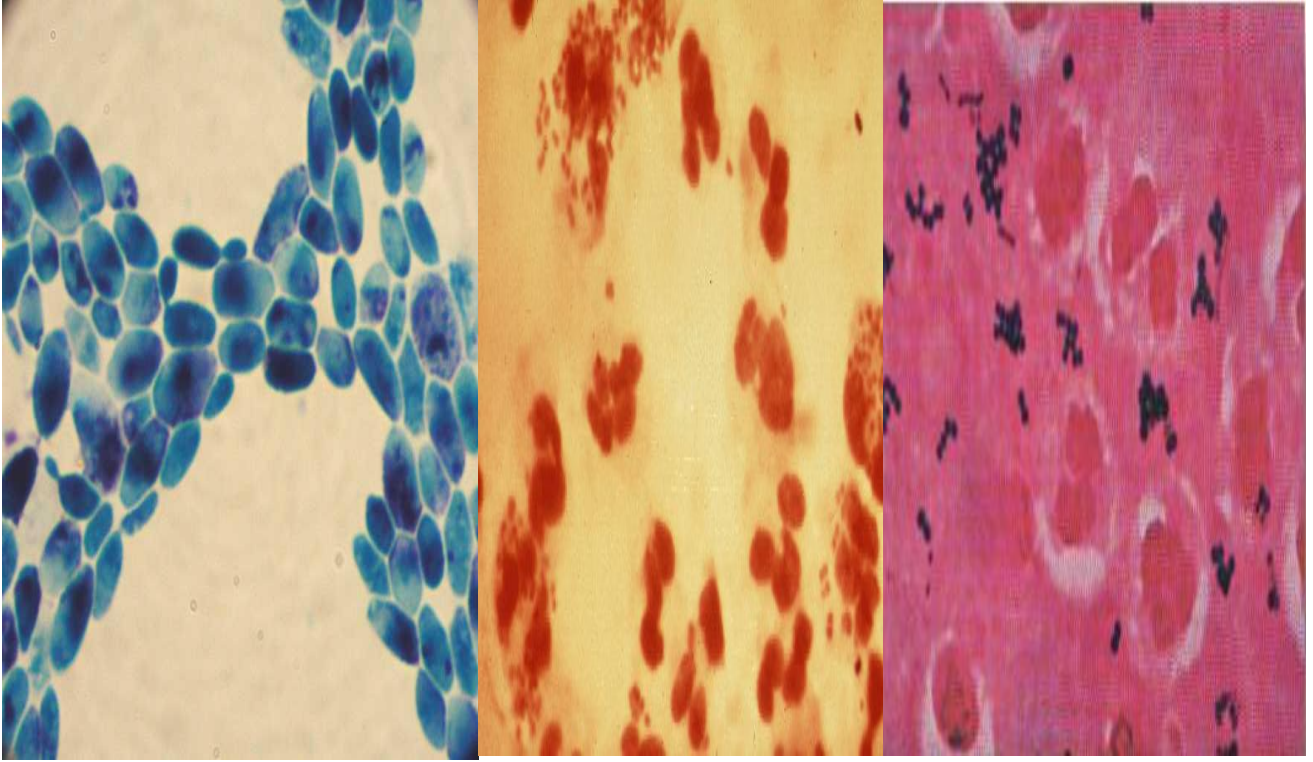


Master Degree of Medical Microbiology and Immunology

Log Book

” كراسة الأنشطة ”

اللازمة لحصول المتدرب على درجة الماجستير في
الميكروبيولوجي والمناعة الطبية



2022-2023



Contents

NO	SUBJECT	PAGE
1	Personal data	3
2	Instructions to the use of logbook	4
3	Program aims and curriculum structure	6
4	Basic science courses	7
	Course 1: Public Health (Epidemiology & Medical statistics)	8
5	Course 2: Basics of Infection Control and Immunology	21
6	Speciality course	31
	Course 3: Microbiology and Advanced Immunology	
	Module 1: General Microbiology (Molecular Biology & Infection (advanced)	
	Module 2: Immunology	
	Module 3: Applied Medical Microbiology	
	Bacteriology	
	Virology	
	Mycology	
7	Other Scientific Activities	83
8	Elective course	87
9	Master Degree Thesis pathway	91
10	Declaration	92



Personal photo

Name.....

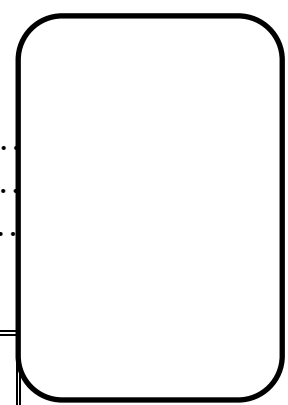
Date of birth.....

Address.....

Place of work.....

