Peer Revision

Reviewers	University	Date of Revision
- Prof. Dawlat Salem	Cairo	10/12/2011
- Prof. Ahmad K. Mansur	Mansura	28/11/2011

Program Specification of Medical Doctorate Degree of Physical Medicine, Rheumatology and Rehabilitation

Sohag University **Faculty of Medicine**

A. Basic Information

1. Program title: MD in Physical Medicine, Rheumatology and Rehabilitation
2. Program type: Single
3. Faculty: Faculty of Medicine
4. Department: Physical medicine ,Rheumatology & Rehabilitation.
5. Coordinator: Prof. ohamed Ali Ismaeel
6. Assistant Coordinator: Sahar Abd El Rahman.
7. External evaluator: Prof. Tayseer Mohammed Khedr
8. Last date of program specifications approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018.

B. Professional Information

1. **Program aims**

The aim of this program is to provide the postgraduate student with the advanced medical knowledge and skills essential for the mastery of practice of specialty and necessary to provide further training and practice in the field of Physical Medicine, Rheumatology and Rehabilitation through providing:

1. Recent scientific knowledge essential for the mastery of practice of Physical Medicine, Rheumatology and Rehabilitation according to the international standards.
2. Skills necessary for proper diagnosis and management of patients in the field of Physical Medicine, Rheumatology and Rehabilitation including diagnostic, problem solving and decision making skills.
3. Ethical principles related to the practice in this specialty.
4. Active participation in community needs assessment and problems identification.
5. Maintenance of learning abilities necessary for continuous medical education.
6. Upgrading research interest and abilities.

2. **Attributes of the post graduate:**

1. Efficient in carrying out the basics and methodologies of scientific research in Physical Medicine, Rheumatology and Rehabilitation.
2. The continuous working to add new knowledge in the field of Rheumatology and Rehabilitation.
3. Applying the analytical course and critical appraisal of the knowledge in his specialty and related fields.
4. Merging the specialized knowledge with the other related knowledge, especially orthopedic surgery, internal medicine, neurology and physiotherapy with conclusion and developing the relationships in between them.

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3. Applying the analytical course and critical appraisal of the knowledge in his specialty and related fields.
4. Merging the specialized knowledge with the other related knowledge, especially orthopedic surgery, internal medicine, neurology and physiotherapy with conclusion and developing the relationships in between them.

5. Showing a deep awareness with the ongoing problems, theories, and advanced sciences in his specialty.
6. Determination of the professional problems and creating solutions for them.
7. Efficient in carrying out the professional skills in his specialty.
8. Using advanced suitable technologies which serves his practice.
9. Efficient communication and leadership of team work in his specialty.
10. Decision making through the available information.
11. Using the available resources efficiently and working to find new resources.
12. Awareness with his role in the development of the society and preserve environment.
13. Behaving in a way which reflects his credibility, accountability, and responsibility.
14. Keeping continuous self development and transfer his experiences and knowledge to others.

3. Intended learning outcomes (ILOs)

a) Knowledge and understanding

By the end of the study of Doctoral program in rheumatological the Graduate should be able to:

a1. Mention the recent advances in the normal structure and function of the musculoskeletal and neuromuscular systems of the human body
a2. Mention the abnormal structure, function, growth and development of the musculoskeletal and neuromuscular systems of the human body and natural history of rheumatological diseases.
a3. Have sound knowledge on the basics of the immune system.
a4. Describe the structure and function of immune system
a5. Identify the role of the immune system in health and disease.
a6. Identify treatment modalities related to the immune system
a7. Mention the physiology of muscle and nerve and the physiology of central nervous system
a8. Mention the nature of pain and pain control systems
a9. Mention updated theories, fundamentals and recent knowledge in the field of Rheumatology specialty and related fields.
a10. Describe the pathology, clinical symptoms and complications of each rheumatological disease.
a11. Mention theories, modalities and recent knowledge in the field of Physical Medicine and Rehabilitation specialty.
a12. Follow up the international rapid update in the management of rheumatological diseases and rehabilitation maneuvers.
a13. List the sex, age and ethnic differences for different rheumatological diseases
a14. List the differential diagnosis of rheumatological diseases.
a15. Mention the various therapeutic methods/alternatives used for rheumatological diseases

a16. List the definition and types of handicap, and the physiolo-pathological basis of each type.
a17. Enumerate and Define the different physical modalities and their uses and contraindications.
a18. Mention the recent advances of principles, methodologies, tools and ethics of scientific research
a19. Mention the recent advances in biostatistics and computer.
a20. Define and mention the medicolegal and research ethics
a21. Define the principles and fundamentals of ethics and legal aspects of professional practice in the field of Physical Medicine, Rheumatology and Rehabilitation
a22. List the principles and fundamentals of quality of professional practice in the field of Physical Medicine, Rheumatology and Rehabilitation
a23. Trace the impact of professional practice on the environment
a24. Explain the methods of environmental development and maintenance

b) Intellectual skills

By the end of the study of Doctoral program in rheumatological the Graduate should be able to:

b1. Analyze and evaluate data and information in the field of Physical Medicine, Rheumatology and Rehabilitation and using it for titration and conclusion.
b2. Determine the involvement of the immune system in the rheumatological disease process.
b3. Choose and evaluate the tests required to achieve proper diagnosis of the case
b4. Assess the integrity and function of the motor system
b5. Differentiate between the multiple complaints of the patient, ranging them from the most important to the less ones.
b6. Decide which investigations are needed for each patient and the significance of these investigations.
b7. Differentiate between chronic rheumatological diseases needing lifelong treatment and other acute short lasting conditions.
b8. Interpret data acquired through history taking to reach a provisional diagnosis.
b9. Differentiate between different causes of handicap and loss of functions of different body organs or systems, and whether they are correctable, modifiable or not at all.
b10. Differentiate between the types and nature of pain perceived by the patient and the best way to eliminate or decrease its perception.
b11. Differentiate between handicapping diseases needing lifelong physiotherapy and other acute short lasting conditions.
b12. Suggest, evaluate and criticize specialized problem-solutions based on the available data.
b13. Have the ability to innovate nontraditional solutions to problems.
b14. Plan research studies that add to knowledge.
b15. Interpret data to diagnose prevalent health problems
b16. Innovate and create researches to find solutions to prevalent problems in the area of Physical Medicine, Rheumatology and Rehabilitation

b17. Criticize researches related to Physical Medicine, Rheumatology and Rehabilitation
b18. Understand how to collect and verify data from different
b19. Formulate scientific papers in the area of Physical Medicine, Rheumatology and Rehabilitation
b20. Assess risk in professional practices in the field of Physical Medicine, Rheumatology and Rehabilitation
b21. Plan to improve performance in the field of Physical Medicine, Rheumatology and Rehabilitation
b22. Make professional decisions in different professional contexts.
b23. Create and evaluate new methods for Rehabilitation
b24. Integrate scientific discussion administration based on scientific evidences and proofs.

c) Professional and practical skills

By the end of the study of Doctoral program in rheumatological the Graduate should be able to:

c1. Master the basic and modern professional, clinical and medical skills in the area of Physical Medicine, Rheumatology and Rehabilitation
c2. Perform complete history and full physical examination of rheumatic patients, and patients needing rehabilitation.
c3. Choose, perform and Interpret the results of diagnostic procedures.
c4. Diagnose rheumatological illnesses.
c5. Recognize patients with life threatening conditions and initiate the proper management according to patient's needs.
c6. Write a professional treatment prescription.
c7. Design, write and evaluate medical reports.
c8. Perform, evaluate and develop methods and tools existing in the area of Physical Medicine, Rheumatology and Rehabilitation
c9. Deal with the possible complications of the diseases themselves or their treatments.
c10. Design and apply rehabilitation program for the different varieties of disabilities.
c11. Inject joints and soft tissues.
c12. Use of Botulinum Toxin for rehabilitation of spasticity.
c13. Use and interpret the results of different diagnostic facilities (e.g. ultrasound and EMG).
c14. Master the basic and modern professional skills in conducting researches in the area of Physical Medicine, Rheumatology and Rehabilitation
c15. Design new methods, tools and ways of conducting researches
c16. Perform recent advanced technological methods in collection, analysis and interpretation of data and in management of prevalent problems in the area of Physical Medicine, Rheumatology and Rehabilitation
c17. Use technological methods to serve the professional practice in the field of Physical Medicine, Rheumatology and Rehabilitation.
c18. Plan for the development of professional practice.
c19. Train junior staff through continuous medical education programs
c20. Master the development of the performance of others.
c21. Plan the development of new methods, tools and ways of professional practice.
c22. Activate and mobilize the community toward evidence based medicine

d) General and transferable skills

By the end of the study of Doctoral program in rheumatological the Graduate should be able to:

d1. Present reports in meetings and seminars effectively.
d2. Communicante Will with his colleagues, top management and subordinatres.
d3. Establish a good patient-physician relationship
d4. Coordinate effectively with other specialities regarding management of some patients who need this coordination, also the skill of when and why to stop managing the case and referring him to another specialist.
d5. Use information technology to serve the development of professional practice
d6. Use appropriate computer program packages.
d7. Teach others and evaluate their performance.
d8. Apply self-assessment methods and identify personal learning needs.
d9. Use different sources for information and knowledge.
d10. Use the computer and internet to gather scientific information.
d11. Collect scientific data from the computer as reviews, photos, and videos.
d12. Analyze and interpret data
d13. Work coherently and successfully as a part of a team and manage a group of people in a work environment.
d14. Moderate scientific meetings according to the available time.

4. Academic standards

Sohag Faculty of Medicine adopted the general National Academic Reference Standards (NARS) provided by the National Authority for Quality Assurance and Accreditation of Education (NAQAEE) for postgraduate programs. This was approved by the Faculty Council decree No. 6854, in its session No. 177, dated 18/5/2009. Based on these NARS, Academic Reference Standards were suggested for this program. These ARS were revised by external evaluator, and approved by the Faculty Council decree No.7528, in its session No. 191, dated 15/3/2010. The adoption of NARS and the suggested ARS were approved by University council degree No 587, in its cession No.60. dated 26-12-2011.

