

**Program SPECIFICATION FOR****Doctor Degree in Histopathology and Cytopathology      Code: 1710800****University: Alexandria****Faculty: Medical Research Institute****Program Specification****A- Basic information****1- Program title :** Doctor of Histopathology and Cytopathology**2- Program type:**    single        double        multiple    **3- Department(s) :** Pathology**4- Coordinator :** Prof Dr/ Amal Sobhy**5- External evaluator(s):** Prof. Dr. Sherif Lotfy Baiomy – Professor of Pathology  
Faculty of Medicine – Tanta University – Egypt. Prof. Dr. Khaireya Abdel Rehim  
Gawish – Professor of Pathology - Faculty of Medicine – Tanta University – Egypt**6- Last date of program specification approval:** 8/1/2017**B- Professional Information****1- Program aims:**

The graduate of the doctor degree of Histopathology &amp; Cytopathology program should:

1. Be able to make wise diagnostic decisions throughout his/her career in pathology.
2. Develop skills of interpretation and diagnosis of histopathological and cytological specimens.
3. Understand the principles and application of proper recent techniques in research & diagnosis.
4. Participate actively in the teaching activities so that he/she may contribute to the educational experience of other students in the department.
5. Add to the scientific knowledge through research and reasoning.
6. Improve procedures using technology and innovation.
7. Be aware of his role in the development of society and preservation of the environment in the light of regional and global changes.

**2- Intended learning outcomes (ILOS)**

**a- knowledge and understanding:**

- a1- Define mechanisms of hypersensitivity & autoimmune disorders.
- a2- Define different infancy and childhood diseases
- a3- Describe pathology and pathogenesis of renal tumours including recent classification and methods of diagnosis.
- a4- Explain neoplasms of CNS tumours.
- a5- Classify neoplasms of skin (epidermal, adnexal & dermal).
- a6- Describe pathology: gross and microscopic picture of thyroid gland pathology (thyroiditis, Graves disease, diffuse & multinodular goiter, adenomas & carcinomas).
- a7- Explain different diseases of the upper & lower GIT (idiopathic, traumatic, inflammatory, congenital, motor dysfunction, reflux, diverticular, infectious, dietary & autoimmune)
- a8 **Recall** interpretation of breast FNAC & TCNB specimens of borderline lesions.

**b- Intellectual skills:**

- b1- Analyze problems in differentiation between benign and malignant lesions by monotypicality & monoclonality as evidenced by IHC & PCR based techniques.
- b2- Examine the pathological changes occurring in cardiovascular, hematopoietic & lymphoid tissues. Special interest is given to infancy related GIT diseases as Coeliac disease & its characteristic microscopic changes, as well Hirschsprung disease.
- b3- Appraise the use of panels of immuno-histochemistry to differentiate between different adult renal tumours.
- b4- Categorize the pathological changes occurring in bone & CNS (traumatic, infectious, metabolic, autoimmune, congenital, hereditary as MEN I & II and neoplastic).
- b5- Distinguish the pathological changes occurring in cutaneous & soft tissue tumours.
- b6- Examine the pathological changes occurring in lung, thyroid, salivary glands & nasopharynx.
- b7- Categorize the pathological changes occurring in GIT, & hepatobiliary tract organs and tissues.
- b8- Distinguish the pathological changes occurring in breast & female genital tract.

**c- professional and practical skills:**

- c1- Practice Fine Needle Aspiration Cytology (FNAC) technique with and without US-guidance.
- c2- Choose the procedure for labeling, handling and disposing of submitted surgical specimens such as LNs that need special fixation in Bowen & adequate sectioning no to alter the morphology.



c3- Interpret the immunohistochemical results independently and as part of team to solve borderline prostatic sextant biopsy specimens.

c4- Interpret histopathologic inflammatory, degenerative & neoplastic cases from different systems & construct a differential diagnosis.

**d- General and transferable skills:**

d1- Work independently or as part of a team

d2- Use relevant Information Technology

d3- Demonstrate effective written and oral communication skills

d4- Design and prepare project proposals

d5- Consider quality and risk issues in laboratory work.

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**3- Academic standards**

**3a External references for standards (Benchmarks)**

Generic Academic Reference Standards of the National Authority for Quality Assurance and Accreditation of Education (NAQAAE)

**Date of Academic Reference standards (ARS) approval by Institute Council: 12/2/2014**

**3b Comparison of provision to selected external references**

ARS NAQAAE	
<b>A1-Basic facts , theories, of the specialty and related subjects/ fields</b>	a1- Recall pathologic problems of different body systems at molecular, cellular and system level.
<b>A2- Mutual relation between professional practice and effects on environment</b>	a2- Recall pathology of reactive & inflammatory disorders with special reference on etiologic agents & ways of prevention.
<b>A3- Recent advances in the field of practice</b>	a3- Define and Classify neoplasms with the use of ancillary technique as electron microscope, immunohistochemistry & translocation studies.
<b>A4-Details of ethical &amp; legal</b>	a4. Explain possible medicolegal