Telephones..... Mobile phone(s).....

E mail.....



Name of lab	Period of work	Lab director signature

Academic Information

MBBCh...../...../..... University Grade

Others...../...../..... University
...../...../..... University



*** Aim of the activities book**

To provide one source of evidence for the assessment committee that you attained the desired level of competency required to gain the award.

In this book you will document all academic and other experiences and skills you attained during your training.

Sections of the book

For each module / course / rotation

You should fill the following sections:-

1- specimens processing log

1- You will first find list with all steps of specimens processing in the concerned module and the minimum number of slides you must prepared, sectioned and stained.

2- You should record all methods of preparing of different tissues for examination by light microscope as well as those for examination by electron microscope in the module and each technique should be signed by you trainer



2- Different stains presentation log

Record the different staining techniques that you have presented in a seminar of the activity.

3- Staining / imaging log

1- You will find a list for different *Staining techniques*, imaging either by light microscope or by TEM as well as by SEM . Also the level of desired performance you should achieve at the end of training.

2- You will find empty tables to write down the procedure, you level of participation and date and signature of supervisor.

4- Rotation / attendance proof

You should have evidence of achievement the required training hours within each module.

For the whole program fill the following sections

1- Academic activities

A- Document all academic activities e.g. lecture, journal clubs, workshops, conference, services attended. This documentation should include the level of participation " attendance, preparation, presentation,....."

2- Academic achievements

A- Document all outcomes you achieved in the field of:-

- Audit participation
- Research "processing specimens and imaging slides " participation.
- Evidence- based medicine "generation of guidelines" protocols
-

3- Formative assessment log

This document all types of formative assessment attended e.g.:-

- Mini practical examination
- Quiseses



Program aims

- 1/1 Extensive coverage of the following topics: bacteriology, virology and mycology, bacterial pathogenicity, immunology, molecular biology, microbial disease – diagnosis, treatment and prevention, antimicrobials and chemotherapy, epidemiology and hospital acquired infection.
- 1/2 To enable the candidates to practice the principles of sterilization and infection control.
- 1/3 To enable candidates to keep with international standards of Bacteriology and common infectious diseases by teaching them high level of practical skills, update their medical knowledge and stress upon applied Microbiology.
- 1/4 Update candidates in the field of research as area of molecular biology and cytogenetic studies as well as genes and/or immunotherapy.
- 1/5 The acquisition of life-long habits of reading, literature searches, consultation with colleagues, attendance at scientific meetings, and the presentation of scientific work that are essential for continuing professional development (CPD).
- 1/6 Enable them to work effectively, in partnership with other health professionals, support staff and service users.
- 1/7 Enable them to understand and get the best of published scientific research and do their own.

Curriculum Structure:

Program Time Table

Duration of program 3 years maximally 5 years divided into

- Part 1

Program-related basic science courses and ILOs + elective courses

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

- 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 should not be set **before 12 months** from registering the M Sc subject;

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

- Part 2

Program –related speciality courses and ILOs

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

n.b. Fulfillment of the requirements in each course as described in the template and registered in the log book is a pre-request for candidates to be assessed and undertake part 1 and part 2 examinations.



Faculty of Medicine



Dept. of Microbiology and Immunology

First Part

Academic activities of basic sciences

Practice with academic and clinical departments during year 1

- **Course 1: Public Health (Epidemiology & Medical statistics)**
- **Course 2: Basics of Infection Control and Immunology**



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Dept. of Microbiology and Immunology

Course 1: Public Health: Epidemiology and Medical Stastics)

Requirements

- **Credit points:** 4 credit points for didactic (lectures, seminars, tutorial) and 5 points for training.
- Minimal rate of attendance 80% of training and didactic



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Dept. of Microbiology and Immunology

Course 1: module 1; Epidemiology

Requirements

- **Credit points:** 3 credit points for didactic (lectures, seminars, tutorial) and 1 points for training.
 - Minimal rate of attendance 80% of training and didactic



Requirements

◆ Credit points: 3 credit points for didactic

Name of the module/ unit	Credit points	Responsible department	Attendance & topics	Percentage of total Achieved credit points
Epidemiology	3CP	Public Health and community medicine	Year 1 attendance for 30 hours	100%
	1 CP		10 hours Epidemiology of Bacterial infections	33.3%
	1 CP		10 hours - Epidemiology of Viral infections	33.3
	1CP		10 hours - Epidemiology of Environmental Sanitation	33.3%
Student signature			Principle coordinator signature	Head of the department signature



