



# **Department of Pathology**

**Course Specifications** 

# **Pathology Third Year**

2011-2012

#### Pathology First Year Course specifications

University: T anta Faculty: Medicine Department: Pathology

#### **1- Administrative Information**

• Course title: Pathology

• Code: TMED.03:01

- Department offering the course: Department of Pathology
- Program (s) on which this course is given: M.B.B.Ch
- Departments offering the program: all other Departments of the faculty
- Academic year/Level: Third year of M.B.B.Ch
- Semester in which the course is given: 1 academic year from September through April
- Date of specifications /revision: September 12,2011
- Date of approval by departmental/faculty council: 21/9/2011
- Taught hours:

• Lectures: 120 hrs (5 hrs/ week)

• Tutorial: 15 hrs (1 hr / 2-3 weeks)

• Practical: 105 hrs

• Others:

• Total: 240 hrs

#### 2 - Overall Course Aims

- To familiarize students with the basic disease patterns and their underlying mechanisms within the specific organ system.
- To provide students with essential knowledge for their clinical rounds and to prepare them for their subsequent clinical careers.

#### 3- Intended learning outcomes (ILOs):

### a- knowledge and understanding:

By the of the course the student should be able to

- al-To recognize the etiology and pathogenesis of different disease processes.
- a2-Fully describe and discuss characteristic gross and microscopic pictures of different pathologic lesions within specific organ system and the associated functional disturbances .
- a3-Determine the fate and complications of different disease processes

a4- To identify the etiology of illness and disease, with special emphasis on environmental and traumatic causes.

a5-To recognize the altered development, growth, structure and function of the body and mind that occur as a result of disease.

#### b- Intellectual skills

By the of the course the student should be able to

b1-Compare between the different disease processes

b2- Predict the diagnosis of different diseases based on the underlying gross and microscopic pictures.

b3- Interpret a pathology report

#### c- Professional &practical skills

By the of the course the student should be able to

- c1- Exhibit clinical decision analysis skills that weighs the pros and cons of the proposed interventions. C2- Distinguish the different diagnostic pathological tools.
- C3- Being familial with different laboratory techniques for handling pathological samples, appropriate types of fixatives and processing technique
- C4- Fully describing the pathologic pictures of different disorders based on gross and microscopic pictures aiming at reaching a correct diagnosis

#### d-General transferable skills

By the of the course the student should be able to

- d1-Express freely and adequately themselves by improving descriptive capabilities and communication skills
- d2-Respond appropriately according to the seriousness of pathologic diagnosis in acceptable human manner.
- d3-Maintain a suitable image in manner, dress, speech and relationships that is consistent with the medical profession
- d4 Know when and how to ask for senior consultation.
- d5 Work collaboratively with other health professionals in other disciplines to maximize patient benefits and minimize the risk of errors.
- d6 Identify his/her personal weaknesses through accurate self-assessment and/or supervisors and colleagues and actively set a clear learning plan to address these weaknesses.
- d7 Utilize the resources of biomedical information including the available electronic facilities to update his/her knowledge

4- Topics (Contents of the course)				
		No. of h	rs.	
Topic	Total	Lectures		rial/Pr
	1		actic	
General pathology	117	54		& 51
			(63	hrs)
1 Introduction:	1	1		
Pathology, its related disciplines& Technical points				1
2 Inflammation & repair	13	5	6	2
3 Cell injury, degeneration, disease of Ageing & necrosis	11	5	4	2
4 Circulatory disturbances & gangrene	22	8	12	2
5 Granulomas &mycotic infections	26	12	12	2
6 Viral diseases & immunity	5	5		
7 Genetic disorders	1	1		
8 Ionising radiation	2	2		
9 Nutritional diseases	2	2		
10 Growth disturbances	8	2	4	2
11 Neoplasia	22	8	12	2
Cytology, immunohistochemistry, how to search a topic	4	3	1	
Special Pathology	133	71	12	& 50
	1.5	_	(62 l	
1 Cardiovascular system	12	7	4	1
Heart& blood vessels	1.5			
2 Respiratory system	13	8	4	1
3 Gastrointestinal system	13	8	4	1
4 Liver & gall bladder	9	6	2	1
5 Urinary system	17	10	6	1
6 Male genital system	8	4	4	1
7 Female genital system	13	6	6	1
8 Breast	9	4	4	1
9 Blood &Lymphoreticular system	15	8	6	1
10 Bone & Joints	8	3	4	1
11 Endocrine gland	9	4	4	1
12 Central nervous system	6	3	2	1

# 5-Teaching and learning methods

- 5.1 Large group lectures
- 5.2 Small group discussions, seminars and case studies.