5. Curriculum Structure and Contents

5.a- Program duration: 7 semesters (3.5 years)

5.b- Program structure:

5.b.i- No. of hours per week:

Subject	No. of Hours/Week		
	Lectures	Practical	Clinical
First Part:			
Minors:			
Biostatistics & Computer	2	2	
Research Methodology	2	2	
Primary Medical Reports	1	2	
Basic Sciences:			
Anatomy	2		
Physiology	2		
Clinical Immunology	2		
Second Part:			
Majors: Rheumatic Diseases	6.5 2	3.5	10 4
Immunology	0.5	0.5	1

Musculoskeletal Disorders	1		2
Physical modalities and Electrotherapy	1	1	1
Rehabilitation Medicine	1.5	1.5	1.5
Optional Courses: one of the followings: Pediatric Rehabilitation	0.5	0.5	0.5
Geriatric Rehabilitation	0.5	0.5	0.5
Rehabilitation of sport injuries	0.5	0.5	0.5
Advanced Clinical Immunology	0.5	0.5	0.5

code	Item		No	%
b.i	Total credit hours	Compulsory	86	95.56
		Elective	0	0
		Optional	4	4.44
b.iii	credit hours of basic sciences courses		6	6.66
b.iv	credit hours of courses of social sciences and humanities		0	0
b.v	credit hours of specialized courses:		53	58.89
b.vi	credit hours of other course		8	8.9
b.vii	Practical/Field Training		8	8.9
b.viii	Program Levels (in credit-hours system): Level 1: 1st part Level 2: 2nd Part Level 3: Thesis		 14 53 15	 15.56 58.89 16.7

6. **Program courses:** 11 courses are compulsory + 1/4 Optional Course.

6-1 Level of Program

Semester…1…..

First Part:

a. Compulsory

Course Title	Total No. of Credit hours	No. of hours/week			Program ILOs
		Lect.	Prac.	Clin.	
Biostatistics & Computer	3	2	2		a19, b15, b18, c16, d6, d9
Research Methodology	3	2	2		a18, b14, b16, b17, b19, c14, c15, d9, d13
Primary Medical Reports	2	1	2		a8, a16, a20, a21, b7, b9, b11, b20, c5, c7, c9, d1, d2, d3, d4, d7, d9, d11, d13, d14
Anatomy	2	2			a1, a13, b4, b9, c1, d5, d9, d10, d11
Physiology	2	2			a1, a7, a8, b4, b9, b10, c1, c3, d4, d5, d9, d10
Clinical Immunology	2	2			a3, a4, a5, a6, a14, b2, b3, b6, b21, c3, c8, d2, d5, d9, d10, d11, d12

Second part:

a. Compulsory

Course Title	Total No. of Credit hours	No. of hours/week			Program ILOs
		Lect.	Practical	Clinical	
Rheumatic Diseases	16	2		4	a2, a9, a10, a12, a13, a14, a15, a21, a22, a23, a24, b1, b3, b5, b6, b7, b8, b12, b13, b19, b20, b21, b22, b24, c1, c2, c3, c4, c5, c6, c7, c8, c9, c13, c17, c18, c19, c20, c21, c22, d1, d2, d3, d4, d5, d7, d8, d9, d10, d13, d14
Immunology	5	0.5	0.5	1	a3, a4, a5, a6, a9, b2, b3, b6, b12, b13, b24, c3, c4, c7, d5, d7, d8, d9, d11, d13, d14
Musculoskeletal Disorders	8	1		2	a2, a7, a9, a10, a12, a13, a15, a23, b1, b3, b4, b5, b6, b8, b12, b13, b17,b19, b20, b21, b22, , c1, c2, c3, c4, c6, c7, c8, c13, c17, c18, c19, c20, c21, c22, d2, d3, d4, d5, d7, d8, d9
Physical Modalities and Electrotherapy	8	1	1	1	a11, a15, a17, b1, b9, b10, b11, b13, b20, b22, b23, c1, c6, c7, c8, c9, c17, c18, c19, c20, c21, d2, d3, d7, d8, d13
Rehabilitation Medicine	12	1.5	1.5	1.5	a8, a9, a11, a12, a16, a21, a22, a23, a24, b1, b4, b5, b6, b8, b9, b10, b11, b12, b13, b17, b19, b20, b21, b22, b23, b24, c1, c5, c6, c7, c8, c9, c10, c11, c12, c17, c18, c19, c20, c21, d1, d2, d3, d4, d5, d7, d8, d11, d13, d14

b- Optional – one required

Course Title	Total No. of Credit hours	No. of hours/week			Program ILOs
		Lect	Lab	Exer	
Pediatric Rehabilitation	4	0.5	0.5	0.5	a11, a12, b4, b13, b21, c1, c8, c10, d5
Geriatric Rehabilitation	4	0.5	0.5	0.5	a11, a12, b4, b11, b13, b21, c1, c5, c9, c10, d5
Sport Medicine	4	0.5	0.5	0.5	a11, a12, b4, b13, b21, c1, c10, d5
Advanced Immunology	4	0.5	0.5	0.5	a3, a4, a6, b2, b13, b21, c1, d5

7. Program Admission Requirements

I- General Requirements.

- Candidate should have either MBBch degree from any Egyptian Faculty of Medicine or Equivalent Degree from Medical Schools abroad approved by the ministry of high Education.
- Candidate should know how to speak & write English well
- Candidate should have computer skills**.**
- Follow postgraduate bylaw Regulatory rules of Sohag Faculty of Medicine approved by the ministerial decree No. (44), dated 6/1/2010.

II- Specific Requirements

- Master degree in Physical Medicine, Rheumatology and Rehabilitation with at least "Good Rank".

8. Regulations for Progression and Program Completion

Duration of program is 90 credit hours (≥7 semesters ≥3.5 years), starting from registration till acceptance of the thesis; divided to:

First Part: (15 Credit hours ≥6 months ≥1 semester):

- Program-related basic science, Research Methodology, Ethics & medical reports, Biostatistics and computer.
- At least six months after registration should pass before the student can ask for examination in the 1st part.
- Two sets of exams: 1st in October — 2nd in April after fulfillment of the credit hours.
- At least 60% of the written exam and 60% of the total oral and practical/clinical is needed to pass in each course.
- For the student to pass the first part exam, a score of at least 60% (Level D) in each course is needed.
- Those who fail in one course need to re-exam it only.
- GPA of ≥1.3 is needed to pass this level (semester).

Second Part: (50-60 Credit hours ≥24 months= 4 semesters):

- Program related specialized science of Physical Medicine, Rheumatology and Rehabilitation courses. At least 24 months after passing the 1st part should pass before the student can ask for examination in the 2nd part.
- Fulfillment of the requirements in each course as described in the template and registered in the log book (8 Credit hours; with obtaining ≥75% of its mark)is a prerequisite for candidates to be assessed and undertake part 1 and part 2 examinations; the credit hours of the logbook are calculated as following:
  - Each Cr. Hr.= 60 working Hrs.
  - Logbook= 8 Cr. Hr. X 60 working Hrs = 480 Working Hrs.
  - Collection of working Hrs. is as following:

Activity		**Hrs**
Grand rounds	**اجتماع علمى موسع**	**٦**
Training courses	**دورات تدريبية**	**12/ day**
Conference attendance	**حضور مؤتمرات علمية** **داخلى** **خارجة**	 **١٢/day** **18/day**
Thesis discussion	**حضور مناقشات رسائل**	**٦**
Workshops	**حضور ورش عمل**	**١٢/day**
Journal club	**ندوة الدوريات الحديثة**	**٦**

Seminars	**لقاء علمى موسع**	٦
Morbidity and Mortality conference	**ندوة تحليل المخاطر المرضية أوالوفاة**	٦
Self education program	**برنامج التعليم الذاتى**	٦

- Two sets of exams: 1st in October - 2nd in April.
- At least 60% of the written exam is needed to be admitted to the oral and practical exams.
- 4 times of oral and practical exams are allowed before the student has to re-attend the written exam.

Third Part (Thesis) (15 Credit hours =24-48 months=4-8 semester):

- Documentation of the subject should not be delayed for > 1.5 years after registration.
- Could start after registration and should be completed, defended and accepted after passing the 2nd part final examination, after passing of at least 24 months after documentation of the subject of the thesis and after publishing of at least one paper from the thesis in a specialized peer-reviewed journal.
- Accepting the thesis is enough to pass this part.

9. Methods of student assessments:

Method of assessment	weight	The assessed ILOs
1-Research assignment		- General transferable skills, intellectual skills
2-Written Exams: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	50%	 - Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills
3-OSCE/ OSPE	50%	-Practical skills, intellectual skills, general transferable skills
4-Structured Oral Exams		- Knowledge, Intellectual skills, General transferable skills

Assessment schedule:

Part I:

- Biostatistics & Computer: Written Exam (2 hours) + Structured oral Exam + OSPE
- Research Methodology: Written Exam (2 hours) + structured oral Exam + OSPE
- Primary medical reports: Written Exam (2 hour) + Structured oral Exam + OSPE
- Human Anatomy & Embryology: Written Exam (2 hours) + structured oral Exam.
- Medical Physiology: Written Exam (2 hours) + structured oral Exam.
- Clinical Immunology: Written Exam (2 hours) + structured oral Exam.

Part II:

- Rheumatic Diseases and Immunology: Written Exam (3 hours) + OSCE + Structured oral Exam.
- Rehabilitation Medicine and Physical Modalities and Electrotherapy: Written Exam (3 hours) + OSCE + Structured oral Exam.
- One written exam containing commentary (1.30 hours)

- One written exam of Optional subject (2 hours).
- Planning muscle electrical and prosthetic devices and artificial limbs: Structured oral Exam + OSPE.

10. Evaluation of program intended learning outcomes

Evaluator	Tool	Sample
1- Senior students	Questionnaire	5
2- Alumni	Questionnaire	4
3- Stakeholders (Employers)	Questionnaire	30
4-External Evaluator(s) (External Examiner(s))	Report	1
5- Other		

Course Specification of Biostatistics and Computer in MD degree in Physical Medicine, Rheumatology & Rehabilitation

Sohag University **Faculty of Medicine**

1. Program on which the course is given: MD Degree in Physical Medicine, Rheumatology and Rehabilitation
2. Major or Minor element of programs: Minor
3. Department offering the program: Physical Medicine, Rheumatology and Rehabilitation Department.
4. Department offering the course: Community Medicine and public Health.
5. Academic year / Level: 1st part.
6. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018

A. Basic Information

Title: Biostatistics and Computer
Code: COM 0527-300

Title	Lecture	Practical	Total	Credit
Biostatistics and Computer	30	30	60	3

B. Professional Information

1. Overall Aims of Course

- To use precisely medical biostatistics and computer programs

2. Intended Learning Outcomes of Course (ILOs)

a) Knowledge and Understanding:

By the end of the course, the student is expected to be able to:

a1. List different programs of analysis of data and statistical packages
a2. Define the recent advances of sources of data and methods of collection.
a3. Summarize data, construct tables and graphs
a4. Calculate measures of central tendency and measures of dispersion
a5. Describe the normal curves and its uses
a6. Illustrate selected tests of significance and the inferences obtained from such tests
a7. Illustrate selected tests of significance for parametric and non parametric inferences
a8. Identify factor analysis and discrimination analysis

b) Intellectual Skills

By the end of the course, the student is expected to be allowed to:

b1. Understand how to collect and verify data from different sources
b2. Interpret data to diagnose prevalent health problems in Physical Medicine, Rheumatology and Rehabilitation Department

c) Professional and Practical Skills:

By the end of the course, the student is expected to practice the following:

c1. Perform recent advanced technological methods in collection, analysis and interpretation of data and in management of prevalent problems in Physical Medicine, Rheumatology and Rehabilitation Department

d) General and Transferable Skills:

By the end of the course, the student is expected to be able to:

d1. Use appropriate computer program packages.

d2. Use of different sources for information and knowledge about biostatistics.

