra Didactic (lectures, seminars, tutorial) according to their needs
2. Extra training according to their needs

7. Course assessment methods:

i. Assessment tools:

9. Written and oral examination
 10. Check list
 11. log book & portfolio
 12. Objective structured clinical examination
- ii. **Time schedule:** At the end of the second part

iii. **Marks:** 200

8. List of references

i. Lectures notes

- Course notes
- Staff members print out of lectures and/or CD copies

ii. Essential books

- Davidson's Principles and Practice of Medicine - 20th Edition - 2006-07
- Hutchison's Clinical Methods; Robert Hutchison; Harry Rainy; 21st edition; 2003

iii. Recommended books

- Harrison's Principles of General surgery, 17th Edition by Anthony Fauci, Eugene Braunwald, Dennis Kasper, and Stephen Hauser (Hardcover - Mar 6 2008)

iv. Periodicals, Web sites, ... etc

➤ Periodicals

- General surgery journal
- Annals of General surgery journal
- Journal of General surgery

➤ Web sites

- www.pubmed. Com

V. others

- None

9. Signatures

Course Coordinator:	Head of the Department:
Date:	Date:

Course 2: Clinical Pathology

Name of department: *Medical Parasitology*

Faculty of medicine

Assiut University

2022-2023

1. Course data

- + Course Title: Clinical Pathology
- + Course code: PAR231
- + Speciality is Medical Parasitology
- + Number of credit points: 4 credit points for didactic (40%) 6 credit points for training (60%) total: 10 (100%)
- + Department (s) delivering the course: Clinical Pathology in conjunction with Medical Parasitology
- + Coordinator (s): Staff members of Clinical Pathology Department in conjunction with Medical Parasitology Department as annually approved by both departments councils
- + Date last reviewed: 9-2022
- + Requirements (prerequisites) if any :
 - None
- + Requirements from the students to achieve course ILOs are clarified in the joining log book.

2. Course aims

- To make the students able to be familiar with the diagnosis parasitic problems that may be encountered with Medical Parasitology
- To make the students able to deal with parasitic cases safely and effectively as regard their investigations and management.

3. Course intended learning outcomes (ILOs):

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	<i>Methods of Evaluation</i>
<p>A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions:</p> <ul style="list-style-type: none"> - routine examination of stool sample - routine examination of urine sample - routine examination of blood sample - advanced immunological diagnostic techniques - flow cytometry in parasitic diseases - different techniques of PCR - parasites detected in urine samples - parasites detected in stool samples - parasites detected in blood samples - report writing - Biosafety in laboratories - equipments in laboratories 	<ul style="list-style-type: none"> -Clinical round -Didactic (lectures, seminars, tutorial) -Case presentation -Hand on workshops, Unit 	<ul style="list-style-type: none"> -Written and oral examination -Log book
B. Mention the principles of basics of Clinical Pathology		

C. State update and evidence based Knowledge of Different techniques related to parasitic infections		
D. Memorize the facts and principles of the relevant basic supportive sciences related to Clinical Pathology.		
E. Mention the basic ethical and medicolegal principles relevant to the Clinical Pathology.		
F. Mention the basics of quality assurance to ensure good clinical care in his field		
G. Mention the ethical and scientific principles of medical research		
H. State the impact of common health problems in the field of Clinical Pathology on the society.		

B-Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of relevant basic and clinically supportive sciences with clinical reasoning, diagnosis of common diseases related to Clinical Pathology.	-Clinical rounds -Senior staff experience	-Procedure & case presentation -log book & portfolio
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to common clinical situations related to Clinical Pathology.		
C. Design and present cases, seminars in common problem.		
D-Formulate management plans and alternative decisions in different situations in the field of the Clinical Pathology.		

C-Practical skills (Patient Care)

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Obtain proper history and examine patient's samples in caring and respectful behaviors.	-Clinical round -Seminars -Lectures -Tutorial -Case presentation -Hand on workshops, -Clinical rotation in the general medical emergency Unit	-OSCE -log book & portfolio -Clinical exam in Clinical Pathology
B. Order the following noninvasive and invasive diagnostic procedures • Routine appropriate Lab investigations related to conditions mentioned in A.A	-Clinical round with senior staff -Observation Post graduate teaching -Hand on workshops	-OSCE -log book & portfolio -Clinical exam in Clinical Pathology
C. Interpret the following noninvasive and invasive diagnostic procedures • Routine appropriate Lab investigations related to conditions mentioned in A.A • Blood picture • Blood chemistry	-Clinical round with senior staff -Observation Post graduate teaching -Hand on workshops	

D. Perform the noninvasive and invasive diagnostic procedures	-Clinical round with senior staff -Observation Post graduate teaching -Hand on workshops	
E. Prescribe the following noninvasive and invasive therapeutic procedures : • proper diagnosis for conditions mentioned in A.A	- Clinical round with senior staff -Perform under supervision of senior staff	- Procedure presentation - Log book - Chick list
F. Carry out patient management plans for common conditions related to Clinical Pathology mentioned in A.A.	- Clinical round with senior staff - Perform under supervision of senior staff	
G. Use information technology to support patient care decisions and patient education in common clinical situations related to Clinical Pathology.		
H-Provide health care services aimed at preventing health problems related to Clinical Pathology.		
I-Provide patient-focused care in common conditions related to Clinical Pathology, while working with health care professionals, including those from other disciplines like: Conditions mentioned in A.A		

D-General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Perform practice-based improvement activities using a systematic methodology (audit, logbook)	-Case log -Observation and supervision -Written & oral communication	--Log book & portfolio -Procedure & case presentation
B. Appraises evidence from scientific studies (journal club)	- Case log - Observation and supervision - Written & oral communication - Journal clubs - Discussions in seminars and clinical rounds	--Log book & portfolio -Procedure & case presentation
C. Conduct epidemiological Studies and surveys.		
D. Perform data management including data entry and analysis.		
E. Facilitate learning of junior students and other health care professionals.	-Clinical rounds -Senior staff experience	

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Maintain therapeutic and ethically sound relationship with patients.	-Simulations -Clinical round -Seminars -Lectures -Case presentation -Hand on workshops	-Global rating -Procedure & case presentation -Log book & portfolio -Chick list
G. Elicit information using effective nonverbal, explanatory, questioning, and writing skills.		
H. Provide information using effective nonverbal, explanatory, questioning, and writing skills.		
I. Work effectively with others as a member of a health care team or other professional group.		
J. Present a case in <ul style="list-style-type: none"> Common problems of Clinical Pathology. 		
K. Write a report <ul style="list-style-type: none"> Patients' medical reports 	-Senior staff experience	
L. Council patients and families about <ul style="list-style-type: none"> Conditions mentioned in A.A 	-Perform under supervision of senior staff	

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
M. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society	-Observation Senior staff experience -Case taking	-Objective structured clinical examination -Patient survey
N. Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices		- 360o global rating
O. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities		-Objective structured clinical examination -360o global rating

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
P. Work effectively in relevant health care delivery settings and systems.	-Observation -Senior staff experience	-360o global rating
Q. Practice cost-effective health care and resource allocation that does not compromise quality of care.		-Check list evaluation of live or recorded performance
R. Assist patients in dealing with system complexities.		-360o global rating - Patient survey

4. Course contents (topic s/modules/rotation Course Matrix

Time Schedule: First part

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skills	General Skills
	A	B	C	D
Basics of Clinical Pathology	B	A	-	-
routine examination of stool sample	A, D-H	A-D	A-I	A-O
-routine examination of urine sample	A, D-H	A-D	A-I	A-O
- routine examination of blood sample	A, D-H	A-D	A-I	A-O
- advanced immunological diagnostic techniques	A, D-H	A-D	A-I	A-O
- flow cytometry in parasitic diseases	A,C-H	A-D	A-I	A-R
- different techniques of PCR				
- parasites detected in urine samples	A, D-H	A-D	A-I	A-O

5. Course methods of teaching/learning:

1. Didactic (lectures, seminars, tutorial)
2. Seminars
3. Post graduate teaching
4. Observation and supervision
5. Written, practical & oral communication

6. Course methods of teaching/learning: for students with poor achievements

1. Extra Didactic (lectures, seminars, tutorial) according to their needs
2. Extra training according to their needs

7. Course assessment methods:

i. Assessment tools:

1. Written and oral examination
2. Check list
3. log book & portfolio
4. Objective structured clinical examination

ii. Time schedule:

At the end of the second part

iii. Marks: 200

8. List of references

i. Lectures notes

- Course notes
- Staff members print out of lectures and/or CD copies

ii. Essential books

- Davidson's Principles and Practice of Medicine - 20th Edition - 2006-07

iii. Recommended books

- Principles of Clinical Pathology, 7th Edition, Braunwald, Dennis Kasper, and Stephen Hauser (Hardcover - Mar 6 2008)

iv. Periodicals, Web sites, ... etc

➤ Periodicals

- Annals of Clinical Pathology journal
- Journal of Clinical Pathology

➤ Web sites

- www.pubmed. Com

V. others

- None

9. Signatures

Course Coordinator: .	Head of the Department:
Date:	Date:

Course 2: Obstetrics and Gynecology.










Name of department: Medical Parasitology

Faculty of medicine

Assiut University

2022-2023

1. Course data

-  **Course Title: Obstetrics and Gynecology.**
-  **Course code: PAR224**
-  **Speciality is Medical Parasitology**
-  **Number of credit points: 4 credit points for didactic (40%) 6 credit points for training (60%) total: 10 (100%)**
-  **Department (s) delivering the course: Obstetrics and Gynecology. in conjunction with Medical Parasitology**
-  **Coordinator (s): Staff members of Obstetrics and Gynecology Department in conjunction with Medical Parasitology Department as annually approved by both departments councils**
-  **Date last reviewed: 9-2022**
-  **Requirements (prerequisites) if any :**
 - **None**
-  **Requirements from the students to achieve course ILOs are clarified in the joining log book.**

2. Course aims

- To make the students able to be familiar with the diagnosis of Obstetrics and Gynecology problems that may be encountered with Medical Parasitology
- To make the students able to deal with Obstetrics and Gynecology related parasitic cases safely and effectively as regard their investigations and management.

3. Course intended learning outcomes (ILOs):

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	<i>Methods of Evaluation</i>
<p>A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions:</p> <ul style="list-style-type: none"> - classify parasites infecting the female genital tract - classify parasites related to pregnancy - outline the routes if infection of each parasite(To revise their life cycles - Toxoplasmosis - Trichomonus vaginalis - Other parasitic infections of female genital tract or with pregnancy - principals of immunological testes used in diagnosis - outline the Drugs used in the medical treatment of each parasite or surgical treatment 	<p>-Clinical round</p> <p>-Didactic (lectures, seminars, tutorial)</p> <p>-Case presentation</p> <p>-Hand on workshops,</p> <p>Unit</p>	<p>-Written and oral examination</p> <p>-Log book</p>
B. Mention the principles of basics of Obstetrics and Gynecology.		
C. State update and evidence based Knowledge of Diffèrent Obstetrics and Gynecology cases related to parasitic infections		

D. Memorize the facts and principles of the relevant basic supportive sciences related to Obstetrics and Gynecology.		
E. Mention the basic ethical and medicolegal principles relevant to the Obstetrics and Gynecology cases .		
F. Mention the basics of quality assurance to ensure good clinical care in his field		
G. Mention the ethical and scientific principles of medical research		
H. State the impact of common health problems in the field of Obstetrics and Gynecology. on the society.		

