PROGRAM SPECIFICATIONS

Doctorate degree of Pediatrics

Code: **PMPM**

Program Specification

A. Basic Information

1- Program Title: **MD degree in pediatrics**
2- Program Type: **Single** √ Double Multiple
3- Department (s): **Pediatric department**
4- Coordinator: **Dr. Ahmed Ibrahim**
5- External Evaluator:

6- **Last date of program specifications approval:** the bylaws of the MD 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: **2019**

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

B. Professional Information

1. Program Aims

The overall aims of the course are that the student:
1. Become able to keep with the international standards of pediatrics patient care by mastering high level of clinical skills, bedside care skills, in addition to update medical knowledge as well as clinical experience and competence in the area of pediatric medicine.
2. Actively acquire the skills necessary for proper diagnosis and management of patients, including diagnostic, problem solving and decision-making skills.
3. Acquire enough experience to recognize and manage critically ill patients with utmost urgency.
4. Develop skills to perform high standard scientific medical research and how to proceed to publications in indexed journals

5. Provide basic ethical and medicolegal practices in the field of pediatrics
6. Acquire the knowledge regarding the pathophysiological basis of pediatric hematological, renal, pulmonary, gastrointestinal, rheumatic, metabolic and neurological diseases

7. Actively acquire interpersonal and communication skills that establish and maintain professional relationships with patients, families, and other members of health care teams.

8. Become a continuous self-learner.

9. Acquire basic knowledge in research methods and biostatistics to conduct a research in the pediatric field

2. Program Intended Learning Outcomes (ILOs)

a- Knowledge and Understanding:

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

a1. Describe the principles of applied physiology in the field of pediatrics.
a2. Describe the pathological basis of the most common diseases in the field of pediatrics.
a3. Describe the research ethics, statistical methods, study designs, data collection and analysis needed in research.
a4. List theories, basics and updated medical, clinical, epidemiological and socio-behavioral science relevant to pediatrics as well as evidence-based applications of this knowledge to patient care
a5. Recognize common pediatric diseases and their causations.
a6. Describe methods of diagnosis of pediatric diseases and their complications
a7. Recognize principles of the management of pediatric diseases
a8. Recognize methods of prevention of pediatric diseases
a9. Identify principles of the care of term and preterm newborn babies
a10. List an accurate and rapid diagnosis of the most common acute emergencies in children and its management.
a11. Recognize fundamental knowledge of pediatric intensive care medicine as regards, dealing with critically ill patients, ICU equipment, indications, contraindications and training skills of different intensive care techniques
a12. Mention ethical, medico logical principals and bylaws relevant to practice in the field of pediatrics
a13. Identify the new researches related to the field of pediatrics
a14. Demonstrate advances knowledge of biostatistics.
a15. Provide the major goals of an effective quality assurance program:

- Evidenced of accountability for services rendered and compliances with standards of practice.
- A defined mechanism to identify, measures and resolves, clinical issues related to practice.
- A defined mechanism of evaluating quality indicators, collecting data, developing corrective action and assessing outcomes.

b- Intellectual Skills

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

b1. Apply the basic and clinically supportive sciences which are appropriate to Pediatrics related conditions, problems and topics
b2. Discuss the differential diagnosis in a logical priority.
b3. Solve problems in different fields of pediatrics and neonatology
b4. Select the most important diagnostic investigations in different cases
b5. Interpret properly the different laboratory results.
b6. Select the priority of different health problems in the society
b7. Formulate management plans and alternative decisions in different situations in the field of pediatrics
b8. Conduct research studies and write a scientific study on a research problem
b9. Critically appraise research designs relevant to healthcare
b10. Plan to improve performance related to pediatrics practice

b11. Assess Risk in professional practices
b12. Discuss the principles of evidence based medicine and evidence based practice.
b13. Be innovative in dealing with different situations