3. Contents

Topic	No. of hours	Lecture	Tutorial /Practical
Recent advances in collection, analysis and interpretation of data	6	3	3
-Details of Tests of significance: Proportion test	6	3	3
Chi-square test	6	3	3
Student T test	6	3	3
Paired T test	6	3	3
-Correlation	4	2	2
Regression	6	3	3
-ANOVA test	4	2	2
-Discrimination analysis	6	3	3
Factor analysis	4	2	2
- parametric and non parametric tests	6	3	3
Total Hours	**60**	**30**	**30**
Total Credit Hour	**3**	**2**	**1**

4. Teaching and Learning Methods

4.1- Lectures

4.2- Practical sessions

4.3- Computer search assignments

4.4- Computer application

5. Student Assessment Methods

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	 - Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.3-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills
5.4 Computer search assignment	-General transferable skills, intellectual skills

Assessment Schedule

Assessment 1:	Final written exam	Week: 24
Assessment 2:	Final Structured Oral Exam	Week: 24
Assessment 3:	Attendance and absenteeism throughout the course	
Assessment 4:	Computer search assignment performance throughout the course	

Weighting of Assessments

Final-term written examination	50	%
Final Structured Oral Exam	50	%
Total	100	%

Formative only assessments: attendance and absenteeism and Computer search assignments performance.

6. List of References

6.1- Essential Books (Text Books)

1-Maxy-Rosenau Public health and preventive medicine, 2008.,Robert Wallace, publisher McGraw-Hill Medical; 15 edition.

6.2- Recommended Books

1- Dimensions of Community Based projects in Health Care, 2018. Arxer, Steven L., Murphy, John W.; 1st edition.

2- Parks Text Book of Preventive & Social Medicine. 2017., K. Park. BanarsidasBhanot Publishers; 23 edition.

3- Clinical Epidemiology: The Essentials, 2013, Robert F., Suzanne W. Fletcher, Grant S., publisher Lippincott Williams & Wilkins; 5 edition.

6.3- Periodicals, Web Sites, …etc

1-American Journal of Epidemiology

2-British Journal of Epidemiology and Community Health

3- WWW. CDC and WHO sites

7. Facilities Required for Teaching and Learning:

1-ADEQUATE INFRASTRUCTURE: including teaching places (teaching class, teaching halls, teaching laboratory), comfortable desks, good source of aeration, bathrooms, good illumination, and safety & security tools.

2- TEACHING TOOLS: including screens, computers including cd (rw), data shows, projectors, flip charts, white boards, video player, digital video camera, scanner, copier, colour and laser printers.

Course Coordinator: Dr/ **Foad Metry Atya**

Head of Department: Prof/ Ahmed Fathy Hammed

Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013, Revised:1/12/2018

Course Specification of Research Methodology in MD degree in Physical Medicine, Rheumatology & Rehabilitation

Sohag University **Faculty of Medicine**

1. Program on which the course is given: MD Degree in Physical Medicine, Rheumatology and Rehabilitation
2. Major or Minor element of programs: Minor
3. Department offering the program: Physical Medicine, Rheumatology and Rehabilitation Department.
4. Department offering the course: Community Medicine and public Health.
5. Academic year / Level: 1st part.
6. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018

A. Basic Information

Title: Research Methods
Code: COM 0527-300

Title	lecture	practical	total	credit
Research Methods	**30**	**30**	**60**	**3**

B. Professional Information

1. Overall Aims of Course

- To use precisely the research methodology in researches

2. Intended Learning Outcomes of Course (ILOs)

a) Knowledge and Understanding:

By the end of the course, the student is expected to be able to:

a1. Define the recent advances of screening tests pertinent to selected diseases and the at-risk approach in the application of screening tests.

a2. Explain the usefulness of screening tests, and calculate sensitivity, specificity, and predictive values.

a3. Describe the study design, uses, and limitations.

a4. Mention the recent advances of principles, methodologies, tools and ethics of scientific research.

a5. Explain the strategies and design of researches.

a6. Describe bias and confounding.

a7. Describe sampling techniques and list advantages of sampling

a8. Identify principles of evidence based medicine.

b) Intellectual Skills

By the end of the course, the student is expected to be able to:

b1. Conduct research studies that adds to knowledge.

b2. Formulate scientific papers in the area of Physical Medicine, Rheumatology and Rehabilitation Department.

b3. Innovate and create researches to find solutions to prevalent health problems in the area of Physical Medicine, Rheumatology and Rehabilitation Department

b4. Criticize researches related to Physical Medicine, Rheumatology and Rehabilitation Department

c) Professional and Practical Skills:

By the end of the course, the student is expected to be able to:

c1. Master the basic and modern professional skills in conducting researches in the area of Physical Medicine, Rheumatology and Rehabilitation Department

c2. Design new methods, tools and ways of conducting researches. .

d) General and Transferable Skills:

By the end of the course, the student is expected to be able to:

d1. Use of different sources for information and knowledge to serve research.

d2. Work coherently and successfully as a part of a team and team's leadership in conducting researches and field studies.

3. Contents

Topic	No. of hours	Lecture	Tutorial/ Practical
Details of epidemiological studies (case control, cohort and cross sectional)	8	4	4
Clinical trials, Quasi experimental study	6	3	3
Bias and errors	6	3	3
Setting a hypothesis	6	3	3
Recent advances in screening	6	3	3
- Evidence – based Medicine:			
Concept and examples	4	2	2
Applicability	4	2	2
Scientific writing:			
A protocol	4	2	2
A curriculum	4	2	2
Setting an objective	2	1	1
- Critical thinking	2	1	1
Formulation of papers	8	4	4
Total Hours	**60**	**30**	**30**
Total Credit hours	**3**	**2**	**1**

4. Teaching and Learning Methods

4.1- Lectures.

4.2- Computer search assignments

5. <u>Student Assessment Methods</u>

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	 - Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.3-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills
5.4 Computer search assignment	-General transferable skills, intellectual skills

Assessment Schedule

Assessment 1Final written exam Week: 24
Assessment 2Final Structured Oral Exam Week: 24
Assessment 3 Attendance and absenteeism throughout the course
Assessment 4 Computer search assignment performance throughout the course

Weighting of Assessments

Final-term written examination	50	%
Final Structured Oral Exam	50	%
Total	100	%

Any formative only assessments Attendance and absenteeism throughout the course

Computer search assignment performance throughout the course

6. List of References

6.1- Essential Books (Text Books)

1-Maxy-Rosenau Public health and preventive medicine, 2008.,Robert Wallace, publisher McGraw-Hill Medical; 15 edition.

6.2- Recommended Books

1- Dimensions of Community Based projects in Health Care, 2018. Arxer, Steven L., Murphy, John W.; 1st edition.
2- Parks Text Book of Preventive & Social Medicine. 2017., K. Park. BanarsidasBhanot Publishers; 23 edition.
3- Clinical Epidemiology: The Essentials, 2013, Robert F., Suzanne W. Fletcher, Grant S., publisher Lippincott Williams & Wilkins; 5 edition.

6.3- Periodicals, Web Sites, …etc

1-American Journal of Epidemiology
2-British Journal of Epidemiology and Community Health
3- WWW. CDC and WHO sites

7. Facilities Required for Teaching and Learning:

1-ADEQUATE INFRASTRUCTURE: including teaching places (teaching class, teaching halls, teaching laboratory), comfortable desks, good source of aeration, bathrooms, good illumination, and safety & security tools.
2- TEACHING TOOLS: including screens, computers including cd (rw), data shows, projectors, flip charts, white boards, video player, digital video camera, scanner, copier, colour and laser printers.

Course Coordinator: Dr/ **Foad Metry Atya**

Head of Department: Prof/ Ahmed Fathy Hammed

Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013, Revised:1/12/2018

Course Specification of Primary Medical Reports in MD degree in Physical Medicine, Rheumatology & Rehabilitation

Sohag University **Faculty of Medicine**

1- Program on which the course is given: MD Degree in Physical Medicine, Rheumatology and Rehabilitation

2- Major or Minor element of programs: Minor

3- Department offering the program: Physical Medicine, Rheumatology and Rehabilitation Department.

4- Department offering the course: Forensic Medicine and Clinical Toxicology.

5- Academic year / Level: 1st part.

6- Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018

A. Basic Information

Title: Primary Medical Reports
Code: FOR 0527-300

Title	Lecture	Practical	Total	Credit
Primary Medical Reports	**15**	**30**	**45**	**2**

B. Professional Information

1. Overall Aims of Course

The overall aim of the course of primary medical reports is to provide the MD students with the general knowledge and abilities to write correct medical reports and to know the different ethical and legal aspects of medical practice.

2. Intended Learning Outcomes of Course (ILOs)

a) Knowledge and Understanding:

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

a1. Describe the nature of pain
a2. Mention the definition and types of handicap and infirmity.
a3. Define and mention the medicolegal and research ethics
a4. Define the principles and fundamentals of ethics and legal aspects of professional practice in the field of Physical Medicine, Rheumatology and Rehabilitation.

b) Intellectual Skills

By the end of the course the student should have the ability to:

b1. Differentiate between chronic rheumatological diseases needing lifelong treatment and other acute short lasting conditions.
b2. Differentiate between different causes of handicap and loss of functions of different body organs or systems, and whether they are correctable, modifiable or not at all.
b3. Differentiate between handicapping diseases needing lifelong physiotherapy and other acute short lasting conditions.
b4. Assess risk in professional practices in the field of Rheumatology

c) Professional and Practical Skills:

By the end of the course the student should have the ability to:

c1. Recognize patients with life threatening conditions and initiate the proper management according to patient's needs.

c2. Design, write and evaluate medical reports.

c3. Deal with the possible complications of the diseases themselves or their treatments.

d) General and Transferable Skills:

By the end of the course the student should have the ability to:

d1. Present reports in meetings and seminars effectively.

d2. Communicate well with his colleagues, top management and subordinatres.

d3. Establish a good patient-physician relationship

d4. Coordinate effectively with other specialities regarding management of some patients who need this coordination, also the skill of when and why to stop managing the case and referring him to another specialist.

d5. Teach others and evaluate their performance.

d6. Use different sources for information and knowledge.

d7. Collect scientific data from the computer as reviews, photos, and videos.

d8. Work coherently and successfully as a part of a team and manage a group of people in a work environment.

d9. Moderate scientific meetings according to the available time.

