



Mansoura Faculty of Medicine

Department of Histology and
Cell Biology

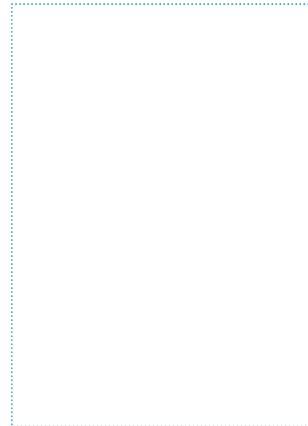
Logbook of Histology & Cytology



"PhD Degree"

(HIST 600)

IDENTIFICATION DATA



Name:

Place and date of birth

Address:

Telephone number

E-mail:

M.B., B. Ch:

Date:

Degree:

Master Degree:

Date:

Degree:

PhD Degree:

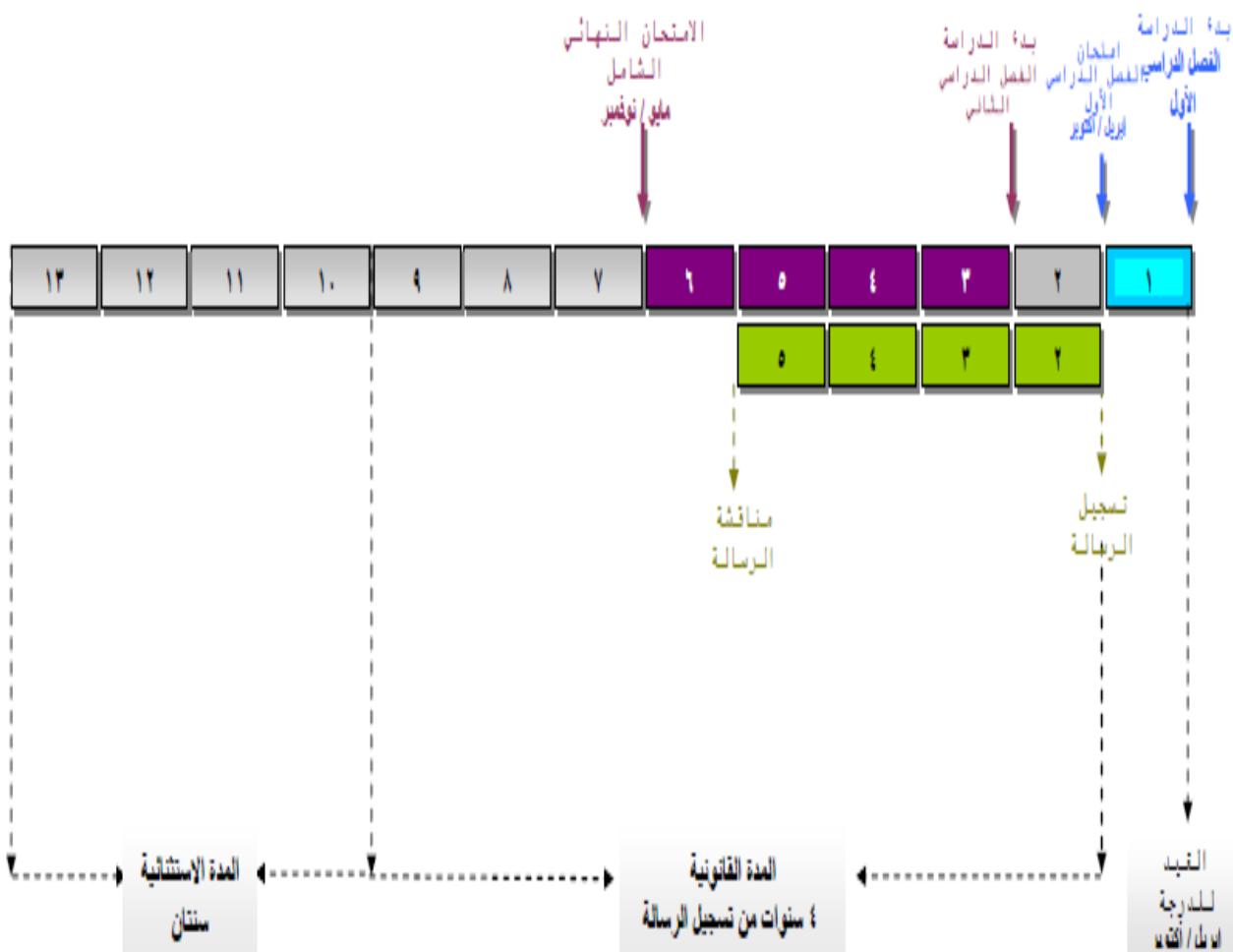
Date of Registration:

