



# Mansoura University Faculty of Medicine

# Log Book Pathology Department

# 2016 - 2017







رسالة الكلية

	Template For	
	Course	Specification
Faculty :	Mansoura Faculty of Medi	cine
<b>Department :</b>	Pathology	
<b>Course Specifica</b>	tion	
Programme(s)	on which the course is given :	MB.B Ch
Department off	ering the course :	Pathology
Academic year	/ level :	2015/2016 (3 <sup>rd</sup> year)
Date of specific	ation approval :	27/1/2016
A- Basic info	ormation	
Title: Patho	ology Code: PATH	[
Lecture: 120	Practical/tutorial 120	Total: 240

# B- Professional Information1 - Overall Aims of Course:

UDC

To enable the student to acquire knowledge, skill, and attitude related to pathogenesis, morphological (microscopic and macroscopic pictures) and clinical manifestations of basic pathological processes and specific diseases at the molecular, cellular, tissue, organs, and whole body level.

#### 2 – Intended Learning Outcomes of Course (ILOs)

#### A- Knowledge and Understanding:

By the end of the course, the student will be able to:

- A1-Identify altered structure and function of the body and its major systems that are seen in various diseases as regard etiology, pathogenesis, pathological features, prognosis, fate & complications.
- A2- Identify the general pathological features of inflammation (definition, etiology, types, pathogenesis of each type, gross morphology, microscopic features, systemic manifestations, fate & complications), tissue repair (definition, types, examples for each & factors affecting tissue repair), cell injury (etiology, pathogenesis, types, examples for each, macroscopic & microscopic features and effects) and cell death (types and examples, etiology, pathogenesis & pathological features).
- A3- Recognize different forms of circulatory disturbances as atherosclerosis, embolism, gangrene, edema, congestion, **thrombosis**.....etc.
- A4- Identify different aspects of infections as toxaemia, bacteraemia, septicaemia and pyaemia.
- A5- Explain aetiology, pathogenesis, clinical presentation, pathological forms, macroscopic & microscopic features, fate and complications of tuberculosis.
- A6- Explain aetiology, pathogenesis, clinical features and diagnosis of syphilis.
- A7- Identify pathological features of various viral, mycotic and parasitic diseases.
- A8-Recognize patterns, pathogenesis and morphology of growth disturbances.
- **A9-** Identify steps of carcinogenesis and origin and morphological features of different types of neoplasms.

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- A10- Recognize aetiology, pathogenesis, clinical features, diagnosis of common and life threatening illness affecting the body and each of its major organ systems, presenting throughout the age spectrum including inflammatory, neoplastic and degenerative lesions of different body systems including:-
  - Cardiovascular system
  - Respiratory system
  - Gastrointestinal system
  - Hepatobiliary system
  - Exocrine pancreas and peritoneum
  - Urinary system
  - Male genital system
  - Female genital system
  - Breast
  - Endocrine glands
  - Musculoskeletal system
  - Hematopoeitic system
  - Lymph nodes and spleen
  - Central nervous system

#### **B-** Intellectual Skills:

By the end of the course, the student will be able to:

