



Faculty of Medicine
Suez Canal University



Rheumatology and Rehabilitation Department
Program Specification- MD

PROGRAM SPECIFICATIONS

Program Title:

**MD Degree of Physical
Medicine, Rheumatology
and Rehabilitation**



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Program Specification

A- Basic Information

1. **Program Title:** MD Physical medicine, Rheumatology and Rehabilitation
2. **Program Type:** Single Double Multiple
3. **Department offering the program(s):** Physical medicine, Rheumatology and Rehabilitation, anatomy, physiology, Clinical pathology, Public health, Radiology
4. **Coordinator:** Head of Physical medicine, Rheumatology and Rehabilitation department
5. **External Evaluator(s):** Prof Dr. Naglaa Gad Allah (Ain Shams University)
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:** 180 Credit points (CP)

B- Professional Information

1- Program Aims

By the end the postgraduate students are expected to:

1. Acquire high standard knowledge of clinical medicine in their specialty area.
2. Be up to date with recent advances in medicine
3. Participate in life-long learning activities, including research.
4. Be able to treat patients
5. Provide medical care that incorporates the patient empathy, awareness of behavioral issues, the incorporation of preventive medicine, and health promotion.
6. Be able to demonstrate interpersonal and communication skills that enable them to establish and maintain professional relationships with patients, families, and other members of health care teams.
7. Be able to critically evaluate their methods of clinical practice
8. Be able to integrate evidence-based medicine into patient care,



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9. Show an understanding of research methods, and improve patient care practices.
10. Understand health care delivery systems
11. Be able to provide effective and qualitative patient care within the system
12. Be able to practice cost-effective medicine.

2- Intended Learning Outcomes (ILOs)

By the end of the program the postgraduate students should be able to:

a- Knowledge and Understanding:

- a.1 Discuss 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.
- a.2 Explain orthotics and prosthetics, including biomechanics of fitting and manufacturing, through instruction and arrangements made with appropriate orthotic-prosthetic facilities.
- a.3 Discuss the principles of pharmacology as they relate to the indications for and complications of drugs utilized in PM&R and Rheumatological diseases.
- a.4 Describe the basis of quality related to the rheumatology and rehabilitation practice.

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)
- b2. Integrate knowledge of basic sciences relevant to physical medicine and rehabilitation such as anatomy, physiology, Immunology and pathophysiology of the neuro-musculoskeletal, cardiovascular and pulmonary systems, kinesiology and biomechanics, functional anatomy, electro-diagnostic medicine, fundamental research design and methodologies, and instrumentation related to the field.
- b3. Integrate knowledge of the natural history and pathophysiology of Rheumatological disease and the basic scientific principles and evidence base underpinning the current practice of rheumatology.
- b4. Interpret pertinent laboratory, and imaging materials for the patient.
- b5. Analyze critically to recognize the impact of their own value judgments and those of patients.
- b6. Prioritize problems.
- b7. Analyze, interpret, objectively evaluate and prioritize information, recognizing its limitations.



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- b8. 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, analysing and interpreting data;
 - Evaluate the relationship between evidence, audit and observed variation in clinical practice.
 - Write scientific paper related to his MD thesis
- b9. Exhibit creativity/resourcefulness in their professional learning, scientific endeavor and clinical practice.
- b10. Assess risk in relation to their own work and profession
- b11. Demonstrate Regularly improve their practical performance using sound up to date knowledge
- b12. Cope with uncertainty by:
- accepting that uncertainty is unavoidable in the practice of medicine;
 - Using appropriate cognitive and intellectual strategies to deal with uncertainty when it arises.
- b13. Practice professional decision making
- b14. Demonstrate the ability to critically assess the scientific literature.
- b15. Demonstrate the ability to extract and apply evidence from scientific studies to patient care.
- b16. Use reliable and current information in diagnosis and treatment
- b17. Apply research methods, medical informatics, and the application of technology as applied to medicine.

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.