3. Contents

Topic	No. of hours	Lecture	practical
Definition of poison, classification of poison and factors that influence toxicity	5	2	3
Diagnosis & Management of poisoning including: respiratory support, circulatory support and neurological support	5	2	3
toxicological sampling and permanent infirmity	5	2	3
How to write a toxicological report & How to write death certificate	5	2	3
Obligation of physicians (towards patients, colleagues, community)	5	2	3
Consent, and professional secrecy	5	2	3
Types of malpractice, and items of medical responsibility	5	1	4
Medicolegal aspects of organ transplantation, intersex states, euthanasia, assisted reproduction techniques	5	1	4
Ethical considerations of medical research involving human subjects	5	1	4
Total hours	**45**	**15**	**30**
Total Credit Hours	**2**	**1**	**1**

4. Teaching and Learning Methods:

4.1- Lectures.

4.2- Assignment

5. Student Assessment Methods:

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	 - Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.3-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills
5.4 assignment	-General transferable skills, intellectual skills

Assessment Schedule

1- Assessment 1: written examination week 24
2- Assessment 2: Structured Oral Exam week 24
3- Assessment of attendance & absenteeism throughout the course

Weighting of Assessments

Final-term written examination	50 %
Oral Examination	30 %
OSPE Examination	20 %
Total	100%

Formative only assessments: attendance and absenteeism

6. List of References:

Essential books

Simpson's Forensic Medicine, 13th Edition, by Jason Payne-James, RichardJones,Steven B Karch,John Manlove. published by Hodder& Stoughton Ltd (2011).

Goldfrank'sToxicologic Emergencies, (9th ed.) by Lewis S. Nelson, Robert S. Hoffman, Mary Ann Howland, Neal A Lewin, Lewis R. Goldfrank, Neal E. Flomenbaum. Published by McGraw-Hill (2011)

Emergency Toxicology,Peter Viccellio,(2nded.) Published by Lippincott Williams & Wilkins (1998)

Recommended books

Medical ethics.(1997)Robert M Veatch. 2nd edition.Jones & Bartlett publishers

Periodicals and websites……etc.

Egyptian journals of forensic medicine and clinical toxicology
International journals of forensic medicine and clinical toxicology
www.sciencedirect.com
https://emedicine.medscape.com
https://www.ncbi.nlm.nih.gov/pmc/

7. Facilities Required for Teaching and Learning:

1. ADEQUATE INFRASTRUCTURE: including teaching places (teaching class, teaching halls, teaching laboratory), comfortable desks, good source of aeration, bathrooms, good illumination, and safety & security tools.
2. TEACHING TOOLS: including screens, computers including cd (rw), data shows, projectors, flip charts, white boards, video player, digital video camera, scanner, copier, colour and laser printers.

Course Coordinator: Dr. Soheir Ali Mohamed

Head of Department: Dr. Soheir Ali Mohamed

Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013,Rvised:1/12/2018

Course Specification of Human Anatomy & Embryology in MD degree in Physical Medicine, Rheumatology & Rehabilitation

Sohag University **Faculty of medicine**

1. Program on which the course is given: MD Degree in Physical Medicine, Rheumatology and Rehabilitation
2. Major or Minor element of programs: Minor
3. Department offering the program: Physical Medicine, Rheumatology and Rehabilitation Department.
4. Department offering the course: Human Anatomy & Embryology
5. Academic year / Level: 1st part.
6. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018

A. Basic Information

Title: Human Anatomy & Embryology
Code: ANA 0527-300
Total hours:

Title	Lectures	Practical	Clinical	Total hours	Credit
Anatomy	**30**	**-**	**-**	**30**	**2**

B. Professional Information

1. Overall Aims of Course

By the end of the course the student should be able to have the have the professional knowledge about the anatomy of the upper limb, lower limb and vertebral column.

2. Intended Learning Outcomes of Course (ILOs):

a) Knowledge and Understanding:

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

a1. Mention the recent advances in the normal structure of the musculoskeletal and neuromuscular systems of the human body

a2. List the sex, age and ethnic differences for different Musculoskeletal diseases

b) Intellectual Skills:

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

b1. Assess the integrity and function of the motor system

b2. Differentiate between different causes of handicap and loss of functions of different body organs or systems, and whether they are correctable, modifiable or not at all.

c) Professional and Practical Skills:

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

c1. Master the basic and modern anatomical skills in the area of Physical Medicine, Rheumatology and Rehabilitation

d) General and Transferrable Skills:

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

d1. Use information technology to serve the development of professional practice
d2. Use different sources for information and knowledge.
d3. Use the computer and internet to gather scientific information.
d4. Collect scientific data from the computer as reviews, photos, and videos.

3. Contents

Topic	No. of hours	Lecture
Introduction	2	2
Anatomy of the upper limb Skelton of the upper limb. Muscles of the upper limb. Joints of the upper limb. Blood vessels of the upper limb. Nerves of the upper limb. Anatomy of the hand.	8	8
Anatomy of the lower limb Skelton of the lower limb. Muscles of the lower limb. Joints of the lower limb. Blood vessels of the lower limb. Nerves of the lower limb. Anatomy of the foot.	8	8
Anatomy of the vertebral column	3	3
Anatomy of the back	3	3
Anatomy of the spinal nerves	3	3
Revision	3	3
Total Hours	**30**	**30**
Total Credit Hours	**2**	**2**

4. Teaching and Learning Methods

4-1 Lectures.

5. Student Assessment Methods:

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	 - Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.3-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills

Assessment Schedule

Assessment 1: written examination week 24
Assessment 2: Structured Oral Exam week 24
Assessment of attendance & absenteeism throughout the course

Weighting of Assessments

Final-term written examination	50 %
Structured Oral Exam	50 %
Total	100%

Formative only assessments: attendance and absenteeism

6. List of References

6.1- Essential Books (Text Books)

- Fitzgerald M.J.T. (2016): The anatomical basis of medicine and surgery. By Standing s., ELIS H., Healy J. C., Johnson D. and Williams A. Gray's Anatomy. Elsevier; London, New York. Sydney. Toronto.

6.2- Recommended Books

- Stevens A. and Lowe J. S. (2015): Human histology; 5th edition; edited by Elsevier Mosby
- Colored Atlas of anatomy.
- Martini F. H., Timmons M. J. and McKinley M.P. (2015): Human anatomy; 10 edition.
- Tortora G. J. and Nielson M.T. (2016): Principles of human anatomy 14 edition; Edited by John Wiley and Sons ; United states.
- McMinn R.M.H. (2017): Lasts anatomy regional and applied chapter 7; 14 edition, edited by Longman group UK.

7. Facilities Required for Teaching and Learning

1. ADEQUATE INFRASTRUCTURE: including teaching places (teaching classes, teaching halls), comfortable disks, good source of aeration, bathrooms, good illumination and safety, & security tools.
2. TEACHING TOOLS: including screens, computers including CDs (RW) and USB ports, data shows, projectors, flip charts, white boards, video player, digital video camera, scanner, copier, color and laser printer.
3. COMPUTER PROGRAMS: for designing and evaluating MCQs.

Course Coordinator: Dr . Mohamed Al Badry**.**

Head of Department: Dr. Mohamed Al Badry.

Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013, Revised:1/12/2018

Course Specification of Medical Physiology in MD degree in Physical Medicine, Rheumatology & Rehabilitation

Sohag University **Faculty of Medicine**

1. Program on which the course is given: MD Degree in Physical Medicine, Rheumatology and Rehabilitation
2. Major or Minor element of programs: Minor
3. Department offering the program: Physical Medicine, Rheumatology and Rehabilitation Department.
4. Department offering the course: Medical Physiology.
5. Academic year / Level: 1st part.
6. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018

A. Basic Information

Title: Physiology
Code: PHY 0527-300

Title	Lectures	Practical	Clinical	Total hours	Credit
Medical Physiology	**30**	**-**	**-**	**30**	**2**

B. Professional Information

1. Overall Aims of Course

To prepare a Physical Medicine, Rheumatology and Rehabilitation physician oriented with the physiology of muscle and nerve, also that of C.N.S &endocrine physiology. in addition , graduates should have enough knowledge about the regulation of body temperature, body fluids, homeostasis & haemostasis.

2. Intended Learning Outcomes of Course (ILOs)

a) Knowledge and Understanding:

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

a1. Mention the recent advances in the normal function of the musculoskeletal and neuromuscular systems of the human body.
a2. Mention the physiology of muscle and nerve and the physiology of central nervous system
a3. Mention the nature of pain and pain control systems

b) Intellectual Skills

By the end of the course the student should have the ability to:

b1. Assess the function of the motor system
b2. Differentiate between different causes of handicap and loss of functions of different body organs or systems, and whether they are correctable, modifiable or not at all.
b3. Differentiate between the types and nature of pain perceived by the patient and the best way to eliminate or decrease its perception.

c) Professional and Practical Skills

By the end of the course the student should have the ability to:

c1. Master the basic and modern Physiological skills in the area of Physical Medicine, Rheumatology and Rehabilitation

c2. Interpret the results of diagnostic procedures.

d) General and Transferable Skills

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

d1. Have the skill of coordination with other specialities.

d2. Use information technology to serve the development of professional practice

d3. Use different sources for information and knowledge.

d4. Use the computer and internet to gather scientific information.

3. Contents

Topic	No. of hours	Lecture
The physiology of central nervous system		
Pain sensation.	5	5
Pain control system	5	5
Stretch reflex	5	5
The physiology of muscle and nerve		
Characteristics of nerves	3	3
Electrical examination of muscles and nerves	3	3
Mechanism of muscle contraction	3	3
Types of muscle contraction	2	2
Control of muscle contraction	2	2
Energy consumption of muscle contraction	2	2
Total Hours	**30**	**30**
Credit	**2**	**2**

4. Teaching and Learning Methods

4-1 Lectures.

4-2 Clinical lessons.

4-3 Seminars.

4-4 Assignments for the students to empower and assess the general and transferrable skills.

4-5 Attending and participating in scientific meetings, conferences, workshops and thesis discussion to acquire the general and transferrable skills needed.

5. Student Assessment Methods

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	 - Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.3-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills

Assessment Schedule

1- Assessment 1: written examination week 24
2- Assessment 2: Structured Oral Exam week 24
4- Assessment of attendance & absenteeism throughout the course

Weighting of Assessments

Final-term written examination	50 %
Structured Oral Exam	50 %
Total	100%

Formative only assessments: attendance and absenteeism

6. List of References

6.1- Essential Books (Text Books)

Guyton and Hall Textbook of Medical Physiology, John E. Hall,13th edition, Elsevier Health Sciences, 2015.

6.2- Recommended Books

Ganong's Review of Medical Physiology, 25th Edition, McGraw Hill Professional, 2015.

6.2- Recommended Books

6.3- Periodicals, Web Sites, … etc

7. Facilities Required for Teaching and Learning

1. ADEQUATE INFRASTRUCTURE: including teaching places (teaching classes, teaching halls), comfortable disks, good source of aeration, bathrooms, good illumination and safety, & security tools.
2. TEACHING TOOLS: including screens, computers including CDs (RW) and USB ports, data shows, projectors, flip charts, white boards, video player, digital video camera, scanner, copier, color and laser printer.
3. COMPUTER PROGRAMS: for designing and evaluating MCQs.