Signature:

Head of the Department

**Vice Dean for research
and postgraduate study**

درجة الدكتوراه



لغاء القيد

- مرور عام دون أن يقدم الطالب لامتحان الفصل الدراسي الأول بدون عذر مقبول أو يقف قيد إنتهاء المدة القانونية والاستثنائية للحصول على الدرجة

مدة الدراسة وال ساعات المعتمدة

- الفصل دراسي: ٦٠ ساعة معتمدة
 الجزء الأول : فصل دراسي واحد : ٥ ساعات
 رسالة : ٤ فصول دراسية : ١٥ ساعة
 الجزء الثاني : ٤ فصول دراسية
 * المقررات الدراسية النظرية : ٢٥ ساعة معتمدة
 * كراسة الأنشطة : ١٥ ساعة معتمدة

PhD Degree in Histology & Cytology (HIST 600)

المقررات الدراسية وتوزيع الساعات المعتمدة

الساعات المعتمدة	الكود	Courses	المقررات	
٥	2	HIST 602 EM	Electron Microscope	الميكروسكوب الإلكتروني
	3	HIST 602 GE	Genetics	علم الوراثة
يتم عقد دورات تدريبية لها و يتم استيفاء هذه الدورات بحضورها				دراسات متقدمة في المجال الطبي طرق البحث العلمي الإحصاء الطبى استخدام الحاسوب الآلى فى العلوم الطبية
مخصص لكتابة بروتوكول رسالة الدكتوراه التي تبدأ مع بداية الفصل الدراسي الثاني و تستمر لمدة أربع فصول دراسية				الفصل الدراسي الثاني
٢٥	23	HIST 602	Histology & Cell Biology (Advanced course)	علم الأنسجة وبيولوجيا الخلية (مستوى متقدم)
	2	HIST 602 CC HIST 602 HE HIST 602 IM	Elective course: • Clinical Chemistry • Haematology • Immunology	المقرر الاختياري (يختار مقرر واحد فقط): • الكيمياء الاكلينيكية • أمراض الدم • علم المناعة
١٥		HIST 502 P		برنامج التدريب العملي في علم الأنسجة والخلايا - تحضير العينات لفحصها بالميكروسكوب الضوئي - تحضير العينات لفحصها بالميكروسكوب الإلكتروني - أنواع الصبغات المختلفة • أنشطة علمية مختلفة
١٥			تبدأ مع بداية الفصل الدراسي الثاني و تستمر لمدة أربع فصول دراسية	الرسالة
٦٠			إجمالي الساعات المعتمدة	

نظام الامتحان وتوزيع الدرجات: (دكتوراه المستويوجيا – الأنسجة والخلايا)

الفصل الدراسي الأول

الدرجة	الاختبار	المقرر
تعريفي		
١٠٠	اختبار تحريري مدته ثلاثة ساعات	الميكروسكوب الإلكتروني
١٠٠	اختبار تحريري مدته ثلاثة ساعات	علم الوراثة

الامتحان النهائي الشامل

اجمالي	الدرجة			الاختبار	المقرر
	عملي	شعبي	تعريفي		

	١٠٠	١٠٠	١٠٠ + ١٠٠	إختباران تحريريان مدة كل منهما ثلاث ساعات + اختبار شفهي + اختبار عملي	علم الأنسجة وبيلوجيا الخلية
٤٥٠	إختبار تحريري مدته ساعة				
المقرر الاختياري					

Contents

I. First Part of PhD Degree

Semester 1:

- ➲ Electron Microscope
- ➲ Genetics
- ➲ Advanced Courses in:
 - ✚ Research Methods
 - ✚ Medical Statistics
 - ✚ The use of computer in medical science

II. Second Part of PhD Degree

Semester 2.....Thesis

Semester 3.....Cytology

Semester 4.....General Histology

Semester 5.....Special Histology

Semester 6.....Neuro-histology

Elective course:

- Clinical Chemistry
- Haematology
- Immunology

III. Activities

IV. Timetable of PhD Program

I. First Part of PhD Degree

5 Credit Hours	Code	Course
	HIST 602 EM	Electron Microscope
	HIST 602 GE	Genetics
	Advanced Courses in:	
	 Research Methods	
	 Medical Statistics	
	 The use of computer in medical science	