<b>practice</b>	ethics in research & routine pathology fields.
<b>A5 -Quality standards of the practice</b>	a5- Recognize the quality standards in pathology practice & research.
<b>A6- Design, conduction &amp; publishing of scientific research</b>	Acquire design, conduction & publishing of scientific research through the thesis.
<b>A7- Ethical considerations in different types of scientific research</b>	a5- Recognize the quality standards in pathology practice & research.
<b>B1- Analyze, deduce, extrapolate &amp; evaluation of information</b>	b1- Appraise recent tools for diagnosis of diseases whether neoplastic, inflammatory or degenerative diseases.
<b>B2- Solve the majority of problems in the specialty according to the available data ( complete or incomplete)</b>	b2- Categorize different cases by using ancillary techniques.
<b>B3- Conduct research studies that add to the existing specialty knowledge</b>	b3- Differentiate between various anaplastic tumours by using research results.
<b>B4- Publish scientific articles/papers ( in indexed journals)</b>	Publish scientific articles/papers ( in indexed journals)Through thesis
<b>B5- Plan and implement ( or supervise implementation of) enhancement &amp; Improvement approaches to practice</b>	Plan and implement ( or supervise implementation of) enhancement & Improvement approaches to practice Through student questionnaire.
<b>B6- Take decisions in various professional situations ( including dilemmas &amp; controversial issues)</b>	b2- Categorize different cases by using ancillary techniques.
<b>B7- Add to the specialty field through creativity &amp; innovation</b>	Add to the specialty field through creativity & innovation through thesis



<b>B8- Manage discussions on basis of evidence and proofs</b>	Manage discussions on basis of evidence and proofs through student seminars.
<b>C1- Competent in all basic and all required advanced professional skills ( to be determined according to the specialty board/ department)</b>	C1. Practice research and ancillary molecular techniques independently and as a part of a team.
<b>C2- Write and appraise reports</b>	C2. Apply immunohistochemical and ancillary techniques reports using recently approved scoring methods
<b>C3- Evaluate <i>and improve</i> methods and tools used in specialty</b>	C3. Apply most recent tumour classifications & recent research techniques.
<b>C4- Use technology to advance practice</b>	Use technology to advance practice through thesis
<b>C5- Plan professional development courses to improve practice and enhance performance of juniors</b>	C4. Practice regular scientific meetings to review difficult cases & use of proper techniques to reach a final diagnosis
<b>D1- Communicate effectively using all methods</b>	d1- Communicate effectively using all methods
<b>D2- Use information technology to improve his/her professional practice</b>	d2- Use information technology to improve his/her professional practice
<b>D3- Teach and evaluate others</b>	d3- Teach and evaluate others
<b>D4- Perform self appraisal &amp; seek continuous learning</b>	d4- Perform self appraisal & seek continuous learning
<b>D5- Use different sources of information to obtain data</b>	d5- Use different sources of information to obtain data
<b>D6- Work in teams as well as a member in larger teams</b>	d6- Work in teams as well as a member in larger teams
<b>D7- Manage scientific meetings and appropriately utilize time</b>	d7- Manage scientific meetings and appropriately utilize time





## 5- Program Courses

### 5.1- Compulsory: 18 credits

Code No.	Course Title	No. of credit hours	No. of hours /week	
			Lecture	Practical
1710801	General pathology	3	1	4
1710802	Systemic pathology I	2	1	2
1710803	Systemic pathology II	3	1	4
1710804	Systemic pathology III	2	1	2
1710805a	Cyto -pathology Ia	2	1	2
1710805b	Cyto-pathology Ib	2	1	2
1710806a	Cyto-pathology IIa	2	1	2
1710806b	Cyto-pathology IIb	2	1	2

### 5.2- Elective – 6 credits

Code No.	Course Title Elective I	No. of credit hours	No. of hours /week	
			Lectures	Practical
1706820	Bacteriology	3	2	2
1707820	parasitology	3	2	2
1708820	immunology	3	2	2
1713820	Human genetics	3	2	2
1721820	Medical statistics	3	2	2
1700758	Gynecology	3	2	2
1715820	Internal Medicine	3	2	2
1714820	Surgery	3	2	2

### 5.3- Elective II (None)

### 5.4- Optional – (none)

## 6- Program admission requirements

Graduate student with M.B.Ch.B.of medicine or equivalent degrees, master of pathology.

**7- Regulations for progression and program completion**

For the progression and completion of the program to obtain the degree of Doctor, the student must:

1. Complete 48 credit hours with CGPA of at least C+
2. Submit a thesis validity report by an examination committee approved by the department council and their members include at least one external examiner.

