



*Faculty of Medicine*  
*Suez Canal University*

*Pathology Department*  
*Program Specification- MSc*

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***PROGRAM SPECIFICATIONS***

*Program Title:*

**Master of Pathology**

*Code:*

**PAPA**



## **Program Specification**

### **A- Basic Information**

1- Program Title: Master of Pathology

2- Program Type:  **Single**    Double    Multiple  

3- Department (s): **Pathology Department**

4- Coordinator: **Head of department: Prof Maha Atwa**

5- External Evaluator(s) : **Prof. Osama Helmy-Prof.Yhia ElAshry**

6- Last date of program specifications approval: The bylaws of the Master program in Pathology in the Faculty of Medicine, Suez Canal University were approved by the Supreme Council of Universities in 2016.

7-Date of specification revision approval: **2017**

8- **Number of credit points for this degree: 120 CP**

### **B- Professional Information**

#### **1- Program Aim**

The programs aims at qualifying a cadre of proficient pathologist to contribute to the advancement of histopathological diagnosis and pathological education in Egypt and to cope with the era of academic accreditation.

The overall aims of the program are that the student:

- Actively acquires the essential core of up-to-date basic knowledge and skills in pathology equivalent to what is required from a pathologist.
- Becomes able to use pathological knowledge and diagnostic skills in practice, prevent and solve the relevant institution and workplace problems.
- Be able to plan a research project in Experimental Pathology
- Adopts positive attitudes towards humans, human specimens, the community, and science.
- Becomes a continuous self-learner.
- Adopts new strategies of learning and assessment on their work place.



- Use the new concept and basics of pathological diagnostic techniques in their educational insinuations.

## **2- Intended Learning Outcomes (ILOs) of the program**

*By the end of this program, participants should be able to:*

### ***a- Knowledge and Understanding:***

- a1. Identify the relevant pathological concepts.
- a2. Describe the pathogenesis of different organs' diseases.
- a3. Recognize the principles of laboratory tissue processing within surgical pathology and cytopathology, especially gross description and dissection of received specimen, block selection in neoplastic and non-neoplastic diseases and chemicals used during tissue processing and their roles.
- a4. Recognize updated preparation and staining techniques for specimens, and identify principles of 'special' histochemical methods and principles of common molecular pathology techniques.
- a5. Identify features of malignancy and non-neoplastic disorders in sites commonly investigated with cytopathology.
- a6. Recognize the medico-legal aspects of the practice of pathology and autopsy
- a7. Identify relevant strategies to ensure confidentiality and aware of situations when confidentiality might be broken.
- a8. Recognize basic knowledge of research ethics
- a9. Recognize basic knowledge of biostatistics
- a10. Recognize basis and principles of quality assurance in pathology lab

### ***b- Intellectual Skills***

*By the end of this program, participants should be able to:*

- b1. Analyze and interpret the Pathology results in relation to pathogenesis and to patient management.
- b2. Gather, Analyze and evaluate knowledge and data to solve problems
- b3. Think critically and apply his knowledge in pathology to solve clinical problems
- b4. Formulate a research hypothesis based on evidence and apply the appropriate methods to assess the validity of this hypothesis.
- b5. Evaluate the scientific approach and research design in a given published article in a pathology journal.
- b6. Demonstrate proficiency in evaluating and presenting findings from appropriate peer-reviewed journals.
- b7. Apply the principles of evidence-based medicine in practice.
- b8. Promote and practice lifelong learning through the use of multiple sources, including information technology.



- b9. Assess risk in dealing with human specimens
- b10. Make professional decisions in relation to different professional sequences

***c- Professional and Practical Skills***

*By the end of this program, participants should be able to:*

- c.1 Perform the necessary techniques required from a pathology specialist.
- c.2 Perform fine needle aspiration of the accessible organs
- c.3 Evaluate the adequacy of techniques performed by the anatomical pathology and cytology lab personnel.
- c.4 Evaluate the adequacy of the clinical, and other laboratory data provided in the requisition forms.
- c.5 Use all relevant information resources to acquire and evaluate evidence-based information.
- c.6 Issue an adequate pathology report containing all the data needed from the Pathologist.
- c.7 Achieve effective communication with the clinicians and fellow Pathologists.