B-Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of relevant basic and clinically supportive sciences with clinical reasoning, diagnosis of common diseases related to Obstetrics and Gynecology. .	-Clinical rounds -Senior staff experience	-Procedure & case presentation -log book & portfolio
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to common clinical situations related to Obstetrics and Gynecology. .		
C. Design and present cases, seminars in common problem.		
D-Formulate management plans and alternative decisions in different situations in the field of the Obstetrics and Gynecology. .		

C-Practical skills (Patient Care)

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Obtain proper history and examine patient's samples in caring and respectful behaviors.	-Clinical round -Seminars -Lectures -Tutorial -Case presentation -Hand on workshops, -Clinical rotation in the general medical emergency Unit	-OSCE -log book & portfolio -Clinical exam in Obstetrics and Gynecology.
B. Order the following noninvasive and invasive diagnostic procedures • Routine appropriate Lab investigations related to conditions mentioned in A.A	-Clinical round with senior staff -Observation Post graduate teaching -Hand on workshops	-OSCE -log book & portfolio -Clinical exam in Obstetrics and Gynecology.
C. Interpret the following noninvasive and invasive diagnostic procedures • Routine appropriate Lab investigations related to conditions mentioned in A.A • Blood picture • Blood chemistry	-Clinical round with senior staff -Observation Post graduate teaching -Hand on workshops	
D. Perform the noninvasive and invasive diagnostic procedures	-Clinical round with senior staff -Observation Post graduate teaching -Hand on workshops	

E. Prescribe the following noninvasive and invasive therapeutic procedures : <ul style="list-style-type: none"> proper diagnosis for conditions mentioned in A.A 	- Clinical round with senior staff -Perform under supervision of senior staff	- Procedure presentation - Log book - Chick list
F. Carry out patient management plans for common conditions related to Obstetrics and Gynecology. mentioned in A.A.	- Clinical round with senior staff - Perform under supervision of senior staff	
G. Use information technology to support patient care decisions and patient education in common clinical situations related to Obstetrics and Gynecology. .		
H-Provide health care services aimed at preventing health problems related to Obstetrics and Gynecology. .		
I-Provide patient-focused care in common conditions related to Obstetrics and Gynecology. , while working with health care professionals, including those from other disciplines like: Conditions mentioned in A.A		

D-General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Perform practice-based improvement activities using a systematic methodology (audit, logbook)	-Case log -Observation and supervision -Written & oral communication	--Log book & portfolio -Procedure & case presentation
B. Appraises evidence from scientific studies (journal club)	- Case log - Observation and supervision - Written & oral communication - Journal clubs - Discussions in seminars and clinical rounds	--Log book & portfolio -Procedure & case presentation
C. Conduct epidemiological Studies and surveys.		
D. Perform data management including data entry and analysis.		
E. Facilitate learning of junior students and other health care professionals.	-Clinical rounds -Senior staff experience	

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Maintain therapeutic and ethically sound relationship with patients.	-Simulations -Clinical round -Seminars -Lectures -Case presentation -Hand on workshops	-Global rating -Procedure & case presentation -Log book & portfolio -Chick list
G. Elicit information using effective nonverbal, explanatory, questioning, and writing skills.		
H. Provide information using effective nonverbal, explanatory, questioning, and writing skills.		
I. Work effectively with others as a member of a health care team or other professional group.		
J. Present a case in <ul style="list-style-type: none"> Common problems of Obstetrics and Gynecology. . 		
K. Write a report <ul style="list-style-type: none"> Patients' medical reports 	-Senior staff experience	
L. Council patients and families about <ul style="list-style-type: none"> Conditions mentioned in A.A 	-Perform under supervision of senior staff	

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
M. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society	-Observation Senior staff experience -Case taking	-Objective structured clinical examination -Patient survey
N. Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices		- 360o global rating
O. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities		-Objective structured clinical examination -360o global rating

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
P. Work effectively in relevant health care delivery settings and systems.	-Observation -Senior staff experience	-360o global rating
Q. Practice cost-effective health care and resource allocation that does not compromise quality of care.		-Check list evaluation of live or recorded performance
R. Assist patients in dealing with system complexities.		-360o global rating - Patient survey

4. Course contents (topic s/modules/rotation Course Matrix

Time Schedule: First part

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skills	General Skills
	A	B	C	D
Basics of Obstetrics and Gynecology.	B	A	-	-
- classify parasites infecting the female genital tract	A, D-H	A-D	A-I	A-R
- classify parasites related to pregnancy	A, D-H	A-D	A-I	A-R
- outline the routes if infection of each parasite(To revise their life cycles	A, D-H	A-D	A-I	A-R
- Toxoplasmosis	A, D-H	A-D	A-I	A-R
- Trichomonus vaginalis	A,C-H	A-D	A-I	A-R
- Other parasitic infections of female genital tract or with pregnancy	A, D-H	A-D	A-I	A-R

5. Course methods of teaching/learning:

1. Didactic (lectures, seminars, tutorial)
2. Seminars
3. Post graduate teaching
4. Observation and supervision
5. Written, practical & oral communication

6. Course methods of teaching/learning: for students with poor achievements

1. Extra Didactic (lectures, seminars, tutorial) according to their needs
2. Extra training according to their needs

7. Course assessment methods:

i. Assessment tools:

1. Written and oral examination
2. Check list
3. log book & portfolio
4. Objective structured clinical examination

ii. Time schedule: At the end of the second part

iii. Marks: 200

8. List of references

i. Lectures notes

- Course notes
- Staff members print out of lectures and/or CD copies

ii. Essential books

- Diagnostic medical parasitology- 20th Edition – 2012.
- Clinical parasitology; Robert Hutchison; Harry Rainy; 21st edition;2003

iii. Recommended books

- parasites, 7th Edition, Braunwald, Dennis Kasper, and Stephen Hauser (Hardcover - Mar 6 2008)

iv. Periodicals, Web sites, ... etc

➤ Periodicals

- Annals of Obstetrics and Gynecology. journal
- Journal of Obstetrics and Gynecology.

➤ Web sites

- www.pubmed. Com

V. others None

9. Signatures

Course Coordinator:	Head of the Department:
Date:	Date:

Course 2: Ophthalmology

Name of department: *Medical Parasitology*

Faculty of medicine

Assiut University

2022-2023

1. Course data

- + Course Title: Ophthalmology
- + Course code: PAR224
- + Speciality is Medical Parasitology
- + Number of credit points: 4 credit points for didactic (40%) 6 credit points for training (60%) total: 10 (100%)
- + Department (s) delivering the course: Ophthalmology in conjunction with Medical Parasitology
- + Coordinator (s): Staff members of Ophthalmology Department in conjunction with Medical Parasitology Department as annually approved by both departments councils
- + Date last reviewed: 9-2022
- + Requirements (prerequisites) if any :
 - None
- + Requirements from the students to achieve course ILOs are clarified in the joining log book

2. Course aims

- To make the students able to be familiar with the diagnosis of Ophthalmology problems that may be encountered with Medical Parasitology
- To make the students able to deal with Ophthalmology related parasitic cases safely and effectively as regard their investigations and management.

3. Course intended learning outcomes (ILOs):

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	<i>Methods of Evaluation</i>
<p>A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions:</p> <ul style="list-style-type: none"> - classify parasites of the eye - outline the routes of infection of each parasite (To revise their life cycles) - outline the complications of each parasite - Protozoan Eye Infection - Helminthic Eye Infection - Ocular Infestation Caused by Ectoparasites - Potentially Blinding Parasitic Infection - outline the Drugs used in the medical treatment of each parasite 	<p>-Clinical round</p> <p>-Didactic (lectures, seminars, tutorial)</p> <p>-Case presentation</p> <p>-Hand on workshops, Unit</p>	<p>-Written and oral examination</p> <p>-Log book</p>
B. Mention the principles of basics of Ophthalmology		
C. State update and evidence based Knowledge of Different Ophthalmology cases related to parasitic infections		

D. Memorize the facts and principles of the relevant basic supportive sciences related to Ophthalmology		
E. Mention the basic ethical and medicolegal principles relevant to the Ophthalmology cases.		
F. Mention the basics of quality assurance to ensure good clinical care in his field		
G. Mention the ethical and scientific principles of medical research		
H. State the impact of common health problems in the field of Ophthalmology on the society.		

E- Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of relevant basic and clinically supportive sciences with clinical reasoning, diagnosis of common diseases related to Ophthalmology.	-Clinical rounds -Senior staff experience	-Procedure & case presentation -log book & portfolio
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to common clinical situations related to Ophthalmology.		
C. Design and present cases, seminars in common problem.		
D-Formulate management plans and alternative decisions in different situations in the field of the Ophthalmology.		

C-Practical skills (Patient Care)

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Obtain proper history and examine patient's samples in caring and respectful behaviors.	-Clinical round -Seminars -Lectures -Tutorial -Case presentation -Hand on workshops, -Clinical rotation in the general medical emergency Unit	-OSCE -log book & portfolio -Clinical exam in Ophthalmology
B. Order the following noninvasive and invasive diagnostic procedures • Routine appropriate Lab investigations related to conditions mentioned in A.A	-Clinical round with senior staff -Observation Post graduate teaching -Hand on workshops	-OSCE -log book & portfolio -Clinical exam in Ophthalmology
C. Interpret the following noninvasive and invasive diagnostic procedures • Routine appropriate Lab investigations related to conditions mentioned in A.A • Blood picture • Blood chemistry	-Clinical round with senior staff -Observation Post graduate teaching -Hand on workshops	

D. Perform the noninvasive and invasive diagnostic procedures	-Clinical round with senior staff -Observation Post graduate teaching -Hand on workshops	
E. Prescribe the following noninvasive and invasive therapeutic procedures : • proper diagnosis for conditions mentioned in A.A	- Clinical round with senior staff -Perform under supervision of senior staff	- Procedure presentation - Log book - Chick list
F. Carry out patient management plans for common conditions related to Ophthalmology mentioned in A.A.	- Clinical round with senior staff - Perform under supervision of senior staff	
G. Use information technology to support patient care decisions and patient education in common clinical situations related to Ophthalmology.		
H-Provide health care services aimed at preventing health problems related to Ophthalmology.		
I-Provide patient-focused care in common conditions related to Ophthalmology , while working with health care professionals, including those from other disciplines like: Conditions mentioned in A.A		

D-General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Perform practice-based improvement activities using a systematic methodology (audit, logbook)	-Case log -Observation and supervision -Written & oral communication	--Log book & portfolio -Procedure & case presentation
B. Appraises evidence from scientific studies (journal club)	- Case log - Observation and supervision - Written & oral communication - Journal clubs - Discussions in seminars and clinical rounds	--Log book & portfolio -Procedure & case presentation
C. Conduct epidemiological Studies and surveys.		
D. Perform data management including data entry and analysis.		
E. Facilitate learning of junior students and other health care professionals.	-Clinical rounds -Senior staff experience	

