



Faculty of Medicine
Suez Canal University



Rheumatology and Rehabilitation Department
Program Specification- MSc

PROGRAM SPECIFICATIONS

Program Title:

Master Degree of Physical
Medicine, Rheumatology
and Rehabilitation



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Programme Specification

A- Basic Information

1. **Programme Title:** MSc Physical medicine, Rheumatology and Rehabilitation
2. **Programme Type:** Single Double Multiple
3. **Department offering the program(s):** Physical medicine, Rheumatology and Rehabilitation, anatomy physiology, Internal medicine, Clinical pathology, Public health, Forensic and toxicology
4. **Coordinator:** Head of Physical medicine, Rheumatology and Rehabilitation department
5. **External Evaluator(s):**
6. **First date of program specifications approval:** 1/4/2008
7. **Last date of Modification approval** 6/4/2010
8. **Last date of revision approval:** April 2017
9. **Number of credit point:** 120 Credit point (CP)

B- Professional Information

1- Program Aims

By the end the candidate is expected to:

1. Acquire knowledge of accepted standards of clinical medicine in their respective specialty area
2. Remain Up to date with new developments in medicine
3. Be able to participate in life-long learning activities, including research.
4. Be able to effectively treat patients.
5. Acquire interpersonal and communication skills that enable them to establish and maintain professional relationships with patients, families, and other members of health care teams.
6. Be able to critically evaluate their methods of clinical practice.
7. Understand health care delivery systems, provide qualitative patient care within the system.



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2- Intended Learning Outcomes (ILOs)

a- Knowledge and Understanding:

Medical Knowledge about established and evolving biomedical, clinical, and cognate sciences, as well as the application of this knowledge to patient care;

- a1 Describe the diagnosis, pathogenesis, treatment, prevention, and rehabilitation of those neuromusculoskeletal, neurobehavioral, cardiovascular, pulmonary, and other system disorders common to this specialty in patients of both sexes and all ages.
- a2 Describe the natural history and pathophysiology of rheumatological disease and the basic scientific principles and evidence base underpinning the current practice of rheumatology. This knowledge base will be applied to ensure safe and competent clinical practice in relation to the environment.
- a3 Identify the principles of bioethics as applied to medical care, and the students must participate in decision-making involving ethical issues that arise in the diagnosis and management of their patients.
- a4 Recognize knowledge of basic sciences relevant to physical medicine and rehabilitation such as anatomy, physiology, Immunology and pathophysiology and pathology of the neuromusculoskeletal, cardiovascular and pulmonary systems, kinesiology and biomechanics, functional anatomy, electrodiagnostic medicine, fundamental research design and methodologies, and instrumentation related to the field. This instrumentation should pertain to physiologic responses to the various physical modalities and therapeutic exercises, and the procedures commonly employed by physiatrist.
- a5 Recognize knowledge of related internal medicine and conditions.
- a6 Identify relevant laboratory, and imaging materials for the patient.
- a7 Describe orthotics and prosthetics, including fitting and manufacturing, through instruction and arrangements made with appropriate orthotic-prosthetic facilities.
- a8 Describe the principles of pharmacology as they relate to the indications for and complications of drugs utilized in PM&R and rheumatological diseases.
- a9 Describe the basis of quality related to the Rheumatology and Rehabilitation practice.
- a10 Recognize the principles of biomedical ethics, medico-legal aspects of health problems, and malpractice.



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b. Intellectual Skills

- b1 Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation. (Define problem and formulate differential diagnosis) (Problem solving skills)
- b2 Analyze critically to recognize the impact of their own value judgments and those of patients.
- b3 Analyze, interpret, objectively evaluate and prioritize information, recognizing its limitations.
- b4 Interpret relevant laboratory, and imaging materials for the patient.
- b5 Demonstrate insight into research and scientific method through:
 - critical appreciation of methodology;
 - formulating research questions that are pertinent to medicine;
 - choice and application of appropriate quantitative and qualitative methodologies;
 - collecting, analyzing and interpreting data;
 - Analyzing and using numerical data (Use simple statistical methods)
- b6 Assess risk in relation to their own work and profession
- b7 Perform regularly improve their practical performance using sound up to date knowledge
- b8 Demonstrate Professional decision making
- b9 Demonstrate the ability to critically assess the scientific literature.

c. Professional and Practical Skills

- c1 Perform all skills required in the course specifications
- c2 Evaluate and Use reliable and current information and tools in diagnosis and treatment
- c3 Demonstrate respect for patients and families and advocate for the primacy of patient's welfare and autonomy.
- c4 Interact with others without discriminating on the basis of religious, ethnic, sexual, or educational differences.
- c5 Demonstrate positive work habits, including punctuality, dependability, and professional appearance.
- c6 Adhere to ethical principles in the practice of medicine.
- c7 Demonstrate principles of confidentiality with all information transmitted both during and outside of a patient encounter.
- c8 Demonstrate knowledge of regulatory issues pertaining to the use of human subjects in research.



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- c9 Communicate medical problems and patient options at appropriate levels of understanding.
- c10 Maintain comprehensive, timely, and legible medical records.

d. General and Transferable Skills

- d 1 Perform self- and peer-assessment
- d 2 Demonstrate effective presentation skills.
- d 3 Present information clearly in written, electronic and oral forms
- d 4 Communicate ideas and arguments effectively;
- d 5 Manage time and resources and set priorities;
- d 6 Work within a changing environment;
- d 7 Teach effectively and act as a mentor to others
- d 8 Work effectively within a team.
- d 9 Use computers efficiently
- d 10 Adopt the principles of lifelong learning
- d 11 Treat patients in a manner consistent with the most up-to-date information on diagnostic and therapeutic effectiveness.
- d 12 Perform self-evaluations of clinical practice patterns and practice-based improvement activities using a systematic methodology.
- d 13 Use the medical library and electronically mediated resources to discover pertinent medical information.
- d 14 Demonstrate effectiveness in developing appropriate doctor-patient relationships.
- d 15 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.
- d 16 Elicit medical information in effective ways and communicate ideas with others.
- d 17 Work effectively with others as a member or leader of a health care team.