 $\ensuremath{\mathsf{MCQ}}$  and problem solving cases based on the topics listed below:

- \*Acute and chronic inflammation and repair.
- \*Degenerative changes.
- \*Necrosis and cell injury.
- \*Granulomas.
- \*Non specific infections and immunologic disturbances.
- \*Circulatory disorders.
- \*Neoplasms
- \*Cardiovascular cases
- \* Respiratory cases.
- \*G. I.T cases.
- \*Hepato-billiary cases.
- \* Renal cases. st cases
- \*Skeletal cases.
- 5.3 Practical sessions
- 5.3-a Histopathology slide lab.

LIST OF SLIDES : ( 55 slides)				
Cardiovascular system	1- RHEUMATIC CARDITIS			
	2- CAVERNOUS HAEMANGIOMA			
Respiratory system	3- LOBAR PNEUMONIA (GREY HEPATIZATION)			
	4- CHRONIC VENOUS CONGESTION, LUNG			
	5- RHINOSCLEROMA			
Gastrointestinal tract	6- BILHARZIAL POLYP, COLON			
	7- JUVENILE RETENMTION COLONIC POLYP			
	8- MUCOID ADENOCARCINOMA, COLON			
	9- NON MUCOID ADENOCARCINOMA, COLON			
	10-ACUTE SUPPURATIVE APPENDICITIS			
Liver, gall bladder &	11-LIVER CIRRHOSIS			
pancreas	12-CHRONIC VENOUS CONGESTION, LIVER (D)			
	13-AMYLOID LIVER*(D)			
	14-HEMANGIOMA IN LIVER			
Urinary system	15-CHRONIC GLOMERULONEPHRITIS			
	16-RENAL CELL CARCINOMA (CLEAR CELL VARIANT)			
	17-WILM`S TUMOUR			
	18- PAPILLARY TRNSITIONAL CELL CARCINOMA.			
Male genital system	19-SEMINOMA			
	20-BENIGN PROSTATIC HYPERPLASIA			
Female genital system	21-VESICULAR MOLE			
	22-ENDOMETRIAL CARCINOMA.			
	23-LEIOMYOMA			

	24-SECRETORY ENDOMETRIUM (N)
	25-PROLIFERATIVE ENDOMETRIUM (N58)
	26-CYSTIC ENDOMETRIAL HYPERPLASIA
	27-ADENOMYOSIS
	28-ENDOMETRIOSIS OF ANTERIOR ABDOMINAL WALL
	29-PAPILLARY SEROUS CYSTADENOCARCINOMA.
	30-MUCINOUS CYSTADENOMA OVARY (N57)
	31-DERMOID CYST
Breast	32-FIBROCYSTIC DISEASE OF THE BREAST
	33-FIBROADENOMA
	34-DUCT MAMMARY CARCINOMA
	35-METASTATIC MAMMARY CARCINOMA IN LYMPH NODE
Lymphoreticular &	36-HODGKIN'S LYMPHOMA
spleen	37-REACTIVE FOLLICULAR HYPERPLASIA OF LYMPH NODE
	(N66).
	38-TUBERCULOUS CASEATING LYMPHADENITIS
	39-SARCOIDOSIS SPLEEN
	40-AMYLOID DEGENERATION, SPLEEN, DIFFUSE TYPE
	41-CONGESTED SPLEEN
Bone & joint	42-OSTEOCLASTOMA
	43-OSTEOCHONDROMA
Endocrine system	44-HASHIMOTO THYROIDITIS
	45-NODULAR THYROID GOITER
	46-THYROID ADENOMA
	47-PAPILLARY THYROID CARCINOMA
Nervous system	48-MENINGIOMA
-	49-SCHWANNOMA
Skin & subcutaneous	50-CHRONIC NON SPECIFIC DERMATITIS
tissue	51-ACTIONOMYCOSIS
	52-SQUAMOUS CELL PAPILLOMA, SKIN
	53-SQUAMOUS CELL CARCINOMA, SKIN
	54-BASAL CELL CARCINOMA, SKIN
	55-MALIGNANT MELANOMA, SKIN

# 5.3.b Museum for gross pathology specimens LIST OF MUSEUM SPECIMENS (147) JARS:

•	Cardiovascular system	(12) jars.
•	Respiratory system	(13) jars.
•	G.I.T	(14) jars.