● **Credit points: 1 credit point for practical training.**

Practical/ Clinical/ training	Credit points	Responsible department	Attendance	Percentage of total Achieved points
Practical training in epidemiology	1CP	Public Health and community medicine	Practical training for at least 2 weeks (3h/day) in Public Health and community medicine department.	100%
	0.5 CP		2week (1.5h/day) Practical training for at least 2 weeks (1.5h/day) in Public Health and community medicine department in Public Health and community medicine department. With practice of Log of 10 Problem solving in:- Screening methods for different infections.	50%
	0.5CP		1week (3h/day) Practical training for at least 1week (3h/day) in Public Health and community medicine department with practice of Log of 10 Problem solving in: - Laboratory examination of food handlers.	50%
Student signature			Principle coordinator signature	Head of the department signature



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Dept. of Microbiology and Immunology

Course 1: module 2; Medical Statistics

Requirements

- **Credit points:** 1 credit point for didactic (lectures, seminars, tutorial) and 4 credit points for training.
 - Minimal rate of attendance 80% of training and didactic



Requirements

● **Credit points:1 credit point for didactic**

Name of the module/ unit	Credit points	Responsible department	Attendance& topics	Percentage of total Achieved points
Medical Statistics	1 CP	Public Health and community medicine	Year 1 attendance for 10 hours	100%
	0.2CP		2 hours - Methods of data collection.	20%
	0.2CP		2 hours - Methods of data presentation.	20%
	0.2CP		2 hours - Methods of data analysis.	20%
	0.4CP		4 hours - Vital statistics.	40%
Student signature			Principle coordinator signature	Head of the department signature



◆ Credit points: 4 credit point for practical training.

Practical/ Clinical/ training	Credit points	Responsible department	Attendance & activities	Percentage of Achieved points
Practical training in Medical Statistics	4 CP	Public Health and community medicine	4 weeks (5h/day) Practical training in Medical Statistics lab of Public Health and community medicine department for at least 4 weeks (5h/day) with practice of medical statistics activities log	100%
	1 CP		1 week Practical training in Medical Statistics lab for at least 1 week with practice of - Log of 10 Problem solving in: -Data collection.	25%
	1CP		1 week Practical training in Medical Statistics lab for at least 1 week with practice of - Log of 10 Problem solving in: - Data presentation: a) Numerical presentation. b) Graphical presentation. c) Mathematical presentation.	25%



	1.5CP		1.5 week Practical training in Medical Statistics lab for at least 1 week with practice of - Log of 10 Problem solving in: - Data analysis (analytic statistics or tests of significance). - Population sample.	37.5%
	0.5CP		1 week(3hours/day) Practical training in Medical Statistics lab for at least 1 week(3hours/day) with practice of - Log of 10 Problem solving in: Vital statistics.	12.5%
Student signature			Principle coordinator Signature	Head of the department signature



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Dept. of Microbiology and Immunology

Didactics Attendance

Date	Attendance	Topic	Signature

Remarks:

Signature:



Practical Skills record
(Problem solving in data collection)

NO.	Practical Skills	Level of competency*	Location	Signature

* Level of competency
 A- Independent performance
 B- Performance under supervision
 C- Observed



* **Name:**

* **Period of training From:**

To:

* **Site:**

***Rotation**

General skills	could not judge (0)	strongly disagree (1)	(2) ↷ (3)		(4) ↷ (5)		(6) ↷ (7)	strongly agree (7)
Perform practice-based improvement activities using a systematic methodology (share in audits and risk management activities And use logbooks).								
Appraises evidence from scientific studies.								
Conduct epidemiological Studies and surveys.								
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.								



Course2: Basics of Infection Control and Immunology

Requirements

- **Credit points: 4** credit points for didactic (lectures, seminars, tutorial) and 5 points for training.
- Minimal rate of attendance 80% of training and didactic
 - MCQ Assessment (One MCQ examination at the second half of the 1st year)



4 Credit points for didactic

Name of the course	Credit points	Responsible department	Attendance & TOPICS	Percentage of Achieved points
Basics of infection control and Immunology	4CP	Medical Microbiology & Immunology	40 hours in Medical Microbiology & Immunology	100%
	<u>2 CP</u>		20 hours for Basics of Immunology	<u>50%</u>
	0.2CP		-Innate immunity 2h	5%
	0.2CP		-antigens 2h	5%
	0.2CP		-Cells of the immune response 2h	5%
	0.2CP		-Acquired immunity 2h	5%
	0.2CP		-Humoral immunity 2h	5%
	0.2CP		-Antibodies 2h	5%
	0.2CP		-Monoclonal antibodies 2h	5%
	0.2CP		- The complement system 2h.	5%
0.4CP	- Cell-mediated immunity 4h	10%		
	<u>1.75CP</u>		17.5 hours for Basics of infection control	<u>43.75%</u>
	0.5CP		-Nosocomial infections 5h	12.5%
	0.5CP		-Prevention of nosocomial infections 5h	12.5%
	0.75CP		-Sterilization and disinfection 7.5h	18.75%
	0.25CP		Formative assessment	6.25%
Student signature			Principle coordinator signature	Head of the department signature