3- Academic Standards

3a External References for Standards (Benchmarks)

- Generic Academic Reference Standards (ARS) for post graduate programs

**3b Comparison of Provision to External References
(Annex I)**

4- Curriculum Structure and Contents



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4.a 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.

4.b Program structure:

The program consists of:

1. The first part (30 CP):

Duration: 15 weeks for one academic semester

This part lasts for 6 months and ends in written, practical, and oral exams. It includes:

- a. A course in Research Methodology (Code: RB) planned and held in the Community Medicine Department of the Faculty of Medicine, Suez Canal University. This part includes I(4 CP).
- b. A courses in Research Ethics (Code: RE) 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 (code: E), the students should select one elective among six available courses. This part includes (2 CP).
- d. A course in **Physiology** (code : PRPR01) planned and held in the Physiology department; this part includes (4 CP).
- e. A course in **Applied anatomy** (code : PRPR02) planned and held in the Anatomy department; this part includes (4 CP).
- f. A course in **Medicine** (code: PRPR03) planned and held in the internal medicine department; this part includes (5 CP).
- g. **A course in Applied physics** (code: PRPR04) planned and held in the rheumatology and rehabilitation department ; this part includes (4 CP).
- h. A course in **Clinical immunology** (code: PRPR05) planned and held in the microbiology and immunology department ; this part includes (5 CP).

2. Master Thesis (30 CP):

(not included in the total marks of the Master degree)

The candidate has the right to register the thesis protocol 6 months after registration for the Master degree.

The thesis defense is allowed 6 months after the date of the Faculty Council approval of the thesis protocol and passing the First Part exam.

3. The Second Part (60 CP):

Duration: 45 weeks for 3 consecutive academic semesters.

The second part comprises of three specialized courses in Rheumatology, planned and held in the Rheumatology and Rehabilitation Department.

This part lasts for (45 weeks) for 3 consecutive academic semesters ending by written and practical exams.



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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: 120 credit Points. Every credit point includes 25 working hour

4biii- No. of credit points of basic sciences courses: 17 CP



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5- Program Courses

5.1- Level/Year of Programme: 1st part MSc

a. Compulsory

Courses			Assessment				
Code No.	Course Title	No. of Credit hours	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		
PRPR01	Physiology	4	1	1 hour	60	20	
PRPR02	Applied anatomy	4	1	1 hour	60	20	
PRPR03	Medicine	5	1	1 hour	75	25	
PRPR04	Applied physics	4	1	1 hour	60	20	
PRPR05	Clinical immunology	5	1	1 hour	75	25	
E	Elective course*	2	1	1 hour	40		
Total		30 credit points			600 marks**		

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

- E01 Evidence based medicine
- E02 Scientific writing
- E03 Quality in medical education
- E04 Infection control
- E05 Critical appraisal
- E06 Communication skills

**Every credit point equal 20 marks



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5.2 Level/Year of Program: Second part MSc
a. Compulsory

Courses			Assessment					
Code No.	Course Title	No. of Credit hours	Written Exam			Oral exam	Practical or clinical Exam	Continues assessment *(Portfolio)
			No of Papers	Duration	Marks			
PRPR06	Rheumatology • Theoretical part • Practical part	14 5	1	3 hours	165	110	330	Continues assessment *(Portfolio)
	Electrophysiology, electrodiagnosis and physical medicine • Theoretical part • Practical part	14 5	1	3 hours	165			
	Physical medicine, orthotics and prothetics • Theoretical part • Practical part	12 5						
	***Scientific activities	5 (not included in the total marks)						
Total		60 credit points			**1100			330

*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- **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



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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

Bachelor of Medicine & surgery with minimum good grade & very good in Medicine

7. Student Assessment Methods

- 7.1 Written (MEQ) to assess the cognitive domain.
- 7.2 MCQs to assess the cognitive domain
- 7.3 Observations to assess Clinical skills.
- 7.4 Portfolio to assess the cognitive, psychomotor and the affective domains.
- 7.5 OSCE to assess the psychomotor and the affective domains.

8- Weighting of Assessments

Type of exam	
First part (30 credit points= 600 mark)	
• Written exam	110
• Oral exam	490
• <u>Total</u>	600
Second part (60 credit points including 5 credit not included in the total marks=1100 mark)	
• Oral exam	110
• Clinical exam	330
• Written exam	330
• Portfolio	330
<u>Total</u>	1100
<u>Total of the Master degree</u>	1700



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9- Regulations for Progression and Programme Completion

First part (40%)

Passing level 60% of total marks of the exam and at least 50% passing level of the 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 Programme Intended Learning Outcomes

Evaluator	Tool	Sample
1- Postgraduate students	Questionnaires	Random sample of participants
2- Alumni	Questionnaires	Comprehensive sample
3- Stakeholders (Employers)	Self-administered questionnaires	Random sample
4-External Evaluator(s) (External Examiner(s))	Attending exam. (using checklist and/or rating scale)	Random sample
5- Other		

Annex 2

Attach Course Specifications

Head of the department

Prof. Dr / Mohamed Hefny