Electron Microscope

Nº	Date	Subject	Hours	Staff
				Name
				Signature
1		Instrumental Base	5	Dr Awny
2		Fixation: <ul style="list-style-type: none">• Physical fixation• Cryo-fixation• Chemicalfixation Principles• Criteria of proper fixation methods• Primary Fixation• Post fixation	5	Dr Awny
3		Buffer	2	Dr Awny
4		Dehydration	3	Dr Awny
5		Impregnation	3	Dr Awny
6		Sectioning: <ul style="list-style-type: none">• Staining semi-thin sections• Ultra-thin sections• Sectioning problems	2	Dr Awny
7		Staining: <ul style="list-style-type: none">• Enblock staining• Post staining• Staining of thin sections• Staining of ultra-thin sections• Negative staining	5	Dr Awny
8		Scanning E/M	5	Dr Awny
		Total hours	30	

Genetics

Week	Date	Lecture			Staff	
		Number	Hour	Topic	Name	Signature
1 st	/ /	1	1	DNA	Dr S. Gawish	
		2	1	Chromosomes	Dr S. Gawish	
		3	1	Centromere & Centrifugation Techniques	Dr S. Gawish	
2 nd	/ /	1	1	Telomere	Dr S. Gawish	
		2	1	DNA Replication	Dr S. Gawish	
		3	1	DNA Transcription	Dr S. Gawish	
3 rd	/ /	1	1	RNA Processing	Dr S. Gawish	
		2	1	Main 3 Types Of RNA	Dr S. Gawish	
		3	1	Other Types Of RNA	Dr S. Gawish	
4 th	/ /	1	1	Genetic Code	Dr S. Gawish	
		2	1	Protein Synthesis	Dr S. Gawish	
		3	1	Regulation Of Gene Expression	Dr S. Gawish	
5 th	/ /	1	1	DNA Repair	Dr S. Gawish	
		2	1	Mutation	Dr S. Gawish	
		3	1	Human Genome	Dr S. Gawish	
6 th	/ /	1	1	Genome Of Microorganisms	Dr S. Gawish	
		2	1	Mitochondrial Genome	Dr S. Gawish	
		3	1	Restriction Endonucleases	Dr S. Gawish	
7 th	/ /	1	1	Gel Electrophoresis	Dr S. Gawish	
		2	1	Blotting Techniques	Dr S. Gawish	
		3	1	ISH, FISH & Microarray Techniques	Dr S. Gawish	
8 th	/ /	1	1	Gene Amplification & Cloning Vectors	Dr S. Gawish	
		2	1	Gene Sequencing	Dr S. Gawish	
		3	1	Gene Mapping	Dr S. Gawish	
9 th	/ /	1	1	Strategies Of Genetic Engineering	Dr S. Gawish	
		2	1	Applications Of Genetic Engineering	Dr S. Gawish	

		3	1	Fingerprinting & Footprinting	Dr S. Gawish	
10 th	/ /	1	1	Interphase	Dr S. Gawish	
		2	1	Mitosis	Dr S. Gawish	
		3	1	Meiosis	Dr S. Gawish	
11 th	/ /	1	1	Karyotyping	Dr S. Gawish	
		2	1	X & Y Chromosomes	Dr S. Gawish	
		3	1	Banding Techniques	Dr S. Gawish	
12 th	/ /	1	1	Numerical Chromosomal Anomalies	Dr S. Gawish	
		2	1	Structural Chromosomal Anomalies	Dr S. Gawish	
		3	1	Ch., Epigenetics, Extranuclear Inheritance	Dr S. Gawish	
13 th	/ /	1	1	Mendelian Inheritance	Dr S. Gawish	
		2	1	Non-Mendelian Inheritance	Dr S. Gawish	
		3	1	Genetic Variation In Natural Population B	Dr S. Gawish	
14 th	/ /	1	1	Genetics Of Cancer	Dr S. Gawish	
		2	1	Gene Therapy	Dr S. Gawish	
		3	1	Stem Cells	Dr S. Gawish	
15 th	/ /	1	1	Cloning	Dr S. Gawish	
		2	1	State of the Art in Molecular Biology	Dr S. Gawish	
		3	1	State of the Art in Genetics	Dr S. Gawish	

Research Methods

Date:

Medical Statistics

Date:

The use of computer in medical science

Date:

