



Logbook of MS of Medical Biochemistry

TOP INVERSITY FACULTY OF ME





Personal Data

Personal Data	
Name:	
Department:	
Mobile Number:	
E-mail Address:	
Master Degree.	
Date of registration:/	
Signature:	
Head of the Department Vice Dean for research and postgraduate stud	ју
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To provide evidence that the candidate attained the desired level of competence required to gain the award. In this book, the candidate will document all academic and clinical skills he/she attained during their training.

Important regulations (for MS candidates):

- -To be legible for the first part MS exam you have to attend at least 70% of the lectures of each course in the semester as evidenced by the logbook
- -To be legible for the (MCQ online) exam at the end of each of second part semesters you have to attend at least 70% of the lectures of each course/module in the semester as evidenced by the logbook.
- To be legible for the final MS exam:
- 1- A time interval of 36 months must pass since the day of registration to the job for residents and demonstrators and 30 months since the day of degree registration for non residents.
- 2- You have to spend a year of daily clinical/practical training in the department or two years with three times/week practical/clinical training.
- 3-You have to register 4 semesters on Ibn lhaythm registration page.
- 4- You have to attend 70% of the lectures of each course in the second part of MS degree.
- 5- You have to fulfill and perform 70% of the practical skills documented in the logbook.

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Bylaws of the MS







الساعات المعتمدة		الكسود	Course	264	
الإجمالي	المقسرر الإجمالي		Course	المقسور	
	13	BIC 504	Basic Medical Biochemistry & Molecular Biology	مبادئ الكيمياء الحيوية الطبية والبيولوجيا الجزيئية	
٨	39/	BIC 504 BI BIC 504 CY	Elective Course - Basic Immunology - Cytokines	المقررات الاختيارية (يختار مقرر واحد) - أساسيات علم المناعة - السيتوكينات	الفصل الدراسي الأول والثاني
	351	BIC 504 Ad	Advanced Medical Biochemistry& Molecular Biology	الكيمياء الحيوية الطبية والبيولوجيا الجزيئية المتقدمة	الفصل الدراسي - الثالث والرابع
10	T. P.	BIC 504 NC BIC 504 CR	-Neurochemistry -Chemistry of respiration	المقررات الاختيارية (يختار مقرر واحد) كيمياء الجهاز العصبي- كيمياء الجهاز التنفسي	
١٢	١.	التدريب العملي في	ويوية الطبية والبيولوجية الجزيئية برنامج	الكيمياء الـ	كراسة الأنشطة
	۲	شطة علمية مختلفة	ii		
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٤٥					











نظام الامتحان وتوزيع الدرجات: (ماجستير الكيمياء الحيوية الطبية)

امتحان الجزء الأول

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إجمالي		لسدرجة	11		الاغتبار	المقرر
	عملي	شفهي	MCQ	تعريري		33
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إجمالي	السدرجة	الاختبار	المقرر





	عملي	شفهي	MCQ	تعريري		
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٥,			9	٤.	اختبار تحريري مدته ساعة واحدة	المقرر الاختياري
٦٥.	لي الدرجة	إجما				







Contents

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Section II: Practical skills

Section III. Seminars

Section IV: Student teaching sections.

Section V. Scientific activities (conferences/workshops)

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Section I: Scientific Lectures







Name of the course: Medical Biochemistry & Molecular Biology (Basic level I)

Compulsory: First part:

Credit hours: 6 Semester: (spring|fall|summer) year......

Date	Title of the lecture	Lecturer's signature		
	Module 1			
Carbohydrate chemistry				
Lipid chemistry		8-1		
Protein chemistry				
1:0,				
Purine & pyrimidine che <mark>mistr</mark>		Lu l		
metabolism		151		
Physical chemistry				
Molecular biology & recombin		(2)		
Vitamins& enzymes				
Basic knowledge of Cell cycle				
apoptosis.				
Module 2				
Carbohydrate metabolism.				