Course Coordinator: Dr. Ahmed Mostafa

Head of Department: Dr. Hoda. Mostafa

Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013, Revised:1/12/2018

Course Specification of Clinical Immunology in MD degree in Physical Medicine, Rheumatology & Rehabilitation

Sohag University **Faculty of Medicine**

1. Program on which the course is given: MD Degree in Physical Medicine, Rheumatology and Rehabilitation
2. Major or minor element of program: Minor
3. Department offering the program: Physical Medicine, Rheumatology and Rehabilitation Department.
4. Department offering the course: Medical Microbiology & Immunology.
5. Academic year / Level: 1st part.
6. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018

A. Basic Information

Title: Clinical Immunology

Code: MIC 0527-300

Title	Lectures	Practical	Clinical	Total hours	Credit
Clinical Immunology	**30**	**-**	**-**	**30**	**2**

B. Professional Information

1. Overall Aims of Course

The student is expected to acquire knowledge about the structure and function of the immune system and the role of the immune system in health and disease. The course includes basic immunology for the clinician where the student is taught about the components of the immune system, then investigative tools for the immune system, and finally the various applications of the immune system in health and disease, particularly diseases of concern to rheumatologists.

2. Intended Learning Outcomes of Course (ILOs)

a) Knowledge and Understanding:

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

a1. Have sound knowledge on the basics of the immune system.
a2. Describe the structure and function of immune system
a3. Identify the role of the immune system in health and disease.
a4. Identify treatment modalities related to the immune system
a5. List the differential diagnosis of Rheumatological diseases of immunological origin.

b) Intellectual Skills

By the end of the course the student should have the ability to:

b1. Determine the involvement of the immune system in the rheumatological disease process.

b2. Choose and evaluate the proper immunological tests required to achieve proper diagnosis of the case
b3. Decide which serological investigations are needed for each patient and the significance of these investigations.
b4. Plan to improve performance in the field of Rheumatology depending on the recent advances in clinical immunology

c) Professional and Practical Skills

By the end of the course the student should have the ability to:

c1. Choose proper serological tests, handle samples correctly and interpret the results of serological procedures.
c2. Evaluate Serological and Immunological tests existing in the area of Physical Medicine, Rheumatology and Rehabilitation

d) General and Transferable Skills

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

d1. Be reliable and responsible in fulfilling obligations
d2. Use information technology to serve the development of professional practice
d3. Use different sources for information and knowledge.
d4. Use the computer and internet to gather scientific information.
d5. Collect scientific data from the computer as reviews, photos, and videos.
d6. Interpret a report containing immunological data

3. Contents

Lectures	**No. of hours**	**Lectures**
Introduction to the immune system	6	6
Recognition of antigens	6	6
Maturation, activation and regulation of lymphocytes	6	6
Effector mechanisms of the immune response	6	6
The immune system in defense and disease	6	6
Total Hours	**30**	**30**
Credit	**2**	**2**

4. Teaching and Learning Methods

4-1 Lectures.
4-2 Clinical lessons.
4-3 Seminars.
4-4 Assignments for the students to empower and assess the general and transferrable skills.
4-5 Attending and participating in scientific meetings, conferences, workshops and thesis discussion to acquire the general and transferrable skills needed.

5. Student Assessment Methods

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills

5.2-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	 - Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.3-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills

Assessment Schedule

1- Assessment 1: written examination week 24
2- Assessment 2: Structured Oral Exam week 24
4- Assessment of attendance & absenteeism throughout the course

Weighting of Assessments

Final-term written examination	50 %
Structured Oral Exam	50 %
Total	100%

Formative only assessments: attendance and absenteeism

6. List of References

6.1- Essential Books (Text Books)

Jawetz Medical Microbiology2016.
Roitt Essential Immunology.
Abbas Clinical Immunology
Alberts Molecular Biology

6.2- Recommended Books

A coloured Atlas of Microbiology.
Topley and Wilson, Microbiology

6.3- Periodicals, Web Sites, … etc

http://mic.sgmjournals.org/

7. <u>Facilities Required for Teaching and Learning:</u>

1- ADEQUATE INTRASTRUCTURE: including teaching places (teaching class), comfortable desks, good source of aeration, bathrooms, good illumination and safety and security
2- Teaching tools: including screens, computers data shows, projectors, flip charts, white board, video player, digital video camera, scanner, copier, color and laser printers.

Course Coordinator: Dr . Nahed Fath Alla

Head of Department: Prof. Abeer M. Shenief

Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013, Revised:1/12/2018

Course Specification of Second Part in MD degree in Physical Medicine, Rheumatology & Rehabilitation

Sohag University **Faculty/ Medicine**

1. Program on which the course is given: MD Degree in Physical Medicine, Rheumatology and Rehabilitation
2. Major or Minor element of programs: Major
3. Department offering the program: Physical Medicine, Rheumatology and Rehabilitation Department.
4. Department offering the course: Physical Medicine, Rheumatology and Rehabilitation Department.
5. Academic year / Level: 2nd part
6. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018

A. Basic Information

Title: Second Part Courses

Code: RHE 0527-300

Total hours:

Title	Lectures	Practical	Clinical	Total hours	credit
Rheumatic Diseases	120	-	240	360	16
Immunology	30	30	60	120	5
Musculoskeletal Diseases	60	-	120	180	8
Physical Medicine	60	60	60	180	8
Rehabilitation	90	90	90	270	12
Total	**360**	**180**	**570**	**1110**	**49**

B. Professional Information

1. Overall Aims of Course

By the end of this course the students should be able to have the professional knowledge of diagnosis of most rheumatological and musculoskeletal diseases so as to be able to professionally protect, diagnose and advice the Rheumatology patient correctly, and should be able to have the professional knowledge of different physical modalities available for treating and palliating physically handicapped patients and to have the skills of dealing with these conditions so as to minimize the handicap and pain and maximize function of the affected organs and systems.

2. Intended Learning Outcomes of Course (ILOs)

a) Knowledge and Understanding:

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

Module 1: Rheumatic Diseases

a1. Mention the abnormal structure, function, growth and development of the musculoskeletal and neuromuscular systems of the human body and natural history of rheumatological diseases

a2. Mention updated theories, fundamentals and recent knowledge in the field of Rheumatology specialty and related fields.
a3. Describe the pathology, clinical symptoms and complications of each rheumatological disease.
a4. Follow up the international rapid update in the management of rheumatological diseases.
a5. List the sex, age and ethnic differences for different rheumatological diseases
a6. List the differential diagnosis of rheumatological diseases.
a7. Mention the various therapeutic methods/alternatives used for rheumatological diseases
a8. Define the principles and fundamentals of ethics and legal aspects of professional practice in the field of Rheumatology
a9. List the principles and fundamentals of quality of professional practice in the field of Rheumatology
a10. Trace the impact of professional practice on the environment
a11. Explain the methods of environmental development and maintenance

Module 2: Immunology

a1. Have sound knowledge on the basics of the immune system.
a2. Describe the structure and function of immune system
a3. Identify the role of the immune system in health and disease.
a4. Identify treatment modalities related to the immune system
a5. Mention updated theories, fundamentals and recent knowledge in the field of Immunology
a6. Follow up the international rapid update in the management of rheumatological diseases based on the recent advances in the field of immunology.

Module 3: Musculoskeletal Diseases

a1. Mention the abnormal structure, function, growth and development of the musculoskeletal and neuromuscular systems of the human body and natural history of musculoskeletal diseases.
a2. Mention the physiology of muscle and nerve and the physiology of central nervous system
a3. Mention updated theories, fundamentals and recent knowledge in the field of musculoskeletal disorders.
a4. Describe the pathology, clinical symptoms and complications of each musculoskeletal disease.
a5. List the sex, age and ethnic differences for different Musculoskeletal diseases
a6. Mention the various therapeutic methods/alternatives used for musculoskeletal diseases
a7. Trace the impact of professional practice on the environment

Module 4: Physical Medicine

a1. Mention theories, modalities and recent knowledge in the field of Physical Medicine
a2. Mention the various physical modalities used for rheumatological diseases
a3. Enumerate and Define the different physical modalities and their uses.

Module 5: Rehabilitation Medicine

a1. Mention the nature of pain and pain control systems
a2. Mention updated theories, fundamentals and recent knowledge in the field of Rehabilitation Medicine.
a3. Mention theories, modalities and recent knowledge in the field of Physical Medicine and Rehabilitation specialty.

a4. Follow up the international rapid update in rehabilitation maneuvers.
a5. List the definition and types of handicap, and the physiolo-pathological basis of each type.
a6. Define the principles and fundamentals of ethics and legal aspects of professional practice in the field of Physical Medicine and Rehabilitation
a7. List the principles and fundamentals of quality of professional practice in the field of Physical Medicine and Rehabilitation
a8. Trace the impact of professional practice on the environment
a9. Explain the methods of environmental development and maintenance

b) Intellectual Skills

By the end of the course the student should have the ability to:

Module 1: Rheumatic Diseases

b1. Analyze and evaluate data and information in the field of Rheumatology and using it for titration and conclusion.
b2. Choose and evaluate the tests required to achieve proper diagnosis of the case
b3. Differentiate between the multiple complaints of the patient, ranging them from the most important to the less ones.
b4. Decide which investigations are needed for each patient and the significance of these investigations.
b5. Differentiate between chronic rheumatological diseases needing lifelong treatment and other acute short lasting conditions.
b6. Interpret data acquired through history taking to reach a provisional diagnosis.
b7. Suggest, evaluate and criticize specialized problem-solutions based on the available data.
b8. Have the ability to innovate nontraditional solutions to problems.
b9. Formulate scientific papers in the area of Rheumatology
b10. Assess risk in professional practices in the field of Rheumatology
b11. Plan to improve performance in the field of Rheumatology
b12. Make professional decisions in different professional contexts.
b13. Integrate scientific discussion administration based on scientific evidences and proofs.
b14. Criticize researches related to Rheumatology

Module 2: Immunology

b1. Determine the involvement of the immune system in the rheumatological disease process.
b2. Choose and evaluate the immunological tests required to achieve proper diagnosis of the case
b3. Decide which immunological investigations are needed for each patient and the significance of these investigations.
b4. Suggest, evaluate and criticize specialized problem-solutions based on the available data.
b5. Have the ability to innovate nontraditional solutions to problems.
b6. Integrate scientific discussion administration based on scientific evidences and proofs.

