



Faculty of Medicine
Kafrelsheikh University

Department of Pathology

Course Specifications

Pathology Third Year

2017-2018

Pathology third Year Course specifications

University: Kafrelsheikh

Faculty: Medicine

Department: Pathology

1- Administrative Information

- **Course title: Pathology**
- **Code: KFMED.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: August,2016**
- **Date of approval by departmental/faculty council :**
- **Taught hours:**
 - **Lectures : 120 hrs (5 hrs/ week)**
 - **Practical including tutorial : (120 hrs / week)**
 - **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

a1-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- Identify the etiology of illness and disease, with special emphasis on environmental and traumatic causes.

a5-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 familiar 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)

Topic	No. of hrs.			
	Total	Lectures	Tutorial/Practical	
General pathology	117	54	12 & 51 (63 hrs)	
1 Introduction: Pathology, its related disciplines& Technical points	1	1		
2 Inflammation & repair	13	5	6	2
3 Cell injury and cell death	12	6	4	2
4 Circulatory disturbances	23	9	12	2
5 Granulomas	25	13	10	2
6 Infectious diseases	5	2	2	1
6 Immunity and hypersensitivity	3	3		
7 Genetic disorders	1	1		
8 Radiation injury	2	2		
9 Nutritional deficiencies	2	2		
10 Cellular adaptations and disorders of growth	8	2	4	2
11 Neoplasia	22	8	12	2
Systemic Pathology	133	71	12 & 50 (62 hrs)	
1 Diseases of the cardiovascular system (Heart& blood vessels)	12	7	4	1
2 Diseases of the respiratory system	13	8	4	1
3 Diseases of the digestive system	13	8	4	1
4 Diseases of the liver, gall bladder, exocrine pancreas and peritoneum	9	6	2	1
5 Diseases of the urinary system	17	10	6	1
6 Diseases of the male genital system	8	4	4	1
7 Diseases of the female genital system	13	6	6	1
8 Diseases of the breast	9	4	4	1
9 Diseases of bone & joints	8	3	6	1
10 Diseases of blood & lymphoid tissue	15	8	4	1
11 Diseases of the endocrine system	9	4	4	1
12 Diseases of the 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.

5.3 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-biliary cases.
- *Renal cases. st cases
- *Skeletal cases.

5.4 Practical sessions

5.3-a Histopathology slide lab.

LIST OF SLIDES : (52 slides)	
Cardiovascular system	1- CAVERNOUS HAEMANGIOMA
Respiratory system	2- LOBAR PNEUMONIA (GREY HEPATIZATION) 3- CHRONIC VENOUS CONGESTION, LUNG 4- RHINOSCLEROMA 5- BRONCHIECTASIS
Digestive system	6- JUVENILE RETENMTION COLONIC POLYP 7- MUCOID ADENOCARCINOMA, COLON 8- NON MUCOID ADENOCARCINOMA, COLON 9- ACUTE SUPPURATIVE APPENDICITIS
Liver, gall bladder & pancreas	10- LIVER CIRRHOSIS 11-CHRONIC VENOUS CONGESTION, LIVER 12-AMYLOID LIVER 13-HEMANGIOMA IN LIVER
Urinary system	14-CHRONIC GLOMERULONEPHRITIS 15-RENAL CELL CARCINOMA (CLEAR CELL VARIANT) 16- PAPILLARY TRANSITIONAL CELL CARCINOMA. 17- BILHARZIASIS OF THE URINARY BLADDER
Male genital system	18- SEMINOMA 19- BENIGN PROSTATIC HYPERPLASIA
Female genital system	20- VESICULAR MOLE 21- ENDOMETRIAL CARCINOMA. 21-LEIOMYOMA