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Dept. of Microbiology and Immunology

5 credit points for training

Clinical training	Credit points	Responsible department	Attendance & activities	Percentage of Achieved points
Basics of infection control and Immunology	2.5 CP	Medical Microbiology & Immunology in Infection control lab	<p>Practical training in Medical Microbiology & Immunology in Infection control lab for at least in 12 weeks (6hour /wk) with practice of cases in Infection control lab as</p> <p>Practice with identification of common nosocomial pathogens as mentioned below in log of cases.</p>	50%
	2.5 CP		<p><input checked="" type="checkbox"/> Attendance of at least 12 weeks in the infection control Unit (6hour /wk)</p>	50 %
Student signature			Principle coordinator Signature	Head of the department signature



Identification of nosocomial pathogens:

Pathogens	Number
Staphylococci	30 cases
Enterococci	6 cases
Lactose fermenter Enterobacteriaceae	20 cases
Ecoli	10 cases
Klebsiella	10 cases
Non Lactose fermenter Enterobacteriaceae	15 cases
Proteus	10 cases
Salmonella	As logged of
Pseudomonas	5 cases
Candida	10 cases
Anthracooids	5 cases
Diphtheroids	5 cases



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Dept. of Microbiology and Immunology

Lecture Attendance

Date	Attendance	Topic	Signature

Remarks:

Signature:



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Dept. of Microbiology and Immunology

Attendance in Infection control laboratory

Date	Signature of supervisor	Date	Signature of supervisor



Faculty of Medicine



Dept. of Microbiology and Immunology

Attendance in Infection control laboratory

Date	Signature of supervisor	Date	Signature of supervisor



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Dept. of Microbiology and Immunology

Practical Skills record

NO.	Practical Skills	Level of competency*	Location	Signature

* Level of competency
A- Independent performance
B- Performance under supervision
C- Observed



Practical Skills record

NO.	Practical Skills	Level of competency*	Location	Signature

* Level of competency
A- Independent performance
B- Performance under supervision
C- Observed



* *Name:*

* *Period of training From:*

To:

* *Site:*

***Rotation**

General skills	could not judge (0)	strongly disagree (1)	(2)		(3)		(4)		(5)		(6)	strongly agree (7)
			↩	↪	↩	↪	↩	↪				
Perform practice-based improvement activities using a systematic methodology (share in audits and risk management activities And use logbooks).												
Appraises evidence from scientific studies.												
Conduct epidemiological Studies and surveys.												
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.												



Course3:Microbiology

and advanced Immunology

Units' Titles' list	% from total Marks	Level (Year)	Core Credit points		
			Didactic	training	Total
1) Unit 1 "General Microbiology"	32.1%	1,2	5	40	45
2) Unit 2 " Immunology"	14.3%	1,2	5	15	20
3) Unit 3 " Applied Microbiology"	53.6%	2&3	14	61	75
Total No. of Units:	3	-	24	116	140



Faculty of Medicine



Dept. of Microbiology and Immunology

Course 3; Module 1:

General Microbiology



Module 1

General Microbiology

Rotation / attendance proof

الأماكن التي تدرّب بها

توقيع مدير المعمل	توقيع مشرف الوحدة	أسم المعمل التي تدرّب بها

Requirements

Requirements

● **Credit points:** 5 credit point for didactic (lectures, seminars, tutorial) and 40 point for training.

- Minimal rate of attendance 80% of training and didactic

- MCQ Assessment (One MCQ examination at the second half of the 2nd year)
- 2 practical examinations (One at the end of the 1st half and another in the end of the 2nd half of the 1st year)
- 2 practical examinations (One at the end of the 1st half and another in the end of the 2nd half of the 2nd year)



Year (1) (15 credit points for training)

Clinical training	Credit points	Responsible department	Attendance&activities	Percentage of Achieved points
General Microbiology	15CP	Medical Microbiology & Immunology	Year 1	37.5% Of the total training of unit 1
	5CP		Practical training in Medical Microbiology & Immunology department for at least 25 weeks (6h/wk or 1h/day) in Microbiology lab <input checked="" type="checkbox"/> Practice with preparation of <u>students' General Microbiology</u> practical sections samples in the bacteriology lab at the department as mentioned below in log of samples	33.4%
	4.5 CP		<input checked="" type="checkbox"/> Attendance in the General Microbiology practical sections in the department's student class with seniors <u>of at least 22</u> weeks (1 hours /day) as mentioned below	30%
	5CP		<input checked="" type="checkbox"/> Attendance of at least 25 weeks (1 hours /day) in the General Microbiology practical sections in students' lab with seniors as mentioned below	33.3 %
	0.5CP		<input checked="" type="checkbox"/> Formative assessment	3.3%
Student signature			Principle coordinator Signature	Head of the department signature