Module 3: Musculoskeletal Diseases

b1. Analyze and evaluate data and information in the field of Musculoskeletal Disorders and using it for titration and conclusion.
b2. Choose and evaluate the tests required to achieve proper diagnosis of the case
b3. Assess the integrity and function of the motor system

b4. Differentiate between the multiple complaints of the patient, ranging them from the most important to the less ones.
b5. Decide which investigations are needed for each patient and the significance of these investigations.
b6. Interpret data acquired through history taking to reach a provisional diagnosis.
b7. Suggest, evaluate and criticize specialized problem-solutions based on the available data.
b8. Have the ability to innovate nontraditional solutions to problems.
b9. Formulate scientific papers in the area of musculoskeletal diseases
b10. Assess risk in professional practices in the field of musculoskeletal disorders
b11. Plan to improve performance in the field of Muscoloskeletal disorders
b12. Make professional decisions in different professional contexts.
b13. Criticize researches related to musculoskeletal disorders

Module 4: Physical Medicine

b1. Analyze and evaluate data and information in the field of Physical Therapy and using it for titration and conclusion.
b2. Differentiate between different causes of handicap and loss of functions of different body organs or systems, and whether they are correctable, modifiable or not at all.
b3. Differentiate between the types and nature of pain perceived by the patient and the best way to eliminate or decrease its perception.
b4. Differentiate between handicapping diseases needing lifelong physiotherapy and other acute short lasting conditions.
b5. Have the ability to innovate nontraditional solutions to problems.
b6. Assess risk in professional practices in the field of Physical Medicine
b7. Make professional decisions in different professional contexts.
b8. Create and evaluate new physical modalities and maneuvers

Module 5: Rehabilitation Medicine

b1. Analyze and evaluate data and information in the field of Physical Medicine and Rehabilitation and using it for titration and conclusion.
b2. Assess the integrity and function of the motor system
b3. Differentiate between the multiple complaints of the patient, ranging them from the most important to the less ones.
b4. Decide which investigations are needed for each patient and the significance of these investigations.
b5. Interpret data acquired through history taking to reach a provisional diagnosis.
b6. Differentiate between different causes of handicap and loss of functions of different body organs or systems, and whether they are correctable, modifiable or not at all.
b7. Differentiate between the types and nature of pain perceived by the patient and the best way to eliminate or decrease its perception.
b8. Differentiate between handicapping diseases needing lifelong physiotherapy and other acute short lasting conditions.
b9. Suggest, evaluate and criticize specialized problem-solutions based on the available data.
b10. Have the ability to innovate nontraditional solutions to problems.
b11. Formulate scientific papers in the area of Rehabilitation Medicine
b12. Assess risk in professional practices in the field of Physical Medicine and Rehabilitation

b13. Plan to improve performance in the field of Physical Medicine and Rehabilitation
b14. Make professional decisions in different professional contexts.
b15. Create and evaluate new methods for Rehabilitation
b16. Integrate scientific discussion administration based on scientific evidences and proofs.
b17. Criticize researches related to Physical Medicine, Rheumatology and Rehabilitation

c) Professional and Practical Skills

By the end of the course the student should have the ability to:

Module 1: Rheumatic Diseases

c1. Master the basic and modern professional, clinical and medical skills in the area of Rheumatology
c2. Perform complete history and full physical examination of rheumatic patients
c3. Choose, perform and Interpret the results of diagnostic Investigations.
c4. Diagnose rheumatological illnesses.
c5. Recognize patients with life threatening conditions and initiate the proper management according to patient's needs.
c6. Write a professional treatment prescription.
c7. Design, write and evaluate medical reports.
c8. Perform, evaluate and develop methods and tools existing in the area of Rheumatology
c9. Deal with the possible complications of the diseases themselves or their treatments.
c10. Use and interpret the results of diagnostic musculoskeletal ultrasound for early diagnosis of rheumatic disease
c11. Use technological methods to serve the professional practice in the field of Rheumatology
c12. Plan for the development of professional practice.
c13. Train junior staff through continuous medical education programs
c14. Master the development of the performance of others.
c15. Plan the development of new methods, tools and ways of professional practice.
c16. Activate and mobilize the community toward evidence based medicine

Module 2: Immunology

c1. Choose proper serological tests, handle samples correctly and interpret the results of serological procedures.
c2. Diagnose rheumatological illnesses of immunological base.
c3. Understand and evaluate Immunological reports.
c4. Activate and mobilize the community toward evidence based medicine

Module 3: Musculoskeletal Diseases

c1. Master the basic and modern professional, clinical and medical skills in the area of Musculoskeletal Disorders
c2. Perform complete history and full physical examination of rheumatic patients
c3. Choose, perform and Interpret the results of diagnostic Investigations.
c4. Diagnose musculoskeletal illnesses.
c5. Write a professional treatment prescription.
c6. Design, write and evaluate medical reports.
c7. Perform, evaluate and develop methods and tools existing in the area of musculoskeletal diseases
c8. Use and interpret the results of EMG for diagnosis of Neuromuscular diseases

c9. Use technological methods to serve the professional practice in the field of musculoskeletal diseases
c10. Plan for the development of professional practice.
c11. Train junior staff through continuous medical education programs
c12. Master the development of the performance of others.
c13. Plan the development of new methods, tools and ways of professional practice.
c14. Activate and mobilize the community toward evidence based medicine

Module 4: Physical Medicine

c1. Master the basic and modern professional, clinical and medical skills in the area of Physical Modalities
c2. Write a professional treatment prescription.
c3. Design, write and evaluate medical reports.
c4. Perform, evaluate and develop physical methods and tools existing in the area of Physical Medicine
c5. Deal with the possible complications and precautions of different physical modalities
c6. Use technological methods to serve the professional practice in the field of Physical Medicine.
c7. Plan for the development of professional practice.
c8. Train junior staff through continuous medical education programs
c9. Master the development of the performance of others.
c10. Plan the development of new methods, tools and ways of professional practice.

Module 5: Rehabilitation Medicine

c1. Master the basic and modern professional, clinical and medical skills in the area of Rehabilitation
c2. Recognize patients with life threatening conditions and initiate the proper management according to patient's needs.
c3. Write a professional treatment prescription.
c4. Design, write and evaluate medical reports.
c5. Perform, evaluate and develop physical methods and tools existing in the area of Rehabilitation Medicine
c6. Deal with the possible complications and precautions of different physical modalities
c7. c-7 Design and apply rehabilitation program for the different varieties of disabilities.
c8. Inject joints and soft tissues.
c9. Use Botulinum Toxin for rehabilitation of spasticity.
c10. Use technological methods to serve the professional practice in the field of Rehabilitation Medicine.
c11. Plan for the development of professional practice.
c12. Train junior staff through continuous medical education programs
c13. Master the development of the performance of others.
c14. Plan the development of new methods, tools and ways of professional practice.

d) General and Transferable Skills

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

Module 1: Rheumatic Diseases

d1. Present reports in meetings and seminars effectively.
d2. Communicate well with his colleagues, top management and subordinatres.
d3. Establish a good patient-physician relationship

d4. Coordinate effectively with other specialities regarding management of some patients who need this coordination, also the skill of when and why to stop managing the case and referring him to another specialist.
d5. Use information technology to serve the development of professional practice
d6. Teach others and evaluate their performance.
d7. Apply self-assessment methods and identify personal learning needs.
d8. Use different sources for information and knowledge.
d9. Use the computer and internet to gather scientific information.
d10. Work coherently and successfully as a part of a team and manage a group of people in a work environment.
d11. Moderate scientific meetings according to the available time.

Module 2: Immunology

d1. Use information technology to serve the development of professional practice
d2. Teach others and evaluate their performance.
d3. Apply self-assessment methods and identify personal learning needs.
d4. Use different sources for information and knowledge.
d5. Collect scientific immunological data from the computer.
d6. Work coherently and successfully as a part of a team and manage a group of people in a work environment.
d7. Moderate scientific meetings according to the available time.

Module 3: Musculoskeletal Diseases

d1. Communicate well with his colleagues, top management and subordinates.
d2. Establish a good patient-physician relationship
d3. Coordinate effectively with other specialities regarding management of some patients who need this coordination, also the skill of when and why to stop managing the case and referring him to another specialist.
d4. Use information technology to serve the development of professional practice
d5. Teach others and evaluate their performance.
d6. Apply self-assessment methods and identify personal learning needs.
d7. Use different sources for information and knowledge.

Module 4: Physical Medicine

d1. Communicate well with his colleagues, top management and subordinates.
d2. Establish a good patient-physician relationship
d3. Teach others and evaluate their performance.
d4. Apply self-assessment methods and identify personal learning needs.
d5. Work coherently and successfully as a part of a team and manage a group of people in a work environment.

Module 5: Rehabilitation Medicine

d1. Present reports in meetings and seminars effectively.
d2. Communicate well with his colleagues, top management and subordinates.
d3. Establish a good patient-physician relationship
d4. Coordinate effectively with other specialities regarding management of some patients who need this coordination, also the skill of when and why to stop managing the case and referring him to another specialist.
d5. Use information technology to serve the development of professional practice
d6. Teach others and evaluate their performance.
d7. Apply self-assessment methods and identify personal learning needs.
d8. Collect scientific data from the computer.
d9. Work coherently and successfully as a part of a team and manage a group of people in a work environment.

d10. Moderate scientific meetings according to the available time.

3. Contents

Module 1: Rheumatic Diseases

Topic	No. of hours	Lecture	Clinical
Evaluation Of Rheumatology Patient	12	4	8
Monoarticular Joint Disease	6	2	4
Polyarticular Joint Disease	6	2	4
Systemic Manifestations of Rheumatic Diseases	9	3	6
The Fibromyalgia Syndrome	9	3	6
Rheumatoid Arthritis	24	8	16
Psoriatic Arthritis	9	3	6
Ankylosing Spondylitis	9	3	6
Reactive and Enteropathic Arthritis	6	2	4
Osteoarthritis	24	8	16
GOUT	15	5	10
Other Crystal Induced Arthropathies	6	2	4
Systemic Lupus Erythematosus	24	8	16
Systemic Sclerosis	18	6	12
Mixed Connective Tissue Syndrome	6	2	4
Overlap Syndrome	6	2	4
Idiopathic Inflammatory Myopathy	15	5	10
Metabolic Myopathies	6	2	4
Heritable Diseases of the Connective Tissues	6	2	4
Sjogren's syndrome	6	2	4
Vasculitides	18	6	12
Juvenile Idiopathic Arthritis	24	8	16
Juvenile SLE	12	4	8
Juvenile Systemic Sclerosis	6	2	4
Juvenile Dermatomyocitis	6	2	4
Juvenile Vasculitis	6	2	4
Adult Onset Still's Disease	6	2	4
Osteoporosis	18	6	12
Modalities of Therapy in Rheumatic Diseases	18	6	12
Infection and Arthritis	15	5	10
Rheumatic Manifestations of Systemic Diseases	9	3	6
Total	**360**	**120**	**240**
Credit	**16**	**8**	**8**

Module 2: Immunology

Topic	No. of hours	Lecture	Practical	Clinical
The Hypersensitivity Reactions	28	7	7	14

