

# MASTER DEGREE OF OF HUMAN PHYSIOLOGY Log Book

" كراسة الأنشطة "
اللازمة لحصول المتدرب
على درجة الماجستير
في علم وظائف الأعضاء
2022-2023



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Personal Da	ta:		
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Academic In	formation:		
MBBCh	University	//	
Grade			
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#### \* 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 clinical/practical, academic, 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- Clinical/Practical experiments presentation log

- 1- You will first find list with all required cases/ or experiments in the concerned module and the minimum number of cases/ or experiments you must get exposed to and level of participation you should achieve for each type of cases/ or experiments.
- 2- You should record all clinical cases or experiments done in the module and each case/ or experiment should be signed by you trainer.

#### 2- Clinical/Practical case presentation log

Record the cases or experiments related to the module that you have presented in a seminar or other activity.



#### 3- Procedures log

- 1- You will find a list for required procedure and level of desired performance you should achieve at the end of training.
- 2- You will find empty tables to write down the procedure, your 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, conferences, 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 "clinical trial" participation.
  - Evidence- based medicine "generation of guidelines" protocols

#### 3- Formative assessment log

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

- Mini clinical examination
- Quieses



#### **PROGRAMM AIMS**

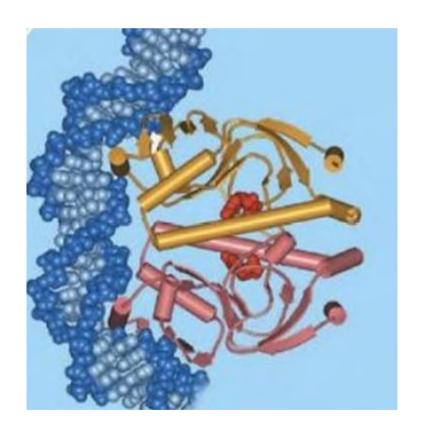
- 1/1: To prepare highly qualified physiologists.
- 1/2: To prepare candidates to the basics of scientific medical research and its ethics.
- 1/3: To enable the candidates to develop basic concepts and principles of human physiology logically and clearly correlate and analyze physiological phenomena.
- 1/4: To provide an educational environment that encourages creativity and research both fundamental and applied.
- 1/5: To enable students improves their skills in research and undergraduate teaching.
- 1/6: By the end of the program students will be able to:
  - 1. Have a satisfactory level of knowledge of the cellular basis of Medical physiology and function of organ systems of the body and the control systems of the human body and varies body functions in health.
  - 2. Develop knowledge concerning molecular biology & the bases of genetics.
  - 3. Understand and get the best of published scientific researches.



- 4. Emphasis is placed on the acquisition of a sound basic training in general physiology through individually planned programs of course work, tutorials, seminars and supervised research.
- 5. Demonstrate skills in oral and written presentations.
- 6. Provide an understanding of quality assurance issues.
- 7. Become acquainted with the methods of consulting the literature and preparing review.
- 8. Develop a professional skill in techniques used for experimental physiology on isolated organs, tissues and whole animals.
- 9. Graduates with a degree in physiology can pursue careers in research, teaching or management in academia, the pharmaceutical and biotechnology industries, private research institutions, government science or regulatory agencies, or medicine and health care.



# course "1-1" BIOCHEMISTRY





## Course "I-1" BIOCHEMISTRY

#### 1. Practical experiments log book

No	Experiment	Number of each
		experiments
1	Different methods of collection and	
	preparation of body fluid samples.	
2	Estimation of some indices by kits (ELISA	
	& RIA).	
3	Chemical methods of measurement of some	
	indices.	

#### Requirements

- I. Attendance of at least 80% of practical sections.
- II. Doing at least 5 experiments in each.
- III. Students are able to do experiments and recognized procedures.
- IV. Practical assessment at the end of course.



#### 2- Practical experiments presentation log book

Record the cases related to the module that you have presented in a seminar or other activity.

H.N	Diagnosis of case	Level of participation *	Location	Signature of supervisor

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

#### 3- Procedures log book

HN	Procedure	Level of competency*	Location	Signature

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



#### Requirements

- I. Attendance of at least 80% of practical sections.
- II. Doing at least 2 experiments in each done independent

#### 4- Rotation / attendance proof

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			•



## postgraduate student's program Rotation in training assessment

*	Name.	•
---	-------	---

\* Period of training From:

To:

\* Site:

#### \*Rotation

General skills	could	strongly				strongly
	not	disagree	(2) (3)	(4) $(5)$	(6)	agree
	judge	(1)				(7)
	(0)					
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.						