Lipid metabolism	
General protein metabolism	
Individual amino acid Metabolism	
Principles of Heme metabolism	
Metabolic interrelation & minerals	
Mechanism of hormonal action	
Basic function of Cell organelles	
& structure of biological membrane	V/ \
Biological oxidation	0.1
&Xenobiotic metabolism	







Name of the course: Advanced Medical Biochemistry & Molecular Biology)

(Basic level II)

Compulsory Second part:

Credit hours: 13 Semester: (spring|fall|summer) year......

Date	Title of the lecture	Lecturer's signature
/.\	Module 1	
1.Water metabolism & acid-		
base balance		
2. Chemistry of carbohydrate,		
lipid & protein		3
3.Metabolism of		
Carbohydrate& glycoprotein.		
4. Diabetes mellitus		151
5 Metabolism of lipid &		
ecosanoids		
6 Metabolismof protein &		
individual amino acids.		
7. Purine & pyrimidine		
nucleotides metabolism		
8. Porphyrine metabolism &		
bile pigment.		
9.Metabolic integration& the		





Fed/Fast cycle.	
10. Biological Transport and	
cell membrane	
11. Biochemistry of endocrine	
glands.	
12. Hormonal action & Cell	
signaling.	

Date	Title of the lecture	Lecturer's signature
1-2/	Module 2	3-
1. Molecular biology &		
biotechnology		
2. Oncology (oncogenes & tumor		131
markers).		101
3. Immunochemistry and tissue		
chemistry		
4. Micronutrients (Vitamins &		*/
Minerals)		
5. Enzymes		
6. Muscle chemistry & metabolism		
7. Biological oxidation &		
bioenergetics.		





8. Xenobiotics and detoxification	
9. Free radicals and antioxidants	
10. Blood (plasma proteins &	
homeostasis).	
11. Protein traffic and sorting	
12. Apoptosis	V/\







Name of the course: Basic immunology

Elective First part

Credit hours: 2 Semester: (spring|fall|summer) year......

Date	Title of the lecture	Lecturer's signature
1- Development and function of the organs and cells involved in immune response		J
2- Properties of antigens and antibodies and the way they interact with each other		1:15
3- Genetic control and regulation of antibody		
4- Different types of immune response		151
5- Different types of immunologic disorders		
6- Immunologic aspects of transplantation		
7– The role of immune system in cancer		
8- Currently available vaccines and recommended immunization schedules		





Name of the course: Cytokines

Elective First part

Credit hours: 2 Semester: (spring|fall|summer) year......

Date	Title of the lecture	Lecturer's signature
1- General properties of the		
cytokines		
2- Different cytokines that		1/1
mediate and regulate the		·/
innate Immunity		181
3- Different cytokines that		
mediate and regulate the		
adaptive Immunity		
4- The role of cytokines		3
in hematopoiesis		10
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Name of the course: Neurochemistry

Elective Second part

Credit hours: 2 Semester: (spring|fall|summer) year......

Date	Title of the lecture	Lecturer's signature
1- : Neurotransmitters and the		
Receptors		
2- Excitatory and		1
InhibitoryNeurotransmitters		P.1
3- Important points as regard		
Neurotransmitters:		
4. Biochemical Basis of some		IVI
neuropsychatric disorder <mark>s:</mark>		Ш

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Name of the course: Chemistry of Respiration

Elective Second part

Credit hours: 2 Semester: (spring|fall|summer) year......