General Microbiology students' practical sections samples:

Sections	Number
Slides of Gram positive cocci	20
Slides of Gram negative bacilli	20
Slides of TB	15
Preparation of pathological specimens	10
Preparation of culture media	20
Preparation of tube agglutination test	10
Preparation of ASO test	10
Preparation of Complement fixation test	10

The General Microbiology practical sections

Sections	Number
Microscope	20
Gram staining	20
Ziehl-Neelsen stain	15
pathological specimens collection	10
culture media	20
Sterilization	10
Serology	10



Year 2(5 credit point for didactic)

Name of the course	Credit points	Responsible department	Attendance & topics	Percentage of Achieved points	
Unit 1: General Microbiology	5CP	Medical Microbiology & Immunology	Year 2	100 % of the didactics of Unit 1	
General Microbiology	<u>1.5CP</u> 0.3 0.3 0.3 0.3 0.3		15 hours (3 hours for each) -Bacterial morphology -Bacterial structure and Taxonomy -Bacterial physiology and metabolism -Antimicrobial therapy -Host-parasite relationship	6% 6% 6% 6% 6%	
Molecular Biology	<u>1.5CP</u> 0.3 0.3 0.3 0.3 0.3		15 hours (3 hours for each) -The structure and regulation of DNA & genome - Transcription, translation and Protein synthesis -Mutation & DNA repair -DNA transfer -Genetic engineering and its applications	6 % 6% 6% 6% 6%	
Infection Control (Advanced)	<u>1CP</u> 0.4 0.4 0.2		10 hours -Sterilization and Disinfection(4h) -Multidrug resistant organisms(4h) -Water born infections (2h)	8% 8% 4%	
	0.5CP		Conference or seminars	10%	
	0.5CP		Formative assessment	10%	
Student signature				Principle coordinator Signature	Head of the department signature



Year 2 (25 credit point for training)

Clinical training	Credit points	Responsible department	Attendance	Percentage of Achieved points
Training in General Microbiology unit	25CP	Microbiology Department & Infection Control Unit	Year 2	62.5% of the training in Unit 1
Infection control (advanced)	<u>10CP</u>		<p>Practical training in infection control lab for at least 20 weeks (3h/day) with practice of cases samples and log of cases as mentioned below with fulfilling the following required skills in Identification of nosocomial infecting microorganisms in the following samples at the infection control lab:</p> <ul style="list-style-type: none"> • Urine • endotracheal tube • Sputum • Throat swabs • Stool • Wound swabs • Pus • Blood <p><u>Case log mentioned below</u></p>	<p><u>40%</u></p> <p>4% 8% 4% 4% 4% 4% 4% 8%</p>
	1			
	2			
	1			
	1			
	1			
	1			
	1			
	2			



	5CP		<p>Practical training in infection control lab for at least 10 weeks (3h/day) with practice of cases samples and log of cases as mentioned below with fulfilling the following required skills in monitoring efficiency of sterilization at the infection control lab.</p> <p><u>As mentioned in log cases below</u></p>	20%
	5CP		<p>- Practical training in infection control lab for at least 10 weeks (3h/day) with practice of cases samples and log of cases as mentioned below with fulfilling the following required skills in examination of water samples at the infection control lab</p> <p><u>As mentioned below</u></p>	20%
Molecular Biology	4.5CP		Attendance at least one Workshops in PCR	18%
	0.5CP		➤ Formative assessment	2%
Student signature			Principle coordinator Signature	Head of the department signature



Infection Control advanced training

Items	Number
-Examination of the following nosocomial specimens:	
• Urine	20
• endotracheal tube	20
• Sputum	15
• Throat swabs	5
• Stool	5
• Wound swabs	5
• Pus	5
• Blood	20
• monitoring efficiency of sterilization	20
• examination of water samples	10



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Dept. of Microbiology and Immunology

Attendance in students’ class

Date	Signature of supervisor	Date	Signature of supervisor



Faculty of Medicine



Dept. of Microbiology and Immunology

Post graduate teaching Second: Tutorial

Date	Title of lecture	Signature of Staff member



Post graduate teaching Second: practical Teaching

Date	Title of lecture	Signature of Staff member



Formative assessment and MCQ

Exam	Score	Grade*	Date	Signature

***Degree**

- A- Excellent
- B- Very good
- C- Good
- D- Pass



Postgraduate student's program Rotation in training assessment

* **Name:**

* **Period of training From:**

To:

* **Site:**

*Rotation

General skills	could not judge (0)	strongly disagree (1)	(2) (3)	(4) (5)	(6)	strongly agree (7)
Perform practice-based improvement activities using a systematic methodology (share in audits and risk management activities And use logbooks).						
Appraises evidence from scientific studies.						
Conduct epidemiological Studies and surveys.						
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.						