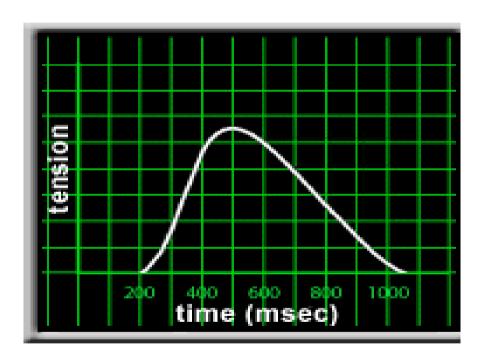
General skills	could	strongly		J)		$\mathcal{J}$		strongly
	not	disagree	(2)	(3)	(4)	(5)	(6)	agree
	judge	(1)						(7)
	(0)							
Facilitate learning of students, lab technical staff and other health care professionals including their evaluation and assessment.								
Maintain therapeutic and ethically sound relationship with patients, their families, lab technical staff and other health professionals.								
Elicit information using effective nonverbal, explanatory, questioning, and writing skills.								
Provide information using effective nonverbal, explanatory, questioning, and writing skills.								
Work effectively with others as a member of a team or other professional group.								
Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society.								
Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices.								



General skills	could not judge (0)	strongly disagree (1)	(2)	(3)	(4)	(5)	(6)	agree (7)
Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities.								
Work effectively in relevant academic and health care delivery settings and systems including good administrative and time management.								
Adopt cost-effective practice and resource allocation that does not compromise quality of services.								
Assist patients in dealing with system complexities.								



# course "I-2" PHARMACOLOGY





## Course "I-2" PHARMACOLOGY

#### 1. Practical experiments log book

No	Experiment	Number of each
		experiments
1	Preparation of different physiological solutions.	
2	Experiments on isolated organs and effect of	
	different drugs on them.	

#### Requirements

- I. Attendance of at least 80% of practical sections.
- II. Doing at least 5 experiments in each.
- III. Students are able to do experiments and recognized procedures.
- IV. Practical assessment at the end of course.



#### 2- Practical experiments presentation log book

Record the cases related to the module that you have presented in a seminar or other activity.

H.N	Diagnosis of case	Level of participation *	Location	Signature of supervisor

<sup>\*</sup> Level of participation

- A- Plan and carry out
- B- Carry out
- C- Carry out under supervision



#### 3- Procedures log book

HN	Procedure	Level of competency*	Location	Signature

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



#### **Requirements**

- I. Attendance of at least 80% of practical sections.
- II. Doing at least 4 experiments in each done independent

#### 4- Rotation / attendance proof

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# Postgraduate student's program Rotation in training assessment

*	Name	•

\* Period of training From:

To:

\* Site:

#### \*Rotation

General skills	could	strongly				strongly
	not	disagree	(2) (3)	(4) $(5)$	(6)	agree
	judge	(1)				(7)
	(0)					
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.						



General skills	could	strongly				$\bigcap$		strongly
General bining	not	disagree	(2)	(3)	(4)	(5)	(6)	agree
				(3)	(4)	(3)	(0)	
	judge	(1)						(7)
	(0)							
Facilitate learning of students, lab technical staff and other health care professionals including their evaluation and assessment.								
Maintain therapeutic and ethically sound relationship with patients, their families, lab technical staff and other health professionals.								
Elicit information using effective nonverbal, explanatory, questioning, and writing skills.								
Provide information using effective nonverbal, explanatory, questioning, and writing skills.								
Work effectively with others as a member of a team or other professional group.								
Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society.								
Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices.								



General skills	could not judge (0)	strongly disagree (1)	(2)	(3)	(4)	(5)	(6)	strongly agree (7)
Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities.  Work effectively in relevant academic and health care delivery settings and systems including good administrative and time management.								
Adopt cost-effective practice and resource allocation that does not compromise quality of services.  Assist patients in dealing with system complexities.								



# course "1-3" Any other Basic course



#### Course "I-3"

#### 1. Practical experiments log book

No	Experiment	Number of each experiments
1		
2		
3		

#### Requirements

- I. Attendance of at least 80% of practical sections.
- II. Doing at least 5 experiments in each.
- III. Students are able to do experiments and recognized procedures.
- IV. Practical assessment at the end of course.



#### 2- Practical experiments presentation log book

Record the cases related to the module that you have presented in a seminar or other activity.

H.N	Diagnosis of case	Level of participation *	Location	Signature of supervisor

<sup>\*</sup> Level of participation

- A- Plan and carry out
- B- Carry out
- C- Carry out under supervision



#### 3- Procedures log book

HN	Procedure	Level of competency*	Location	Signature

<sup>\*</sup> Level of competency

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



#### Requirements

- I. Attendance of at least 80% of practical sections.
- II. Doing at least 4 experiments in each done independent

#### 4- Rotation / attendance proof

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			<del>•</del>



# Postgraduate student's program Rotation in training assessment

*	Name	:
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\* Period of training From:

To:

\* Site:

#### \*Rotation

General skills	could	strongly				strongly
	not	disagree	(2) (3)	(4) $(5)$	(6)	agree
	judge	(1)				(7)
	(0)					
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.						



General skills	could	strongly		$\mathcal{I}$		$\mathcal{I}$		strongly
	not	disagree	(2)	(3)	( <b>4</b> )	(5)	(6)	agree
		(1)	(= )	(0)	(-)	(0)	(0)	(7)
	judge	(1)						(7)
	(0)							
Facilitate learning of students, lab technical staff and other health care professionals including their evaluation and assessment.								
Maintain therapeutic and ethically sound relationship with patients, their families, lab technical staff and other health professionals.								
Elicit information using effective nonverbal, explanatory, questioning, and writing skills.								
Provide information using effective nonverbal, explanatory, questioning, and writing skills.								
Work effectively with others as a member of a team or other professional group.								
Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society.								
Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices.								