II. Second Part of

PhD Degree

Item	Credit Hours	Semester	Course	Code
Thesis	15	2		
Histology & Cell Biology	25	3	Cytology	HIST 602
		4	General Histology	
		5	Special Histology	
		6	Neuro-histology	
Elective course:		2	Clinical Chemistry	HIST 602 CC
			Haematology	HIST 602 HE
			Immunology	HIST 602 IM
Practical course Activity	12	15		HIST 602 P
	3			

Semester 2: Thesis

Thesis (15 credit hours)

English Title	
Arabic Title	
Supervisors	
Date of Registration	
Date of Discussion	

Thesis (15 credit hours)

Summary

**Publication
From the Thesis**

Semester 3:

Cytology

(From / / to / /)

Week	Date	Lecture			Practical		Staff	
		Nº	Hrs	Topic	Hrs	Topic	Name	Signature
Week 1	/ /	1	3	-Introduction for Histology (principles and techniques)	1	-Preparation of paraffin sections	Dr. Nazik	
	/ /	2	2	-Microscopy: principles, types and applications *Phase contrast microscope *Differential phase microscope	2	-Staining of paraffin sections with H&E	Dr. Nazik	
Week 2	/ /	1	3	-Mercury lamps -Ultraviolet and fluorescence microscope -Confocal laser, atom force microscope	1	-Interpretation of slides	Dr. Nazik	
	/ /	2	2	-Probe scanning electron microscope -Preparations of sections for TEM & SEM	2	-Preparation and staining of frozen sections	Dr. Nazik	
Week 3	/ /	1	3	-Principles, types and applications of electron microscope	1	-Interpretation of electron microscope photographs	Dr. Nazik	
	/ /	2	2	-Introduction for histochemical methods	2	-Histochemical techniques for: *Alk. Phosphatase *Succinic dehydrogenase	Dr. Nazik	
Week 4	/ /	1	3	-Cell membrane molecular structure: *Proteins	1	-EM photographs	Dr. Nazik	
	/ /	2	2	-Cell membrane molecular structure: *Lipids and cholesterol *Lipid raft	2	-EM photographs for intramembranous proteins	Dr. Nazik	

Week	Date	Lecture			Practical		Staff	
		Nº	Hrs	Topic	Hrs	Topic	Name	Signature
Week 5	/ /	1	3	-Cell membrane molecular structure: *CHO *Cell coat *Differential centrifugation & density gradient centrifugation	1	-Staining of the cell coat -EM photographs of cell coat	Dr. Nazik	
	/ /	2	2	-Function of the cell membrane	2	-Endocytosis -Exocytosis	Dr. Nazik	
Week 6	/ /	1	3	-Mitochondria: Molecular structure, function and diseases -Types of ATPases	1	-Demonstration of mitochondria(LM) -EM photographs	Dr. Nazik	
	/ /	2	2	-Endomembranous system: *Ribosomes and rER	2	-Basophilia of the cytoplasm	Dr. Nazik	
Week 7	/ /	1	3	-Endomembranous system: *Golgi apparatus	1	-Demonsration of Golgi apparatus for LM -EM photographs	Dr. Nazik	
	/ /	2	2	-Endomembranous system: *sER	2	-EM photographs -Tissue culture(PPT)	Dr. Nazik	
Week 8	/ /	1	3	-Endomembranous system: *Lysosomes *Clinical hint	1	-EM photographs	Dr. Nazik	
	/ /	2	2	-Endomembranous system: *Endosomes *Intracytoplasmic vesicle trafficking	2	-Isotypes, labeling and methods of staining of immunohisto-chemistry	Dr. Nazik	
Week 9	/ /	1	3	-Endomembranous system: *Peroxisomes *Clinical hint	1	-EM photographs	Dr. Nazik	
	/ /	2	2	-Microtubules -Centriole -Cilia & Flagella -Clinical hint	2	-Staining of centriole (Iron Hx) -Demonstration of the cilia	Dr. Wafaa	
Week 10	/ /	1	3	-Microfilaments -Intermediate filaments -Thick filaments	1	-EM photographs	Dr. Wafaa	
	/ /	2	2	-Cell locomotion -Clinical hint	2	-Staining of CHO (PAS & Best Carmine)	Dr. Wafaa	