- **B1-** Relate the morphological changes of common and important diseases at macroscopic and microscopic level to clinical conditions such as:
  - ✓ Inflammatory lesions (e.g. acute appendicitis, chronic cholecystitis)
  - ✓ Tissue repair (e.g. skin scar)
  - ✓ Degenerative diseases (e.g. cloudy swelling, fatty liver, hyalinosis, amyloidosis)
  - ✓ Circulatory disturbances (e.g. thrombus, pulmonary embolism)
  - ✓ Infectious diseases (e.g. tuberculosis)
  - ✓ Growth disturbances (e.g. hypertrophy, atrophy, hyperplasia)
  - ✓ Neoplasms whether benign (e.g. nevus, papilloma) or malignant (e.g. carcinoma, sarcoma)
  - ✓ Cardiovascular diseases (e.g. ventricular hypertrophy)
  - ✓ Respiratory diseases (e.g. emphysema, rhinoscleroma, oat cell carcinoma)
  - ✓ Gastrointestinal diseases (e.g crohn's disease, ulcerative colitis)
  - ✓ Hepatobiliary diseases (e.g gall stones, cirrhosis, hepatocellular carcinoma)
  - ✓ Urinary system (e.g polycystic kidney, bladder carcinoma)
  - ✓ Male genital system (e.g benign prostatic hyperplasia, testicular tumors)
  - ✓ female genital system (e.g patterns of endometrium, ovarian tumors)
  - ✓ breast (e.g benign & malignant breast tumors)
  - ✓ endocrine diseases (e.g goiter)
  - ✓ musculoskeletal diseases (e.g tumors of bone and cartilage)
  - ✓ diseases of lymph nodes (e.g reactive hyperplasia, lymphoma)
  - ✓ CNS diseases (e.g meningioma, cerebellar astrocytoma).
- B2- Correlate clinical manifestation with pathological mechanisms occurring at the molecular,
  - tissue, organ, and whole body level such as:
    - Suppuration
    - o Fibrosis & collagen deposition during tissue repair
    - Pathogenesis of thrombosis, embolisms & gangrene
    - Pathogenesis of primary and secondary tuberculosis

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- Steps of carcinogenesis.
- B3- Predict complications and organize prognostic factors of various diseases such as:
  - ☑ Inflammatory lesions e.g abscess
  - ☑ Tissue repair e.g tissue fibrosis
  - Circulatory disturbances e.g thrombosis, embolism
  - ☑ Infectious diseases e.g TB
  - $\blacksquare$  Neoplasms in different organs

#### C- Professional and Practical Skills:

By the end of the course, the student will be able to:

- C1- Elicit microscopic data of different pathological lesions.
- C2- Elicit macroscopic findings of different pathological lesions.
- C3- Differentiate between different diagnosis to arrive at a preferred or definite diagnosis.

#### **D-** <u>General and Transferable Skills:</u>

By the end of the course, the student will be able to:

- **D1-** Honor and respect seniors and other colleagues involved in his teaching and subsequently in his future practice.
- D2- Communicate ideas and arguments effectively.
- **D3-** Work effectively within a team.

#### <u>3 – Contents</u>

Торіс	No. of hours	Lecture	Tutorial/Practical
General pathology	111	53	58
1- Introduction	2	2	-
2- Inflammation	14	7	7
3- Repair	6	4	2
4- Cell injury and cell death	12	6	6
5- Circulatory disturbances	17	6	11
6- Infectious diseases	32	16	16
a- Toxaemia			
b- Bacteraemia			
c- Septicaemia			
d- Pyaemia			
e-TB			
f- Syphilis			
g- Viral infections			
h- Mycotic diseases			
i- Parasitic diseases			
7- Disturbances of growth	4	2	2
8- Neoplasia	23	10	13
Special pathology	129	67	62
1- Cardiovascular diseases	12	8	4
2- Respiratory diseases	16	8	8
3- Gastrointestinal diseases	15	8	8
4- Diseases of hepatobiliary	10	5	5
system			
5- Diseases of exocrine pancreas	1	1	-
and peritoneum			
6- Diseases of urinary system	12	6	6
7- Diseases of male genital system	4	2	2

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8- Diseases of female genital	12	5	7
system			
9- Diseases of breast	8	4	4
10- Endocrine diseases	10	4	5
11- Diseases of musculoskeletal	10	5	5
system			
12- Blood diseases	2	2	-
13- Diseases of lymph nodes and	11	5	6
spleen			
14- Diseases of central nervous	7	4	3
system			