General skills	could not judge (0)	strongly disagree (1)	(2)	(3)	(4)	(5)	(6)	agree (7)
Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities.								
Work effectively in relevant academic and health care delivery settings and systems including good administrative and time management.								
Adopt cost-effective practice and resource allocation that does not compromise quality of services.								
Assist patients in dealing with system complexities.								



# course "1-4" NEUROLOGY





## course "I-4" NEUROLOGY

#### 1. Case/Practical experiments log book

No	Experiment	Number experiments	of	each
1	Learning practical of neurophysiology as			
	electroencephalograph (EEG).			
2	Learning practical of myogram.			
3	Learning practical of evoked potentials.			
4	Knowing complete neurological examination of the patients (cranial nerves, sensory, motor, coordination tests, vestibular apparatus).			

#### Requirements

- I. Attendance of at least 80% of practical sections.
- II. Doing at least 5 experiments or cases in each.
- III. Students are able to do techniques and recognized procedures.
- IV. Practical assessment at the end of course.



#### 2- Practical experiments presentation log book

Record the cases related to the module that you have presented in a seminar or other activity.

H.N	Diagnosis of case	Level of participation *	Location	Signature of supervisor

<sup>\*</sup> Level of participation

- A- Plan and carry out
- B- Carry out
- C- Carry out under supervision



#### 3- Procedures log book

HN	Procedure	Level of competency*	Location	Signature

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



#### Requirements

- I. Attendance of at least 80% of practical sections.
- II. Doing at least 5 procedures and examination of patients done independent

#### 4- Rotation / attendance proof

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## postgraduate student's program Rotation in training assessment

*	Name.	•
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\* Period of training From:

To:

\* Site:

#### \*Rotation

General skills	could	strongly				strongly
	not	disagree	(2) (3)	(4) (5)	(6)	agree
	judge	(1)				<b>(7</b> )
	(0)					
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.						



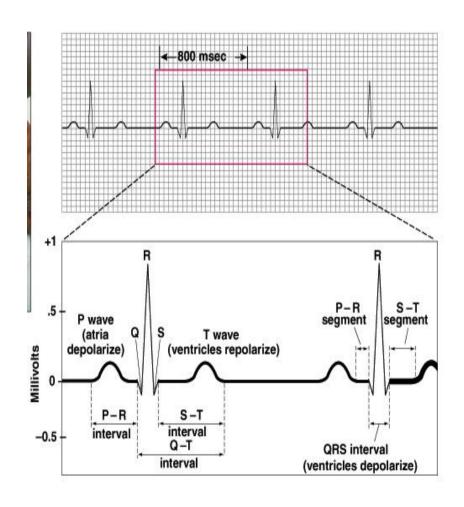
General skills	could	strongly		$\mathcal{J}$		$\mathcal{J}$		strongly
	not	disagree	(2)	(3)	(4)	(5)	(6)	agree
	judge	(1)						(7)
	(0)							, ,
Facilitate learning of students, lab technical staff and other health care professionals including their evaluation and assessment.								
Maintain therapeutic and ethically sound relationship with patients, their families, lab technical staff and other health professionals.								
Elicit information using effective nonverbal, explanatory, questioning, and writing skills.								
Provide information using effective nonverbal, explanatory, questioning, and writing skills.								
Work effectively with others as a member of a team or other professional group.								
Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society.								
Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices.								



General skills	could	strongly		$\widehat{\mathcal{J}}$		$\hat{\mathcal{Y}}$		strongly
	not	disagree	(2)	(3)	(4)	(5)	(6)	agree
	judge	(1)						(7)
	(0)							
Demonstrate sensitivity and								
responsiveness to patients'								
culture, age, gender, and								
disabilities.								
Work effectively in relevant								
academic and health care								
delivery settings and systems								
including good administrative and time								
management.								
Adopt cost-effective practice								
and resource allocation that								
does not compromise quality of								
services.								
Assist patients in dealing with								
system complexities.								



## course "I-5" CARDIOLOGY





### course "I-5" CARDIOLOGY

#### 1. Case/Practical experiments log book

No	Experiment	Number experiments	of	each
1	Knowing how to do ECG and interpretation			
	on it.			
2	Knowing basis of echocardiography &			
	catheterization			

#### Requirements

- I. Attendance of at least 80% of practical sections.
- II. Doing at least 5 procedures in each.
- III. Students are able to do techniques and recognized procedures.
- IV. Practical assessment at the end of course.



#### 2- Practical experiments presentation log book

H.N	Diagnosis of case	Level of participation *	Location	Signature of supervisor

<sup>\*</sup> Level of participation

- A- Plan and carry out
- B- Carry out
- C- Carry out under supervision



HN	Procedure	Level of competency*	Location	Signature

<sup>\*</sup> Level of competency

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



- I. Attendance of at least 80% of practical sections.
- II. Doing at least 5 procedures done independent

#### 4- Rotation / attendance proof

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## Postgraduate student's program Rotation in training assessment

*	Name.	•
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\* Period of training From:

To:

\* Site:

#### \*Rotation

General skills	could	strongly				strongly
	not	disagree	(2) (3)	(4) $(5)$	(6)	agree
	judge	(1)				(7)
	(0)					
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.						