Week	Date	Lecture			Practical		Staff	
		Nº	Hrs	Topic	Hrs	Topic	Name	Signature
Week 11	/ /	1	3	-Cell inclusions: *Stored food *Pigments *Crystals -Cytosol -Clinical hint	1	-Staining of lipids (Sudan III and Sudan black)	Dr. Wafaa	
	/ /	2	2	-Nucleus: *Introduction *Nuclear envelope *Nuclear pore & nuclear pore complex	2	-EM photographs of the nucleus	Dr. Nawal	
Week 12	/ /	1	3	-Nucleus: *Subnuclear bodies (e.g. Cojal bodies) * Nucleolus *Nuclear sap *Nuclear lamina & clinical hint *Dynamics and regulation	1	-EM photographs	Dr. Nawal	
	/ /	2	2	-Nucleus: *Chromatin *Molecular structure *Sex chromatin *Clinical hint	2	-Demonstration of sex chromatin	Dr. Nawal	
Week 13	/ /	1	3	-Morphology of chromosomes -Cell cycle (Interphase & mitotic cell division) -Control of the cell cycle	1	-EM photographs	Dr. Nawal	
	/ /	2	2	-Meiotic cell division: *Oogenesis *Spermatocytogenesis	2	-EM photographs	Dr. Nawal	
Week 14	/ /	1	3	-Karyotyping -Chromosomal anomalies	1	-Banding techniques -Karyotyping	Dr. Nawal	
	/ /	2	2	-Autoradiography	2	-Pictures -Feulgen stain -Methyl green pyronine stain	Dr. Nawal	
Week 15	/ /	1	3	-Mitotic figure -Mitotic index -Hybridization techniques	1	-Interpretation of mitotic figures	Dr. Nawal	
	/ /	2	2	-Apoptosis	2	-Interpretation of apoptotic cells and nuclei (LM &EM)	Dr. Nawal	

Semester 4:

General Histology

(From / / to / /)

Week	Date	Lecture				Practical		Staff	
		Nº	Hrs	Topic	Hrs	Topic		Name	Signature
Week 16	/ /	1	2	-Covering epithelium	3	-Parrafin sections of different types of epithelium		Dr. Amany	
	/ /	2	2	-Glandular epithelium				Dr. Amany	
	/ /	3	2	-Glandular epithelium				Dr. Amany	
Week 17	/ /	1	2	-Cell junction	3	-Sections of neuroepithelium		Dr. Amany	
	/ /	2	2	-Neuroepithelium				Dr. Amany	
	/ /	3	2	- Basement membrane				Dr. Amany	
Week 18	/ /	1	2	-C.T. fibres	3	-Sections of C.T. fibres and cells		Dr. Dorria	
	/ /	2	2	-C.T. matrix				Dr. Dorria	
	/ /	3	2	- C.T. cells				Dr. Dorria	
Week 19	/ /	1	2	- C.T. cells	3	-Sections of different types of C.T. proper and cartilage		Dr. Dorria	
	/ /	2	2	-C.T. proper				Dr. Dorria	
	/ /	3	2	-Cartilage				Dr. Dorria	
Week 20	/ /	1	2	-Bone cells	3	-Preparation of decalcified sections of bone		Dr. Dorria	
	/ /	2	2	-Types of bone				Dr. Dorria	
	/ /	3	2	-Ossification				Dr. Dorria	

Week	Date	Lecture			Practical		Staff	
		Nº	Hrs	Topic	Hrs	Topic	Name	Signature
Week 21	/ /	1	2	-Skeletal muscle fibre	3	-Paraffin sections of skeletal muscles	Dr. Dalia Refaat	
	/ /	2	2	-Triad of tubular system			Dr. Dalia Refaat	
	/ /	3	2	-Classification of muscle fibres			Dr. Dalia Refaat	
Week 22	/ /	1	2	-Cardiac muscle fibre, wall of the heart	3	-Paraffin sections of wall of the heart and moderator band	Dr. Dalia Refaat	
	/ /	2	2	-Valves and conducting system			Dr. Dalia Refaat	
	/ /	3	2	-Moderator band			Dr. Dalia Refaat	
Week 23	/ /	1	2	-Erythrocytes and thrombocytes	3	-Preparation and staining of blood films -Sections of medium sized artery and vein	Dr. Amany	
	/ /	2	2	-Leucocytes and haemocytogenesis			Dr. Amany	
	/ /	3	2	-Arteries and veins			Dr. Amal	
Week 24	/ /	1	2	-Arterio-venous connections	3	-Paraffin sections of aorta and inferior vena cava	Dr. Amal	
	/ /	2	2	-Blood capillary and sinusoids			Dr. Amal	
	/ /		2	-A-V anastomosis			Dr. Amal	
Week 25	/ /	1	2	-The neuron	3	-Paraffin sections of nerve trunk	Dr. Amal	
	/ /	2	2	-The nerve fibre			Dr. Amal	
	/ /	3	2	-The peripheral nerve trunk			Dr. Amal	