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Maintain therapeutic and ethically sound relationship with patients.	-Simulations -Clinical round -Seminars -Lectures -Case presentation -Hand on workshops	-Global rating -Procedure & case presentation -Log book & portfolio -Check list
G. Elicit information using effective nonverbal, explanatory, questioning, and writing skills.		
H. Provide information using effective nonverbal, explanatory, questioning, and writing skills.		
I. Work effectively with others as a member of a health care team or other professional group.		
J. Present a case in <ul style="list-style-type: none"> Common problems of Ophthalmology. 		
K. Write a report <ul style="list-style-type: none"> Patients' medical reports 	-Senior staff experience	
L. Counsel patients and families about <ul style="list-style-type: none"> Conditions mentioned in A.A 	-Perform under supervision of senior staff	

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
M. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society	-Observation Senior staff experience -Case taking	-Objective structured clinical examination -Patient survey
N. Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices		- 360o global rating
O. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities		-Objective structured clinical examination -360o global rating

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
P. Work effectively in relevant health care delivery settings and systems.	-Observation -Senior staff experience	-360o global rating
Q. Practice cost-effective health care and resource allocation that does not compromise quality of care.		-Check list evaluation of live or recorded performance
R. Assist patients in dealing with system complexities.		-360o global rating - Patient survey

4. Course contents (topic s/modules/rotation Course Matrix

Time Schedule: First part

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skills	General Skills
	A	B	C	D
Basics of Ophthalmology	B	A	-	-
- classify parasites of the eye	A, D-H	A-D	A-I	A-R
- outline the routes if infection of each parasite(To revise their life cycles	A, D-H	A-D	A-I	A-R
- - outline the complications of each parasite	A, D-H	A-D	A-I	A-R
- Protozoan Eye Infection	A, D-H	A-D	A-I	A-R
- - Helminthic Eye Infection - Ocular Infestation Caused by Ectoparasites	A,C-H	A-D	A-I	A-R
- Potentially Blinding Parasitic Infection	A, D-H	A-D	A-I	A-R

5. Course methods of teaching/learning:

6. Didactic (lectures, seminars, tutorial)
7. Seminars
8. Post graduate teaching
9. Observation and supervision
10. Written, practical & oral communication

6. Course methods of teaching/learning: for students with poor achievements

3. Extra Didactic (lectures, seminars, tutorial) according to their needs
4. Extra training according to their needs

7. Course assessment methods:

i. Assessment tools:

13. Written and oral examination
14. Check list
15. log book & portfolio
16. Objective structured clinical examination

ii. **Time schedule:** At the end of the second part

iii. **Marks:** 200

8. List of references

i. Lectures notes

- Course notes
- Staff members print out of lectures and/or CD copies

ii. Essential books

- Ophthalmology at a Glance by Gurjeet Jutley, Jane Olver, Laura Crawley, and Lorraine Cassid, 2005.

iii. Recommended books

- Principles of Ophthalmology , 4th Edition, Braunwald, Dennis Kasper, and Stephen Hauser (Hardcover - Mar 6 2008)

iv. Periodicals, Web sites, ... etc

➤ Periodicals

- Annals of Ophthalmology journal
- Journal of Ophthalmology
- **Web sites** www.pubmed. Com

V. others None

9. Signatures

Course Coordinator:	Head of the Department:
Date:	Date:

Course 2: Pediatric

Name of department: *Medical Parasitology*

Faculty of medicine

Assiut University

2022-2023

1. Course data

- + Course Title: Pediatric
- + Course code: PAR225
- + Speciality is Medical Parasitology
- + Number of credit points: 4 credit points for didactic (40%) 6 credit points for training (60%) total: 10 (100%)
- + Department (s) delivering the course: Pediatric in conjunction with Medical Parasitology
- + Coordinator (s): Staff members of Pediatric Department in conjunction with Medical Parasitology Department as annually approved by both departments councils
- + Date last reviewed: 9-2022
- + Requirements (prerequisites) if any :
 - None
- + Requirements from the students to achieve course ILOs are clarified in the joining log book.

2. Course aims

- To make the students able to be familiar with the diagnosis parasitic problems that may be encountered with Medical Parasitology
- To make the students able to deal with parasitic cases safely and effectively as regard their investigations and management.

3. Course intended learning outcomes (ILOs):

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	<i>Methods of Evaluation</i>
<p>A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions:</p> <ul style="list-style-type: none"> - classify parasites infecting the gastrointestinal tract of children - outline the routes of infection , symptomatology of each parasite (To revise their life cycles classify parasites infecting the genitourinary tract of children - outline the routes of infection of each parasite(To revise their life cycles classify parasites infecting the respiratory and nervous system of children - outline the routes of infection , symptomatology of each parasite (To revise their life cycles classify parasites related to childhood - outline the Drugs used in the medical treatment of each parasite or surgical treatment 	<ul style="list-style-type: none"> -Clinical round -Didactic (lectures, seminars, tutorial) -Case presentation -Hand on workshops, <p style="text-align: center;">Unit</p>	<ul style="list-style-type: none"> -Written and oral examination -Log book
B. Mention the principles of basics of Pediatric		
C. State update and evidence based Knowledge of		

Diffèrent pediatric cases related to parasitic infections		
D. Memorize the facts and principles of the relevant basic supportive sciences related to Pediatric .		
E. Mention the basic ethical and medicolegal principles relevant to the Pediatric cases .		
F. Mention the basics of quality assurance to ensure good clinical care in his field		
.G. Mention the ethical and scientific principles of medical research		
H. State the impact of common health problems in the field of Pediatric on the society.		

B-Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of relevant basic and clinically supportive sciences with clinical reasoning, diagnosis of common diseases related to Pediatric .	-Clinical rounds -Senior staff experience	-Procedure & case presentation -log book & portfolio
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to common clinical situations related to Pediatric .		
C. Design and present cases, seminars in common problem.		
D-Formulate management plans and alternative decisions in different situations in the field of the Pediatric .		

C-Practical skills (Patient Care)

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Obtain proper history and examine patient's samples in caring and respectful behaviors.	-Clinical round -Seminars -Lectures -Tutorial -Case presentation -Hand on workshops, -Clinical rotation in the general medical emergency Unit	-OSCE -log book & portfolio -Clinical exam in Pediatric
B. Order the following noninvasive and invasive diagnostic procedures • Routine appropriate Lab investigations related to conditions mentioned in A.A	-Clinical round with senior staff -Observation Post graduate teaching -Hand on workshops	-OSCE -log book & portfolio -Clinical exam in Pediatric
C. Interpret the following noninvasive and invasive diagnostic procedures • Routine appropriate Lab investigations related to conditions mentioned in A.A • Blood picture	-Clinical round with senior staff -Observation	

• Blood chemistry	Post graduate teaching -Hand on workshops	
D. Perform the noninvasive and invasive diagnostic procedures	-Clinical round with senior staff -Observation Post graduate teaching -Hand on workshops	
E. Prescribe the following noninvasive and invasive therapeutic procedures : • proper diagnosis for conditions mentioned in A.A	- Clinical round with senior staff -Perform under supervision of senior staff	- Procedure presentation - Log book - Chick list
F. Carry out patient management plans for common conditions related to Pediatric mentioned in A.A.	- Clinical round with senior staff - Perform under supervision of senior staff	
G. Use information technology to support patient care decisions and patient education in common clinical situations related to Pediatric .		
H-Provide health care services aimed at preventing health problems related to Pediatric .		
I-Provide patient-focused care in common conditions related to Pediatric , while working with health care professionals, including those from other disciplines like: Conditions mentioned in A.A		

D-General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Perform practice-based improvement activities using a systematic methodology (audit, logbook)	-Case log -Observation and supervision -Written & oral communication	--Log book & portfolio -Procedure & case presentation
B. Appraises evidence from scientific studies (journal club)	- Case log - Observation and supervision - Written & oral communication - Journal clubs - Discussions in seminars and clinical rounds	--Log book & portfolio -Procedure & case presentation
C. Conduct epidemiological Studies and surveys.		
D. Perform data management including data entry and analysis.		
E. Facilitate learning of junior students and other health care professionals.	-Clinical rounds -Senior staff experience	

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Maintain therapeutic and ethically sound relationship with patients.	-Simulations -Clinical round -Seminars -Lectures -Case presentation -Hand on workshops	-Global rating -Procedure & case presentation -Log book & portfolio -Chick list
G. Elicit information using effective nonverbal, explanatory, questioning, and writing skills.		
H. Provide information using effective nonverbal, explanatory, questioning, and writing skills.		
I. Work effectively with others as a member of a health care team or other professional group.		
J. Present a case in <ul style="list-style-type: none"> Common problems of Pediatric . 		
K. Write a report <ul style="list-style-type: none"> Patients' medical reports 	-Senior staff experience	
L. Council patients and families about <ul style="list-style-type: none"> Conditions mentioned in A.A 	-Perform under supervision of senior staff	

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
M. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society	-Observation Senior staff experience -Case taking	-Objective structured clinical examination -Patient survey
N. Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices		- 360o global rating
O. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities		-Objective structured clinical examination -360o global rating

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
P. Work effectively in relevant health care delivery settings and systems.	Observation -Senior staff experience	-360o global rating
Q. Practice cost-effective health care and resource allocation that does not compromise quality of care.		-Check list evaluation of live or recorded performance
R. Assist patients in dealing with system complexities.		-360o global rating - Patient survey

4. Course contents (topic s/modules/rotation Course Matrix

Time Schedule: First part

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skills	General Skills
	A	B	C	D
Basics of Pediatric	B	A	-	-
classify parasites infecting the gastrointestinal tract of children	A, D-H	A-D	A-I	A-R
- outline the routes of infection , symptomatology of each parasite (To revise their life cycles	A, D-H	A-D	A-I	A-R
classify parasites infecting the genitourinary tract of children	A, D-H	A-D	A-I	A-R
- outline the routes of infection of each parasite(To revise their life cycles	A, D-H	A-D	A-I	A-R
classify parasites infecting the respiratory and nervous system of children	A,C-H	A-D	A-I	A-R
classify parasites related to childhood	A, D-H	A-D	A-I	A-R

5. Course methods of teaching/learning:

1. Didactic (lectures, seminars, tutorial)
2. Seminars
3. Post graduate teaching
4. Observation and supervision
5. Written, practical & oral communication

6. Course methods of teaching/learning: for students with poor achievements

1. Extra Didactic (lectures, seminars, tutorial) according to their needs
2. Extra training according to their needs

7. Course assessment methods:

i. Assessment tools:

1. Written and oral examination
2. Check list
3. log book & portfolio
4. Objective structured clinical examination

ii. Time schedule:

At the end of the second part

iii. Marks: 200

8. List of references

i. Lectures notes

- Course notes
- Staff members print out of lectures and/or CD copies

ii. Essential books

Essentials of Medical Parasitology by Apurba Sankar Sastry,

Ltd., 2014

iii. Recommended books

- Principles of Pediatric , 7th Edition, Braunwald, Dennis Kasper, and Stephen Hauser (Hardcover - Mar 6 2008)

iv. Periodicals, Web sites, ... etc

➤ Periodicals

- Annals of Pediatric journal
- Journal of Pediatric

➤ Web sites

- www.pubmed. Com

V. others

- None

9. Signatures

Course Coordinator:	Head of the Department:
Date:	Date:

Course 2: Tropical medicine and gastroenterology










Name of department: Medical Parasitology

Faculty of medicine

Assiut University

2022-2023

1. Course data

-  **Course Title: Tropical medicine and gastroenterology**
-  **Course code: PAR224**
-  **Speciality is Medical Parasitology**
-  **Number of credit points: 4 credit points for didactic (40%) 6 credit points for training (60%) total: 10 (100%)**
-  **Department (s) delivering the course: Tropical medicine and gastroenterology in conjunction with Medical Parasitology**
-  **Coordinator (s): Staff members of Tropical medicine and gastroenterology Department in conjunction with Medical Parasitology Department as annually approved by both departments councils**
-  **Date last reviewed: 9-2022**
-  **Requirements (prerequisites) if any :**
 - **None**
-  **Requirements from the students to achieve course ILOs are clarified in the joining log book.**

2. Course aims

- To make the students able to be familiar with the diagnosis of Tropical medicine and gastroenterology that may be encountered with Medical Parasitology
- To make the students able to deal with Tropical medicine and gastroenterology related parasitic cases safely and effectively as regard their investigations and management.