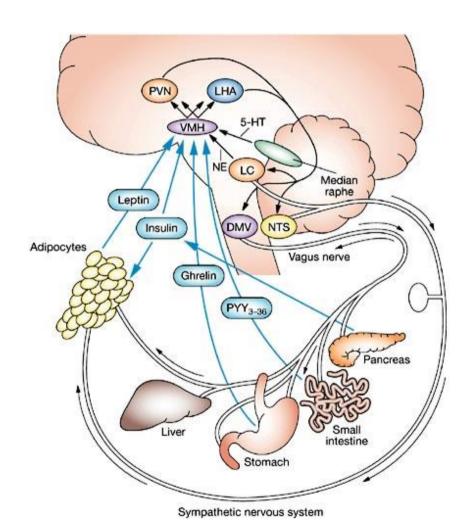
General skills	could	strongly		$\mathcal{J}$		$\mathcal{J}$		strongly
	not	disagree	(2)	(3)	(4)	(5)	(6)	agree
	judge	(1)						(7)
	(0)							
Facilitate learning of students, lab technical staff and other health care professionals including their evaluation and assessment.								
Maintain therapeutic and ethically sound relationship with patients, their families, lab technical staff and other health professionals.								
Elicit information using effective nonverbal, explanatory, questioning, and writing skills.								
Provide information using effective nonverbal, explanatory, questioning, and writing skills.								
Work effectively with others as a member of a team or other professional group.								
Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society.								
Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices.								



General skills	could not judge (0)	strongly disagree (1)	(2)	(3)	(4)	(5)	(6)	strongly agree (7)
Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities.  Work effectively in relevant academic and health care delivery settings and systems								
including good administrative and time management.  Adopt cost-effective practice								
and resource allocation that does not compromise quality of services.  Assist patients in dealing with system complexities.								



## Speciality course: Course 2: (Medical Physiology)





Units' Titles' list	% from	Level	Core	Credit po	ints
	total Marks	(Year)	Didactic	training	Total
1. Unit {Module} 1: General & Cellular Basis of Medical Physiology.		1,2	1	2	3
2. Unit {Module} 2: Nerve and Muscle.		1,2	1	4	5
3. Unit {Module} 3: Autonomic Nervous system.		1,2	1	4	5
4. Unit {Module} 4: Physiology of the Central Nervous		2,3	5	28	33
System and Special Sense.  5. Unit {Module} 5:		1,2	4	22	26
Cardiovascular Physiology.		1,2	2	12	14
Immunity.		1,2	2	8	10
Gastrointestinal physiology.		1,2	2	13	15
<ul><li>8. Unit {Module} 8: Respiration.</li><li>9. Unit {Module} 9: General Metabolism and Regulation of Body Temperature.</li></ul>		2,3	1	5	6
10.Unit (Module) 10: Renal Physiology.		2,3	1	8	9
11.Unit {Module) 11: Body fluids, Electrolytes and Acid Base Regulation.		2,3	1	2	3
12.Unit {Module} 12: Endocrine System and Reproduction.		2,3	1	9	10
Total No of units	12		24	116	140



Second Part	Speciality courses						
	Speciality Clinical Work						
Speciality Courses	PHY203A						
1. Unit 1: General & Cellular Basis of Medical Physiology.		1CP	2CP	3CP			
2. Unit 2: Nerve and Muscle.		1CP	4CP	5CP			
<ul><li>3. Unit 3: Autonomic Nervous system.</li><li>4. Unit 4: Physiology of the</li></ul>		1CP	4CP	5CP			
Central Nervous System and Special Sense.		5CP	27CP	32CP			
5. Unit 5: Cardiovascular Physiology.		4CP	22CP	26CP			
6. Unit 6: Blood & Immunity.		2CP	12CP	14CP			
7. Unit 7: Gastrointestinal physiology.		2CP	8CP	10CP			
8. Unit 8: Respiration.		2CP	13CP	15CP			
9. Unit 9: General Metabolism and Regulation of Body Temperature.							
<ul><li>10. Unit 10: Renal Physiology.</li><li>11. Unit 11: Body fluids,</li></ul>		1CP	5CP	6CP			
Electrolytes and Acid Base Regulation.		1CP	2CP	3CP			
12) Unit 12: Endocrine System and							
Reproduction.		3СР	9CP	12CP			
Total of the second part		24	96	120			



- \*Fulifilling of requirements either didactics or practical attendence and experiments is at least 80% of requirements.
  - \* Formative assessment at least every 6 months.

#### **Course 2; Unit: ENDOCRINOLOGY**

#### 1. Practical experiments log book

No	Experiment	Number of each experiments
1	Function tests of endocrine glands	

#### Requirements

- I. Attendance of at least 80% of practical sections.
- II. Doing at least 5 experiments in each.
- III. Students are able to do experiments and recognized procedures.
- IV. Practical assessment at the end of course.