#### 4- Course - ILOs matrix

Topics	ILOs																		
-					Kno	wledge Intellectual skil			skills	P	ractic	al	Transferable						
						-									skills	5		skills	,
	a1	a2	a3	a4	a5	a6	a7	a8	a9	a10	b1	b2	b3	c1	c2	c3	d1	D2	D3
Introduction	•																•	•	•
Inflammation	•	٠									•	•	•	•	•	•	•	•	•
Repair	•	•									•	•	•	•	•	•	•	•	٠
Cell injury& cell death	•	•									•			•	•	•	•	•	٠
Circulatory disturbances	•		•								•	•	•	•	•	•	•	•	•
Infectious diseases	•			•	•	•	•				•	•	•	•	•	•	•	•	•
Growth disturbances	•							•			•			•	•	•	•	•	•
Neoplasia	•								•		•	•	•	•	•	•	•	•	•
CVS diseases	•									•	•		•	•	•	•	•	•	•
RS diseases	•									•	•		•	•	•	•	•	•	•
GIT diseases	•									•	•		•	•	•	•	•	•	•
Hepatobiliary diseases	•									•	•		•	•	•	•	•	•	•
Diseases of exocrine	•									•	•		•	•	•	•	•	•	•
pancreas & peritoneum																			
Urinary diseases	•									•	•		•	•	•	•	•	•	٠
Male genital diseases	•									•	•		•	•	•	•	•	•	•
Female genital diseases	•									•	•		•	•	•	•	•	•	•
Diseases of breast	•									•	•		•	•	•	•	•	•	•
Endocrine diseases	•									•	•		•	•	•	•	•	•	•
Musculoskeletal diseases	•									•	•		•	•	•	•	•	•	•
Blood diseases	•									•	•		•	•	•	•	•	•	•
Diseases of LNs & spleen	•									٠	•		•	٠	٠	•	•	•	٠
CNS diseases	•									•	•		•	•	٠	•	•	•	٠

#### 5 – Teaching and Learning Methods

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		5.1	-	Lect sess ** 1 wee Prof ** 2 hour teac ** 2 Mal larg ** 7 Den hour Eac	tures ions Lectu kly fesso Smal rs fc hing Sepa aysia e pat There nons rs fo h slie ion	and ires for 2 for 2 or Ka ll gro or ea hall rate an st tholo efore tratio r mu de se are o	take 2 gro mal- oup ch 8 is th Lect uder ogy I c, the on: 4 seum ectio divid	all g plac pups Eldi teacl 3 stu ne pa ures teac teac teac teac hou n) n co led i	roup xe 2 . Th n Af hing dent tholo & si each ching urs/w ntain nto	teach times e lect nmed. take smal ogy m mall g of a p g is del ceek (2 us (90- small	ing: per ure l place l group perioe livere 2 hou -100 grou	The wee hall oup f m. o tea d 2.5 ed ov urs fo stud ups (	k of is th ce w teach ching 5 hou ver 3 or sh lents (10-1	rse i a to he th veekl ning. g 2 t urs. I 0 we ide s ). Th 15 st	s co tal p eater y of The imes t tak ectione stu- uder	mpo erio r nan r a p e sm per e pla on, th udent tts e	sed of d 6 l med oerioo all g wee ace i ne ot ts of ach)	of 60 hours after d 2.5 group k for n the her 2 each . Fo	) s 5 5 7 7 2 1 r
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#### 6 - Stı Method of

student assessment

exams Final written exam

Mid-term/Term

Final structured pactical exam Final structured

oral exam MCQ exam

Log book

Student activity

Attendance criteria: Minimum acceptance of attendance in the course is 75%

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#### Assessment Schedule

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Assessment 1	Term exam: at the end of the 1 <sup>st</sup> term
Assessment 2	Final written exam: at the end of the year
Assessment 3	Structured Oral & structured practical exam: at the
	end of the year
Assessment 4	Student self activity (student presentation)

#### Weighting of Assessments

Mid year MCQ exam	50 marks	(16.6%)
Log book	5 marks	(1.7%)
Student activity	5 marks	(1.7%)
Final written Examination	150 marks	(50%)
	(including 20 1	marks MCQ
	in each written	paper)
Final structured practical Examination	60 marks	(20%)
Final structured oral Examination	30 marks	(10 %)
Total	300 marks	(100%)