3. Course intended learning outcomes (ILOs):

A-Knowledge and understanding

ILOs	Methods of teaching/ learning	<i>Methods of Evaluation</i>
<p>A. Describe the etiology, clinical picture, diagnosis and management of the following diseases and clinical conditions:</p> <ul style="list-style-type: none"> - Classify parasites of the Hepatobiliary and GIT system. - Outline the routes of infection of each parasite (To revise their life cycles) - - Outline the complications of each parasite. - Protozoan hepatobiliary and GIT Infection - - Helminthic hepatobiliary and GIT Infection - Principles of the laboratory diagnostic tests for parasitic diseases of hepatobiliary and GIT system. - Outline the Drugs used in the treatment of each parasite. 	<p>-Clinical round</p> <p>-Didactic (lectures, seminars, tutorial)</p> <p>-Case presentation</p> <p>-Hand on workshops,</p>	<p>-Written and oral examination</p> <p>-Log book</p>
B. Mention the principles of basics of Tropical medicine and gastroenterology		
C. State update and evidence based Knowledge of Different Tropical medicine and gastroenterology cases related to parasitic infections		

D. Memorize the facts and principles of the relevant basic supportive sciences related to Tropical medicine and gastroenterology		
E. Mention the basic ethical and medico legal principles relevant to the Tropical medicine and gastroenterology cases.		
F. Mention the basics of quality assurance to ensure good clinical care in his field		
G. Mention the ethical and scientific principles of medical research		
H. State the impact of common health problems in the field of Tropical medicine and gastroenterology on the society.		

B-Intellectual outcomes

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Correlates the facts of relevant basic and clinically supportive sciences with clinical reasoning, diagnosis of common diseases related to Tropical medicine and gastroenterology.	-Clinical rounds -Senior staff experience	-Procedure & case presentation -log book & portfolio
B. Demonstrate an investigatory and analytic thinking (problem solving) approaches to common clinical situations related to Tropical medicine and gastroenterology.		
C. Design and present cases, seminars in common problem.		
D-Formulate management plans and alternative decisions in different situations in the field of the Tropical medicine and gastroenterology.		

C-Practical skills (Patient Care)

ILOs	Methods of teaching/ learning	Methods of Evaluation
<p>A. Obtain proper history and examine patient's samples in caring and respectful behaviors.</p>	<p>-Clinical round -Seminars -Lectures -Tutorial -Case presentation -Hand on workshops, -Clinical rotation in the general medical emergency Unit</p>	<p>-OSCE -log book & portfolio -Clinical exam in Tropical medicine and gastroenterology</p>
<p>B. Order the following noninvasive and invasive diagnostic procedures</p> <ul style="list-style-type: none"> • Routine appropriate Lab investigations related to conditions mentioned in A.A 	<p>-Clinical round with senior staff -Observation Post graduate teaching -Hand on workshops</p>	<p>-OSCE -log book & portfolio -Clinical exam in Tropical medicine and gastroenterology</p>
<p>C. Interpret the following noninvasive and invasive diagnostic procedures</p> <ul style="list-style-type: none"> • Routine appropriate Lab investigations related to conditions mentioned in A.A • Blood picture • Blood chemistry 	<p>-Clinical round with senior staff -Observation Post graduate teaching -Hand on workshops</p>	

D. Perform the noninvasive and invasive diagnostic procedures	-Clinical round with senior staff -Observation Post graduate teaching -Hand on workshops	
E. Prescribe the following noninvasive and invasive therapeutic procedures : • proper diagnosis for conditions mentioned in A.A	- Clinical round with senior staff -Perform under supervision of senior staff	- Procedure presentation - Log book - Chick list
F. Carry out patient management plans for common conditions related to Tropical medicine and gastroenterology mentioned in A.A.	- Clinical round with senior staff - Perform under supervision of senior staff	
G. Use information technology to support patient care decisions and patient education in common clinical situations related to Tropical medicine and gastroenterology.		
H-Provide health care services aimed at preventing health problems related to Tropical medicine and gastroenterology.		
I-Provide patient-focused care in common conditions related to Tropical medicine and gastroenterology , while working with health care professionals, including those from other disciplines like: Conditions mentioned in A.A		

D-General Skills

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Perform practice-based improvement activities using a systematic methodology (audit, logbook)	-Case log -Observation and supervision -Written & oral communication	--Log book & portfolio -Procedure & case presentation
B. Appraises evidence from scientific studies (journal club)	- Case log - Observation and supervision - Written & oral communication - Journal clubs - Discussions in seminars and clinical rounds	--Log book & portfolio -Procedure & case presentation
C. Conduct epidemiological Studies and surveys.		
D. Perform data management including data entry and analysis.		
E. Facilitate learning of junior students and other health care professionals.	-Clinical rounds -Senior staff experience	

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Maintain therapeutic and ethically sound relationship with patients.	-Simulations -Clinical round -Seminars -Lectures -Case presentation -Hand on workshops	-Global rating -Procedure & case presentation -Log book & portfolio -Chick list
G. Elicit information using effective nonverbal, explanatory, questioning, and writing skills.		
H. Provide information using effective nonverbal, explanatory, questioning, and writing skills.		
I. Work effectively with others as a member of a health care team or other professional group.		
J. Present a case in <ul style="list-style-type: none"> Common problems of Tropical medicine and gastroenterology. 		
K. Write a report <ul style="list-style-type: none"> Patients' medical reports 	-Senior staff experience	
L. Council patients and families about <ul style="list-style-type: none"> Conditions mentioned in A.A 	-Perform under supervision of senior staff	

Professionalism

ILOs	Methods of teaching/ learning	Methods of Evaluation
M. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society	-Observation Senior staff experience -Case taking	-Objective structured clinical examination -Patient survey
N. Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices		- 360o global rating
O. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities		-Objective structured clinical examination -360o global rating

Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
P. Work effectively in relevant health care delivery settings and systems.	-Observation -Senior staff experience	-360o global rating
Q. Practice cost-effective health care and resource allocation that does not compromise quality of care.		-Check list evaluation of live or recorded performance
R. Assist patients in dealing with system complexities.		-360o global rating - Patient survey

4. Course contents (topic s/modules/rotation Course Matrix

Time Schedule: First part

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skills	General Skills
	A	B	C	D
Basics of Tropical medicine and gastroenterology	B	A	-	-
- Classify parasites of the Hepatobiliary and GIT system.	A, D-H	A-D	A-I	A-R
- Outline the routes if infection of each parasite(To revise their life cycles	A, D-H	A-D	A-I	A-R
- Outline the complications of each parasite.	A, D-H	A-D	A-I	A-R
- - Protozoan hepatobiliary and GIT Infection	A, D-H	A-D	A-I	A-R
- Helminthic hepatobiliary and GIT Infection	A,C-H	A-D	A-I	A-R
- Principals of the laboratory diagnostic tests for parasitic diseases of hepatobiliary and GIT system.	A, D-H	A-D	A-I	A-R
- Outline the Drugs used in the treatment of each parasite.	A, D-H	A-D	A-I	A-R

5. Course methods of teaching/learning:

1. Didactic (lectures, seminars, tutorial)
2. Seminars
3. Post graduate teaching
4. Observation and supervision
5. Written, practical & oral communication

6. Course methods of teaching/learning: for students with poor achievements

1. Extra Didactic (lectures, seminars, tutorial) according to their needs
2. Extra training according to their needs

7. Course assessment methods:

i. Assessment tools:

1. Written and oral examination
2. Check list
3. log book & portfolio
4. Objective structured clinical examination

ii. Time schedule: At the end of the second part

iii. Marks: 200

8. List of references

i. Lectures notes

- Course notes
- Staff members print out of lectures and/or CD copies

ii. Essential books

Essentials of Medical Parasitology by Apurba Sankar Sastry,
Ltd., 2014

iii. Recommended books

- Principles of Tropical medicine and gastroentrology , 7th Edition, Braunwald, Dennis Kasper, and Stephen Hauser (Hardcover - Mar 6 2008)

iv. Periodicals, Web sites, ... etc

➤ Periodicals

- Annals of Tropical medicine and gastroentrology journal
- Journal of Tropical medicine and gastroentrology

➤ Web sites

- www.pubmed. Com

V. others

- None

9. Signatures

Course Coordinator:	Head of the Department:
Date:	Date:

Second Part

Course 3: Parasitology advanced










Department of Parasitology

Faculty of medicine

Assiut University

2022-2023

1. Course data

-  **Course Title: Parasitology**
-  **Course code: PAR208A**
-  **Speciality: Parasitology**
-  **Number of credit point: Didactic 24, (22.4 %), practical 96 (77.6 %), total 120 CP**
-  **Department (s) delivering the course : Department of Medical Parasitology**
-  **Date last reviewed: 9-2022**
-  **Coordinators:**
 - **Principle course coordinator: Prof.Dr/ Doaa Abdel Hafeez Yones**
 - **Assistant coordinator: Dr/ Tasneem Ismail**
-  **Admission Requirements:**
-  **Admission Requirements (prerequisites): non**

Requirements from the students to achieve course ILOs are clarified in the joining log book.

2. Course Aims

- To be competent to function as specialist in Parasitology. This will require acquisition of a sufficient level of skill in the separate disciplines of Parasitology, to serve as a consultant within the context of a regional or community hospital.
- Develop reasonable and complete differential diagnoses for parasitology cases based on the available clinical information, gross and microscopic features, and current published literatures and when to resort to special techniques.
- Describe the etiology, pathogenesis, structural and functional manifestations of different parasitic diseases that affect body organs and to be able to place specific diseases in context with their prevalence, morbidity and mortality in society as a whole.
- Relate pathologic and clinical manifestations and behavior of different parasites to their response to treatment.
- Be able to draw essential conclusions from gross and microscopic findings and to write a final parasitology report.