#### 2- Practical experiments presentation log book

H.N	Diagnosis of case	Level of participation *	Location	Signature of supervisor

<sup>\*</sup> Level of participation

- A- Plan and carry out
- B- Carry out
- C- Carry out under supervision



HN	Procedure	Level of competency*	Location	Signature

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



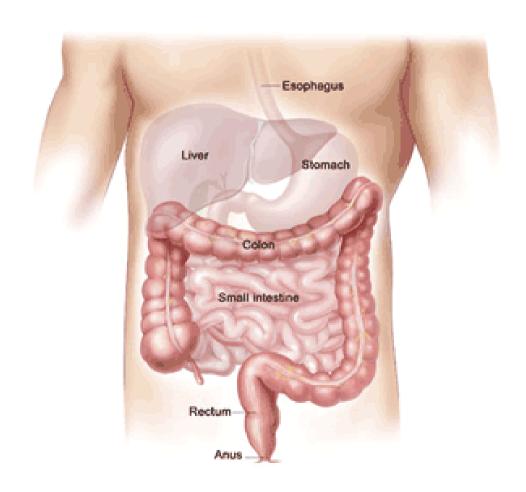
- I. Attendance of at least 80% of practical sections.
- II. Doing at least 4 experiments in each done independent

#### 4- Rotation / attendance proof

توقيع مدير المعمل	توقيع رئيس القسم	التاريخ	أسم المعمل التى تدرب بها
			4:



# Course 2; unit: GASTROENTEROLOGY





#### **Course 2; unit : GASTROENTEROLOGY**

#### 1. Practical experiments log book

No	Experiment	Number of each experiments
1	Function tests of different organs of GIT	
2	Test of motility of different organs of GIT	
3	Test of secretions of different organs of GIT	

#### Requirements

- I. Attendance of at least 80% of practical sections.
- II. Doing at least 5 experiments in each.
- III. Students are able to do experiments and recognized procedures.
- IV. Practical assessment at the end of course.



#### 2- Practical experiments presentation log book

H.N	Diagnosis of case	Level of participation *	Location	Signature of supervisor

<sup>\*</sup> Level of participation

- A- Plan and carry out
- B- Carry out
- C- Carry out under supervision



HN	Procedure	Level of competency*	Location	Signature

<sup>\*</sup> Level of competency

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



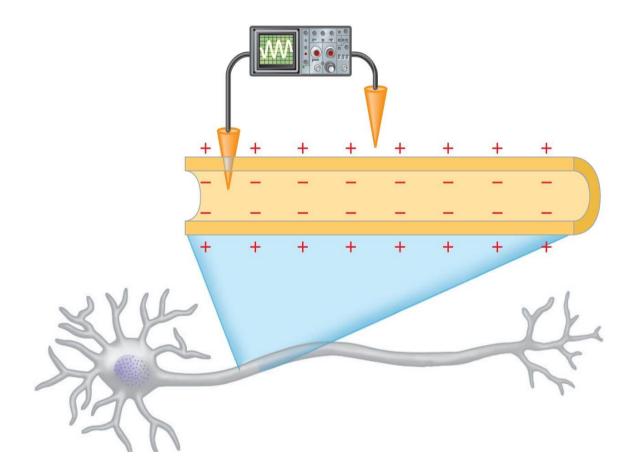
- I. Attendance of at least 80% of practical sections.
- II. Doing at least 4 experiments in each done independent

#### 4- Rotation / attendance proof

توقيع مدير المعمل	توقيع رئيس القسم	التاريخ	أسم المعمل التى تدرب بها



# Course 2; unit 1 MUSCLE & NERVE





### Course 2; unit 1: MUSCLE & NERVE 1. Case/Practical experiments log book

No	Experiment	Number of each experiments
1	Preparation of model of nerve and muscle	caper inicites
2	Studying different factors affecting nerve excitation and skeletal muscles contraction.	
3	Induction of evoked potential of nerve	

#### Requirements

- I. Attendance of at least 80% of practical sections.
- II. Doing at least 5 procedures in each.
- III. Students are able to do techniques and recognized procedures.
- IV. Practical assessment at the end of course.



#### 2- Practical experiments presentation log book

H.N	Diagnosis of case	Level of participation*	Location	Signature of supervisor

<sup>\*</sup> Level of participation

- A- Plan and carry out
- B- Carry out
- C- Carry out under supervision



HN	Procedure	Level of competency*	Location	Signature

<sup>\*</sup> Level of competency

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



- I. Attendance of at least 80% of practical sections.
- II. Doing at least 5 procedures done independent

#### 4- Rotation / attendance proof

توقيع مدير المعمل	توقيع رئيس القسم	التاريخ	أسم المعمل التى تدرب بها
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## Course 2; unit 2: CENTRAL NERVOUS SYSTEM



### SPECIAL SENSES





## Course 2: 2unit : CENTRAL NERVOUS SYSTEM & SPECIAL SENSES 1. Case/Practical experiments log book

No	Experiment	Number of each experiments
1	Recording of electro-encephalograph	
2	Recording of electro-myograph	
3	Recording of nerve conduction velocity	
4	Examination of central nervous system (cranial nerves, sensory, motor, co- ordination tests and vestibular apparatus).	
5	Doing hearing tests by tuning fork	
6	Recording of audiometer	
7	Examination of visual field	
8	Determination of visual acuity	
9	Evaluation of color vision	
10	Examination of intra-ocular pressure	
11	Examination of the fundus	



- I. Attendance of at least 80% of practical sections.
- II. Doing at least 5 procedures in each.
- III. Students are able to do techniques and recognized procedures.
- IV. Practical assessment at the end of course.