#### Course Specifications: Pathology Third Year, 2011-2012

• Hepatobilliary and pancreatic (15) jars.

• Urinary tract, male genital (30) jars.

• Endocrine pathology (5) jars.

Blood diseases and lymphoreticular disorders (6) jars.
 CNS and PNS (2) jars.

CNS and PNS (2) jars.
 Skeletal system and joint pathology (4) jars.

• Soft tissue (6) jars.

• Female genital system and breast disorders (40) jars.

# **6-Student Assessment :**

#### a)Methods used

- .1 periodical exam to assess a1-2, c1=3, d1-3
- .2 Mid-Term written exam to assess a 1-5
- .3 Final written exam to assess a1-5,b1-3,c1-3
- .4 Oral exam to assess a1-5,b1-3,c1-3, d1-8
- .5 Practical exam to assess a1-5,b1-3,c1-3,d1-8
- .6 Activities in practical sessions to assess a1-2, c1=3, d1-3

### b)- Assessment schedule التوقيت

Assessment	Week
1 periodical exam	8, 23
2 Mid-Term written exam	18
3 practical exam	30
4 Final written exam	32
5 Oral exam	32
6 Activities	All through academic year

# c- Weighing of assessments(توزيع الدرجات)

Exam	Marks	% of Total
Mid term examination	45	15%
Final term examination	150	50%
Oral examination	30	10%
Practical/laboratory work	60	20%
Periodical examinations	10	3.3%
Semester work	-	%
Other types of assessment	5	1.7%
Activities in practical sessions		
Total	300	100%

#### d) Attendance criteria:

1. Practical attendance

75% of practical attendance is required

#### E- Grading system:

Examination	Topic	Description	Marks
Mid term exam		MCQ, short questions, definintions	45
Activity	Student sharing		5
	activities in		
	practical		
	sessions		
Periodical	Sheet	Practical application & MCQs on weeks	10
Examinations	examinations	8 & 23 of practical schedule	
Final Examination	Written (3-hours)	Three hours written paper	150
		composed of short & long essay type	
		questions, case study	
	Practical exam:	6 slides and 6 jars spots	60
	(12 spots) +		
	Oral exam		30
	(10 minutes) one		
	session		
Total			300

### 7- List of references

#### 7.1 Course notes

- 8.1.a Staff member's pathology book.
- 8.1.b Staff member's Color atlas of gross Pathology
- 8.1.c Staff member's Color atlas of microscopic Pathology.

#### 7.2 Text book

8.2.a Kumar, Cotran & Robbins, Basic Pathology.

#### 7.3 Recommended books

8.3.a Walter & Israel General pathology

#### 7.4 Periodicals and web sites

- 7.4.a http://www.PATHMAX.com
- 7.4.b http://www.-medlib.med.utah.edu/Web Path / LABS/ LABMENU. Html
- 7.4.c <a href="http://www.medscap.com/pathologyhome">http://www.medscap.com/pathologyhome</a>
- 7.5.d <a href="http://www.qwumc.edu/dept/path/2f.htm">http://www.qwumc.edu/dept/path/2f.htm</a>
- 7.4.e Lecture CDs available on request.

# 8- Facilities Required for Teaching and Learning

- Lecture halls equipped with computers, sound systems, data show projectors, white board
- Labs equipped with computers, sound systems, dual projectors for gross or microscopic specimens (via microscopes with built in digital cameras) and data show presentation, white board, binocular microscopes for students.
- Set of slides for each 20 students to be used throughout the year.
- Museum specimens
- Projector slides.

• Over head projector.