3. Intending learning outcomes (ILOs)

A. Knowledge and understanding

Unit (1): Medical Helminthology

ILOs	Methods of teaching/ learning	Methods of Evaluation
A- Describe common conditions and diseases related to: - trematodes - cestodes - nematodes	-Lectures -Books -journals -Tutorials - Seminars	Written and oral examination Log book
B. Mention the following factual basics and principles essential to the course topics.	Didactic	Log book
C. State update and evidence based Knowledge related to the course topics mentioned above.	Didactic	Log book
D. Memorize the facts and principles of the other relevant basic and clinically supportive sciences related to speciality including: microbiology, immunology, genetics	Didactic	Log book
E. Mention the basic ethical and medico-legal principles relevant to the speciality.		
F. Mention the basics of quality assurance to ensure good professional skills in his field.		
G. Mention the ethical and scientific principles of medical research		

Unit 2: Medical protozoology

ILOs	Methods of teaching/ Learning	Methods of Evaluation
A- Describe common clinical conditions and diseases related to protozoology Including: <ul style="list-style-type: none"> • Amoebic induced diseases • Flagellates induced diseases • Apicomplexa induced disease 	-Lectures -Books -journals -Tutorials - Seminars -Case study	Logbook Written, oral and practical examination
B. Mention the following factual basics and principles essential to course topics	Didactic	Oral written exam
C. State update and evidence based Knowledge related to course topics	Didactic	Oral written exam
D. Memorize the facts and principles of the other relevant basic and clinically supportive sciences related to speciality including: topics of the course		
E. Mention the basic ethical and medicolegal principles relevant to the parasitologist.		
F. Mention the basics of quality assurance to ensure good professional skills in his field.		
G. Mention the ethical and scientific principles of medical research		
H. State the impact of common problems related to the field of Parasitology on the society and how good practice can improve these problems.	Didactic	Oral written exam

Unit3: Medical Entomology

<i>ILOs</i>	<i>Methods of teaching/ Learning</i>	<i>Methods of Evaluation</i>
A- Describe common clinical conditions and diseases caused or transmitted by medical Entomology including: <ul style="list-style-type: none"> • Introduction to medical entomology • Mosquitoes • Flies • Fleas and bugs • Lice • Ticks and mites 	-Lectures -Books -journals -Tutorials - Seminars -Case study Departmental teaching sessions: These occur on a regular basis	Log book Written, l and oral examination Log book (attendance of at least 60% of lectures Attendance of at least 60% of seminars and journal clubs Checklist -log book – Procedure/case presentation
B. Mention the following factual basics and principles essential topics of the course	Didactic	Log book Written, and oral examination
C. State update and evidence based Knowledge related to the course:	Didactic	Log book Written, and oral examination
D. Memorize the facts and principles of the other relevant basic and clinically supportive sciences related to speciality including:	Didactic	Log book Written, l and oral examination
E. Mention the basic ethical and medicolegal principles relevant to the medical entomology	Didactic	Log book Written, l and oral examination
F. Mention the basics of quality assurance to ensure good professional skills in his field.		
G. Mention the ethical and scientific principles of medical research	Didactic	Log book Written, l and oral examination
H. State the impact of common problems related to the field of speciality on the society and how good practice can improve these problems.	Didactic	Log book

Unit4: Immunoparasitology

ILOs	Methods of teaching/ Learning	Methods of Evaluation
A- Describe common clinical conditions and diseases related to Immunoparasitological reactions including: <ul style="list-style-type: none"> Immunoparasitological reactions to helminthes Immunoparasitological reactions to protozoa Immunoparasitological reactions to entomology (arthropods) General immunological reactions and techniques. 	-Lectures -Books -journals -Tutorials - Seminars -Case study Departmental teaching sessions: These occur on a regular basis	Log book Written, and oral examination Log book (attendance of at least 60% of lectures) Attendance of at least 60% of seminars and journal clubs Check list -log book & portfolio Procedure/case presentation
B. Mention the following factual basics and principles essential to the course topics.	Didactic	Logbook
C. State update and evidence based Knowledge related to the course topics	Didactic	Logbook
D. Memorize the facts and principles of the other relevant basic and clinically supportive sciences related to speciality.	Didactic	Log book Written, and oral examination
E. Mention the basic ethical and medicolegal principles relevant to the immunoparasitology	Didactic	Log book
F. Mention the basics of quality assurance to ensure good professional skills in his field.	Didactic	Log book Written, and oral examination
G. Mention the ethical and scientific principles of medical research	Didactic	Log book
H. State the impact of common problems related to the field of Parasitology on the society and how good practice can improve these problems.	Didactic	Log book

Unit5: Laboratory techniques

ILOs	Methods of teaching/ Learning	Methods of Evaluation
<p>A- Describe common conditions and steps related Laboratory techniques in Parasitology including</p> <ul style="list-style-type: none"> • General Laboratory techniques • Laboratory techniques of helminthes • Laboratory techniques of protozoa • Laboratory techniques of entomology 	<p>-Lectures -Books -Tutorials - Seminars -Case study Departmental teaching sessions: These occur on a regular basis</p>	<p>Log book Written, l and oral examination Log book (attendance of at least 60% of lectures Attendance of at least 60% of seminars and journal clubs Chick list -log book & portfolio -Procedure/case presentation</p>
B. Mention the following factual basics and principles essential to the course	Didactic	log book & portfolio -Procedure/case presentation
C. State update and evidence based Knowledge related to the course topics	Didactic	log book & portfolio -Procedure/case presentation
D. Memorize the facts and principles of the other relevant basic and clinically supportive sciences related to laboratory techniques	Didactic	log book & portfolio -Procedure/case presentation
E. Mention the basic ethical and medicolegal principles relevant to the speciality.	Senior Staff experience	log book
F. Mention the basics of quality assurance to ensure good professional skills in his field.	Senior Staff experience	Log book
G. Mention the ethical and scientific principles of medical research	Senior Staff experience Journal clubs	Log book
H. State the impact of common problems related to the field of Parasitology on the society and how good practice can improve these problems.	Senior Staff experience Seminars Tutorials	Log book

B-Intellectual outcomes for the whole course

<i>ILOs</i>	<i>Methods of teaching/ learning</i>	<i>Methods of Evaluation</i>
A- Correlates the facts of relevant basic and clinically supportive sciences with conditions and diseases appropriate to Parasitology in clinical reasoning, diagnosis and management of various diseases and as ability to generate a differential diagnosis, explain clinical-pathologic correlations, and evaluate scientific and clinical laboratory data.	Senior staff experience Departmental teaching sessions:	logbook
B-Demonstrate an investigatory and analytic thinking (problem solving) approaches to conditions relevance to course topics		
C-Design and present audits, cases, seminars in common problems related to parasitology	Seminars Case presentation	logbook
D. Formulate management plans and alternative decisions in different situations in the field of the Parasitology.	Seminars Case presentation	logbook

C. Practical skills for the whole course

ILOs	Methods of teaching/ learning	Methods of Evaluation
<p>A. Perform the following basic lab skills essential to the course:</p> <ul style="list-style-type: none"> - possessing Sufficient manual dexterity to perform dissection safely and accurately, without damage to parasite's tissues. - Principles of macroscopic description. - Principles of microscopic description. - Special techniques. <ul style="list-style-type: none"> -Recognizing histological features of of different parasites - Preparation and staining techniques for common specimen types - Correct specimen orientation. - Open fresh specimen. - Obtaining fresh tissue for touch preparation, freezing, electron microscopy etc. - 	<p>supervision Written & oral communication. Discussions in seminars Scientific meetings participate in seminars Routine work: The most important learning experience will be day-to-day work. Trainees will be closely supervised during training. This close supervision allows for frequent short episodes of teaching.</p>	<p>Log book Practical and oral examination</p>
<p>B. Use instruments and devices in evaluation of</p> <ul style="list-style-type: none"> - Setting up a microscope with ergonomic safety and operate it effectively. - Digital camera and photography <ul style="list-style-type: none"> - The use of departmental protocols for the handling; of specimens including identification, documentation, entering patient data on to computer and measures to prevent specimen mix-ups. - Training in the Laboratory aspects of the Fixation, preparation, staining description of specimens 	<p>Routine work: The most important learning experience will be day-to-day work. Trainees will be closely supervised during training. This close supervision allows for frequent short episodes of teaching.</p>	<p>Log book Practical and oral examination</p>
<p>C. Interpret the following non invasive/invasive</p>		

<p>procedures/ experiments</p> <ul style="list-style-type: none"> - Correct interpretation of parasitological features in the context of available clinical information and other laboratory findings. - Data from molecular analyses in the context of the clinical situation and morphological appearances when undertaking diagnostic parasitology - Ability to source and request appropriate molecular tests, as clinically required. - Developing the practice of integrating clinical, radiological and pathological data in formulating accurate parasitological diagnoses 		
<p>D. Perform the following non invasive/invasive procedures/ experiments</p> <p>Training in the Laboratory aspects of the Fixation, preparation, staining of specimens</p> <ul style="list-style-type: none"> - macroscopic and microscopic examination of various samples and specimens - Recognizing and accurately diagnose a broad range of common parasitic conditions on both stool and tissues materials . - Providing appropriate strategies for biopsy (histological and cytological), tissue handling, and reporting to include the features of prognostic and therapeutic importance. 	<p>Routine work: The most important learning experience will be day-to-day work. Trainees will be closely supervised during training. This close supervision allows for frequent short episodes of teaching.</p>	<p>Log book Practical and oral examination</p>
<p>E. Write and evaluate competently all forms of professional reports related to parasitology as</p> <ul style="list-style-type: none"> - Final gross and microscopic report with suitable summaries - Creating a final report that incorporates both morphological and molecular data where appropriate 	<p>Senior staff experience</p> <ul style="list-style-type: none"> -Cases presentation participate in cases multi-header microscope seminars 	<p>Log book Practical and oral examination</p>
<p>F. Perform the following basic experiments in related basic sciences to be utilized in the research work:</p> <ul style="list-style-type: none"> - Routine tissue processing: fixation and staining. 	<p>Senior staff experience</p> <ul style="list-style-type: none"> -Cases presentation participate in cases multi-header microscope seminars 	<p>Log book Practical and oral examination</p>

G. Use information technology to support decisions in common situations related to parasitology	-Cases presentation participate in cases multi-header microscope seminars	Log book Practical and oral examination
H. Develop and carry out plans for performing experiments related to Parasitological diagnosis	participate in cases multi-header microscope seminars	Log book Practical and oral examination
I. Counsel and educate students, technicians and junior staff, in the lab about conditions related to Parasitology including handling of samples, devices, safety and maintenance of laboratory equipment.	participate in cases multi-header microscope seminars	Log book Practical examination
J. Share in providing health care services aimed solving health problems and better understanding of the normal structure and function.	Senior staff experience seminars	Log book

D. General Skills for the whole course

Practice-Based Learning and Improvement

ILOs	Methods of teaching/ Learning	Methods of Evaluation
A. Perform practice-based improvement activities using a systematic methodology (audit, logbook): Sample processing, microscopic examination,	Log book and supervision Written & oral communication Journal clubs	Log book Portfolios Procedure/case presentation
B. Appraises evidence from scientific studies: Researches and evidence based practice and internet updates.	Discussions in seminars Scientific meetings	
C. Participate in one audit or survey related to the course		
D. Perform data management including data entry and analysis.		
E. Facilitate learning of junior students and other health care professionals.		

Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Maintain ethically sound relationship with others.	Observation & supervision	Simulation Record review (report)
G. Elicit information using effective nonverbal, explanatory, questioning, and writing skills.		
H. Provide information using effective nonverbal, explanatory, questioning, and writing skills.		
I. Work effectively with others as a member of a health care team or other professional group.		
J. Present a case in seminars and scientific meetings...		
K. Write a report in gross, microscopic immunohistochemical and final diagnostic report...		

Professionalism

<i>ILOs</i>	<i>Methods of teaching/ learning</i>	<i>Methods of Evaluation</i>
L-. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society	Observation & supervision Educational prescription	Objective structured practical examination 2.Student survey
M. Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices	Didactic (lectures, seminars, tutorial)	
N. Demonstrate sensitivity and responsiveness to others' culture, age, gender, and disabilities		

Systems-Based Practice

ILOs	Methods of teaching/learning	Methods of Evaluation
O. Work effectively in relevant health care delivery settings and systems.	Observation & supervision Didactic Didactic (lectures, seminars, tutorial Educational prescription	1-student survey 2.portfolios
P. Practice cost-effective health care and resource allocation that does not compromise quality of care.		
Q -Assist patients in dealing with system complexities.		

4. Course contents (topic s/modules/rotation Course Matrix

Time Schedule: Second part

Topic	Covered ILOs			
	Knowledge	Intellectual	Practical skill	General Skills
Unit 1: Medical helminthology	A-G	A-D	A-J	A-P
Unit 2: Medical protozoology	A-H	A-D	A-J	A-Q
Unit 3: Medical entomology	A-H	A-D	A-J	A-Q
Unit 4: Immunoparasitology	A-H	A-D	A-J	A-Q
Unit 5: Laboratory techniques	A-H	A-D	A-J	A-Q

5. Course Methods of teaching/learning:

1. Lectures
2. Course notes
3. Multihead microscopic slide seminars
4. Scientific meetings...
5. Private study

6. Course Methods of teaching/learning: for students with poor achievements

1. Extra Didactic (lectures, seminars, tutorial) according to their needs
- 2.** Extra training according to their needs

7. Course assessment methods:

i. Assessment tools: ...log book

- written, oral , practical examination and log book
- Examination MCQ – A standardized examination using multiple-choice questions (MCQ). The in-training examination and written board examinations are examples.
- Examination Oral – Uses structured realistic cases and patient case protocols in an oral examination to assess clinical decision-making.

ii. Time schedule: At the end of second part

iii. Marks 1200

8. List of references

i. Lectures notes

Course notes

Staff members print out of lectures and/or CD copies

ii. Essential books:

- Lynne Shore Garcia, David A. Bruckner (2014):
Diagnostic Medical Parasitology 6th Edition. Hodder
Arnold press <https://www.amazon.com/>
- Clinical parasitology; Robert Hutchison; Harry Rainy; 21st
edition; 2003

iii. Recommended books

- parasites, 7th Edition, Braunwald, Dennis Kasper, and
Stephen Hauser (Hardcover - Mar 6 2008)

iv. Periodicals, Web sites, ... etc

- Human parasitology
- Journal of Tropical Med and Parasitology
- *Journal of Parasitology*
- *Journal of Parasite Immunology*.
- Journal of Egyptian Society of parasitology

v. Web sites

- <http://www.parasiticdiseases.com/>
- [http://www.medscape.com/infectiousdiseases.home](http://www.medscape.com/infectiousdiseases/home)

9. Signatures

Course Coordinator:	Head of the Department:
Date:	Date:

ANNEX 2

Program Academic Reference Standards (ARS)

1- Graduate attributes for basic master degree

The Graduate (master degree years of study) must:

- 1-** Have the capability to be a scholar, understanding and applying basics, methods and tools of scientific research and medical audit in the field of Parasitology.
- 2-** Appraise and utilise scientific knowledge to continuously update and improve clinical practice in related Parasitology.
- 3-** Acquire sufficient medical knowledge in the basic biomedical, clinical, behavioural and clinical sciences, medical ethics and medical jurisprudence and apply such knowledge in patient care in the field of Parasitology.
- 4-** Dealing with common problems and health promotion using updated information in the field of Parasitology.
- 5-** Identify and share to solve health problems in Parasitology.
- 6-** Acquire all competencies –including the use of recent technologies- that enable him to provide safe, scientific, and ethical care including update use of new technology in the Parasitology field.
- 7-** Demonstrate interpersonal and communication skills that ensure effective information exchange with other health professions, the scientific community, junior students and the public.
- 8-** Function as supervisor, and trainer in relation to colleagues, medical students and other health professions.
- 9-** Acquire decision making capabilities in different situations related to his field of practice.
- 10-** Show responsiveness to the larger context of the related health care system, including e.g. the organisation of health care, partnership with health care providers and managers, practice of cost-effective health care, health economics, and resource allocations.
- 11-** Be aware of public health and health policy issues and share in system-based improvement of his practice and related health care.
- 12-** Show appropriate attitudes and professionalism.
- 13-** Demonstrate skills of lifelong learning and maintenance of competence and ability for continuous medical education and learning in subsequent stages in the Parasitology or one of its subspecialties.

2- Competency based Standards for basic master degree graduates

2.1- Knowledge and understanding

By the end of the program, the graduate should demonstrate satisfactory knowledge and understanding of

2-1-A- Established basic, biomedical, clinical, epidemiological and behavioral sciences related to Parasitology.

2-1-B- The relation between practice in Parasitology and the welfare of society.

2-1-C- Up to date and recent developments in common problems related to the field of Parasitology.

2-1-D- Ethical and medicolegal principles relevant to practice in the Parasitology field.

2-1-E -Quality assurance principles related to the good medical practice in the Parasitology field.

2-1-F- Ethical and scientific basics of medical research.

2.2- Intellectual skills:

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

2-2-A- Correlation of different relevant sciences in the problem solving and management of common problems of the Parasitology.

2-2-B- Problem solving skills based on data analysis and evaluation (even in the absence of some) for common situations related to Parasitology.

2.2- C- Demonstrating systematic approach in studying common themes or problems relevant to the Parasitology field.

2-2-D- Making alternative decisions in different situations in the field of Parasitology.

2.3-Practical skills/clinical skills

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

2-3-A - Provide practical and or laboratory services that can help patient care, solving health problems and better understanding of different parasitic diseases.

2-3-B- Demonstrate practical / laboratory skills relevant to Parasitology.

2-3- C- Write and comment on reports for situations related to the field of Parasitology.

2.4- General skills

***By the end of the program, the graduate should be able to
Competency-based outcomes for practice-based learning and
improvement***

2-4-A- Demonstrate practice-based learning and improvement skills that involves investigation and evaluation of their own practice, appraisal and assimilation of scientific evidence, improvements in provided services and risk management.

2-4-B- Use all information sources and technology to improve his practice.

2-4-C- Demonstrate skills of teaching and evaluating others.

***Competency-based objectives for interpersonal and communication
Skills***

2-4-D- Demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their families, lab technical staff and other health professionals.

Competency-based objectives for Professionalism

2-4-E- Demonstrate professionalism behaviors, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.

Competency-based objectives for Systems-based Practice

2-4-F- Demonstrate an awareness of and responsiveness to the larger context and system of health care and academic services and the ability to effectively use system resources to provide care that is of optimal value.

2-4-G- Demonstrate skills of effective time management.

2-4-H- Demonstrate skills of self and continuous learning.

Annex 3, Methods of teaching/learning

Annex 3, Methods of teaching/learning

	Medical knowledge	Practice-based learning/Improvement	Interpersonal and communication skills	Professionalism	Systems-based practice
Didactic (lectures, seminars, tutorial)	X		X	X	X
journal club,	X	X			
Educational prescription	X	X	X	X	X
Present a case (true or simulated) in a grand round	X	X	X	X	
Observation and supervision		X	X	X	X
conferences	X	X	X		X
Written assignments	X	X	X	X	X
Oral assignments	X	X	X	X	X

Teaching methods for knowledge

- ❖ Didactic (lectures, seminars, tutorial)
- ❖ journal club
- ❖ Critically appraised topic
- ❖ Educational prescription (a structured technique for following up on clinical questions that arise during rounds and other venues).
- ❖ Present a case (true or simulated) in a grand round
- ❖ Others

Teaching methods for patient care

- ❖ Observation and supervision /Completed tasks procedure/case logs
- ❖ On-the-job” training without structured teaching is not sufficient for this skill (checklists).
- ❖ Simulation is increasingly used as an effective method for skill/teamwork training.

Teaching methods for other skills

- ❖ Written communication (e.g., orders, progress note, transfer note, discharge summary, operative reports, and diagnostic reports).
- ❖ Oral communication (e.g., presentations, transfer of care, interactions with patients, families, colleagues, members of the health care team) and/or non verbal skills (e.g., listening, team skills)
- ❖ Professionalism, including medical ethics, may be included as a theme throughout the program curriculum that includes both didactic and experiential components (e.g., may be integrated into already existing small group discussions of vignettes or case studies and role plays, computer-based modules) and may be modeled by the faculty in clinical practice and discussed with the resident as issues arise during their clinical practice.

Annex 4, Assessment methods

Annex 4, competency evaluation methods for residency training.

	Medical knowledge	Practice-based learning/Improvement	Interpersonal and communication skills	Professionalism	Systems-based practice
Record review	X		X	X	X
Checklist			X		
Global rating	X	X	X	X	X
Simulations	X	X	X	X	
Portfolios	X	X	X		
Standardized oral examination	X		X		X
Written examination	X				X
Procedure/case log	X				

Annex 4, Glossary of Master Degree doctors assessment methods

- ❖ Record Review – Abstraction of information from patient records, such as medications or tests ordered and comparison of findings against accepted patient care standards.
- ❖ Chart Stimulated Recall – Uses the MSc doctor's patient records in an oral examination to assess clinical decision-making.
- ❖ Mini clinical evaluation: Evaluation of Live/Recorded Performance (single event) – A single resident interaction with a patient is evaluated using a checklist. The encounter may be videotaped for later evaluation.
- ❖ Standardized Patients (SP) – Simulated patients are trained to respond in a manner similar to real patients. The standardized patient can be trained to rate MSc doctor's performance on checklists and provide feedback for history taking, physical examination, and communication skills. Physicians may also rate the MSc doctor's performance.
- ❖ Objective Structured Clinical Examination (OSCE) – A series of stations with standardized tasks for the MSc doctors to perform. Standardized patients and other assessment methods often are combined in an OSCE. An observer or the standardized patient may evaluate the MSc doctors.
- ❖ Procedure or Case Logs – MSc doctors prepare summaries of clinical experiences including clinical data. Logs are useful to document educational experiences and deficiencies.
- ❖ PSQs – Patients fill out Patient Survey questionnaires (PSQs) evaluating the quality of care provided by a MSc doctors.