Date	Title of the lecture	Lecturer's signature
1 - Respiration		
2- Acid-base regulation		
3- Acid-base imbalance		







Section II: Practical skills VERSITY FACULTY OF





First part: 2 credit hours

List of requirements

Name of the practical skill	Total number required	Observer	Assistant	Independent
Identification of laboratory reagents and instruments. Guidelines of work in research lab.	2	2	14	
Safety & ethical code.		III.	1	
Colorimetric estimation (manual and automatic)	10	الله	1 3	5
Urine analysis	4	1	1	3
Chemical DNA extraction	3	731	1/5	5/1
Agarose gel electrophoresis	3	1	1	1
Estimation of the risks of handling and	1	1	06.	
use of chemical agents on community and environment	RSITYF	ACULTY		
Physical chemistry	3		1	2





2nd part: 8 credit hours

Name of the practical skill	Total number required	Observer	Assistant	Independent
DNA extraction (spincolumns).	A 3	1		2
Electrophoresis (vertical and horizontal).	4	2	(V)	2
Molecular biology techniques: conventional PCR.	3	1	1/1	2
Gene polymorphisms by restriction endonucleases.	2	1		K 1
Measurement of some parameters by ELISA.	5	1	1.	4
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Practical skills log

(Under each procedure insert a number of rows equal to the no. required)

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ractical skill 1 Identifi	caion of laboratory reag	gents and instruments.	
Level of	Date	Location	Signature of
participation		-	supervisor
/ 37			
Observer			- 1
Observer		111111111111111111111111111111111111111	12
Observer		11////~	
			•
ractical skill e 2: Colo	rimetric estimation (ma	nual and automatic)	
action skill c 2. cele	111101110 0011110111011 (11101	,	
		1	
Assistant		101.00	
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Independent			
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Independent			
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Independent	1		
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ractical skill 3 uri			
Level of	Date	Location	Signature of
participation			supervisor
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Independent	1 3		12-1
Independent	1315	30	12
Independent	VV		
ractical skill 4: Che	mical DNA extraction		
Observer	A	70	(N. /
Observer Assistant Independent	WIVERSITY	FACULTYO	K W. /





Practical skill 5 Agar	ose gel electrophoresis				
Level of	Date	Location	Signature of		
participation			supervisor		
Observer	- AL	3			
Assistant	A	1.			
Independent		18	V/\		
Practical skill 6: Estinenvironment	mation of the risks of hand	ling and use of chemical ag	gents on community and		
Observer	1		NE		
Practical skill 7 Physical chemistry					
Level of	Date	Location	Signature of		
participation	VIVERSITY	FACILLY	supervisor		
Assistant	-uolla	PAUG			
Independent					
Independent					





ractical skill 8: DNA ex	traction (spincolumns).		
Observer			
Independent	CAL	2	
Independent	4	- 1	
ractical skill 9 Electrop	phoresis (vertical and l	norizontal).	
Level of	Date	Location	Signature of
participation	151	-00	supervisor
Observer	117		
Observer	1 4	811	131
Independent	49	The second	191
Independent			10/
ractical skill 10: Molec	ular biology techniques.	conventional PCR	
Observer			
Independent			
Independent			





Observer				
Independent	معصة		1	
actical skill 12: G	ene polymorphisms b	y restriction endo	nucleases.	
Observer	13	1	13	1:1-1
Independent	156		-10	12
Independent	1		3	N N
Independent		11: 72	- /	151
A KIND OF			/ / /	10,
Independent	A de la	25.75		0





Section III: Seminars





List of requirements:

1- Seminar attendance: 5

2- Seminar performance: 1

1- Attendance

Tonic	Date	Supervisor
Topic	Date	
		signature
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2- Performance

Topic	Date	Supervisor
		signature
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Section IV:

Student teaching sections.

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List of requirements: 70

(May include multiple pages)

Date	Section subject	Supervisor's signature
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Section V:

Scientific activities

(Conferences/workshops)

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List of requirements

Conferences				
Total number required	Attendance	Organization	Presentation	
2	حاه			
1		1		
10	Worksho	ps		
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Total number required	Attendance	Organization	Presentation	
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	7	200		
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5			191	
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Activity (Conference/Workshop	Role	Date	Supervisor's signature
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13/1	5,2	400	3
3	13		F
12	The second	300	13
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