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- c8 Demonstrate knowledge of regulatory issues pertaining to the use of human subjects in research.
- 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 Demonstrate managerial skills
- d. 2 Demonstrate presentation skills
- d. 3 Preform Evaluation for subordinates, peers & program)
- d. 4 Present information clearly in written, electronic and oral forms
- d. 5 Communicate ideas and arguments effectively;
- d. 6 Manage time and resources and set priorities;
- d. 7 Apply the principles of scientific research
- d. 8 work within a changing environment;
- d. 9 Teach effectively and act as a mentor to others
- d. 10 Work effectively within a team.
- d. 11 Use computers efficiently
- d. 12 Treat patients in a manner consistent with the most up-to-date information on diagnostic and therapeutic effectiveness.
- d. 13 Perform self-evaluations of clinical practice patterns and practice-based improvement activities using a systematic methodology.
- d. 14 Use the medical library and electronically mediated resources to discover pertinent medical information.
- d. 15 Demonstrate effectiveness in developing appropriate doctor-patient relationships.
- d. 16 Exhibit effective listening, written and oral communication skills in professional interactions with patients, families and other health professionals.
- d. 17 Conduct both individual consultations and presentations at multidisciplinary conferences that are focused, clear, and concise.
- d. 18 Choose effective modes of communication (listening, nonverbal, explanatory, questioning) and mechanisms of communication (face-to-face, telephone, e-mail, written), as appropriate.
- d. 19 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. 20 Elicit medical information in effective ways and communicate ideas with others.



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d. 21 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

See annex

4.a 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.

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 (8 CP).
- b. Two elective courses (code: E), the students should select one elective among six available courses. This part includes (4 CP).
- c. A course in **Physiology (code : PRPR51)** planned and held in the Physiology department; this part includes (5 CP).
- d. A course in **Clinical immunology** (code: PRPR52) planned and held in the microbiology and immunology department ; this part includes (5 CP).
- e. A course in **Applied anatomy (code : PRPR53)** planned and held in the Anatomy department; this part includes (4 CP).
- f. A course in **Musculoskeletal Radiology** (code: PRPR54) planned and held in the Radiology department; this part includes (5 CP).

2. MD Thesis (50 CP):

(not included in the total marks for MD degree), the candidate has the right to register the thesis protocol after 6 months from the degree registration.

The thesis defense is allowed after 2 years from the date of the faculty council approval on the thesis protocol and passing the first part exam.

3. The Second Part (100 CP):



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

This part lasts for (75 weeks) for 5 consecutive academic semesters 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: 180 credit Points. Every credit point includes 25 working hour

4biii- No. of credit points of basic sciences courses: 21 CP



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5- Program Courses

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

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		
PRPR51	Physiology	5	1	3 hours	75	25	
PRPR52	Clinical Immunology	5	1	3 hours	75	25	
PRPR53	Applied anatomy	4	1	1 ½ hour	60	20	
PRPR54	Musculoskeletal Radiology	4	1	1 ½ hour	60	20	
BR	Biostatistics and Research methodology	8	1	3 hours	160		
E	Two Elective course*	2+2	1+1	1 hour+ 1 hour	40+40		
Total		30 credit points			600 marks**		

*Student should select Two 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 points	Written Exam			Oral exam	Practical or clinical Exam	Continues assessment *(Portfolio)
			No of Papers	Duration	Marks			
PRPR55	Rheumatology • Theoretical part • Practical part	10 20	1 + commentary	3 hours + 1 ½ hour	225 + 90	180	540	
	Electrophysiology , electrodiagnosis Theoretical part • Practical part	10 20						
	Physical medicine, orthotics and prothetics • Theoretical part • Practical part	10 20	1	3 hours	225			
	***Scientific activities	10 (not included in the total marks)						
Total	100 credit points			**1800				

*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 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 2 years from the date of the faculty council approval on the MD thesis protocol.

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

6- Program Admission Requirements

Bachelor degree of Surgery and Medicine and Master degree of Rheumatology with minimum good grade

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	140
• Oral exam	460
• Total	600
Second part (100 credit points including 10 credit not included in the total marks=1800 mark)	
• Oral exam	180
• Clinical exam	540
• Written exam	540
• Portfolio	540
• Total	1800
<u>Total scores of MD degree</u>	2400



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7- 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% total of clinical and oral exam

Thesis/Assay

Passing discussion is required for MD degree

8- Evaluation of Program 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