#### 2- Practical experiments presentation log book

H.N	Diagnosis of case	Level of participation*	Location	Signature of supervisor

<sup>\*</sup> Level of participation

- A- Plan and carry out
- B- Carry out
- C- Carry out under supervision



HN	Procedure	Level of competency*	Location	Signature

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



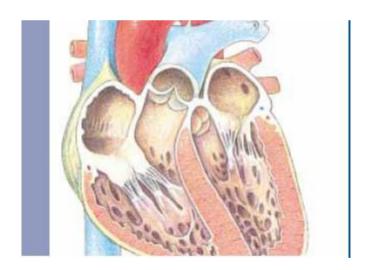
- I. Attendance of at least 80% of practical sections.
- II. Doing at least 5 procedures done independent

#### 4- Rotation / attendance proof

توقيع مدير المعمل	توقيع رئيس القسم	التاريخ	أسم المعمل التى تدرب بها
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## Course 2; Unit 3: CARDIOVASCULAR SYSTEM





#### **Course 2; unit 3: CARDIOVASCULAR SYSTEM**

#### 1. Case/Practical experiments log book

No	Experiment	Number of each experiments
1	Isolated perfuse heart (rabbit & frog)	•
	experiments and determined factors affecting	
	them	
2	Recording of arterial blood pressure in	
	humans and experimental animals.	
3	Recording of heart rates	
	in humans and experimental animals.	
4	Recording of electrocardiograph (ECG) in	
	humans and experimental animals.	
5	Recording the effect of cholinergic and	
	adrenergic drugs on blood pressure, heart	
	rate, ECG in experimental animals.	
6	Measurement of activity of the	
	Baroreceptors on sympathetic and	
	parasympathetic nervous system.	



- I. Attendance of at least 80% of practical sections.
- II. Doing at least 5 procedures in each.
- III. Students are able to do techniques and recognized procedures.
- IV. Practical assessment at the end of course.

#### 2- Practical experiments presentation log book

H.N	Diagnosis of case	Level of participation*	Location	Signature of supervisor

<sup>\*</sup> Level of participation

- A- Plan and carry out
- B- Carry out
- C- Carry out under supervision



HN	Procedure	Level of competency*	Location	Signature

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



#### Requirements

- I. Attendance of at least 80% of practical sections.
- II. Doing at least 5 procedures done independent

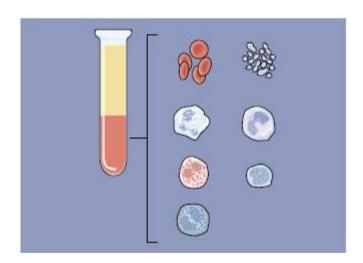
#### 4- Rotation / attendance proof

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توقيع مدير المعمل	توقيع رئيس القسم	التاريخ	أسم المعمل التى تدرب بها
			بها



## Course 2; unit 4:

## BLOOD





#### Course 2; unit 4: BLOOD

#### 1. Case/Practical experiments log book

No	Experiment	Number of each experiments
1	Assessment hemoglobin contents	
2	Assessment bleeding time, coagulation time, prothrombin time.	
3	Assessment of Erythrocytic sedimentation rate	
4	Determination of blood groups	
5	Assessment of blood hemolysis	
6	Determination of different blood indices in human	

#### Requirements

- I. Attendance of at least 80% of practical sections.
- II. Doing at least 5 procedures in each.
- III. Students are able to do techniques and recognized procedures.
- IV. Practical assessment at the end of course.



#### 2- Practical experiments presentation log book

Record the cases related to the module that you have presented in a seminar or other activity.

H.N	Diagnosis of case	Level of participation*	Location	Signature of supervisor

<sup>\*</sup> Level of participation

- A- Plan and carry out
- B- Carry out
- C- Carry out under supervision



#### 3- Procedures log book

HN	Procedure	Level of competency*	Location	Signature

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



#### Requirements

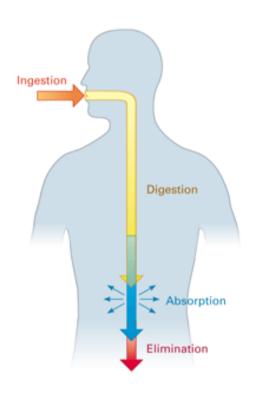
- I. Attendance of at least 80% of practical sections.
- II. Doing at least 5 procedures done independent

#### 4- Rotation / attendance proof

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## Course 2; unit 5: GASTROINTESTINAL TRACT (GIT)





#### Course 2; unit 5: GASTROINTESTINAL TRACT

#### 1. Case/Practical experiments log book

No	Experiment	Number of each experiments
1	Making different models of gastrointestinal	•
	tract	
2	Recording factors affecting GIT	
	contractility, secretion and motility	
3	Gastric function tests	

#### Requirements

- I. Attendance of at least 80% of practical sections.
- II. Doing at least 5 procedures in each.
- III. Students are able to do techniques and recognized procedures.
- IV. Practical assessment at the end of course.



