PROGRAM SPECIFICATIONS

Master degree of Pediatrics

Code: ***PMPM***

Program Specification

A. Basic Information

1- Program Title: **Master degree in Pediatrics**

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

3- Department (s): **Pediatrics department**

4- Coordinator: **Dr. Ahmed Ibrahim**

5- External Evaluator:

6- **Last date of program specifications approval:** the bylaws of the MSc program in pediatrics in the Faculty of Medicine, Suez Canal University were approved by the Supreme Council of Universities on 2016

7- Last date of program specifications revision: **2017**

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

B. Professional Information

1. Program Aims

The overall aims of the program are that the student will:

1. Actively acquire the updated knowledge in the field of pediatrics by covering all topics related to pediatric medicine.
2. Actively acquire clinical skills, bedside care skills, clinical judgment and competence in the area of pediatric medicine.
3. Attain the proper level in problem solving and decision-making skills.
4. Acquire the optimum knowledge and skills in the caring of critically ill pediatric patients.
5. Acquire the communication skills to contact with patients or their caregivers.
6. Attain the suitable level of competency in interpretation of the different investigatory tools used to reach to the final diagnosis of the different pediatric problems.

2. Program Intended Learning Outcomes (ILOs)

a- Knowledge and Understanding:

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

a1. Describe the basic knowledge regarding the pathophysiological, microbiological basis of pediatric hematological, renal, cardio-pulmonary, gastrointestinal, rheumatic, metabolic, endocrinal, infectious and neurological diseases
a2. Identify the management plans for hematological, renal, cardio-pulmonary, gastrointestinal, rheumatic, metabolic, endocrinal, infectious and neurological diseases in the field of pediatrics including the treatment regimen and the required investigations.
a3. List the causes and clinical pictures of pediatrics hematological, renal, cardio-pulmonary, gastrointestinal, rheumatic, metabolic, endocrinal, infectious and neurological diseases.
a4. Describe the normal pattern of growth and development of infants and children.
a5. Recognize the pattern of inheritance in the hematological, renal, cardio-pulmonary, gastrointestinal, rheumatic, metabolic, endocrinal, infectious and neurological pediatric diseases.
a6. Recognize genetic counseling and its importance.
a7. Describe the care of term and preterm newborn babies
a8. Identify the principles of the up-to date diagnostic modalities in hematological, renal, cardio-pulmonary, gastrointestinal, rheumatic, metabolic, endocrinal, infectious and neurological pediatric diseases.
a9. Recognize the Medico legal and ethical consideration in Pediatric care.
a10. Acquire adequate knowledge in research methodology that enable them to design experiments, analyze data, and review literature critically.

a11. Provide students with adequate knowledge in research ethics that enable them to design researches with high ethical consideration.
a12. Recognize basis and principles of quality assurance in professional practice related to pediatrics

b- Intellectual Skills

By the end of this program, students should be able to:
b1. Create the differential diagnosis list for hematological, renal, cardio-pulmonary, gastrointestinal, rheumatic, metabolic, endocrinal, infectious and neurological pediatric diseases.
b2. Use the most suitable diagnostic investigation related to the disease condition.
b3. Interpret properly the results of different diagnostic tests.
b4. Create the management plans for hematological, renal, cardio-pulmonary, gastrointestinal, rheumatic, metabolic, endocrinal, infectious and neurological pediatric diseases.

b5. Use the clinical reasoning and decision analysis skills in solving situations and problems.
b6. Assess risk in professional practices

b7.Plan to improve performance related to pediatric specialty.
b8. Make professional decision in relation to different professional sequences
b9. Conduct a research in pediatrics.

c- Professional and Practical Skills

By the end of this program, students should be able to:
c1. Take efficiently a complete history for children and adolescents
c2. Perform a complete physical Examination in pediatrics.
c3. Assess the normal and abnormal neonatal reflexes.
c4. Assess the growth and development in infants and children.
c5. Interpret of the results of different investigations in children
c6. Write competently all forms of medical records
c7. Use evidence-based medicine in solving patient problems.
c8 Evaluate different methods and tools available related to pediatrics practice.

d- General and Transferable Skills

By the end of this program, students should be able to:
d.1 Perform self- and peer-assessment.

d.2 Choose effective modes of communication (listening, nonverbal, explanatory, questioning) and mechanisms of communication (face-to-face, telephone, e-mail, written), as appropriate.

d.3 Employ Communication skills (patients, family, peers & community).

d.4 Work effectively in a team.
d.5 Work effectively with others as a member or leader of a health care team.
d.6 Demonstrate presentation skills.
d.7 Communicate ideas with colleagues.
d.8 Work within a changing environment;
d.9 Teach effectively and act as a mentor to others
d.10 Manage time effectively.
d.11 Use computers efficiently
d.12 Demonstrate advanced knowledge in Health education and promotion, problem solving skills, self-learning skills, and self-evaluation skills

3. Academic Standards:

3a - External References for Standards (Benchmarks)

- The standards of the National Authority of Quality Assurance and Accreditation in Education (NAQAAE). Website: www.naqaae.org

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 7th, 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 course 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. One elective course, the students should select one elective among six courses. This part includes 2 CP.
    d. The specialized courses in Basic Sciences (Physiology, Biochemistry, Pharmacology, Pathology, Microbiology, Public Health, Embryology, and Clinical Pathology) planned and held in the Academic Departments. It includes 22 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 Pediatrics, planned and held in the Pediatric 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, self-learning and hands-on training.

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

Every credit point includes 25 working hours (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: 1st 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	Duration	Marks		
RB	**Research methodology and Biostatistics**	**4**	**1**	**2 hours**	**80**		
RE	Research Ethics	**2**	**1**	**1 hour**	**40**		
PMPM01	Physiology	**3**	**1**	**1 hour**	**45**	**15**	
PMPM02	Biochemistry	**3**	**1**	**1 hour**	**45**	**15**	
PMPM03	Pharmacology	**3**	**1**	**1 hour**	**45**	**15**	
PMPM04	Pathology	**3**	**1**	**1 hour**	**45**	**15**	
PMPM05	Microbiology	**3**	**1**	**1 hour**	**45**	**15**	
PMPM06	Public Health	**3**	**1**	**1 hour**	**45**	**15**	
PMPM07	Emberyology	**2**	**1**	**1 hour**	**30**	**10**	
PMPM08	Clinical Pathology	**2**	**1**	**1 hour**	**30**	**10**	
E	Elective* Course	**2**	**1**	**1 hour**	**40**		
Total		**30 credit points**			**600 marks**		

***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)**

5.2- Level/Year of Programme: 2nd 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	Duration	Marks			
PMPM09	• Theoretical And Scientific course in Pediatrics	15	2	3 hours For each paper	165 for each paper	110	330	330
	• Practical training in Pediatrics	40						
	***Scientific activities	5 (Not included in the total marks)						
Total		55 credit points			1100 scores			

***Portfolio scores distributed in the different parts of the portfolio and its total score included among the total mark of the second part**
*****Scientific activities are not included in the total marks and includes**

- **Basic Life Support (BLS)**
- **Pediatric Advanced Life Support (PALS**
- **Conferences, seminars, theses defense sessions**

5.3- 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 6 months, started 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
- 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 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	490
Oral and practical exam	110
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**

8- **Regulations for Progression and Program Completion**

The regulations for program completion follow the faculty bylaw 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
Passing level 60% of total marks of the exam
Passing level 60% is prerequisite for MSC degree
Thesis/Assay
Passing thesis defense is perquisite for getting MSc. Degree

9- **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	
5- Other		

Head of Pediatric Department

Prof. Hoda Atwa