#### 7– List of References:

6.1- Course Notes:	Pathology by professors of department
6.2- Essential Books (Text Books)	Robbin's basic pathology text book of pathology
6.3- Recommended Books	Concise pathology & Pathology Illustrated
6.4- Periodicals, Web Sites	www.pathmax.com,etc

#### **<u>8 – Facilities Required for Teaching and Learning:</u>**

- 1. Lecture hall is the museum of pathology department.
- 2. The slide sections are taken in small and large student labs in pathology department.
- 3. The museum sessions are taken in the museum of pathology department.
- 4. Libraries containing recent books
- 5. Archive containing paraffin blocks & slides essential for preparation of students' slides
- 6. Students' labs. with one microscope for every student
- 7. Pathology museum with jars for common lesions
- 8. Website
- 9. Audiovisual aids in the form of computers and data show; one data show present in each lab & one in the museum.
- 10. Pathology dissection labs. In the Faculty of Medicine, Gastro-Enterology Center and Oncology Center

Course Coordinator: Dr. Mona Younis Youssef (lecturer of pathology)

Head of Department : Prof. Dr. Khaled Zalata



Mansoura University Faculty of Medicine Pathology Department 2013-2014

- Student's Name:-

- Address:-

- Phone Number - Home

- Mobile

- E-mail:
- Serial Number:
- Section

Section supervisor

- Group Group supervisor

- Head of the department

# Curriculum Content

# 1- <u>Pathology course</u> \*Theoretical pathology topics : (119 hours) \* <u>Practical course :</u> (115 hours) \*<u>Academic teaching material :</u> <u>I. General pathology:</u> <u>Intended Learning Outcomes (ILOs)</u> Knowledge

1- Introduction

Know the pathological features of cell injury (etiology, pathogenesis, types, examples for each, gross and microscopic features and effects),

### 2- Cell injury, adaptation and cell death

Types, examples, etiology, pathogenesis and pathological features

### 3- Inflammation

Definition, types, pathogenesis of each type, gross and microscopic features, systemic effects, fate and complications.

### 4- Repair

Definition, types and examples for each type and factors affecting the process

### 5- Circulatory disorders

Recognize and describe different forms of circulatory disturbances as thrombosis, embolism, infarction, congestion, edema, hemorrhage and shock.

### 6- Infectious diseases

i. Identify different aspects of infections as toxemia, bacteremia, septicemia and pyemia.

ii. Know pathological features of various bacterial (tuberculosis and syphilis), viral, mycotic and parasitic (Shistosomal) infections.

### 7- Disturbances of growth

- Recognize patterns, pathogenesis, types and morphology of growth disturbances

### 8- Neoplasia

Identify steps of carcinogenesis, origin and morphological features of different types of neoplasms and know the molecular basis of cancer.

Recognize etiology, pathogenesis, morphology, clinical features and diagnosis of common and life threatening illness affecting organs within the major body systems presenting throughout the age spectrum including inflammatory, degenerative, vascular, infectious and neoplastic lesions.

# **II. Special pathology**

Diseases of body systems as regards how to recognize etiology, pathogenesis, morphology, clinical features and diagnosis of common and life threatening illness affecting organs within the major body systems presenting throughout the age spectrum including inflammatory, degenerative, vascular , infectious and neoplastic lesions of.....

- 1- Cardio-vascular system
- 2- Respiratory system
- 3- Gastro-intestinal tract
- 4- Hepato-biliary system
- 5- Exocrine pancreas and peritoneum
- 6- Urinary system
- 7- Male genital system
- 8- Female genital system
- 9- Breast
- 10- Endocrine glands
- 11- Musculo-skeletal system
- 12- Blood diseases
- 13- Lymph nodes and spleen
- 14- Nervous system

# Practical skills:-

By the end of the course, you should be able to...

- 1- Recognize appropriate pathology terminology.
- 2- Describe the morphological changes (gross and microscopic).
- 3- Analyze the gross and microscopic data to reach an appropriate diagnosis.