#### 2- Practical experiments presentation log book

Record the cases related to the module that you have presented in a seminar or other activity.

H.N	Diagnosis of case	Level of participation*	Location	Signature of supervisor

<sup>\*</sup> Level of participation

- A- Plan and carry out
- B- Carry out
- C- Carry out under supervision



#### 3- Procedures log book

HN	Procedure	Level of competency*	Location	Signature

<sup>\*</sup> Level of competency

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



#### Requirements

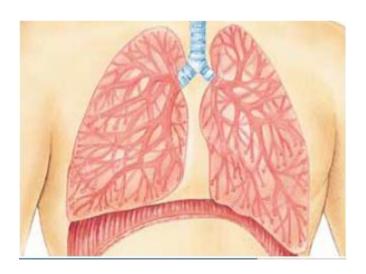
- I. Attendance of at least 80% of practical sections.
- II. Doing at least 5 procedures done independent

#### 4- Rotation / attendance proof

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توقيع مدير المعمل	توقيع رئيس القسم	التاريخ	أسم المعمل التى تدرب بها
			بها



# Course 2: Unit 6: RESPIRATION





#### Course 2; unit 6: RESPIRATION

#### 1. Case/Practical experiments log book

No	Experiment	Number of each experiments
1	Pulmonary functions tests in human and experimental animals	-

#### Requirements

- I. Attendance of at least 80% of practical sections.
- II. Doing at least 5 procedures in each.
- III. Students are able to do techniques and recognized procedures.
- IV. Practical assessment at the end of course.



#### 2- Practical experiments presentation log book

Record the cases related to the module that you have presented in a seminar or other activity.

H.N	Diagnosis of case	Level of participation*	Location	Signature of supervisor

<sup>\*</sup> Level of participation

- A- Plan and carry out
- B- Carry out
- C- Carry out under supervision



#### 3- Procedures log book

HN	Procedure	Level of competency*	Location	Signature

<sup>\*</sup> Level of competency

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



#### Requirements

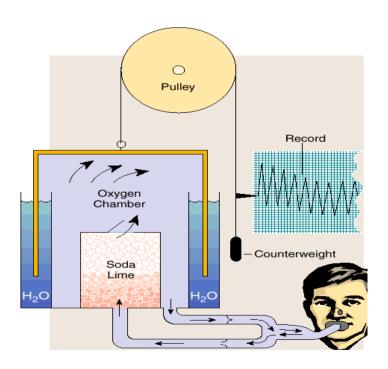
- I. Attendance of at least 80% of practical sections.
- II. Doing at least 5 procedures done independent

#### 4- Rotation / attendance proof

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			بها



# Course 2; Unit 7: GENERAL METABOLISM & REGULATION OF BODY TEMPERATURE





#### Course 2; unit 7: GENERAL METABOLISM &

#### REGULATION OF BODY TEMPERATURE

#### 1. Case/Practical experiments log book

No	Experiment	Number of each
		experiments
1	Estimation of indirect basal metabolic rate	

#### Requirements

- I. Attendance of at least 80% of practical sections.
- II. Doing at least 5 procedures in each.
- III. Students are able to do techniques and recognized procedures.
- IV. Practical assessment at the end of course.



#### 2- Practical experiments presentation log book

Record the cases related to the module that you have presented in a seminar or other activity.

H.N	Diagnosis of case	Level of participation*	Location	Signature of supervisor

<sup>\*</sup> Level of participation

- A- Plan and carry out
- B- Carry out
- C- Carry out under supervision



#### 3- Procedures log book

HN	Procedure	Level of competency*	Location	Signature

<sup>\*</sup> Level of competency

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



#### Requirements

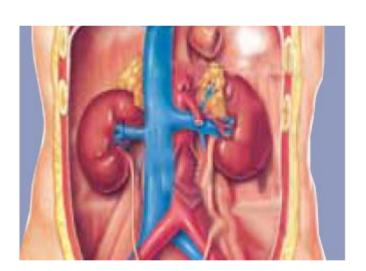
- I. Attendance of at least 80% of practical sections.
- II. Doing at least 5 procedures done independent

#### 4- Rotation / attendance proof

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توقيع مدير المعمل	توقيع رئيس القسم	التاريخ	أسم المعمل التى تدرب بها
			بها



## Course 2; unit: 8 RENAL SYSTEM





### Course 2; Unit 8:RENAL SYSTEM 1. Case/Practical experiments log book

No	Experiment	Number of each
		experiments
1	Assessment of kidney functions as urine and	
	blood analysis and clearance tests	
2	Measurement of glomerular filtration rate	
3	Measurement of renal blood flow	
4	Assessment of tubular functions	

#### Requirements

- I. Attendance of at least 80% of practical sections.
- II. Doing at least 5 procedures in each.
- III. Students are able to do techniques and recognized procedures.
- IV. Practical assessment at the end of course.