Cells involved in Autoimmune Disease and Arthritis	31	8	8	15
Immunological basis of Rheumatic Diseases	27	7	7	15
Immuno-regulatory Drugs	32	8	8	16
Total hours	**120**	**30**	**30**	**60**
Credit	**5**	**2**	**1**	**2**

Module 3: Musculoskeletal Diseases

Topic	**No. of hours**	**Lecture**	**Clinical**
Introduction To Joint Anatomy And Joint Physiology	18	6	12
Electrodiagnostic Evaluation of the Peripheral Nervous System	18	6	12
Differential Diagnosis of Regional Musculoskeletal Pain	18	6	12
Regional Rheumatic Pain Syndrome	18	6	12
Complex Regional Pain Syndromes	18	6	12
Modalities of Therapy in musculoskeletal Diseases	18	6	12
Musculoskeletal Manifestations of Systemic Diseases	18	6	12
Muscoloskeletal Syndromes of Malignancies	18	6	12
Familial Autoinflammatory Syndromes	18	6	12
Tumours and Tumour-like Syndromes of Bone and Joints and Related Structures	18	6	12
Total hours	**180**	**60**	**120**
Credit	**8**	**4**	**4**

Module 4: Physical Medicine

Topic	**No. of hours**	**Lecture**	**Practical**	**Clinical**
Introduction To Anatomy of the Neuromuscular System	15	5	5	5
Interactions with the Medicolegal Systems	9	3	3	3
Therapeutic Physical Agents	21	7	7	7
Electrotherapy	24	8	8	8
Complementary and Alternative Medicine	21	7	7	7
Wheelchairs and assistive devices	24	8	8	8
Upper and lower limb prosthesis	24	8	8	8
Spinal Orthosis	21	7	7	7
Upper and lower limb orthosis	21	7	7	7
Total hours	**180**	**60**	**60**	**60**
Credit	**8**	**4**	**2**	**2**

Module 5: Rehabilitation Medicine

Topic	**No. of hours**	**Lecture**	**Practical**	**Clinical**
Different Types of Paralysis	15	5	5	5
Pain and its nature and pathways	12	4	4	4
Human Walking	15	5	5	5

Topic	No. of hours	Lecture	Practical	Clinical
Disability Determination	15	5	5	5
Imaging Techniques Relative to Rehabilitation	12	4	4	4
Manipulation, Massage and Traction	9	3	3	3
Injection Procedures	15	5	5	5
Spinal Injection Procedures	12	4	4	4
Therapeutic Exercises	24	8	8	8
Aquatic Rehabilitation	9	3	3	3
Psychological aspects of Rehabilitation	6	2	2	2
Ethical issues in Rehabilitation	6	2	2	2
Measuring Quality of Life in Rehabilitation Medicine	18	6	6	6
Emergencies in Rehabilitation Medicine	6	2	2	2
Gait restoration and walking Rehabilitation	12	4	4	4
Spasticity and movement Disorders	18	6	6	6
Pressure ulcers	6	2	2	2
Neurogenic bladder and bowel rehabilitation	6	2	2	2
Stroke rehabilitation and Rehabilitation of traumatic brain injury	12	4	4	4
Cancer Rehabilitation	6	2	2	2
Cardiac Rehabilitation	6	2	2	2
Respiratory Rehabilitation	6	2	2	2
Burn Rehabilitation	6	2	2	2
Speech, language, auditory and swallowing rehabilitation	6	2	2	2
Visual Rehabilitation	6	2	2	2
Transplantation – related Rehabilitation.	6	2	2	2
Total hours	270	90	90	90
Credit	12	6	3	3

4. Teaching and Learning Methods

4-1 Lectures.
4-2 Clinical lessons.
4-3 Seminars.
4-4 Assignments for the students to empower and assess the general and transferrable skills.
4-5 Attending and participating in scientific meetings, conferences, workshops and thesis discussion to acquire the general and transferrable skills needed.

5. Student Assessment Methods

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2- Log book	- General transferable skills
5.3-Written Exam: -Short essay: 40%	- Knowledge

-structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	- Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.4-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills
5.5-OSCE	-Practical skills, intellectual skills General transferable skills
5.6 assignment	-General transferable skills, intellectual skills

Assessment Schedule

Assessment 1: written examination week 96
Assessment 2: Structured Oral Exam week 96
Assessmant 3: OSCE week 96-100
Assessment of attendance & absenteeism throughout the course

Weighting of Assessments

Final-term written examination	50 %
Structured Oral Exam	30 %
OSCE Examination	20 %
Total	100%

Formative only assessments: attendance and absenteeism, log book

6. List of References

6.1- Essential Books (Text Books)

1. Primer Textbook of rheumatology, 13th edition, 2008
2. Kelley textbook of rheumatology, 8th edition, 2009
3. Roitt Essential Immunology
4. Abbas Clinical Immunology
5. Holzemon's Soft Tissue rheumatology, 1st edition, 2005
6. PM & R secrets 2004

6.2- Recommended Books

1. Manual of Rheumatology, 2nd edition, 2004
2. Current of rheumatology, 2nd edition, 2007
3. A coloured Atlas of Microbiology.
4. Topley and Wilson, Microbiology
5. Hodler's Musculoskeletal Diseases, 2005
6. Delisa Textbook of Rehabilitation and Physical Medicine, 2004

6.3- Periodicals, Web Sites, … etc

1. ACR journal of rheumatology.
2. Arthritis Journal
3. EULAR journal
4. ILAR journal.
5. http://mic.sgmjournals.org/

7. **Facilities Required for Teaching and Learning**
    1. ADEQUATE INFRASTRUCTURE: including teaching places (teaching classes, teaching halls), comfortable disks, good source of aeration, bathrooms, good illumination and safety, & security tools.
    2. TEACHING TOOLS: including screens, computers including CDs (RW) and USB ports, data shows, projectors, flip charts, white boards, video player, digital video camera, scanner, copier, color and laser printer.
    3. COMPUTER PROGRAMS: for designing and evaluating MCQs.

Course Coordinator: Dr. Sahar Abd El Rahman

Head of the Department: Prof. Dr. Mohamed Ali Ismaeel

Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013, Revised:1/12/2018

Course Specification of Pediatric Rehabilitation in MD degree in Physical Medicine, Rheumatology & Rehabilitation

Sohag University **Faculty of Medicine**

1. Program on which the course is given: MD Degree in Physical Medicine, Rheumatology and Rehabilitation
2. Major or Minor element of programs: Minor
3. Department offering the program: Physical Medicine, Rheumatology and Rehabilitation Department.
4. Department offering the course: Physical Medicine, Rheumatology and Rehabilitation Department.
5. Academic year / Level: 2nd part (optional course)
6. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018

A. Basic Information

Title: Pediatric Rehabilitation
Code: RHE 0527-300

Lectures	Practical	Clinical	Total hours	Credit
30	30	30	90	4

B. Professional Information

1. Overall Aims of Course

By the end of this course the students should be able to have the professional knowledge of diagnosis of most handicapping problems and infirmities in children, and to have the skills of dealing with these conditions so as to minimize the handicap and pain and maximize function of the affected organs and systems.

2. Intended Learning Outcomes of Course (ILOs)

a) Knowledge and Understanding:

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

a1. Mention theories, modalities and recent knowledge in the field of Pediatric Rehabilitation.

a2. Follow up the international rapid update in pediatric rehabilitation maneuvers.

b) Intellectual Skills

By the end of the course the student should have the ability to:

b1. Assess the integrity and function of the motor system in children

b2. Have the ability to innovate nontraditional solutions to problems.

b3. Plan to improve performance in the field of Pediatric Rehabilitation

c) Professional and Practical Skills

By the end of the course the student should have the ability to:

c1.Master the basic and modern professional, clinical and medical skills in the area of Pediatric Rehabilitation

c2.Perform, evaluate and develop physical methods and tools existing in the area of Pediatric Rehabilitation Medicine

c3.Design and apply rehabilitation program for children.

d) General and Transferable Skills

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

d-1 Use information technology to serve the development of professional practice

3. Contents

Topic	No. of hours	Lecture	Practical	Clinical
Child Walking	15	5	5	5
Disability Determination in children	12	4	4	4
Therapeutic Exercises in children	15	5	5	5
Ethical issues in Pediatric Rehabilitation	2	2	-	-
Measuring Quality of Life in Pediatric Rehabilitation Medicine	10	2	4	4
Emergencies in Pediatric Rehabilitation Medicine	9	3	3	3
Rehabilitation of Cerebral Palsy and related conditions	15	5	5	5
Rehabilitation of Flaccid Paralysis syndromes	12	4	4	4
Total hours	**90**	**30**	**30**	**30**
Credit	**4**	**2**	**1**	**1**

4. Teaching and Learning Methods

4-1 Lectures.

4-2 Clinical lessons.

4-3 Seminars.

4-4 Assignments for the students to empower and assess the general and transferrable skills.

4-5 Attending and participating in scientific meetings, conferences, workshops and thesis discussion to acquire the general and transferrable skills needed.

5. Student Assessment Methods

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2- Log book	- General transferable skills
5.3-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	 - Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.4-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills
5.5 assignment	-General transferable skills, intellectual skills

Assessment Schedule

1- Assessment 1: written examination week 24
2- Assessment 2: Structured Oral Exam week 24
3- Assessment of attendance & absenteeism throughout the course

Weighting of Assessments

Final-term written examination	50 %
Structured Oral Exam	50 %
Total	100%

Formative only assessments: attendance and absenteeism, log book

6. List of References

6.1- Essential Books (Text Books)

PM & R secrets 2004

6.2- Recommended Books

Delisa Textbook of Rehabilitation and Physical Medicine, 2004
Freeman's Physical Therapy of Cerebral Palsy, 2004

7. Facilities Required for Teaching and Learning

1. ADEQUATE INFRASTRUCTURE: including teaching places (teaching classes, teaching halls), comfortable disks, good source of aeration, bathrooms, good illumination and safety, & security tools.
2. TEACHING TOOLS: including screens, computers including CDs (RW) and USB ports, data shows, projectors, flip charts, white boards, video player, digital video camera, scanner, copier, color and laser printer.

Course Coordinator: Dr. Sahar Abd El Rahman

Head of the Department: Dr. Mohamed Ali Ismaeel

Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013, Revised:1/12/2018

Course Specification of Geriatric Rehabilitation in MD degree in Physical Medicine, Rheumatology & Rehabilitation

Sohag University **Faculty of Medicine**

1. Program on which the course is given: MD Degree in Physical Medicine, Rheumatology and Rehabilitation
2. Major or Minor element of programs: Minor
3. Department offering the program: Physical Medicine, Rheumatology and Rehabilitation Department.
4. Department offering the course: Physical Medicine, Rheumatology and Rehabilitation Department.
5. Academic year / Level: 2nd part (optional course)
6. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018

A. Basic Information

Title: Geriatric Rehabilitation

Code: RHE 0527-300

Lectures	Practical	Clinical	Total hours	Credit
30	30	30	90	4

B. Professional Information

1. Overall Aims of Course

By the end of this course the students should be able to have the professional knowledge of diagnosis of most handicapping problems and infirmities in geriatrics, and to have the skills of dealing with these conditions so as to minimize the handicap and pain and maximize function of the affected organs and systems.