#### - List of Gross specimens (Museum jars):-

#### **<u>1- Cell injury</u>**

a. Fatty change liver b. Amyloid spleen and kidney

c. Brown atrophy of the heart

#### **<u>2- Inflammation</u>**

- a. Acute suppurative appendicitis b. Fibrinous pleurisy
- c. Chronic suppurative lung abscess, pleural adhesions

#### <u> 3- Repair</u>

a.Skin scar

b. Malunion of fracture femur

#### **4- Circulatory disorders**

a. Massive pulmonary embolism

c. Moist gangrene of upper limb

e. Cerebral hemorrhage

b. Dry gangrene of lower limb

d. Strangulated hernia

f. Hematocele

#### 5-Tuberculosis

a. Tuberculoma

b. Chronic fibrocaseous pulmonary tuberculosis, confluent bronchopneumonia and fibrinous pleurisy

- c. Tuberculous epididymitis. Tuberculoma of the spermatic cord.
- d. Tuberculous lymphadenitis e. Tuberculous pyonephrosis

#### **6-** Parasitic infection

a. Hydatid cyst b. Coarse bilharzial periportal fibrosis (liver)

c. Bilharzial splenomegaly d. Bilharzial colonic polypi e. Ureteritis cystica

#### 7-Growth disorders/benign tumors

- a. Senile prostatic hyperplasia b. Lipoma c. Dermoid cyst, ovary
- e. Uterine leiomyoma .i- Submucous ii. Subserous

#### 8- Malignant tumors

- a. Urinary bladder carcinoma
- i. Polypoid ii. Diffuse infiltrating iii. Ulcerating
- b. Infiltrating carcinoma large intestine (annular)
- c. Ulcerative carcinoma large intestine
- d. Malignant skin ulcer e. Malignant melanoma

#### 9- Cardiovascular system

a. Left ventricular hypertrophy b. Atherosclerosis

#### **<u>10- Respiratory system</u>**

a. Lobar pneumonia b. Bronchiectasis

#### **<u>11- Gastro-intestinal tract-1</u>**

a. Post corrosive stricture esophagusb. Congenital megacolonc. Malignant ulcer lower third esophagusd. Acquired diverticulum

#### **<u>12- Gastro-intestinal tract-2</u>**

a. Typhoid entritisb. Intussusception (ilio-ilial)c. Crohn's disease.e. Multiple familial polyposis colon

#### 13- Liver/Gall bladder

a. Secondary infected ameobic liver abscess b. Liver cirrhosis

- c. Hepatoma d. Chronic cholecystitis+mixed gall stone
- e. Gall bladder-cholesterol stone f. Multiple secondaries

#### **<u>14-Urinary system</u>**

a. Polycyctic kidney b. Solitary cyst of the kidney c. Pyonephrosis

- d. Hydronephrosis e. Solitary urate stone+pyonephrosis
- f. Chronic diffuse glomerulonephritis g. Hypernephroma h. Wilm's tumor

#### **15-Bone and joints**

a. Adamantinoma of the mandible b. Chondrosarcoma c. Osteo-chondroma d. Giant cell tumor of tendon sheath (Pigmented villonodular synovitis) e. Rickety chest

#### 16- Female genital-1

a. Simple serous cyst of the ovaryb.c. Mucinous cystadenoma-ovaryd.

- b. Papillary serous cystadenoma-ovary
- d. Serous cystadenocarcinoma

#### **<u>17- Female/Endocrine</u>**

a. Vesicular moleb. Subinvoluted secondary infected uterusd. Nodular goiter

#### **18-Breast/CNS**

- a. Fibrocystic disease of the breast b. Giant fibro-adenoma
- c. Scirrhous carcinoma of the breast d. Adult hydrocephalic skull
- e. Cerebellar astrocytoma

