



Faculty of Medicine
Suez Canal University

Pathology Department
Program Specification- MD

PROGRAM SPECIFICATIONS

Program Title:

MD PATHOLOGY

Code:

PAPA



Program Specification

A- Basic Information

1- Program Title: **MD of Pathology**

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

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

4- Coordinator: **Head of Pathology department**

5- External Evaluator(s): Prof.

6- Last date of program specifications approval: **the bylaws of the MD program in pathology in the Faculty of Medicine, Suez Canal University were approved by the Supreme Council of Universities on 27th of November, 2016.**

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

8- **Number of credit points for this degree: 180 CP**

B- Professional Information

1- Program Aim

Enabling the postgraduate student to achieve the pathology requirements necessary for pathology consultant as by the end of this course, the students are expected to be able to:

1. Critically appraise the Anatomic Pathology and Cytology information.
2. Acquire an up to date excellent knowledge of Anatomic Pathology and Cytology at consultant level.
3. Supervise the running of Anatomic Pathology and Cytology techniques and evaluate the results.
4. Integrate the knowledge and results of all investigations including those of the Anatomic Pathology and Cytology techniques to reach a final diagnosis of patients.
5. Establish fruitful professional cooperation with clinicians and fellow Pathologists.
6. Design and supervise Anatomic Pathology and Cytology research studies in collaboration with clinicians and fellow Pathologists.
7. Demonstrate positive attitudes towards the patients, community, environment, humanity, and science.



2- Intended Learning Outcomes (ILOs)

By the end of this programme the student should be able to:

a- Knowledge and Understanding:

- a.1** Describe all pathological concepts.
- a.2** Discuss the pathogenesis of different organs' diseases.
- a.3** Describe the gross and microscopic findings of different pathologies.
- a.4** Demonstrate sufficient knowledge to determine clinically optimal yet cost-effective testing and pathology based therapeutic strategies.
- a.5** Demonstrate awareness and understanding of proficiency programs, such as those provided by CAP and similar organizations.
- a.6** Demonstrate knowledge of the principles of research design, implementation, ethics and interpretation and understanding of the various levels of evidence in medicine and their translation into evidence-based practice.
- a.7** Design a study that can be used to address the health problems in the local setting.
- a.8** Recognize basic of ethics and medico legal aspects of professional practice, related to pathology

b-Intellectual Skills

- b1.** Analyze and interpret the pathology results in relation to pathogenesis and to patient management.
- b2.** Predict the outcome of different pathologies.
- b3.** Formulate a research hypothesis based on evidence and apply the appropriate methods to assess the validity of this hypothesis to perform a pathology research
- b4.** Write a research article that can be submitted to a regional or international scientific journal.
- b5.** Demonstrate proficiency in evaluating and presenting findings from appropriate peer-reviewed journals.
- b6.** Assess risk in handling human specimens
- b7.** Develop and maintain a knowledge base in Pathology necessary for effective implementation of their job as Pathology consultants.
- b8.** Make professional decisions according to pathological findings
- b9.** Judge the level of scientific evidence to support related pathological findings.
- b10.** Critically appraise the scientific literature in physiology.

c- Practical and Professional skills:

By the end of this programme the student should be able to:

- c.1** Use the gross examination of Anatomic Pathology specimens in reaching final diagnosis.
- c.2** Perform fine needle aspiration of the accessible organs.
- c.3** Evaluate the adequacy of the clinical, radiological and other laboratory data provided in the requisition forms.
- c.4** Evaluate the technical adequacy of routine and ancillary histopathology and cytology techniques including special stains and immunohistochemistry.



- c.5 Describe the microscopic picture of lesions in anatomic pathology and cytology.
- c.6 Make histological and cytological diagnosis of the lesions in Anatomic Pathology and Cytology.
- c.7 Evaluate the adequacy of a Pathology report.
- c.8 Explain the Pathology report in a clear language to clinicians and patients and explain the impact of the pathology report on patient management
- c.9 Use technology to serve professional practice
- c.10 Develop personally effective strategies for the identification and remediation of gaps in medical knowledge needed for effective practice

d- *General and Transferable Skills*

By the end of this course the student should be able to:

- d1. Communicate effectively with peers and group facilitators.
- d2. Show respect to other team members' points of view
- d3. Use multiple sources, including information technology, to optimize lifelong learning
- d4. Perform self-evaluation and peer evaluation and be a lifelong learner
- d5. Function effectively in a team.
- d6. Use proficiency programs and try to invent new techniques to improve pathology laboratory practices.
- d7. Patron scientific meetings

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 3 academic years and maximum 7 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 7th, 2016.