Course 3; Module 2

Immunology

- Credit points: 5 point for didactic (lectures, seminars, tutorial) and 15 point for training.

- Minimal rate of attendance 80% of training and didactic
- MCQ Assessment (One MCQ examination at the second half of the second year)
- 1 practical examinations (at the end of the 2nd half of the 1st year)
- 2 practical examinations (One at the end of the 1st half and another in the end of the 2nd half of the 2nd year)



Module 2

(Immunology)

Rotation / attendance proof

الأماكن التي تدرب بها

توقيع مدير المعمل	توقيع رئيس القسم	أسم المعامل التي تدرب بها



Year (1)(5 credit points for training)

Clinical training	Credit points	Responsible department	Attendance & activities	Percentage of Achieved points
Immunology	5CP	Medical Microbiology & Immunology	Year 1	33.3 % Of total training of unit 2
	<u>4 CP</u>		- Practical training in immunology lab of Medical Microbiology & Immunology department for at least 20 weeks(6 h/wk) of attendance with practice of required training skills in providing the principles, precautions, steps, laboratory and experimental care for each of the following immunological tests and techniques including immunological procedures & tests log as mentioned below;	<u>80%</u>
	2CP 1CP 1CP		-ELISA -Western blot - Immunofluorescence	40% 20% 20%
	0.5CP		-Attendance of at least one Workshops	10%
	0.5CP		-Formative assessment	10%
Student signature			Principle coordinator Signature	Head of the department signature



Immunological tests:

Test	Number
ELISA	3 times
Western Blot	2 times
Immunofluorescence	2 times

* Level of competency

A- Independent performance

B- Performance under supervision

C- Observed



Year 2(5 credit point for didactic)

Name of the course	Credit points	Responsible department	Attendance	Percentage of Achieved points
Unit 2: Immunology (advanced)	5CP	Medical Microbiology & Immunology	Year 2	100 % of total didactics of Unit 2
Immunology	1CP		(10 hours) -MHC and transplantation immunology.	20%
	1 CP		(10 hours) -Hypersensitivity reactions.	20%
	1 CP		(10 hours) Tumor immunology	20%
	0.5 CP		5hours -Tolerance and autoimmunity	10%
	0.5 CP		5 hours -Immuno - deficiency disorders	10%
	0.75 CP		-Attendance of academic activities in department including the following: - Seminars for at least 50% of seminars in department. - Attendance of at least one Conference	15%
	0.25 CP		Formative assessment	5%
Student signature			Principle coordinator Signature	Head of the department Signature



Year 2 (10 credit point for training)

Clinical training	Credit points	Responsible department	Attendance & activities	Percentage of Achieved points
Unit 2: Immunology (advanced)	10 CP	Microbiology Department	Year 2	66.7 % of total training in Unit 2
	8.5CP		*Practical training in immunology lab of Medical Microbiology & Immunology department for at least 15 weeks(6 h/wk) of attendance with practice of required training skills in performance of immunological tests log as mentioned below in the Immunology lab at the department including	85%
	3 CP 3 CP 2.5 CP		-ELISA test. -Tube agglutination. - Immunofluorescence	30% 30% 25%
	0.5 CP		Attendance of at least one Workshop related to Immunology (advanced)	5%
	1 CP		➤ Formative assessment	10%
Student signature			Principle coordinator Signature	Head of the department signature



Log of immunological test;

Test	Least number required
ELISA	2 times
Immunofluorescence	1times
Tube agglutination	2 times

* Level of competency

A- Independent performance

B- Performance under supervision

C- Observed



Postgraduate student's program Rotation in training assessment

* **Name:**

* **Period of training From:**

To:

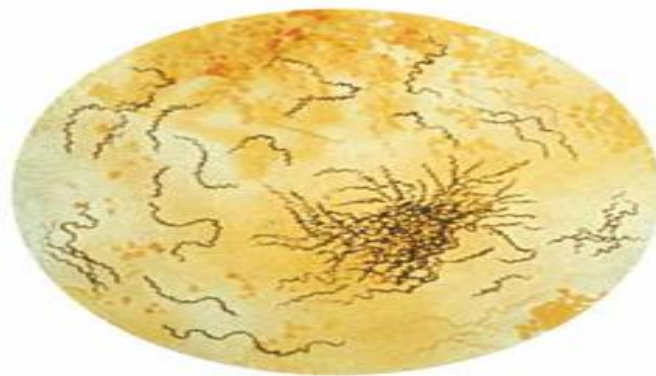
* **Site:**

*Rotation

General skills	could not judge (0)	strongly disagree (1)	(2)	(3)	(4)	(5)	(6)	strongly agree (7)
Perform practice-based improvement activities using a systematic methodology (share in audits and risk management activities And use logbooks).								
Appraises evidence from scientific studies.								
Conduct epidemiological Studies and surveys.								
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.								