***d- General and Transferable Skills***

*By the end of the program, participants should be able to:*

- d.1 Communicate effectively with peers and group facilitators.
- d.2 Function effectively in a team.
- d.3 Use information technology to serve in the development of professional practice
- d.4 Perform self-evaluation and peer evaluation and specify his own educational needs
- d.5 Use different resources to obtain knowledge and information.
- d.6 Accept constructive criticism and feedback on their work
- d.7 Manage time effectively
- d.8 Adopt the principles of self and lifelong learning

**3- Academic Standards**

**3a - External References for Standards (Benchmarks)**

The generic Academic Reference Standards (ARS) of NAQAAE for Postgraduate

**3b - Comparison of Provision to External References (attached)**

**4- Curriculum Structure and Contents**

**4a- Program duration:** the program lasts for a minimum of 2 academic years and maximum 5 years, as specified in the internal bylaws for postgraduate studies based on credit points system in the Faculty of Medicine, Suez Canal University approved on February 7<sup>th</sup>, 2016.

**4b- Program structure:**



**Master Program Credit points (CP) structure:**

**Total needed credit points for getting master degree 120 CP**

The program consists of **First part 30 CP, Thesis 30 CP, and Second part 60 CP**

1. The first part of the program: 30 CP, its duration (15 weeks) for one academic semester. It includes
  - a. A course in Research Methodology planned and held in the Community Medicine Department of the Faculty of Medicine, Suez Canal University. This part includes 4 CP.
  - b. A courses in Research ethics planned and held in the Forensic and Toxicology Department of the Faculty of Medicine, Suez Canal University. This part includes 2 CP.
  - c. The specialized courses in Pathology, planned and held in the General Pathology Department. It includes 16 CP.
  - d. A course in applied histology planned and held in the Histology and cell biology Department. It includes 6 CP.
  - e. One elective course, the students should select one elective among six courses. This part includes 2 CP.
2. Master thesis: 30 CP, not included in the total marks for master degree, the candidate has the right to register the thesis protocol after 6 months from the degree registration. The thesis defense is allowed after 6 months from the date of the faculty council approval on the thesis protocol and passing the first part exam.
3. The second part of the program: 60 CP, its duration (45 weeks ) for 3 consecutive academic semesters. The second part comprises the specialized courses in Special Pathology, planned and held in the pathology department. This part lasts for 1.5 years ending by written and practical exams.

**4bi- No. of hours per week:** 2 CP / week which equivalent 50 hours/ week, including lectures, tutorials, surgical pathology lab attendance, self-learning and hands-on training.

**4bii- No. of credit Points:** the Master program is 120 Credit Points

Every credit point include 25 working hour (30% = 7 hours for face to face learning activities, and 70% =18 hours for self-learning activities).



## 5-Program Courses

### 5.1- Level/Year of Program: 1<sup>st</sup> part MSc

#### a. Compulsory

Courses			Assessment				
Code No.	Course Title	No. of Credit points	Written Exam			Oral exam	Practical or clinical Exam
			No of Papers	Durati on	Marks		
RB	Research methodology and Biostatistics	4	1	2 hours	80		
RE	Research Ethics	2	1	1 hour	40		
PAPA01	General pathology	16	1	3 hours	155	30	135
PAPA02	Applied Histology	6	1	3 hours	55	15	50
E	Elective Course*	2	1	1 hour	40		
<b>Total</b>		<b>30 credit points</b>			<b>600 marks**</b>		

\*E: Student should select one course of the following as an elective course:

One elective course has 2 CP. The students should select one elective in first part of the Master degree

E01	Evidence Based medicine	(Community Department)
E02	Scientific Writing	(Medical Education Department)
E03	Quality in Medical Education	(Medical Education Department)
E04	Infection Control	(Microbiology Department)
E05	Critical Appraisal	(Community Department)
E06	Communication Skills	(Medical Education Department)