4b- Program structure:

MD Program Credit points (CP) structure:

Total needed credit points for getting MD degree 180 CP

The program consists of **First part 30 CP, Thesis 50 CP, and Second part 100 CP**

1. **The first part of the program:** 30 CP, its duration (15 weeks) for one academic semester. The first part comprises the following:
 - a. A course in applied Histology, planned and held in the histology Department. It includes 6 CP.



- b. The specialized courses in General Pathology, planned and held in the Pathology Department. It includes 12 CP.
 - c. A course in Research Methodology planned and held in the Community Medicine Department of the Faculty of Medicine, Suez Canal University. This part includes 8 CP.
 - d. Two electives each one has 2 CP. The students should select one elective which has not been selected in the Master Degree.
- 3- **MD thesis:** 50 CP, no scores for thesis. 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 2 years from the date of the faculty council approval on the thesis protocol.
- 4- **The second part of the program:** 100 CP, its duration (75 weeks) for 5 consecutive academic semesters. The second part comprises the specialized courses in pathology, planned and held in the Pathology Department. This part lasts for 2 years ending by written and practical exams.

3bi- No. of credit Points: the MD program is 180 credit Point system.

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: First part of MD (30 CP)



*Student should select two courses of the following as an elective courses:

Courses			Assessment				
Code No.	Course Title	No. of Credit points	Written Exam			Oral exam	Practical or clinical Exam
			No of Papers	Duration	Marks		
PAPA51	Course In applied histology	6	1	3 hours	90	30	
PAPA52	Course In General Pathology	12	1	3 hours	145	15	80
BR	Research methodology and Biostatistics	8	1	3 hours	160		
E	Two Elective courses*	2+2	1+1	1 hour+1 hour	40+40		
Total		30 credit points			600 marks**		

Two elective courses each one has 2 CP. The students should select two elective which has not been selected before in 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)

5.2- Level/Year of Program: Second part of MD program (100 CP)

Courses			Assessment					
Code No.	Course Title	No. of Credit points	Written Exam			Oral exam	Practical or clinical Exam	Continues assessment *(Portfolio)
			No of papers	Duration	Marks			
PAPA53	Special Pathology course	60	2	3 hours For each paper	360 for each paper	180	360	540
	Practical training in Pathology	30						



	***Scientific activities	10 (not included in the total marks)							
Total		100 credit points			1800**marks				

***Portfolio its scores distributed in the different parts of the portfolio and its total score included among total mark od 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.

6- Program Admission Requirements

- The program accepts candidates with Master in Pathology with a grade of GOOD at least.
- 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.
- 7.4 Observations** to assess practical and presentation skills.
- 7.5 Portfolio** to assess the cognitive, psychomotor and the affective domains.

8- Weighting of Assessments

Type of exam

First part (30 credit points= 600 mark)

- Written exam 475



- Oral and practical exam 125
- **Total** **600**

Second part (100 credit points including 10 credit points not included in the total marks =1800 mark)

- Oral exam 180
- Practical exam 360
- Written exam 720
- Portfolio 540

Total **1800**

9- Regulations for Progression and Program Completion

The regulations for program completion follow the general regulations for the Faculty of Medicine, Suez Canal University for MD approved by the Supreme Council of Universities. The program is considered complete with the accomplishment of 2 summative assessment (for the first and the second parts) and the defense of a thesis developed and submitted for the purpose of acquiring the degree.

First part

- Passing level 60% of total marks of the exam and at least 50% passing level of the total written exam marks

Second part

- Passing level 60% of total marks of the exam
- Passing level 60% total of practical and oral exam

Thesis/Assay

- Passing discussion is required for MD degree

10- Evaluation of Program Intended Learning Outcomes (ILOs)

Evaluator	Tool	Sample
1- Postgraduate students	Needs assessment questionnaires	Random sample of participants
2- Alumni (N/A since this is the first time to implement the program)	N/A	N/A
3- Stakeholders	Self-administered questionnaires DELPHI Focus groups	According to the method
4- External Evaluator(s) (External Examiner(s))	External audit of the program specifications	

Head of Pathology Department

Prof. Maha Atwa