# Intended learning outcomes of the course (A)

The name of course	Pathology	Fa
Code of course	03:01	De

Academy / University:Tanta

Faculty: Medicine Department: Pathology

Topics of the course	Week Study	Knowledge & Understanding	Intellectual Skills	Professio nal Skills	General transferabl e skills
General Pathology					
1- Introduction: Pathology, its related disciplines&Technical points	First week	■ a1-a5	■b1-b3	<b>■</b> c1-c4	■d1-d7
2- Inflammation & repair	1st & 2nd	■ a1-a5	<b>■</b> b1-b3	<b>■</b> c1-c4	■d1-d7
3- Cell injury, degeneration, disease of Ageing & necrosis	2nd & 3rd	■ a1-a5	■b1-b3	<b>■</b> c1-c4	■d1-d7
4- Circulatory disturbances & gangrene	4 <sup>th</sup>	■ a1-a5	■b1-b3	<b>■</b> c1-c4	■d1-d7
5- Granulomas &mycotic infections	4 <sup>th-</sup> 6 <sup>th</sup>	■ a1-a5	■b1-b3	<b>■</b> c1-c4	■d1-d7
6- Viral diseases & immunity	7 <sup>th</sup>	<b>■</b> a1-a3	<b>■</b> b1-b3		
7- Genetic disorders	7 <sup>th</sup>	<b>■</b> a1, a4	<b>■</b> b1		
8- Ionising radiation	7 <sup>th</sup>	■a1	<b>■</b> b1		
9- Nutritional diseases	8 <sup>th</sup>	■a1-a5	<b>■</b> b1		
10-Growth disturbances	8 <sup>th</sup>	<b>■</b> a1-a5	<b>■</b> b1-b3		
11-Neoplasia	9th 10th	■ a1-a5	<b>■</b> b1-b3	<b>■</b> c1-c4	■d1-d7
12-Cytology, immunohistochemistry, how to search a topic	11 <sup>th</sup>	<b>■</b> a2	<b>■</b> b3		
Topics of the course	Week Study	Knowledge & Understanding	Intellectual Skills	Professio nal Skills	General transferabl e skills
Special Pathology					
13-Cardiovascular system	11 <sup>th</sup> &	■ a1-a5	<b>■</b> b1-b3	<b>■</b> c1-c4	■d1-d7
Heart& blood vessels	12 <sup>th</sup>				
14-Respiratory system	13 <sup>th</sup> & 14 <sup>th</sup>	■ a1-a5	■b1-b3	<b>■</b> c1-c4	■d1-d7
15-Gastrointestinal system	14 <sup>th</sup> & 15 <sup>th</sup>	■ a1-a5	■b1-b3	<b>■</b> c1-c4	■d1-d7

# Course Specifications: Pathology Third Year, 2011-2012

16-Liver & gall bladder	16 <sup>th</sup>	■ a1-a5	<b>■</b> b1-b3	<b>■</b> c1-c4	■d1-d7
17-Urinary system	19 <sup>th</sup> &	■ a1-a5	■b1-b3	<b>■</b> c1-c4	■d1-d7
	$20^{\text{th}}$				
18-Male genital system	21 <sup>st</sup>	■ a1-a5	<b>■</b> b1-b3	<b>■</b> c1-c4	■d1-d7
19-Female genital system	22 <sup>nd</sup>	■ a1-a5	<b>■</b> b1-b3	<b>■</b> c1-c4	■d1-d7
20-Breast	23 <sup>rd</sup>	■ a1-a5	<b>■</b> b1-b3	<b>■</b> c1-c4	■d1-d7
21-Blood &Lymphoreticular	24 <sup>th</sup>	■ a1-a5	<b>■</b> b1-b3	<b>■</b> c1-c4	■d1-d7
system					
22-Bone & Joints	25 <sup>th</sup>	■ a1-a5	<b>■</b> b1-b3	<b>■</b> c1-c4	■d1-d7
23-Endocrine gland	26 <sup>th</sup>	■ a1-a5	<b>■</b> b1-b3	<b>■</b> c1-c4	■d1-d7
24-Central nervous system	26 <sup>th</sup>	■ a1-a5	<b>■</b> b1-b3	<b>■</b> c1-c4	■d1-d7

Course coordinator	
Prof. Dr. Faika El-Tatawy	signature
Date	
Dr. Mona Abdel Hak	signature
Date	
Dr. Eiman Adel Hasby	signature
Date	
Head of department	
Prof. Dr. Hussein Ghoraba	
signature	Date