- ❖ Case /problems – assess use of knowledge in diagnosing or treating patients or evaluate procedural skills.
- ❖ Models: are simulations using mannequins or various anatomic structures to assess procedural skills and interpret clinical findings. Both are useful to assess practice performance and provide constructive feedback.
- ❖ 360 Global Rating Evaluations – MSc doctors, faculty, nurses, clerks, and other clinical staff evaluate MSc doctors from different perspectives using similar rating forms.
- ❖ Portfolios – A portfolio is a set of project reports that are prepared by the MSc doctors to document projects completed during the MSc study years. For each type of project standards of performance are set. Example projects are summarizing the research literature for selecting a

treatment option, implementing a quality improvement program, revising a medical student clerkship elective, and creating a computer program to track patient care and outcomes.

- ❖ Examination MCQ – A standardized examination using multiple-choice questions (MCQ). The in-training examination and written board examinations are examples.
- ❖ Examination Oral – Uses structured realistic cases and patient case protocols in an oral examination to assess clinical decision-making.
- ❖ Procedure or Case Logs – MSc doctors prepare summaries of clinical experiences including clinical data. Logs are useful to document educational experiences and deficiencies.
- ❖ PSQs – Patients fill out Patient Survey questionnaires (PSQs) evaluating the quality of care provided by MSc doctors.

Annex 5, Program evaluation tools

By whom	Method	sample
Quality Assurance Unit	Reports Field visits	#
External Evaluator (s):According to department council External Examiner (s): According to department council	Reports Field visits	#
Stakeholders	Reports Field visits questionnaires	#
Senior students	questionnaires	#
Alumni	questionnaires	#

Annex 6, Program Correlations:

مصفوفة توافق المعايير القومية القياسية العامة لبرامج الماجستير مع المعايير الأكاديمية
□ المعتمدة من كلية الطب □ جامعة أسيوط لدرجة الماجستير في الطفيليات الطبية

I-General Academic reference standards (GARS) for postgraduates versus Program ARS

1- Graduate attributes

NAQAEE General ARS for Postgraduate Programs	Faculty ARS
1- إجادة تطبيق أساسيات و منهجيات البحث العلمي واستخدام أدواته المختلفة	1- Have the capability to be a scholar, understanding and applying basics, methods and tools of scientific research and medical audit in parasitology
2- تطبيق المنهج التحليلي واستخدامه في مجال التخصص	2- Appraise and utilise scientific knowledge to continuously update and improve clinical practice in parasitology.
3- تطبيق المعارف المتخصصة و دمجها مع المعارف ذات العلاقة في ممارسته المهنية	3- Acquire sufficient medical knowledge in the basic biomedical, clinical, behavioural and clinical sciences, medical ethics and medical jurisprudence and apply such knowledge in patient care in the field of Parasitology.
4- إظهار وعيا بالمشاكل الجارية و الرؤى الحديثة في مجال التخصص	4- Dealing with common problems and health promotion using updated information in the field of Parasitology.
5- تحديد المشكلات المهنية و إيجاد حلول لها	5- Identify and share to solve health problems in his Parasitology field.
6- إتقان نطاق مناسب من المهارات المهنية المتخصصة، واستخدام الوسائل التكنولوجية المناسبة بما يخدم ممارسته المهنية	6- Acquire all competencies that enable him to provide safe, scientific, ethical care including update use of new technology in the parasitology field.

1- Graduate attributes (Continuous)

NAQAAE General ARS for Postgraduate Programs	Faculty ARS
7- التواصل بفاعلية و القدرة على قيادة فرق العمل	7- Demonstrate interpersonal and communication skills that ensure effective information exchange with other health professions, the scientific community, junior students and the public. 8- Function as supervisor, and trainer in relation to colleagues, medical students and other health professions.
8- اتخاذ القرار في سياقات مهنية مختلفة	9- Acquire decision making capabilities in different situations related to Parasitology field of practice.
9- توظيف الموارد المتاحة بما يحقق أعلى استفادة و الحفاظ عليها	10- Show responsiveness to the larger context of the related health care system, including e.g. the organisation of health care, partnership with health care providers and managers, practice of cost-effective health care, health economics, and resource allocations.
10- إظهار الوعي بدوره في تنمية المجتمع و الحفاظ على البيئة في ضوء المتغيرات العالمية و الإقليمية	11- Be aware of public health and health policy issues and share in system-based improvement of Parasitology practice and related health care.
11- التصرف بما يعكس الالتزام بالنزاهة و المصداقية و الالتزام بقواعد المهنة	12- Show appropriate attitudes and professionalism.
12- تنمية ذاته أكاديميا و مهنيا و قادرا علي التعلم المستمر	13- Demonstrate skills of lifelong learning and maintenance of competence and ability for continuous medical education and learning in subsequent stages in Parasitology or one of its subspecialties.

2-Academic standards

NAQAAE General ARS for Postgraduate Programs	Faculty ARS
2-1-أ-النظريات و الأساسيات المتعلقة بمجال التعلم وكذا في المجالات ذات العلاقة.	2.1. A - Established basic, biomedical, clinical, epidemiological and behavioral sciences related to parasitology
2-1-ب-التأثير المتبادل بين الممارسة المهنية وانعكاسها علي البيئة.	2.1. B- The relation between practice in parasitology and the welfare of society.
2-1-ج-التطورات العلمية في مجال التخصص.	2.1. C- Up to date and recent developments in common problems related to the parasitology
2-1-د-المبادئ الأخلاقية و القانونية للممارسة المهنية في مجال التخصص.	2.1. D- Ethical and medicolegal principles relevant to practice in the parasitology field.
2-1-هـ- مبادئ و أساسيات الجودة في الممارسة المهنية في مجال التخصص	2.1. E- Quality assurance principle related to the good medical practice in the parasitology
2-1-و- أساسيات وأخلاقيات البحث العلمي	2.1. F- Ethical and scientific basics of medical research.

2-Academic standards (Continuous)

NAQAAE General ARS for Postgraduate Programs	Faculty ARS
2-2-أ- تحليل و تقييم المعلومات في مجال التخصص والقياس عليها لحل المشاكل	2.2. A- Correlation of different relevant sciences in the problem solving and management of common problems of the parasitology 2.2. B- Problem solving skills based on data analysis and evaluation (even in the absence of some) for common situations related to parasitology.
2-2-ب- حل المشاكل المتخصصة مع عدم توافر بعض المعطيات	2.2. B- Problem solving skills based on data analysis and evaluation (even in the absence of some) for common situations related to parasitology
2-2-ج- الربط بين المعارف المختلفة لحل المشاكل المهنية	2.2. A- Correlation of different relevant sciences in the problem solving and management of common problems of parasitology
2-2-د- إجراء دراسة بحثية و /أو كتابة دراسة علمية منهجية حول مشكلة بحثية	2.2. C- Demonstrating systematic approach in studding common themes or problems relevant to the parasitology
2-2-هـ- تقييم المخاطر في الممارسات المهنية في مجال التخصص	2.4. A- Demonstrate practice-based learning and improvement skills that involves investigation and evaluation of their own practice, appraisal and assimilation of scientific evidence, improvements in provided services and risk management.
2-2-و- التخطيط لتطوير الأداء في مجال التخصص	2.4. A- Demonstrate practice-based learning and improvement skills that involves investigation and evaluation of their own practice, appraisal and assimilation of scientific evidence, improvements in provided services and risk management.

2-Academic standards (Continuous)

NAQAEE General ARS for Postgraduate Programs	Faculty ARS
2-2-ز - اتخاذ القرارات المهنية في سياقات مهنية متنوعة	2.2. D- Making alternative decisions in different situations in the field of parasitology
2-3-أ - إتقان المهارات المهنية الأساسية و الحديثة في مجال التخصص	2.3.A- Provide practical and or laboratory services that can help patient care ,solving health problems and better understanding of the normal structure and function. 2.3. B- Demonstrate practical / laboratory skills relevant to parasitology
2-3-ب - كتابة و تقييم التقارير المهنية	2.3. C- Write and comment on reports for situations related to the parasitology field
2-3-ج - تقييم الطرق و الأدوات القائمة في مجال التخصص	2.3.A- Provide practical and or laboratory services that can help patient care ,solving health problems and better understanding of the normal structure and function. 2.3. B- Demonstrate practical / laboratory skills relevant to Parasitology

2-Academic standards (Continuous)

NAQAAE General ARS for Postgraduate Programs	Faculty ARS
2-4-أ-التواصل الفعال بأنواعه المختلفة	2.4. D- Demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their families, lab technical staff and other health professionals.
2-4-ب- استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية	2.4. A- Demonstrate Practice-Based learning and Improvement skills that involves investigation and evaluation of their own practice, appraisal and assimilation of scientific evidence, improvements in provided services and risk management. 2.4. B- Use all information sources and technology to improve his practice.
2-4-ج- التقييم الذاتي وتحديد احتياجاته التعليمية الشخصية	2.4. A- Demonstrate Practice-Based learning and Improvement skills that involves investigation and evaluation of their own practice, appraisal and assimilation of scientific evidence, improvements in provided services and risk management. 2.4. B- Use all information sources and technology to improve his practice. 2.4. E-Demonstrate Professionalism behaviors, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.

2-Academic standards (Continuous)

NAQAAE General ARS for Postgraduate Programs	Faculty ARS
2-4-2-د- استخدام المصادر المختلفة للحصول على المعلومات و المعارف	2.4. A- Demonstrate Practice-Based learning and Improvement skills that involves investigation and evaluation of their own practice, appraisal and assimilation of scientific evidence, improvements in provided services and risk management.
2-4-2-هـ- وضع قواعد ومؤشرات تقييم أداء الآخرين	2.4. C- Demonstrate skills of teaching and evaluating others.
2-4-2-و- العمل في فريق ، وقيادة فرق في سياقات مهنية مختلفة	2.4. F- Demonstrate an awareness of and responsiveness to the larger context and system of health care and academic services and the ability to effectively use system resources to provide care that is of optimal value.
2-4-2-ز- إدارة الوقت بكفاءة	2.4. G- Demonstrate skills of effective time management.
2-4-2-ح- التعلم الذاتي و المستمر	2.4. H- Demonstrate skills of self and continuous learning.