**8- Evaluation of Students enrolled in the program.**

Tool evaluation	Intended learning outcomes being assessed
Written	ILOs a &b
Practical	ILOs c
Oral	ILOs a ,b &d
Semester Work	ILOs b & d

**Evaluation of the Program**

Evaluator	Tool	Sample
1- Senior students	Interview	At least 50 %
2- Alumni	Interview	Representative sample
3- Stakeholders (Employers)	Interview	Representative sample
4- External Evaluator(S) or External Examiner (s)	Reports	Name of evaluator or examiner
5- Other		

**Dates of Previous editions/revisions:**

Editions/Revisions Number	Date
Edition no.1	2009
Edition no. 2	2011





Edition no.3	5/6/2014
Edition no.3, revision no.1	12/2014
Edition no.3, revision no.2	10/2016
Edition no.3, revision no.3	9/2017

**Program coordinator :**

Name: Prof Dr Amal Sobhy El Sedfy      Signature:

**Department Head:**

Name: Prof Dr Amal Sobhy El Sedfy      Signature:

**Date of Department Council Approval: 6/9/ 2017**



### Program aims & ILO's matrix

<i>Program aims</i>	<i>a1</i>	<i>a2</i>	<i>a3</i>	<i>a4</i>	<i>a5</i>	<i>a6</i>	<i>a7</i>	<i>a8</i>	<i>b1</i>	<i>b2</i>	<i>b3</i>	<i>b4</i>	<i>b5</i>	<i>b6</i>	<i>b7</i>	<i>b8</i>	<i>c1</i>	<i>c2</i>	<i>c3</i>	<i>c4</i>	<i>d1</i>	<i>d2</i>	<i>d3</i>	<i>d4</i>	<i>d5</i>
Be able to make wise decisions throughout his/her career in pathology.								*								*						*			*
Develop skills of interpretation and diagnosis of histopathological and cytological specimens.				*	*	*							*				*	*	*	*	*		*		
Understand the principles and application of proper recent techniques in research & diagnosis.	*	*							*		*								*	*		*			
Participate actively in the teaching activities so that he/she may contribute to the educational experience of other students in the department.							*					*		*			*				*			*	*
Add to the scientific knowledge through research and reasoning.			*				*	*		*															*
Improve procedures using technology and innovation.						*								*	*				*	*					
Be aware of his role in the development of society and preservation of the environment in the light of regional and global changes.						*					*														



### Courses vs program ILO Matrix

Course Title	A 1	A 2	A 3	A 4	A 5	A 6	A 7	A 8	B1	B2	B 3	B 4	B 5	B 6	B 7	B 8	C 1	C 2	C 3	C 4	D 1	D 2	D 3	D 4	D 5
1710801	x												x							x	x	x	x	x	x
1710802		x	x						x		x						x		x		x	x	x	x	x
1710803	x			x		x			x	x								x			x	x	x	x	x
1710804								x					x						x		x	x	x	x	x
1710805a	x				x							x	x					x			x	x	x	x	x
1710805b		x				x			x					x						x	x	x	x	x	x
1710806a	x						x			x					x		x				x	x	x	x	x
1710806b	x									x						x		x			x	x	x	x	x



ARS vs ILOs matrix

Program ILO's/ Academic standard	A1	A2	A3	A4	A5	A6	A7	A8	B1	B2	B3	B4	B5	B6	B7	B8	C1	C2	C3	C4	D1	D2	D3	D4	D5
A1				x		X	X	X																	
A2	x					X	X																		
A3		x	x		X	x		X																	
A4					X		X	X																	
A5					x		x	x																	
B1									X				x	X	x	X									
B2										x				X	X	X									
B3											x	x	X	x		x									
C1																	X			X					
C2																		X	X						
C3																		x	X						
C4																				x					
D1																					X	x			X
D2																						X			
D3																					X		X		
D4																								X	
D5																						X			
D6																					X		X		
D7																							x		x



### Teaching methods vs Course matrix

	1710801 (general)	1710802 (syst path I- CVS+lymphoma)	1710803 (syst path II-renal, male, endocrine)	1710804 (syst path III- bone+CNS)	1710805a (cyto path Ia-soft tissue+skin)	1710805b (cyto path Ib- resp+thyroid+salivary)	1710806a (cyto path IIa- liver+GIT)	1710806b (cyto path IIb- breast+femal e)
Lecture	*	*	*	*	*	*	*	*
Practical	*	*	*	*	*	*	*	*
Brainstorming	*	*	*	*	*	*	*	*
Discussion Groups	-	-	-	-	-	-	-	-
Problem Solving	*	*	*	*	*	*	*	*
Case Study	-	-	-	-	-	-	-	-
Field Training	-	-	-	-	-	-	-	-
Role playing	-	-	-	-	-	-	-	-
Training Workshops	-	-	-	-	-	-	-	-
Self-Directed Learning	*	*	*	*	*	*	*	*
e-learning	-	-	-	-	-	-	-	-
Project	-	-	-	-	-	-	-	-