#### **19- Lymphoid system**

a. Hodgkin's lymphoma-L.N b. Malignant lymphoma-spleen c. Malignant lymphoma-small intestine

c. Bronchogenic carcinoma

### List of slides to be studied representing examples of different pathological lesions

1	Fatty change of liver	21	Squamous cell papilloma
2	Hyaline spleen.	22	Villous adenoma.
3	Acute diffuse Suppurative	23	Fibroadenoma (intracanalicular)
	appendicitis.		
4	Allergic nasal polyp	24	Lipoma
5	Serofibrinous Peritonitis (small	25	Osteochondroma.
	intestine).		
6	Chronic non-specific	26	Capillary haemangioma.
	cholecystitis.		
7	Chronic pyelonephritis.	27	Cavernous haemangioma.
8	Scar of the skin	28	Cavernous lymphangioma.
9	Pulmonary congestion	29	Intradermal nevus
10	Infarction (spleen).	30	Malignant melanoma
11	Thrombus.	31	Squamous cell carcinoma.
12	Tuberculous lymphadenitis.	32	Basal cell carcinoma.
13	T.B lung.	33	Adenocarcinoma( colon)
14	Madura foot.	34	Mucoid adenocarcinoma (Colon)
15	Hydatid disease.	35	Chondrosarcoma.
16	Bilharziasis of urinary bladder	36	Giant cell tumor.
17	Bilharziasis large intestine	37	Wilm's tumour
18	Senile prostatic hyperplasia	38	Teratoma (benign cystic)
19	Cystic endometrial hyperplasia.	39	Liver with metastatic
			adenocarcinoma
20	Liver cirrhosis.	40	Metastatic carcinoma L.N.

# Intellectual skills:-

By the end of the course, you should be able to...

- 1- Inspect and describe the morphological changes of common and important lesions at the gross and microscopic levels.
- 2- Inspect the basis of morphological observations in terms of pathological mechanisms.
- 3- Determine prognosis (fate and complications) of various diseases.

# Methods of Assessment

Total pathology marks are 300 divided as follows

## I. <u>Continuous assessment</u> (60 marks)

1- Mid year exam 45 marks(90 MCQ x 0.5 mark each = 45).2-LOG BOOK(15 marks)Student's activity including:-i- Dissection attendance(5 marks)ii- Self assessment(5 marks)iii- Presentation(5 marks)

- During the course (30 weeks), you will be evaluated through your regular attendance (minimum 70%). Active participation is required for validation to enter the practical exam.

# II. Final written exam (150 marks)

\* Paper I (General pathology) \*Paper II (Special pathology)

75 marks. 75 marks.

\* 30% of the written exam marks (45 marks) will be for MCQ questions

- Type of written exam: Cases and short questions.

- Time for written exam: 2 hours for each paper.

# III. Final oral and practical exam (90 marks)

\*Oral exam 30 marks (through standardized oral cards).

\*Practical exam 60 marks (20 marks for slides, 20 for museum specimens and 20 for interactive electronic gross and microscopic specimens).

# \*\* Contact us :

The pathology team will be so close for any further questions, suggestions or any new ideas... just contact us on our e-mail

Pathology.dep@hotmail.com

# LOG BOOK

# Attendance of slide sections and museum

	Day/date	Activity	Signature
1			
1			
2			
2			
3			
3			
4			
4			
5			
5			
6			
6			
7			
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### Overall practical attendance

Sessions	Total number	Attended	% of attendance

A minimum of 70% attendance of sessions is essential to be eligible to enter the final exam. *Signature* 

# **Dissection Lab Attendance**

# 1-Case (1)

Date:	Signature:

# 2-Case (2)

Date:

Signature:

# 3-Case (3)

Date:

Signature:

4-Case (4)

••	••	•	••	••	•	• •	••	•	••	• •	••	• •	••	• •	••	• •	••	•	••	•	• •	•••	•	• •	••	•	••	•	••	•	• •	••	• •	••	•	• •	•	••	••	•	• •	•	••	•	••	•	••	•	• •	•	••	•	•
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# 5-Case (5)

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Total marks (5)

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## **Self Learning Activities**

Presentation

- Presentation title:

Presentation date: Student's group:

1-

- 2-
- 3-
- 4-
- 5-
- 5-

- Supervisors:

- 1-
- 2-
- 3-

4-

- Evaluation:

### Main supervisor