c- Professional and Practical Skills

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

c.1 Take efficiently a complete history for children and adolescents
c.2 Exhibit a skill proficiency in performing a complete physical Examination for children
c.3 Exhibit a skill proficiency in the interpretation of the results of different investigations in children
c.4 Write competently all forms of medical records
c.5 Perform and evaluate diagnostic and therapeutic procedures considered essential in the field of pediatrics
c.6 Use information technology to support patient care decisions and patient education in all pediatrics related clinical situations
c.7 Lead health care professionals, including those from other disciplines to provide patient-focused care in pediatrics related conditions
c.8 Follow up-to-date clinical guidelines and standard protocols of management
c.9 Make informed decisions about diagnostic and therapeutic interventions based on patient information, preferences, up-to-date scientific evidence and clinical judgment for the pediatric related conditions
c.10 Demonstrate skills in obtaining informed consent, including effective communication to patients about procedures, alternative approaches, and possible complications of laboratory-based patient care diagnostic and therapeutic activities, such as those related to transfusion medicine
c.11 Apply decision making skills in emergency and critically ill cases

d- **General and Transferable Skills**

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

d1. Choose effective modes of communication (listening, nonverbal, explanatory, questioning) and mechanisms of communication (face-to-face, telephone, e-mail, written), as appropriate
d2. Use appropriate computer program packages and the internet to serve the development of professional practice
d3. Prepare presentation about a certain topic using MS power point
d4. Demonstrate self-evaluation and lifelong-learning skills.
d5. Accept constructive criticism and feedback on their work.
d6. Manage small and large groups effectively.
d7. Demonstrate cooperation in a group
d8. Patron scientific meetings and manage time effectively

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 3 academic 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, Second part 100 CP, and Thesis 50 CP**
1. The first part of the program: 30 CP, its duration (15 weeks) for academic semester. It includes:

a. A course in Biostatistics and Research Methodology planned and held in the Community Medicine Department of the Faculty of Medicine, Suez Canal University. This part includes CP.
b. A course in applied physiology planned and held in the Physiology Department of the Faculty of Medicine, Suez Canal University. This part includes CP.
c. A course in applied pathology planned and held in the Pathology Department of the Faculty of Medicine, Suez Canal University. This part includes CP.
d. Two elective courses

2. 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 Pediatrics, planned and held in the Pediatric Department. This part lasts for years ending by written and practical exams.
3. MD thesis: 50 CP, not included in the total marks for MD degree, the candidate has the right to register the thesis protocol after months from the degree registration. The thesis defense is allowed after months from the date of the faculty council approval on the thesis protocol and passing the part exam.

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 MD program is 180 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 MD
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	**Biostatistics and Research methodology**	**8**	**1**	**3 hours**	**160**		
PMPM51	**Applied Physiology**	9	1	**3 hours**	135	45	
PMPM52	**Applied Pathology**	9	1	**3 hours**	135	45	
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: 2nd part MD
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			
PMPM53	**Theoretical And Scientific course in Pediatrics**	**30**	**3**	**3 hours** 3 hours 1:30 hrs	**225+ 225+ 90**	**180**	**540**	**540**
	Practical training in Pediatrics	**60**						

	*****Scientific activities**	**10 (not included in the total marks)**						
Total		**90 credit points**			**1800 score**			

***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, Thesis 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 from the date of the faculty council approval on the thesis protocol and passing the first part exam.

N.B. **Thesis represents 50 credit points not included in the total mark for MD degree.**

6-Program Admission Requirements

- The program accepts candidates with master degree in Pediatrics with minimum good grade
- 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

Type of exam	
First part (30 credit points= 600 mark)	
• Written exam	510
• Oral exam	90
• **Total**	**600**
Second part (100 credit points including 10 credit points not included in the total marks =1800 mark)	

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

9- Regulations for Progression and Program Completion

The regulations for program completion follow the faculty bylaws 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 MD degree

Thesis/Assay

Passing thesis defense is perquisite for getting 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	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