Week	Date	Lecture			Practical		Staff	
		Nº	Hrs	Topic	Hrs	Topic	Name	Signature
Week 26	/ /	1	2	-Nerve ganglia	3	Paraffin sections of the spinal and sympathetic ganglia	Dr. Amal	
	/ /	2	2	-The synapse			Dr. Amal	
	/ /	3	2	-The neuroglia			Dr. Amal	
Week 27	/ /	1	2	-Degeneration	3	-Examination of the paraffin sections of the nervous system -Staining of degenerated fibres	Dr. Amal	
	/ /	2	2	-Regeneration			Dr. Amal	
	/ /	3	2	-Stains for degenerated nerve fibres			Dr. Amal	
Week 28	/ /	1	2	-Non capsulated lymphoid follicle	3	-Preparation of paraffin sections of lymph node, spleen and tonsils	Dr. Dorria	
	/ /	2	2	-Lymph node			Dr. Dorria	
	/ /	3	2	-Spleen and tonsils			Dr. Dorria	
Week 29	/ /	1	2	-Thymus gland	3	-Sections of thymus gland -Staining of macrophages	Dr. Dorria	
	/ /	2	2	-The macrophage system			Dr. Amany	
	/ /		2	-The respiratory portion of the respiratory system			Dr. Dalia Refaat	
Week 30	/ /	1	2	-Blood air barrier	3	-Preparation and staining of sections in trachea and lung	Dr. Dalia Refaat	
	/ /	2	2	-Alveolar macrophage			Dr. Dalia Refaat	
	/ /	3	2	-Pleura and blood supply of lung			Dr. Dalia Refaat	

Semester 5:

Special Histology

(From / / to / /)

Week	Date	Lecture				Practical		Staff	
		Nº	Hrs	Topic	Hrs	Topic		Name	Signature
Week 31	/ /	1	2	-Keratinocytes of epidermis of thick skin & medical application	1	-Thick skin preparation Hx&E		Dr. Essam	
	/ /	2	2	-Other cells of epidermis of thick skin &medical application	1	-Thick skin preparation Hx&E		Dr. Essam	
	/ /	3	2	-Dermis of thick skin & immunological activity in the skin	1	-Thick skin (Mallory stain)		Dr. Essam	
Week 32	/ /	1	2	-Thin skin & hair follicle	1	-Thin skin preparation		Dr. Essam	
	/ /	2	2	-Glands of the skin	1	-Thin skin preparation		Dr. Essam	
	/ /	3	2	-Skin pigmentation and nail plate	1	-Thin skin (Mallory stain)		Dr. Essam	
Week 33	/ /	1	2	-Renal corpuscle & blood filtration	1	-Kidney (Hx&E)		Dr. Essam	
	/ /	2	2	Proximal & distal convoluted tubules of kidney	1	-Kidney (Gelatine carmine)		Dr. Essam	
	/ /	3	2	-Nephron Loop of Henle & collecting tubules	1	-Kidney(Alkaline phosphatase)		Dr. Essam	
Week 34	/ /	1	2	-Juxtaglomerular apparatus and blood circulation	1	-Kidney (PAS)		Dr. Essam	
	/ /	2	2	-Urinary bladder and ureter	1	Urinary bladder & ureter preparation		Dr. Essam	
	/ /	3	2	-Oral cavity: *Tongue & *Lip *Pharynx & *Palate	1	Tongue dog and rabbit		Dr. Shireen	
Week 35	/ /	1	2	-General structure of alimentary tract -Esophagus	1	-Esophagus		Dr. Shireen	
	/ /	2	2	Fundus of the stomach	1	Fundus of the stomach		Dr. Shireen	
	/ /	3	2	- Pylorus of the stomach - Gastro-eosophageal junction	1	Pylorus Gastro-eosopha. Jun.		Dr. Shireen	