#### 2- Practical experiments presentation log book

Record the cases related to the module that you have presented in a seminar or other activity.

H.N	Diagnosis of case	Level of participation*	Location	Signature of supervisor

<sup>\*</sup> Level of participation

- A- Plan and carry out
- B- Carry out
- C- Carry out under supervision



#### 3- Procedures log book

HN	Procedure	Level of competency*	Location	Signature

<sup>\*</sup> Level of competency

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



#### Requirements

- I. Attendance of at least 80% of practical sections.
- II. Doing at least 5 procedures done independent

#### 4- Rotation / attendance proof

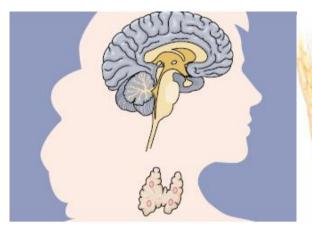
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# Course 2; Unit: 9 ENDOCRINE SYSTEM



### REPRODUCTION







#### Course 2; Unit 9: ENDOCRINE SYSTEM & REPRODUCTION

#### 1. Case/Practical experiments log book

No	Experiment	Number of each experiments
1	Measurement of different hormones	
2	Assessment of functions of different hormones	
3	Methods of determination of testicular function tests	
4	Methods of determination of ovulation time	
5	Methods of determination of pregnancy	

#### Requirements

- I. Attendance of at least 80% of practical sections.
- II. Doing at least 5 procedures in each.
- III. Students are able to do techniques and recognized procedures.
- IV. Practical assessment at the end of course.



#### 2- Practical experiments presentation log book

Record the cases related to the module that you have presented in a seminar or other activity.

H.N	Diagnosis of case	Level of participation*	Location	Signature of supervisor

<sup>\*</sup> Level of participation

- A- Plan and carry out
- B- Carry out
- C- Carry out under supervision



#### 3- Procedures log book

HN	Procedure	Level of competency*	Location	Signature

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



#### Requirements

- I. Attendance of at least 80% of practical sections.
- II. Doing at least 5 procedures done independent

#### 4- Rotation / attendance proof

توقيع مدير المعمل	توقيع رئيس القسم	التاريخ	أسم المعمل التى تدرب بها
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## Elective Course

#### Requirements

- Credit points: 2 credit point.
  - Minimal rate of attendance 80% of lectures and 80% of training



Name	of the	elective	course.	
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#### **Elective Course Lectures**

Date	Attendance	Topic	Signature



#### **Elective Course Practical skills**

Date	Attendance	Topic	Signature
		_	



## Program of Physiology Master Degree 1- Academic activates

Lecture, journal club, seminar, conference, workshop

Activity	Your role **	Date	Signature of supervisor



Activity	Activity Your role **		Signature of supervisor

\*\* Your role:-

A- Attendance

**B-** Organization

C- Presentation



#### Program of Physiology Master Degree 2- Academic achievements

		acific venicities	T
Activity	Your role **	Date	Signature of supervisor



Activity	Your role **	Date	Signature of supervisor		



## Postgraduate student's program Rotation in training assessment

*	Name:
---	-------

\* Period of training From:

To:

\* Site:

\*Rotation

General skills	could	strongly				strongly
	not	disagree	$(2) \qquad (3)$	(4) $(5)$	(6)	agree
	judge	(1)				(7)
	(0)					
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.						



General skills	could	strongly		$\mathcal{J}$		$\mathcal{J}$		strongly
	not	disagree	(2)	(3)	(4)	(5)	(6)	agree
	judge	(1)						(7)
	(0)							
Facilitate learning of students, lab technical staff and other health care professionals including their evaluation and assessment.								
Maintain therapeutic and ethically sound relationship with patients, their families, lab technical staff and other health professionals.								
Elicit information using effective nonverbal, explanatory, questioning, and writing skills.								
Provide information using effective nonverbal, explanatory, questioning, and writing skills.								
Work effectively with others as a member of a team or other professional group.								
Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society.								
Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, business practices.								



General skills	could not judge (0)	strongly disagree (1)	(2)	(3)	(4)	(5)	(6)	strongly agree (7)
Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities.  Work effectively in relevant academic and health care delivery settings and systems including good administrative and time management.								
Adopt cost-effective practice and resource allocation that does not compromise quality of services.  Assist patients in dealing with system complexities.								



#### Program of Physiology Master Degree Formative assessment

		assessificit	
Activity	Your role **	Date	Signature of supervisor



Activity	Your role **	Date	Signature of supervisor



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#### **Declaration**

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Course Structure Mirror	Responsible (Module)	Signature	Date
	Coordinator Name:		
Basic course			
Speciality course			
Module I			
Module II			
Module III			
Module IV			
Module V			
Module VI			
Module VII			
Module VIII			
Module IX			
Module X			
- Master Degree Thesis Acceptance Date:			
- Fulfillment of required contact hours prior			
to final examination			
Physiology master degree principle			
Coordinator:			
Date approved by physiology department			
council:			

يعتمد ، رئيس القسم