2. Intended Learning Outcomes of Course (ILOs)

a) Knowledge and Understanding:

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

a1. Mention theories, modalities and recent knowledge in the field of Rehabilitation of the aging people.

a2. Follow up the international rapid update in geriatric rehabilitation maneuvers.

b) Intellectual Skills

By the end of the course the student should have the ability to:

b1. Assess the integrity and function of the motor system in aged patients

b2. Differentiate between handicapping diseases needing lifelong physiotherapy and other acute short lasting conditions.

b3. Have the ability to innovate nontraditional solutions to problems.

b4. Plan to improve performance in the field of Geriatric Rehabilitation

c) Professional and Practical Skills

By the end of the course the student should have the ability to:

c1. Master the basic and modern professional, clinical and medical skills in the area of Geriatric Rehabilitation

c2. Recognize patients with life threatening conditions and initiate the proper management according to patient's needs.
c3. Deal with the possible complications and precautions of different physical modalities in geriatric rehabilitation
c4. Design and apply rehabilitation program for old people.

d) General and Transferable Skills

By the end of the course the student should be able to:
d1. Use information technology to serve the development of professional practice

3. Contents

Topic	No. of hours	Lecture	Practical	Practical
Walking of the aged patient	12	4	4	4
Disability Determination in old patients	9	3	3	3
Therapeutic Exercises in Geriatric Rehabilitation	15	5	5	5
Ethical issues in Geriatric Rehabilitation	4	4	-	-
Measuring Quality of Life in Geriatric Rehabilitation Medicine	10	2	4	4
Emergencies in Geriatric Rehabilitation Medicine	9	3	3	3
Gait restoration and walking Rehabilitation in Geriatrics	13	3	5	5
Spasticity and movement Disorders in Geriatrics	9	3	3	3
Stroke rehabilitation and Rehabilitation of traumatic brain injury	9	3	3	3
Total hours	90	30	30	30
Credit	**4**	**2**	**1**	**1**

4. Teaching and Learning Methods

4-1 Lectures.
4-2 Clinical lessons.
4-3 Seminars.
4-4 Assignments for the students to empower and assess the general and transferrable skills.
4-5 Attending and participating in scientific meetings, conferences, workshops and thesis discussion to acquire the general and transferrable skills needed.

5. Student Assessment Methods

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2- Log book	- General transferable skills
5.3-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	 - Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.4-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills
5.5 assignment	-General transferable skills, intellectual skills

Assessment Schedule

1- Assessment 1: written examination week 24
2- Assessment 2: Structured Oral Exam week 24
3- Assessment of attendance & absenteeism throughout the course

Weighting of Assessments

Final-term written examination	50 %
Structured Oral Exam	50 %
Total	100%

Formative only assessments: attendance and absenteeism, log book

6. List of References

6.1- Essential Books (Text Books)

PM & R secrets 2004

6.2- Recommended Books

Delisa Textbook of Rehabilitation and Physical Medicine, 2004

7. Facilities Required for Teaching and Learning

1. ADEQUATE INFRASTRUCTURE: including teaching places (teaching classes, teaching halls), comfortable disks, good source of aeration, bathrooms, good illumination and safety, & security tools.
2. TEACHING TOOLS: including screens, computers including CDs (RW) and USB ports, data shows, projectors, flip charts, white boards, video player, digital video camera, scanner, copier, color and laser printer.

Course Coordinator: Dr. Sahar Abd El Rahman

Head of the Department: Dr. Mohamed Ali Ismaeel

Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013, Revised:1/12/2018

Course Specification of Rehabilitation of Sport Injuries in MD degree in Physical Medicine, Rheumatology & Rehabilitation

Sohag University **Faculty/ Medicine**

1. Program on which the course is given: MD Degree in Physical Medicine, Rheumatology and Rehabilitation
2. Major or Minor element of programs: Minor
3. Department offering the program: Physical Medicine, Rheumatology and Rehabilitation Department.
4. Department offering the course: Physical Medicine, Rheumatology and Rehabilitation Department.
5. Academic year / Level: 2nd part (optional course)
6. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018

A. Basic Information

Title: Rehabilitation of Sport Injuries
Code: RHE 0527-300

Lectures	Practical	Clinical	Total hours	Credit
30	30	30	90	4

B. Professional Information

1. Overall Aims of Course

By the end of this course the students should be able to have the professional knowledge of diagnosis of most handicapping problems and infirmities related to sport injuries, and to have the skills of dealing with these conditions so as to minimize the handicap and pain and maximize function of the affected organs and systems.

2. Intended Learning Outcomes of Course (ILOs)

a) Knowledge and Understanding:

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

a1. Mention theories, modalities and recent knowledge in the field of Physical Medicine and Rehabilitation regarding sport injuries.

a2. Follow up the international rapid update in rehabilitation maneuvers in the management of sport injuries.

b) Intellectual Skills

By the end of the course the student should have the ability to:

b1. Assess the integrity and function of the motor system in injuried athletes

b2. Have the ability to innovate nontraditional solutions to problems.

b3. Plan to improve performance in the field of Sport Medicine Rehabilitation

c) Professional and Practical Skills

By the end of the course the student should have the ability to:

c1. Master the basic and modern professional, clinical and medical skills in the area of Rehabilitation of Sport Injuries

c2. Design and apply rehabilitation program for sport injuries.

d) General and Transferable Skills

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

d1. Use information technology to serve the development of professional practice

3. Contents

Topic	No. of hours	Lecture	Practical	Clinical
Disability Determination in Sport Injuries	16	4	6	6
Therapeutic Exercises in Sport Injuries	24	8	8	8
Ethical issues in Sport Injuries	6	6	-	-
Measuring Quality of Life in Sport Injuries Rehabilitation	13	3	5	5
Emergencies in Sport Injuries	12	4	4	4
Gait restoration and walking Rehabilitation in Sport Injuries	19	5	7	7
Total hours	90	30	30	30
Credit	**4**	**2**	**1**	**1**

4. Teaching and Learning Methods

4-1 Lectures.
4-2 Clinical lessons.
4-3 Seminars.
4-4 Assignments for the students to empower and assess the general and transferrable skills.
4-5 Attending and participating in scientific meetings, conferences, workshops and thesis discussion to acquire the general and transferrable skills needed.

5. Student Assessment Methods

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2- Log book	- General transferable skills
5.3-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	 - Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.4-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills
5.5 assignment	-General transferable skills, intellectual skills

Assessment Schedule

1- Assessment 1: written examination week 24
2- Assessment 2: Structured Oral Exam week 24
3- Assessment of attendance & absenteeism throughout the course

Weighting of Assessments

Final-term written examination	50 %
Structured Oral Exam	50 %
Total	100%

Formative only assessments: attendance and absenteeism, log book

6. **List of References**

6.1- Essential Books (Text Books)

PM & R secrets 2004

6.2- Recommended Books

Delisa Textbook of Rehabilitation and Physical Medicine, 2004

7. **Facilities Required for Teaching and Learning**

1. ADEQUATE INFRASTRUCTURE: including teaching places (teaching classes, teaching halls), comfortable disks, good source of aeration, bathrooms, good illumination and safety, & security tools.
2. TEACHING TOOLS: including screens, computers including CDs (RW) and USB ports, data shows, projectors, flip charts, white boards, video player, digital video camera, scanner, copier, color and laser printer.

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Course Specification of Advanced Clinical Immunology in MD degree in Physical Medicine, Rheumatology & Rehabilitation

Sohag University **Faculty/ Medicine**

1. Program on which the course is given: MD Degree in Physical Medicine, Rheumatology and Rehabilitation
2. Major or Minor element of programs: Minor
3. Department offering the program: Physical Medicine, Rheumatology and Rehabilitation Department.
4. Department offering the course: Physical Medicine, Rheumatology and Rehabilitation Department.
5. Academic year / Level: 2nd part (optional course)
6. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018

A. Basic Information

Title: Advanced Clinical Immunology
Code: RHE 0527-300

Lectures	Practical	Clinical	Total hours	Credit
30	30	30	90	4

B. Professional Information

1. Overall Aims of Course

By the end of this course the student is expected to acquire advanced knowledge about the structure and function of the immune system and the role of the immune system in health and disease. The course includes advanced level of clinical immunology for the clinician where the student is taught about the various applications of the immune system in health and disease, particularly diseases of concern to rheumatologists.

2. Intended Learning Outcomes of Course (ILOs)

a) Knowledge and Understanding:

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

a1. Have sound knowledge on the clinical immunology in advanced level.
a2. Describe the structure and function of immune system
a3. Identify treatment modalities related to the immune system

b) Intellectual Skills

By the end of the course the student should have the ability to:

b1. Determine the involvement of the immune system in the rheumatological disease process.
b2. Have the ability to innovate nontraditional solutions to problems.
b3. Plan to improve performance in the field of Clinical Immunology

c) Professional and Practical Skills

By the end of the course the student should have the ability to:

c1. Master the basic and modern professional, clinical and medical skills in the area of Clinical Immunology

d) General and Transferable Skills

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

d1. Use information technology to serve the development of professional practice

3. Contents

Topic	No. of hours	Lecture	Practical	Clinical
Genetic Background of autoimmune diseases	15	5	5	5
Cells involved in Autoimmune Disease and Arthritis	12	4	4	4
Update in The immunopathogenesis of Rheumatoid Arthritis	12	4	4	4
Update in The immunopathogenesis of SLE	12	4	4	4
Update in The immunopathogenesis of Systemic Sclerosis	12	4	4	4
Update in The immunopathogenesis of Inflammatory Myopathies	9	3	3	3
Update in The immunopathogenesis of Vasculitis	9	3	3	3
Update in The immunopathogenesis of Other Rheumatologic Diseases	9	3	3	3
Total Hours	90	30	30	30
Credit	**4**	**2**	**1**	**1**

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Weighting of Assessments

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Total	100%

Formative only assessments: attendance and absenteeism, log book

6. List of References

6.1- Essential Books (Text Books)

Roitt Essential Immunology.

Abbas Clinical Immunology

6.2- Recommended Books

A coloured Atlas of Microbiology.

Topley and Wilson, Microbiology

Kelley textbook of rheumatology, 8th edition, 2009

6.3- Periodicals, Web Sites, … etc

http://mic.sgmjournals.org/

7. Facilities Required for Teaching and Learning

1. ADEQUATE INFRASTRUCTURE: including teaching places (teaching classes, teaching halls), comfortable disks, good source of aeration, bathrooms, good illumination and safety, & security tools.
2. TEACHING TOOLS: including screens, computers including CDs (RW) and USB ports, data shows, projectors, flip charts, white boards, video player, digital video camera, scanner, copier, color and laser printer.

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