Comparison between ARS & ILOS for master degree

In Parasitology

<i>(ARS)</i>	<i>(ILOS)</i>
<p><u>2-1- Knowledge and understanding</u></p> <p>2-1-A- Established basic, biomedical, clinical, epidemiological and behavioral sciences related to parasitology</p>	<p><u>2-1- Knowledge and understanding</u></p> <p>2-1-A- Explain the essential facts and principles of relevant basic sciences including Histology related to parasitology</p> <p>2-1-B- Mention essential facts of clinical supportive sciences related to parasitology</p> <p>2-1-C- Demonstrate sufficient knowledge of the main subjects related to parasitology</p>
<p>2-1-B The relation between practice in the parasitology and the welfare of society.</p>	<p>2-1-H- State the impact of common problems related to the field of Parasitology on the society and how good practice can improve these problems.</p>
<p>2-1-C- Up to date and recent developments in common problems related to the field of parasitology</p>	<p>2-1-C- Demonstrate sufficient knowledge of the main subjects related to parasitology</p> <p>2-1-D- Give the recent and update developments in the most important themes related to parasitology</p>
<p>2-1-D- Ethical and medicolegal principles relevant to practice in the parasitology.</p>	<p>2-1-E- Mention the basic ethical and medicolegal principles that should be applied in practice and are relevant to the field of parasitology.</p>

2-1-E- Quality assurance principles related to the good medical practice in the parasitology field.	2-1-F- Mention the basics and standards of quality assurance to ensure good practice in the field of. parasitology
2-1-F- Ethical and scientific basics of medical research.	2-1-G- Mention the ethical and scientific principles of medical research methodology.

continuous (ARS)	continuous (ILOs)
<u>2-2- Intellectual skills:</u> 2-2-A- Correlation of different relevant sciences in the problem solving and management of common problems of the Parasitology.	<u>2-2- Intellectual skills:</u> 2-2-A- Correlate the relevant facts of relevant basic and clinically supportive sciences with reasoning, diagnosis and management of common problems of the Parasitology.
2-2-B- Problem solving skills based on data analysis and evaluation (even in the absence of some) for common situations related to Parasitology.	2-2-B- Demonstrate an investigatory and analytic thinking approach (problem solving) to common clinical or practical situations related to Parasitology.
2-2-C- Demonstrating systematic approach in studying common themes or problems relevant to the Parasitology field.	2-2-C- Design and /or present a case or review (through seminars/journal clubs.) in one or more of common themes or problems relevant to the Parasitology.
2-2-D Making alternative decisions in different situations in the field of the Parasitology.	2-2-D- Formulate management plans and alternative decisions in different situations in the field of the Parasitology.
<u>2-3- Practical skills:</u> 2-3-A- Provide practical and or laboratory services that can help patient care ,solving health problems and better understanding of the normal structure and function. 2-3-B- Demonstrate practical/laboratory skills relevant to Parasitology.	<u>2/3/1/Practical skills)</u> 2-3-1-A- Demonstrate competently relevant laboratory skills related to Parasitology. 2-3-1-B- Use the up to date technology for the conditions related to Parasitology. 2-3-1-C- Develop plans for performing experiments related to Parasitology. 2-3-1-D- Carry out common experiments related to Parasitology. 2-3-1-E- Counsel and educate students,

	<p>technicians and junior staff, in the lab about conditions related to Parasitology ; including handling of samples, devices, safety and maintenance of laboratory equipments.</p> <p>2-3-1-F- Use information technology in some of the situations related to Parasitology.</p> <p>2-3-1-G- Share in providing health care services aimed supporting patient care ,solving health problems and better understanding of the normal structure and function.</p>
<p>2-3-C- Write and comment on reports for situations related to the field Parasitology.</p>	<p>2-3-1-H Write competently all forms of professional reports related to Parasitology (lab reports, experiments reports,).</p>

continuous (ARS)	continuous (ILOs)
<u>2-4- General skills</u> 2-4-A- Demonstrate practice-based learning and improvement skills that involves investigation and evaluation of their own practice, appraisal and assimilation of scientific evidence, improvements in provided services and risk management	<u>2/3/2 General skills</u> 2-3-2-A- Perform practice-based improvement activities using a systematic methodology (share in audits and risk management activities and use logbooks). 2-3-2-B- Appraises evidence from scientific studies. 2-3-2-C- Conduct epidemiological studies and surveys.
2-4-B- Use all information sources and technology to improve his practice.	2-3-2-C- Conduct epidemiological Studies and surveys. 2-3-2-D- Perform data management including data entry and analysis and Using information technology to manage information, access on-line medical information; and support their own education.
2-4-C- Demonstrate skills of teaching and evaluating others.	2-3-2-E- Facilitate learning of students, lab technical staff and other health care professionals including their evaluation and assessment.
2-4-D- Demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their families, lab technical staff and other health professionals.	2-3-2-F- Maintain therapeutic and ethically sound relationship with patients, their families, lab technical staff and other health professionals. 2-3-2-G- Elicit information using effective nonverbal, explanatory, questioning, and writing skills. 2-3-2-H- Provide information using effective nonverbal, explanatory, questioning, and writing skills.

	2-3-2-I- Work effectively with others as a member of a team or other professional group.
2-4-E- Demonstrate professionalism behaviors, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.	<p>2-3-2-J- Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society.</p> <p>2-3-2-K- Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices.</p> <p>2-3-2-L- Demonstrate sensitivity and responsiveness to others' culture, age, gender, and disabilities.</p>
2-4-F- Demonstrate an awareness of and responsiveness to the larger context and system of health care and academic services and the ability to effectively use system resources to provide care that is of optimal value.	<p>2-3-2-M- Work effectively in relevant academic and health care delivery settings and systems including good administrative and time management.</p> <p>2-3-2-N- Adopt cost-effective practice and resource allocation that does not compromise quality of services.</p> <p>2-3-2-O- Assist patients in dealing with system complexities.</p>
2-4-G- Demonstrate skills of effective time management.	2-3-2-M- Work effectively in relevant academic or health care systems and including good administrative time management.
2-4-H- Demonstrate skills of self and continuous learning.	2-3-2-A- Perform practice-based improvement activities using a systematic methodology (share in audits and risk management activities and use logbooks).

II-Program matrix

Knowledge and Understanding

Course	Program covered ILOs							
	2/1/A	2/1/B	2/1/C	2/1/D	2/1/E	2/1/F	2/1/G	2/1/H
Course 1: methodology of research	√	√	√	√				
Course 2: Any basic course	√	√	√	√	√	√	√	√
Course3: advanced Parasitology	√	√	√	√	√	√	√	√

Intellectual Outcomes

Course	Program covered ILOs			
	2/1/A	2/1/B	2/1/C	2/1/D
Course 1: methodology of research	√	√	√	
Course 2: Any basic course	√	√	√	√
Course3: advanced Parasitology	√	√	√	√

Practical Skills

Course	Program covered ILOs							
	2/3/1 /A	2/3/1/ B	2/3/1/ C	2/3/1/ D	2/3/1/ E	2/3/1/ F	2/3/1/ G	2/3/1/ H
Course 1: methodology of research	√			√				√
Course 2: Any basic course	√	√	√	√	√	√	√	√
Course3: advanced Parasitology	√	√	√	√	√	√	√	√

General Skills

Course	Program covered ILOs							
	2/3/ 2/A	2/3/2/ B	2/3/2/ C	2/3/2/D	2/3/2/ E	2/3/ 2/F	2/3/2/ G	2/3/2 /H
Course 1: methodology of research	√	√	√	√	√	√	√	√
Course 2: Any basic course	√	√	√	√	√	√	√	√
Course3: advanced Parasitology	√	√	√	√	√	√	√	√

General Skills

Course	Program covered ILOs						
	2/3/2/	2/3/2/	2/3/2/	2/3/2/	2/3/2/	2/3/2/	2/3/2/
	I	J	K	L	M	N	O
Course 1: methodology of research	√	√	√	√	√	√	√
Course 2: Any basic course	√	√	√	√	√	√	√
Course3: advanced Parasitology	√	√	√	√	√	√	√

Annex 7, Additional information:

Department information:

Mission

Clinical Diagnostic services, Educational services, Research Services

Affiliated Institutions:

- 1- Department of Parasitology, Ain Shams University, Faculty of Medicine.
- 2- Department of Parasitology, Sohag University
- 3- Department of Parasitology, Minia University.

Research Services:

The main interest of research in our department is the application of recent parasitological research methodologies and discoveries to improving the diagnosis of human parasitic disease.

The department provides research opportunities for postgraduates and staff from the department and from any other discipline both from Egypt and abroad.

Staff members:

• Prof.Dr / Doaa Abdel Hafeez Yones	head of the department
• Prof. Dr/ Riffaat M. Ahmed Kalifa	
• Prof. Dr/ Ahmed Mohamed Ahmed Mandour	
• Prof. Dr/ Atef Attalla sakalla	
• Prof. Dr/ Mahmoud ELhady M. Monib	
• Prof.Dr/ Abd-Allah Abdel-Sameeaa Hassan	
• Prof.Dr/ Fatma Galal Said	
• Prof. Dr/ Magda Attia Elnazer	
• Prof.Dr/ Amany Ibrahim Hamza	
• Prof. Dr/ Ahmed Kamal Dyab	
• Prof.Dr/ Salma Mohamed Abdel Rahman	
• Prof.Dr/ Mohamed Elsalahy M. Monib	
• Prof.Dr / Abeer El said Mahmoud	
• Prof.Dr / Lamia Ahmed A. Galal	
• Prof.Dr / Doaa Abdel Hafeez Yones	
• Prof.Dr / Rasha Abdel Mouniem Hassan	
• Prof.Dr / Hanaa Yousef Abdel Hakeem	
• Prof.Dr / Mohamed Eissa Marghany	
• Dr/ Hanan Eldeek M. ELsaid	
• Dr/Ragaa Ali Mohammed Othman	
• Dr / Enas Abdel-Hameed Mahmoud Huseein	
• Dr / Nahed Ahmed Abdel-Moneim Ahmed Elesaliy	
• Dr / Yasser Mokhtar Mohamed Hasanein	
• Dr / Mona Gaber Mostafa Sayed	
• Dr / Tasneem Ismail Mohamed	
• Dr / Alzahraa Abdelraoof Ahmed	

Assistant lecturers
Sara abdel aal mohamed
Mervat moustafa khalifa
Asmaa hosny Deeb
Radwa yassin ibrahim
Salwa mahmoud abdel rahman
demonstrators
Mai abo- baker abo- zaid
Martina mohsen nageeb
Rokaya abdel Naiem ahmed
Alaa hussien aziz
Maria nagged mourice

Opportunities within the department:

Parasitology is a discipline that dedicated to understanding human parasitic diseases. Parasitology has deep roots in research that provides the scientific foundation for all medical practice. The pathologist works with all other medical specialties, using the tools of laboratory medicine to provide information essential to problem solving in clinical practice.

All of the diagnostic methods that parasitologists now use routinely for patient care our Parasitology Department continues in this tradition of advancing health through basic research and through continually applying the newest knowledge and technologies in order to find better ways of diagnosing, preventing, and treating disease.

Parasitology offers numerous opportunities for training in biomedical research. Intensive researches are available in collaboration with all clinical and basic departments

Experimental parasitology also is available to cover spectrum of basic researches.

Department quality control insurance for completing the program:

We believe that a diverse range of material seen under the appropriate supervision and guidance of an educational supervisor is a superior method of working, towards achieving the required competencies, than the indicative figures below. The College intends to monitor and gather evidence about the optimal workload figures and training periods required to achieve the desired competencies, in conjunction with the relevant methods of assessment for training

(End of the program specification)