	22-SECRETORY ENDOMETRIUM 23-PROLIFERATIVE ENDOMETRIUM 24-CYSTIC ENDOMETRIAL HYPERPLASIA 25-ADENOMYOSIS 26-PAPILLARY SEROUS CYSTADENOCARCINOMA. 27-MUCINOUS CYSTADENOMA OVARY (N57) 28-DERMOID CYST
Breast	29-FIBROCYSTIC CHANGE OF THE BREAST 30-FIBROADENOMA 31-INFILTRATING DUCTAL CARCINOMA (NOS) 32-METASTATIC BREAST CARCINOMA IN LYMPH NODE
Bone & joint	33-OSTEOCLASTOMA 34-OSTEOCHONDROMA
Lymphoid tissue	35-HODGKIN'S LYMPHOMA 36-REACTIVE FOLLICULAR HYPERPLASIA OF LYMPH NODE 37-CASEATING TUBERCULOUS LYMPHADENITIS 38-SARCOIDOSIS OF THE SPLEEN 39-AMYLOID DEGENERATION, SPLEEN REACTIVE CONGESTED SPLEEN (CONGESTIVE SPLENOMEGALY)
Endocrine system	40-HASHIMOTO THYROIDITIS 41-NODULAR THYROID GOITER 42-TOXIC GOUTRE 43-THYROID ADENOMA 44-PAPILLARY THYROID CARCINOMA
Nervous system	45-MENINGIOMA
Skin & subcutaneous tissue	46-ACTIONOMYCOSIS 47-SQUAMOUS CELL PAPILLOMA, SKIN 48-SQUAMOUS CELL CARCINOMA, SKIN 49-BASAL CELL CARCINOMA, SKIN 50-NAEVUS 51-MELANOMA, SKIN 52-LIPOMA

54.b Museum for gross pathology specimens

LIST OF MUSEUM SPECIMENS (106) JARS AND SPECIMENS:

- Cardiovascular system (10) Specimens.
- Respiratory system (17) jars and specimens.
- Digestive system (18) jars and specimens.

- Hepatobiliary and pancreatic diseases (13) jars and specimens.
- Urinary system (10) jars and specimens.
- Male genital system (5) jars and specimens.
- Female genital system and breast diseases (13) jars and specimens.
- Bone diseases (4) jars and specimens.
- Lymphoid tissue & blood (7) jars and specimens.
- Endocrine system (4) jars and specimens.
- Nervous system (2) jars and specimens.
- Skin and subcutaneous tissue diseases (3) jars and specimens.

6-Student Assessment :

a)Methods used

- .1 Periodical exam to assess a1-2, c1=3, d1-3
- .2 Mid-Term written exam to assess a1-5
- .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 التوقيتات

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 Activities in practical sessions	5	1.7%
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, definitions	45
Activity	Student sharing activities in practical sessions		5
Periodical Examinations	Sheet examinations	Practical application & MCQs on weeks 8 & 23 of practical schedule	10
Final Examination	Written (3-hours)	Three hours written paper composed of short & long essay type questions, case study	150
	Practical exam: (8 spots) + 2 OSPE	5 slides and 4 jars spots	60
	Oral exam (10 minutes) one session		30
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 and microscopic pathology

8.1.c Staff member's practical pathology book.

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](http://www.PATHMAX.com)

7.4.b [http:// www.-medlib.med.utah.edu/WebPath / LABS/ LABMENU. Html](http://www.-medlib.med.utah.edu/WebPath/LABS/LABMENU.Html)

7.4.c <http://www.medscape.com/pathologyhome>

7.5.d <http://www.qwumc.edu/dept/path/2f.htm>

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.
- Sets of microscopic slides.
- Museum specimens.
- Large screens for demonstration of educational videos and slides.

Course coordinator

Prof.Dr. Eman Mohammed Saied

Signature..... Date.....

Intended learning outcomes of the course) A(

<input checked="" type="checkbox"/> The name of course	Pathology
Code of course	03:01

Academy /
University: Kafrelshikh
Faculty: Medicine
Department: Pathology

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

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16-Liver & gall bladder	16 th	■ a1-a5	■b1-b3	■c1-c4	■d1-d7
17-Urinary system	19 th & 20 th	■ a1-a5	■b1-b3	■c1-c4	■d1-d7
18-Male genital system	21 st	■ a1-a5	■b1-b3	■c1-c4	■d1-d7
19-Female genital system	22 nd	■ a1-a5	■b1-b3	■c1-c4	■d1-d7
20-Breast	23 rd	■ a1-a5	■b1-b3	■c1-c4	■d1-d7
21-Blood &Lymphoreticular system	24 th	■ a1-a5	■b1-b3	■c1-c4	■d1-d7
22-Bone & Joints	25 th	■ a1-a5	■b1-b3	■c1-c4	■d1-d7
23-Endocrine gland	26 th	■ a1-a5	■b1-b3	■c1-c4	■d1-d7
24-Central nervous system	26 th	■ a1-a5	■b1-b3	■c1-c4	■d1-d7

Course coordinator

Signature..... Date.....

Prof.Dr. Eman Mohammed Saied