Module 3 Applied Medical Microbiology



Requirements

- **Credit points: 14 point for didactic (lectures, seminars, tutorial) and 61 point for training.**

- Minimal rate of attendance 80% of training and didactic
- MCQ Assessment (One MCQ examination at the second half of the second year) & (One MCQ examination at the second half of the third year)
- 2 practical examinations (One at the end of the 1st half and another in the end of the 2nd half of the 2nd year)
- 1 practical examinations (at the end of the 2nd half of the 3rd year)



Systematic medical microbiology
Module 3: Systematic Microbiology
Year 2 (7 credit point for didactic)

Name of the course	Credit points	Responsible department	Attendance & topics	Percentage of Achieved points
Unit 3: Applied Microbiology	7 CP	Medical Microbiology & Immunology	Year 2	50 % of total didactics of Unit 3
Systematic Bacteriology	6CP 0.5 CP		60 hours (5 hours for each) -Gram positive cocci (staphylococci, streptococci, and pneumococci, others)	7.2%
	0.5 CP		-Gram negative cocci (Neisseriaceae)	7.2%
	0.5 CP		-Gram positive bacilli → non-spore forming (corynebacterium, listeria, actinomyces and lactobacilli).	7.2%
	0.5 CP		-Spore forming (Bacillus and clostridium), Anaerobes	7.2%
	0.5 CP		-Mycobacteria (T.B and Leprosy Gram negative bacilli.	7.2%
	0.5 CP		-Enteric gram negative bacilli → Coliforms, E.coli, Klebsiella, Salmonella, shigella, proteus, citrobacter), Serratia, Acinetobacter	7.2%
	0.5 CP		-Pseudomonas, stenotrophomonas	7.2%
	0.5 CP			7.2%



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Dept. of Microbiology and Immunology

	0.5		Vibrio, campylobacter and helicobacter	
	0.5		-Haemophilus, Bordetella and Brucella	7.2%
	0.5		-Yersenia, pasteurella, and francisella, Legionellae.	7.2%
	0.5		-Spirochaetes	7.2%
	0.5		-Mycoplasma and cell wall-defective bacteria.	7.2%
	0.5		-Rickettsia, Coxiella and Chlamydia.	7.2%
	0.5 CP		*Attendance of academic activities in department including the following: -Seminars for at least 50% of seminars in department. - Attendance of at least one Conference	7%
	0.5 CP		Formative assessment	7%
Student signature			Principle coordinator Signature	Head of the department Signature



Year 2(40 credit point for training)

Clinical training	Credit points	Responsible department	Attendance	Percentage of Achieved points
Training in Applied Microbiology unit 3	40 CP	Microbiology Department & Infection Control Unit	Year 2	65.6% of the training in Unit 3
Bacteriology	37.5CP 7.5CP 7.5CP 7.5CP 7.5CP 7.5CP		Practical training in bacteriology department lab for at least attendance 38 weeks with practice of training and fulfilling requirement of training skills and procedures log as mentioned below including System based identification of bacteria as mentioned below -Choosing proper sample -Microscopical identification -Proper culture -Biochemical reactions -Antibiotic sensitivity testing As mentioned below	93.75%
	0.5 CP		-Attendance of at least one workshop related to bacteriology	1.25%
	2 CP		➤ Formative assessment	5%
Student signature			Principle coordinator Signature	Head of the department signature



Bacteriology training items

Items	Number
Choosing proper sample for each infection	20
Microscopical identification	20
Proper culture	20
Biochemical reactions	20
Antibiotic sensitivity testing	30

* Level of competency

- A- Independent performance
- B- Performance under supervision
- C- Observed



Year 3 (7 credit point for didactic)

Name of the course	Credit points	Responsible department	Attendance	Percentage of Achieved points
Unit 3: Applied Microbiology	7 CP	Medical Microbiology & Immunology	Year 3	50 % of total didactics of Unit 3
Virology	4CP		<u>(40 hours)</u>	<u>57%</u>
	1 CP		-General virology (10h)	14.2%
	1.5 CP		-DNA viruses (15h)	21.4%
	1.5 CP		-RNA viruses (15h)	21.4%
Mycology	2CP		<u>(20 hours) 4 h each</u>	<u>28.5%</u>
	0.4 CP	-Classification of fungi, Pathogenesis and Diagnosis of fungal infections	5.7%	
	0.4 CP	-Systemic mycosis,	5.7%	
	0.4 CP	-Subcutaneous mycosis,	5.7%	
	0.4 CP	-Superficial mycosis	5.7%	
	0.4 CP	-opportunistic mycosis.	5.7%	
	0.5 CP	*Attendance of academic activities in department including the following: -Seminars for at least 50% of seminars in department. - Attendance of at least one Conference	7.25%	
	0.5 CP	Formative assessment	7.25%	
Student signature			Principle coordinator Signature	Head of the department signature