		Lecture			Practical		Staff	
Week	Date	Nº	Hrs	Topic	Hrs	Topic	Name	Signature
Week 36	/ /	1	2	Enterο-endocrinal system	1	Staining of Enterο-endocrinal cells	Dr. Shireen	
	/ /	2	2	Small intestine: Lining epithelium of intestinal villi	1		Dr. Shireen	
	/ /	3	2	Small intestine: Lining epith. of intestinal crypt	1	Small intestine	Dr. Shireen	
Week 37	/ /	1	2	-Structure of Small intestinal wall	1		Dr. Shireen	
	/ /	2	2	-Differences between Duodenum, Jejunum and Ileum - Pyloro- duodenal junction	1	Pyloro- duodenal junction	Dr. Shireen	
	/ /	3	2	- Large intestine - Appendix	1	- Large intestine - Appendix	Dr. Shireen	
Week 38	/ /	1	2	-Recto-anal junction	1	Recto-anal junction	Dr. Shireen	
	/ /	2	2	-Organization of exocrine pancreas -Regulation of pancreatic secretion	4	Staining of salivary glands, Liver and pancreas:	Dr. Awny	
	/ /	3	2	-Internal organization of the liver -Drainage chanelles of the liver: *Bile ducts *Blood sinusoids *Lymphatics		*PAS *Mallory *Best carmine *Reticulin *Enzyme histochemistry	Dr. Awny	
Week 39	/ /	1	2	-Zonation of the liver acini -Cytology of hepatocytes	4		Dr. Awny	
	/ /	2	2	-Secretory function of hepatocytes -Gall bladder (structure& histophysiology)			Dr. Awny	
	/ /		2	-Organization of salivary glands -Histophysiology and medical applications of salivary glands			Dr. Awny	
Week 40	/ /	1	2	-Hormonal communication and transmission -Relation between anterior pituitary and hypothalamus	5	Staining of endocrine glands: *PAS *Sudan black *Succinic dehydrogenase	Dr. Awny	
	/ /	2	2	-Cytology of acidophils & basophils -Posterior pituitary (structure& histophysiology)			Dr. Awny	
	/ /	3	2	-Thyroid follicular cells -Thyroid parafollicular cells			Dr. Awny	

Week	Date	Lecture			Practical		Staff	
		Nº	Hrs	Topic	Hrs	Topic	Name	Signature
Week 41	/ /	1	2	-Parathyroid(structure& histophysiology) -Histophysiology of pineal gland	4	Specific stains for: *Pituitary gland *Adrenal medulla	Dr. Awny	
	/ /	2	2	-Biology of steroid secreting cells -Development of adrenal gland			Dr. Awny	
	/ /	3	2	-Corticosteroids (types, regulation) -Relation between adrenal medulla &sympathetic system			Dr. Awny	
Week 42	/ /	1	2	-Blood supply of adrenals -Paraganglia	1	Dissection of male genital system	Dr. Awny	
	/ /	2	2	-Pancreatic islets of Langerhans (cytology &histophysiology)			Dr. Awny	
	/ /	3	2	-Seminal tubules			Dr. Zeinab Sakkara	
Week 43	/ /	1	2	- Spermatogenesis - Sertoli cells	1	-Dissection of male genital system	Dr. Zeinab Sakkara	
	/ /	2	2	-The colonial nature of male germ cells -Spermiogenesis	1	-Sectioning of male genital system	Dr. Zeinab Sakkara	
	/ /	3	2	-Intertesticular ducts	1	-Staining by: *H&E *Mallory trichrome *H&E; c:PSH	Dr. Zeinab Sakkara	
Week 44	/ /	1	2	-Accessory gland & penis -Excretory ducts	1	-Identification of male genital tract	Dr. Zeinab Sakkara	
	/ /	2	2	-Development of the ovary - Follicular growth	1	-Dissection of female genital tract	Dr. Zeinab Sakkara	
	/ /		2	- Ovulation and corpus luteum -Uterine tubes	1	-Sectioning of female genital system	Dr. Zeinab Sakkara	
Week 45	/ /	1	2	-Uterus & uterine cervix -Endometrium	1	-Staining by H&E	Dr. Zeinab Sakkara	
	/ /	2	2	-Endometrial changes during menstrual cycle	1	-Staining by *Mallory trichorme *H&E; c:PSH	Dr. Zeinab Sakkara	
	/ /	3	2	- Mammary gland during various stages of female cycle	1	- Identification of female genital tract	Dr. Zeinab Sakkara	

Semester 6:

Neuro-Histology

(From / / to / /)