\*\*Every credit point equal 20 marks



5.2- Level/Year of Programme: 2<sup>nd</sup> part MSc  
a. Compulsory

Courses			Assessment					
Code No.	Course Title	No. of Credit points	Written Exam			Oral exam	Practical or clinical Exam	Continues assessment *(Portfolio)
			No of papers	Durati on	Marks			
PAPA03	Theoretical course in special Pathology for	30	2	3 hours For each paper	165 for each paper	110	330	330
	Practical training in Pathology	25						
	***Scientific activities	5 (not included in the total marks)						
<b>Total</b>		<b>60 credit points</b>			<b>**1100 score</b>			

\*Portfolio scores distributed in the different parts of the portfolio and its total score included among the total mark of the second part

\*\*Every credit point equal 20 marks

\*\*\*Scientific activities are not included in the total marks

5.3- **Thesis:** A faculty senior & junior supervisor from the staff members are nominated by the department council to prepare a proposal of the thesis protocol after the selection of a subject that is complementary to the research plans of the department. Data collection, methodologies, study question, time table, ethical considerations and budget are formulated by the candidate under guidance of his supervisors into a research project. The research protocol is then peer reviewed by two different staff members nominated by the Head of the department who share their ideas and comments with the supervisors to reach to the final form. The research protocol is discussed then openly in one of the department councils to be approved and diverted to the Faculty research committee where it is subjected to a critical appraisal to meet the research basic standards set by the committee. The final approvals of the research protocol are then issued by the committee of post graduate studies, the Faculty and University Council to be registered. The candidate has the right to register his/her thesis protocol after 6 months from the degree registration. The first time for thesis defense after 6 months from the date of the faculty council approval on the thesis protocol and passing the first part exam.

N.B. Thesis represents 30 credit points not included in the total mark for master degree.



### **6-Program Admission Requirements**

- The program accepts candidates with Bachelor degree in Medicine and Surgery with minimum good grade & very good.
- Registration for the program opens 2 times/year, according to the internal bylaws for postgraduate studies of the Faculty of Medicine, Suez Canal University.

### **7- Student Assessment Methods**

- 7.1 Written (MEQ) to assess the cognitive domain.
- 7.2 MCQs to assess the cognitive domain
- 7.3 Oral Viva Cards to assess higher cognitive and attitude domains.
- 7.3 Observations to assess diagnostic, practical and presentation skills.
- 7.4 Portfolio to assess the cognitive, psychomotor and the affective domains.

### **8- Weighting of Assessments**

**Total marks for master degree 1700**

#### **Type of exam**

#### **First part (30 credit points= 600 mark)**

- Written exam 370
- Oral and practical exam 230
- **Total** 600

#### **Second part (60 credit points including 5 credit points not included in the total marks =1100 mark)**

- Oral exam 110
- Practical exam 330
- Written exam 330
- Portfolio 330
- **Total** 1100

### **9- Regulations for Progression and Program Completion**

The regulations for program completion follow the regulations of Master degree of Pathology in the Faculty of Medicine, Suez Canal University approved by the Supreme Council of Universities.

#### **First part**

Passing level 60% of total marks of the exam

At least 50% passing level of the total written exam marks





**Second part (60%)**

Passing level 60% of total marks of the exam

Passing level 60% is prerequisite for MSC degree

**Thesis/Assay**

Passing thesis defense is prerequisite for getting MSc. Degree

**10-Evaluation of Program Intended Learning Outcomes (ILOs)**

Evaluator	Tool	Sample
1- Postgraduate students	Needs assessment questionnaires	Random sample of participants
2- Alumni	Self-administered questionnaires	Comprehensive sample
3- Stakeholders	Self-administered questionnaires	Random sample
4-External Evaluator(s) (External Examiner(s))	External audit of the program specifications	

*Head of Pathology Department*

*Prof. Maha Atwa*

*Date: November 2017*