Year 3(21 credit point for training)

Clinical training	Credit points	Responsible department	Attendance& activities	Percentage of Achieved points
Training in Applied Microbiology (Unit 3)	21 CP	Microbiology and immunology Department	Year 3	34.4 % of total training in Unit 3
Virology	5CP	Virology lab At the department	*Practical training in the Virology lab of Microbiology and immunology department for at least 10 weeks 3h/day with practice and fulfilling required tests and procedures log as mentioned below -Serological tests for identification of viruses. -Tissue culture	23.8%
	3 CP			14.3%
	2 CP			9.5%
Mycology	14 CP	Bacteriology Lab at the department	-*Practical training in the Bacteriology lab of Microbiology and immunology department for at least 30 weeks (14h/wk) with practice and fulfilling required tests and procedures log as mentioned below including training skills in identification of fungi as follows;	66.7



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Dept. of Microbiology and Immunology

	5 CP 5 CP 2 CP 2 CP		<ul style="list-style-type: none"> • Microscopically • culture • Germ tube test • Antifungal sensitivity testing • As mentioned below 	23.8% 23.8% 9.5% 9.5%
	0.75CP		Attendance of at least one Conference or Workshops related to Applied Microbiology	3.5%
	1.25 CP		➤ Formative assessment	6%
Student signature			Principle coordinator Signature	Head of the department signature

Mycology training items

Items	Number
Microscopical identification	20
culture	20
Antifungal susceptibility	10
Germ tube test	10

- * Level of competency
 A- Independent performance
 B- Performance under supervision
 C- Observed



Systematic medical microbiology (PROCEDURE & practical skills LOG)

NO.	Processing of specimens	Level of participation *	Location	Signature of supervisor

* Level of participation
 A- Plan and carry out
 B- Carry out
 C- Carry out under supervision



**Module 3 (Applied Microbiology)
B-Seminars**

Requirements

- Attendance of at least 50% of the seminars
- Presentation of at least 3 cases in the seminar per year
- Log of at least 1 evidence-based guidelines

First: Attendance

Date	Attendance	Topic	Signature



B- Second: Seminars presentation

Date	Staff group*	Case	Signature

*Staff group
A- Group A
B- Group B
C- Group C



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**Module 3(Applied Microbiology)
Post graduate teaching
First: lectures**

Date	Title of lecture	signature of Staff member



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Date	Title of lecture	signature of Staff member



**Post graduate teaching
Second: Tutorial**

Date	Title of lecture	Signature of Staff member



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Formative assessment and MCQ

Exam	Score	Grade*	Date	Signature

***Degree**

- A- Excellent
- B- Very good
- C- Good
- D- Pass



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Other Activities



Program of Medical Microbiology & Immunology Master Degree

1- Academic activities

Lecture, journal club, seminar, conference, workshop

Activity	Your role **	Date	Signature of supervisor



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Dept. of Microbiology and Immunology

**Program of Medical Microbiology & Immunology Master Degree
2- Academic achievements**

Activity	Your role **	Date	Signature of supervisor



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Dept. of Microbiology and Immunology

Program of Medical Microbiology & Immunology MD Degree 3- Formative assessment

Activity	Your role **	Date	Signature of supervisor



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Dept. of Microbiology and Immunology

Elective Course

Requirements

● **Credit points:** 2 credit point.

- Minimal rate of attendance 80% of lectures and 80% of training



Name of the elective course:

Elective Course Lectures

Date	Attendance	Topic	Signature



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الرسائل العلمية

عنوان الرسالة

عربي : _____

انجليزي : _____

المشرفون : _____

..... -1

..... -2

..... 3

..... -4

تاريخ القيد لدرجة : / /

تاريخ التسجيل الموضوع :

المتابعة الدورية :

التاريخ	ما تم انجازه من بروتكول البحث	المتبقي	توقيع المشرفين



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Dept. of Microbiology and Immunology

Declaration

Course Structure Mirror	Responsible (Module) Coordinator Name:	Signature	Date
First part: Course 1			
First part: Course 2			
Course 3 module 1			
Course 3 module 2			
Course 3 module 3			
- Elective Course (s) Certificate (s) Dates:			
- Master Degree Thesis Acceptance Date:			
- Fulfillment of required credit points prior to final examination			
Medical Microbiology & Immunology MS.c. degree principle Coordinator			
Date approved by Medical Microbiology & Immunology department council			

يعتمد ،
رئيس القسم

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