Week	Date	Lecture			Practical		Staff	
		Nº	Hrs	Topic	Hrs	Topic	Name	Signature
Week 46	/ /	1	2	Meninges	1	Slides	Dr S. Gawish	
	/ /	2	2	CSF	1	Slides	Dr S. Gawish	
	/ /	3	2	Spinal Cord	1	Diagrams	Dr S. Gawish	
Week 47	/ /	1	2	Ascending Tracts	1	Slides	Dr S. Gawish	
	/ /	2	2	Ascending Tracts	1	Slides	Dr S. Gawish	
	/ /	3	2	Descending Tracts	1	Diagrams	Dr S. Gawish	
Week 48	/ /	1	2	Short Tracts	1	Slides	Dr S. Gawish	
	/ /	2	2	Medulla	1	Slides	Dr.Nisreen	
	/ /	3	2	Medulla	1	Diagrams	Dr.Nisreen	
Week 49	/ /	1	2	Reticular Formation	1	Slides	Dr.Nisreen	
	/ /	2	2	Pons	1	Slides	Dr.Nisreen	
	/ /	3	2	Pons	1	Diagrams	Dr.Nisreen	
Week 50	/ /	1	2	Midbrain	1	Slides	Dr.Nisreen	
	/ /	2	2	Midbrain	1	Slides	Dr.Nisreen	
	/ /	3	2	Ear	1	Diagrams	Dr S. Askar	

Week	Date	Lecture			Practical		Staff	
		Nº	Hrs	Topic	Hrs	Topic	Name	Signature
Week 51	/ /	1	2	Ear	1	Slides	Dr S. Askar	
	/ /	2	2	Eye	1	Slides	Dr S. Askar	
	/ /	3	2	Eye	1	Diagrams	Dr S. Askar	
Week 52	/ /	1	2	Eye	1	Slides	Dr S. Askar	
	/ /	2	2	Eye	1	Slides	Dr S. Askar	
	/ /	3	2	Receptors	1	Diagrams	Dr S. Askar	
Week 53	/ /	1	2	Cerebrum	1	Slides	Dr H. Ibrahim	
	/ /	2	2	Cerebrum	1	Slides	Dr H. Ibrahim	
	/ /	3	2	Cerebellum	1	Diagrams	Dr H. Ibrahim	
Week 54	/ /	1	3	Extrapyramidal syst.	1	Slides	Dr S. Gawish	
	/ /	2	3	Thalamus	2	Diagrams	Dr S. Gawish	
Week 55	/ /	1	3	Hypothalamus	1	Slides	Dr S. Gawish	
	/ /	2	3	Limbic System	2	Diagrams	Dr S. Gawish	

Week	Date	Lecture			Practical		Staff	
		Nº	Hrs	Topic	Hrs	Topic	Name	Signature
Week 56	/ /	1	3	Olfaction & taste	1	Slides	Dr S. Sherbini	
	/ /	2	3	Aging of CNS	2	Diagrams	Dr S. Sherbini	
Week 57	/ /	1	3	Aging of CNS	1	Slides	Dr S. Sherbini	
	/ /	2	3	Alzheimer's D	2	Diagrams	Dr S. Sherbini	
Week 58	/ /	1	3	Brain regions	1	Slides	Dr H. Ibrahim	
	/ /	2	3	Precerebellar nuclei	2	Diagrams	Dr H. Ibrahim	
Week 59	/ /	1	3	Refractive media	1	Slides	Dr S. Askar	
	/ /	2	3	Aging of the eye	2	Diagrams	Dr S. Askar	
Week 60	/ /	1	3	Labyrinth	1	Slides	Dr S. Askar	
	/ /	2	3	Aging of the ear	2	Diagrams	Dr S. Askar	

Elective course in:



III. Activities

Scientific activities

(Thesis discussion, conferences and workshops)

IV. Timetable of PhD Degree Program

First part (one semester, 5 credit hours)

Semester	Course Code	Course	Total credits		Total teaching hours		% of Attendance	Date (from --to --)	Signature
			Lectures	Practical	Lectures	Practical			
1	HIST 602 EM	Electron Microscope							
	HIST 602 GE	Genetics							
		Research Methods							
		Medical Statistics							
		The use of computer in medical science							

Second part (5 semesters : 25 theoretical + 15 practical credit hours+15 thesis credit hours)

سجل شخصي

قسم الأنسجة و بиولوجيا الخلية

كلية طب المنصورة

بيانات شخصية

الإسم:

تاريخ الميلاد:

الحالة الاجتماعية:

العنوان:

التليفون:

عنوان البريد الإلكتروني: