جامعة بنها

كلية الطب البشرى

قسم الروماتيزم والتأهيل والطب الطبيعى

توصيف برنامج دكتوراة الروماتيزم والتأهيل والطب الطبيعى

(عام ٢٠١٣-٢٠١٤)

A- Basic Information: * معلومات أساسية

١ - اسم البرنامج : Doctoral (MD) degree Rheumatology, Rehabilitation & Physical Medicine

٢ - طبيعة البرنامج :Multiple(متعدد)

٣- الأقسام المسئولة عن البرنامج:

- القسم المانح للدرجه:

- Rheumatology, Rehabilitation & Physical Medicine Department,

الاقسام المشتركه: -Anatomy and Embroylogy Department

-Physiology Department. :

٤- تاريخ إقرار البرنامج فى مجلس القسم : ٣-٩-٢٠١٣ (٢٠١)

٥- تاريخ إقرار البرنامج فى مجلس الكلية: ١٥-٩-٢٠١٣ (٣٥٦)

٦- مسؤل البرنامج: - Dr. Nashwa I Hashaad,

- Dr. Rasha Fawzy.

٧- المراجعة الداخلية للبرنامج:Prof. Dr. Samia M. Abdelmonem

8- **المراجعة الخارجية للبرنامج**: **Prof. Dr. Nahla M. Gaballah,** Professor of Rheumatology, Rehabilitation and Physical Medicine, Zagazig University.

B- Professional information * معلومات متخصصة:

١ ـ الأهداف العامة للبرنامج :

1- Program aims:

The overall aims of the program are:

1.1. Provide student with an appropriate background covering rheumatic diseases and musculoskeletal disorders as regard causes, pathogenesis, diagnosis and management,

1.2. Increase the students ability to list differential diagnoses of rheumatic and musculoskeletal disorders and apply basics of scientific research,

1.3. Build-up the students' skill to organize treatment plans for rheumatic diseases as well as to design rehabilitation programs for musculoskeletal disorders (acute and chronic),

1.4. Provide students with experience of problem solving and decision-making in atypical clinical situations of specialty,

1.5. Provide students with the trend for evidence-based medicine practice to support up profession and use of various tools in Rheumatology, Rehabilitation and Physical Medicine,

1.6. Increase the students professional ethical values essential to demonstrate appropriate attitude towards patients and colleagues.

1.7. Use of the available resources for establishment of specialized professional skills and find new resources.

٢ ـ المخرجات التعليمية المستهدفة من البرنامج :

2-Intended Learning Outcomes (ILOS):

***2.a. Knowledge and Understanding*: ٢.أ ـ المعرفة والفهم**

On successful completion of the program, the graduate will be able to:

2.a.1.understandthe normal structure and function of the musculoskeletal and neuromuscular systems of the human body,

2.a.2.discussbasic data on the mechanisms of action in the immune system,

2.a.3.Recognize basics of pathogenesis and management of different rheumatic diseases and musculoskeletal disorders,

2.a.4. Recognize causes of morbidity and mortality in musculoskeletal disorders as well as appropriate physiotherapeutic approaches to recover disability consistent with legal and ethical principles of professional practice,

2.a.5. Classify essential investigational plans of the immune system, rheumatic and musculoskeletal disorders as integrated with values of proper medical ethics,

2.a.6. Recognize common physical and rheumatic emergencies and illustrate the clinical outcome in the intensive care unit,

2.a.7. Identify objectives for clinical trials and emerging challenges in the field Rheumatology, Rehabilitation and Physical Medicine,

2.a.8. Describean enhanced patients' health outcome through the development and maintenance of a humanized rehabilitation service in the community.

2.b. Intellectual Skills: **٢. ب ـ القدرات الذهنية :-**

On successful completion of the program, the graduate will be able to:

2.b.1. Analyze symptoms and signs of patients and construct differential diagnoses for the different rheumatic diseases or musculoskeletal disorders,

2.b.2.Assess the function of the motor system regarding different disease presentations and interpret the results of used procedures to solve

professional problems,

2.b.3. Take part in designing researches for the pathogenesis, diagnosis and treatment of different rheumatic diseases or musculoskeletal disorders,

2.b.4. Present scientific subjects of recent information related to Rheumatology, Rehabilitation and Physical Medicine,

2.b.5. Identify the indications and rationale of referring patients to other related specialties according to risks and severity,

2.b.6. Analyze indications, prescriptions and evaluation of different orthoses and prostheses and estimate their cost benefits in rehabilitation programs,

2.b.7. Discuss advances in rehabilitation measures and management of rheumatic diseases based on recent data, evidence-based medicine and professional vision for future developmental plans.

2.c. Practical and professional Skills: ***On*** : **٢.ج . مهارات مهنية وعملية**

successful completion of the program, the graduate will be able to:

2.c.1.Demonstrate skills to perform intra-articular, soft tissue and botulinum injections,

2.c.2.Prescribe manipulation techniques and therapeutic exercises within the rehabilitation program,

2.c.3.Attain the ability to order, write and interpret specialized reports of kinesiologic and electromyographic studies,

2.c.4.Practice up-coming challenges in Rheumatology, Rehabilitation and Physical medicine,

2.c.5. ***Demonstrate*** better awareness of current practice and technological means for rehabilitation in emergency cases and critical situations of stroke, acute pain, brain injury, joint infections, spinal injury and sports injury,

2.c.6.Plan and contribute prospects for future developments within Rheumatology, Rehabilitation and Physical Medicine,

2.c.7.Use and master specific skills and technologies of Rheumatology, Rehabilitation and Physical Medicine practice to contribute to other specialties and improve joint communication.

٢.د . مهارات عامة و منتقلة:

2.d. General and transferable skills:-

By the end of the program the candidate should be able to:

2.d.1. Use the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.

2.d.2. Establish life-long self-learning required for continuous professional development.

2.d.3.Work effectively as a member or leader of a health care team or other professional group.

2.d.4.Communicate effectively with physicians, other health professionals, and health related agencies.

2.d.5. Manage time effectively.

***2.d.6.*Work** effectively with an interdisciplinary team within time-planned shared programs.

٣ ـ المعايير الأكاديمية للبرنامج:

3- Academic Standards of Doctoral (MD) degree Rheumatology, Rehabilitation & Physical Medicine approved in department council September 2013 and in faculty council September 2013,

(ملحق ١)

- **المعايير القياسية لبرامج الدراسات العليا (درجة الماجستير)الصادرة عن الهيئة القومية لجودة**

التعليم والإعتماد (مارس ٢٠٠٩)

- **Academic Reference Standards (ARS) of Master Program,** which wereissued by the National Authority for Quality Assurance & AccreditationNAQAAE (2009), **(ملحق ٢)**

5 ـ هيكل ومكونات البرنامج :

(5) Program structure and contents:

a- Program duration **سنتان و نصف** **: أ ـ مدة البرنامج**

Two years to pass Doctoral (MD) degree:

- **1st part:** One Semester.
- **2nd part:** Three Semesters .
- **Thesis**: four Semesters.

b- Program structure **:ب ـ هيكل البرنامج** **Total hours of program: 60 credit hours**

- **Theoretical: 39hours**
- **Practical: 10 hours**
- **Logbook:5 hours**
- **University and faculty requirement:6 hours**

ج- مستويات ومقررات البرنامج:

Compulsory

البند	المقرارات		الكود	الساعات المعتمدة

جزء أول	علوم أساسية: التدريس والإمتحان تحت إشراف ومسئولية قسم الروماتيزم	مع الإستعانة بالأقسام المتخصصة		٦ ساعة
	التشريح التطبيقى	مقرر نظرى وعملى	RHUM 701	٣ ساعة
	الفسيولوجيا التطبيقية	مقرر نظرى وعملى	RHUM 702	٣ ساعة
الجزء الثانى	يشمل الآتي:			٢٤ ساعة
	أ- مواد إجبارية			٢٠ساعة
	مقرر نظرى وعملي في الأمراض الروماتيزمية	Rheumatic diseases	RHUM 703	٣ ساعة
	مقرر نظرى وعملي في علم المناعة	Immunology	RHUM 704	٣ ساعة
	مقرر نظرى وعملي في أمراض الجهاز الحركي	Musculoskeletal disorders	RHUM 705	٣ ساعة
	مقرر نظرى وعملي في الوسائل الطبيعية والكهرباء الطبية والفسيولوجيا الكهربية (رسم العضلات، توصيل الأعصاب، الحث الجهدى).	Physical modalities, electrotherapy, electrophysiology(EMG, nerve conduction, evoked potential)	RHUM 706	٣ ساعة

	مقرر نظرى وعملي في التأهيل الطبى والأجهزة التعويضية والأطراف الصناعية	Rehabilitation medicine, prosthesis and orthosis	RHUM 707	٣ ساعة
	تدريب إكلينيكي لما جاء بالبنود السابقة		RHUM 705	٥ ساعة
كراسة الأنشطة	يسجل: حضور المؤتمرات والندوات العلمية وندوات الدوريات	Journal club		١٥ ساعة
	حضور الإجتماع العلمي الموسع	Grand conference		
	تدريب علي المهارات مثل الحقن الموضعي، رسم العضلات، فحص بلورات السائل المفصلي بلورات السائل المفصلي بالمجهر الإستقطابي	Intra-articular injections, Electromyograpghy, Polarized microscopy.		
رسالة دكتوراة				١٥ ساعة
الاجمالى				٥٤ ساعة

First part (one semester):

a- Compulsory courses:

Course Title	Course Code	No. hours/week			Total teaching hours
		Lectures	Practical	Total	
Applied Anatomy	RHUM 701	2 hrs/week	1 hr/week	3 hrs/week	45 hrs
Applied Physiology	RHUM 702	2 hrs/week	1 hr/week	3 hrs/week	45 hrs
Total		4 hrs/week	2 hrs/week	6 hrs/week	90 hrs

b- Elective courses: none

Second part (3 semesters):

a- Compulsory courses:

Course Title	Code	No. of hours/week			Total teaching hours
		Theoretical	Clinical	Total	
Rheumatology (Rheumatic Diseases /Immunology)	RHUM 703/704	4	2	6	270
Rehabilitation Medicine (Musculoskeletal Disorders/ Physical Medicine/	RHUM 705/706/ 707	9	3	9	405

Rehabilitation Medicine)					
Practical	**RHUM 708**	**15**			
Log Book Activities					**5**
Total					**485**

b- Elective courses:

Course Title	**Course Code**	**No. hours/week**			**Total teaching hours**
Pediatric rehabilitation	**RHUM 709**	**Lectures**	**Practical**	**Total**	
		2 hrs/week	**2 hr/week**	**4hrs/week**	**60 hrs**
Geriatric rehabilitation	**RHUM 710**	**2 hrs/week**	**2 hr/week**	**4 hrs/week**	**60 hrs**
Rehabilitation of sport injuries	**RHUM 711**	**2 hrs/week**	**2 hr/week**	**4 hrs/week**	**60 hrs**
Advanced clinical immunology	**RHUM 712**	**2 hrs/week**	**2 hr/week**	**4 hrs/week**	**60 hrs**
Adolescent rheumatology	**RHUM 713**	**2 hrs/week**	**2 hr/week**	**4 hrs/week**	**60 hrs**

Total		**2 hrs/week**	**2 hrs/week**	**4hrs/week**	**60 hrs**

٦- محتويات المقرات (راجع توصيف المقررات)

٧ ـ متطلبات الإلتحاق بالبرنامج :7- Program admission requirements

مادة (٢٣) : يشترط لقيد الطالب لدرجة الدكتوراه فى الطب أو الجراحة أو العلوم الطبية الأساسية أن يكون حاصلا على درجة الماجستير فى مادة التخصص بتقدير جيد على الأقل من إحدى جامعات ج . م . ع أو على درجة معادلة لها من معهد علمى أخر معترف به من الجامعة .

☒ **مدة الدراسة لنيل الدكتوراه سنتان ونصف موزعة كا لاتى :**

- **جزء أول :** علوم أساسية ٠ فصل دراسى لمدة ستة شهور (٦ ساعات معتمدة) ومن يرسب يعيد مادة الرسوب فقط .
- **الجزء الثانى** : ثلاث فصول دراسية لمدة سنة ونصف (٣٩) ساعة معتمدة يستوفى خلالها الطالب الساعات المعتمدة ثم يسمح له بالتقدم لامتحان التحريرى وإذا اجتاز الامتحان التحريرى بنجاح يحق له التقدم الى الامتحان الشفهى والعملى والإكلينيكي خلال شهر من تاريخ الامتحان التحريرى .
- **رسالة (١٥ ساعة معتمدة)**

تبدأ الدراسة عند بداية التسجيل تنتهى بامتحان شامل فى نهاية كل أربع فصول دراسية بعد اجتياز الطالب امتحانات الجزء الأول بنجاح يسمح له بتسجيل رسالة لمدة أربعة فصول دراسية تبدأ عند بداية الفصل الدراسى الثانى وتناقش بعد مرور عامين على الأقل من تاريخ تسجيل الرسالة على أن تكون المناقشة بعد ستة اشهر على الأقل مع اجتياز الامتحان التحريرى والإكلينيكية والشفهى (الامتحان الشامل).

يمنح الطالب الدرجة بعد مناقشة الرسالة واجتياز الامتحان الشامل .

- يكون التقدم للقيد لدرجة الدكتوراه مر تين فى السنة خلال شهرى مارس وأكتوبر من كل عام.

٨ ـ القواعد المنظمة لإستكمال البرنامج :

مادة (٢٤) : يشترط فى الطالب لنيل درجة الدكتوراه فى الطب أو الجراحة أو العلوم الطبية الأساسية ما يلى :

- حضور المقررات الدراسية بصفة مرضية طبقا للساعات المعتمدة .
- أن يقوم ببحث فى موضوع تقره الجامعة بعد موافقة مجلس الكلية والقسم لمدة سنتان على الأقل.
- أن يتقدم بنتائج البحث فى رسالة تقبلها لجنة الحكم بعد مناقشة علنية للرسالة .
- اجتياز الطالب ثلاث دورات فى الحاسب الآلى (دورة فى مقدمة الحاسب الألى – دورة تدريبية " متوسطة " – دورة فى تطبيقات الحاسب الألى) ٠ وذلك قبل مناقشة الرسالة .
- اجتياز الطالب اختبار التويفل بمستوى لا يقل عن ٥٠٠ وحدة وذلك قبل مناقشة الرسالة .
- أن يجتاز بنجاح الاختبارات التحريرية والإكلينيكية والشفهية المقررة وفقا لما هو مبين باللائحة.

مادة (٢٥) : على الطالب أن يقيد اسمه للامتحان قبل موعده بشهر على الأقل.

مادة (٢٦) : يشترط لنجاح الطالب فى امتحان الدكتوراه الحصول على الحد الأدنى للنجاح فى جميع الاختبارات المقررة وفى كل جزء من أجزاءها على حدة ذلك بأخذ المتوسط لتقديرات أعضاء اللجنة اذا رسب الطالب فى أى مقرر من المقررات بعد الامتحان فى جميع المقررات.

مادة (٢٧) : يعقد الامتحان التحريرى لدرجة الدكتوراه فى شهرى نوفمبر ومايو من كل عام – لمن يجتاز الامتحان التحريرى فى نفس الدور يتقدم الامتحان الشفهى والاكلينكى والعملى.

مادة (٢٨) : لا يجوز للطالب أن يبقى مقيدا لدرجة الدكتوراه لأكثر من أربع سنوات دون أن يتقدم لمناقشة الرسالة ويجوز لمجلس الكلية أن يعطى الطالب مهلة لمدة سنتين فى حالة قبول العذر.

مادة (٢٩) : تضاف درجات التحريرى ووصف الحالة لبعضها ويعتبر النجاح والرسوب فى المجموع الكلى للتحريرى (٦٠% على الاقل من الدرجة للتحريرى) ومن ينجح فى الامتحان التحريرى يصرح له بدخول باقى الامتحانات الإكلينيكية والشفوية والعملية و

عند الرسوب يعيد الطالب الامتحان الشفوى والاكلينيكى ٠

لا يحق للطالب التقدم للامتحان التحريرى أكثر من أربع مرات ٠

مادة (٣٠) : تبين فى شهادة الدكتوراة موضوع الرسالة٠

مادة (٣١) : تبين الجداول فى الباب الخامس المقررات الدراسية التى تدرس لنيل درجة الدكتوراه طبقا للساعات المعتمدة الاختبارات التحريرية والإكلينيكية والشفوية ٠

٩ -طرق وقواعد تقييم الملتحقين بالبرنامج Students Assessment Methods- ٩

م	الوسيلة	مخرجات التعلم المستهدفة
١	**Written examination**	To assess knowledge & intellectual skills. **2.a.1.→ 2.a.8, 2.b.1. → 2.b.7.**
٢	**Oral examination**	To assess knowledge, intellectual skills & General & transferable skills. **2.a.1.→ 2.a.8, 2.b.1. → 2.b.7, 2.d.1. → 2.d.6.**
٣	**Practical examination**	To assess knowledge, intellectual skills, professional General & transferable skills. **2.a.1.→ 2.a.8, 2.b.1. → 2.b.7, 2.c.1. → 2.c.7, 2.d.1. → 2.d.6.**

First part

المقرر	الاختبار	الـــدرجة	إجمالي

		تحريري	شفهي	عملي	إكلينيكي	
مقرر التشريح والفسيولوجى	إختبار تحريري مدته ٣ ساعات +مع إختبار شفوي.	١٠٠		٢٥	٢٥	١٥٠
		١٠٠		٢٥	٢٥	١٥٠
إجمالي الدرجات						٣٠٠

Second part

المقرر	الاختبار	الـــدرجة				إجمالي
		تحريري	شفهي	إكلينيكي	عملي	
مقررالأمراض الروماتيزمية وأمراض المناعة	اختبار تحريري مدته ٣ ساعات + إختبار إكلينيكي+ إختبار عملى+ إختبار شفهي	١٧٠	٦٥	٦٥		٣٠٠
أمراض الجهاز الحركي الأخري والطب الطبيعي والتأهيل والأطراف الصناعية والأجهزة التعويضية	إختبار تحريري مدته ٣ ساعات في أمراض الجهاز الحركي الأخري والطب الطبيعي والتأهيل والأطراف الصناعية والأجهزة التعويضية + إختيار عملي + شفوي + إكلينيكى	٢٣٠	١١٠	١١٠		٤٥٠
تأهيل الأطفال		٢٥	١٠	١٥		٥٠
تأهيل المسنين		٢٥	١٠	١٥		

تأهيل الإصابات الرياضية		٢٥	١٠	١٥	
مناعة إكلينيكية متقدمة		٢٥	١٠	١٥	
روماتيزم بالغين					
حالة	شرح ووصف علاج الحالة			٥٠	٥٠
إجمالي الدرجة					١١٥٠

١٠ ـ طرق تقويم البرنامج: Evaluation of the Program:

Evaluator	Tools	Signature
Internal evaluator (s) Prof. Dr. Sahar Saad Ganeb	**Focus group discussion Meetings**	report ٢-١
External Evaluator (s) Prof. Dr. Abdel Samad I. El Hawala	**Reviewing according to external evaluator checklist report of NAQAA.**	report ٢-١
Seniorstudent (s) طلاب السنة النهائية	مقابلات , استبيان	all

Alumni الخريجون	مقابلات ،استبيان	Not less than 5 From the last 3
Stakeholder(s) أصحاب العمل	مقابلات ،استبيان	Samples repres From all sectors

١١- استراتيجيات التعليم و التعلم:

١-استراتيجة التعلم النشط

٢- استراتيجةالتعليم المبني على المخرجات

٣-استراتيجةالتعليم المبني على حل المشاكل

المسئول عن البرنامج : التوقيع التاريخ : / /

Program Coordinator:

Name Dr ……..... Signature……..Date ……

الملحقات

ملحق ١: Academic standard of the program (الوثيقة)

ملحق ٢:المعايير القياسية العامة للدراسات العليا الصادرة عن الهيئة.

ملحق٣: مصفوفة المضاهاه بين المعايير المتبناه لبرنامج ماجستير الروماتيزم و التأهيل مع أهداف و نواتج تعلم البرنامج.

ملحق ٤: مصفوفة أهداف ونواتج البرنامج

ملحق ٥: مصفوفة المقررات مع البرنامج Program-Courses ILOs Matrix

ملحق ٦: توصيف المقررات.

Academic standard of the program:(١) ملحق

جامعة بنها

كلية الطب

قسم الروماتيزم والتأهيل والطب الطبيعى

وثيقة المعايير الأكاديمية المرجعيةلبرنامج الدكتوراة

Academic Reference Standards (ARS) for doctoral Degree in Rheumatology, Rehabilitation and Physical Medicine

1. Graduate Attributes:

1-1Mastering the basicsand methodologiesof scientific research.

1-2Continued workto addknowledgein the field ofRheumatology, Rehabilitation and Physical Medicine.

1-3Application ofthe Analytical approach and criticof knowledgein the field of Rheumatology, rehabilitation and physical medicine andrelated fields such as neurological diseases.

1-4 Merge specializedknowledgewithknowledgerelated to Rheumatology, Rehabilitation and Physical Medicine to derive and develop their interfaces.

1-5Showa deepawareness ofthe current problemsand recent theoriesin the field of Rheumatology, rehabilitation and physical medicine.

1-6Identifyingprofessionalproblemsin the field ofRheumatology, Rehabilitation and Physical Medicineand findinginnovative solutions.

1-7Masteringa wide range ofprofessionalskills in the field ofRheumatology, Rehabilitation and Physical Medicine.

1-8 Oriented with development of recent methodsandtools forpracticingRheumatology, Rehabilitation and Physical Medicine.

1-9The use of appropriatetechnological meansto serve theprofessionalpractice in the field of Rheumatology, Rehabilitation and Physical Medicine such as using musculoskeletal ultrasound , electromyography and nerve conduction studies.

1-10Communicate effectivelyand lead ateamin differentprofessionalcontexts.

1-11 Decision making in the light of available information.

1-12 Employ available resources efficiently and its development and work to find new resources.

1-13 Be aware with his role in community development and provide patients with disability and communication disorders solutions to modify their life.

1-14Dispositionreflecting thecommitmentto integrity, credibility and commitment tothe rules ofthe profession.

1-15 Commitment to continuous self-learning and transfer of knowledge and experience to others.

2. Academic Standards:

2.1. Knowledge and understanding:

By the end of MF program, the graduate should recognize and understand the following:

2.1.1 Theories , basics, and modern knowledge in the field of Rheumatology, Rehabilitation and Physical Medicine and related fields such as neurological diseases.

2.1.2 Basics, methodologies and ethics of scientific research and its various methods.

2-1-3 Moral and legal principles of professional practice in the area of Rheumatology, Rehabilitation and Physical Medicine.

2.1.4. Principles and the basics of quality in professional practice in the area of Rheumatology, Rehabilitation and Physical Medicine.

2.1.5knowledge related to the effects ofpracticingRheumatology, Rehabilitation and Physical Medicine on the environmentand ways ofdevelopmentand maintenance ofthe environment.

2.2. Intellectual skills:

By the end of MD program, graduate should be able to recognize the followings:

2.2.1 Analysis and evaluation of information on the area of Rheumatology, Rehabilitation and Physical Medicine, measurement and inference from it.

2-2-2Solution of specializedproblemsbasedon the available data

2-2-3-Research studies which add to theknowledge.

2.2.4Formulation ofscientific papers.

2.2.5Risk Assessmentin professionalpractices in the area of Rheumatology, Rehabilitation and Physical Medicine.

2.2.6Planningfor the improvement ofperformancein the field of Rheumatology, Rehabilitation and Physical Medicine.

2.2.7Professional decision-makingin avariety of professionalcontexts.

2.2.8Innovation /creativity.

2.2.9 Dialogue and debate which is based on evidence.

2.3. Practical/Professional skills

By the end of MD program, graduate should accept the followings skills:

2.3.1Master the basicand modernskills in the field of Rheumatology, Rehabilitation and Physical Medicine.

2.3.2Writingand evaluation ofprofessionalreports such as reports of musculoskeletal ultrasound, reports of electromyography, and nerve conduction studies.

2.3.3Evaluate and developmethods and existing toolsinthe area of Rheumatology, Rehabilitation and Physical Medicine.

2.4.4 Using technichal methods that help professional practice, such as joint aspiration and injection under imaging techniques.

2.3.4. Planning for improvement of professional practice and developping performance of others.

2.4. Communication and transferable skills:

By the end of MD program, graduate should accept the following skills:

2.4.1 Effective communication with its different types.

4.4.2 Use of information technology to serve improvement of the professional practice.

2.2.3 Teach others and evaluate their performance.

2.2.4 Self-assessment and continuous learning.

2.2.5 Use different sources to obtain information and knowledge.

2.2.6 Work in a team and leading the team of work.

2.2.7 Management scientific meetings and the ability to manage time.

اعتماد مجلس القسم رقم (200) ، بتاريخ 8/7/ 2013

رئيس مجلس القسم

اعتماد مجلس الكلية

برامج الدكتوراة

١- موصفات الخريج

خريج برنامج الماجستير فى أي تخصص يجب أن يكون قادرا على :

١-١ اتقان اساسيات ومنهجيات البحث العلمى

١-٢ العمل المستمر على الاضافة للمعارف فى مجال التخصص

١-٣ تطبيق المنهج التحليلى والناقد للمعارف فى مجال التخصص والمجالات ذات العلاقة

١-٤ دمج المعارف المتخصصة مع المعارف ذات العلاقة مستنبطا ومطورا للعلاقات البينية بينها

١-٥ اظهار وعيا عميقا بالمشاكل الجارية والنظريات الحدية فى مجال التخصص

١-٦ تحديد المشكلات المهنية وايجاد حلولا مبتكرة لحلها

١-٧ اتقان نطاقا واسعا من المهارات المهنية فى مجال التخصص

١-٨ التوجة نحو تطوير طرق وادوات واساليب جديدة للمزاولة المهنية

١-٩ استخدام الوسائل التكنولوجية المناسبة بما يخدم ممارستة المهنية

١-١٠ التواصل بفاعلية وقيادة فريق عمل فى سياقات مهنية مختلفة

١-١١ اتخاذ القرار فى ضل المعلومات المتاحة

١-١٢ توظيف الموارد المتاحة بكفاءة وتنميتها والعمل على ايجاد موارد جديدة

١-١٣ الوعى بدوره فى تنمية المجتمع والحفاظ على البيئة

١-١٤ التصرف بما يعكس الالتزام بالنزاهة والمصداقية وقواعد المهنة

١-١٥ الالتزام بالتنمية الذاتية المستمرة ونقل علمه وخبراته للاخرين

المعايير القياسية:

٢-١ المعرفة والفهم

بانتهاء دراسة برنامج الدكتوراة يجب ان يكون الخريج قادرا على الفهم والدراية بكل من

٢-١-١ النظريات والاساسيات والحديث من المعارف فى مجال التخصص والمجالات ذات العلاقة

٢-١-٢ اساسيات ومنهجيات واخلاقيات البحث العلمى واداواته المختلفة

٢-١-٣ المبادئ الاخلاقية والقانونية للممارسة المهنية فى مجال التخصص

٢-١-٤ مبادئ واساسيات الجودة فى الممارسة فى مجال التخصص

٢-١-٥ المعارف المتعلقة بأثار ممارسته المهنية على البيئة وطرق تنمية البيئة وصيانتها

٢-٢ المهارات الذهنية

بانتهاء دراسة برنامج الدكتوراه يجب ان يكون الخريج قادرا على

٢-٢-١ تحليل وتقييم المعلومات فى مجال التخصص والقياس عليها والاستنباط منها

٢-٢-٢ حل المشاكل المتخصصة استنادا على المعطيات المتاحة

٢-٢-٣- إجراء دراسات بحثية تضيف إلى المعارف.

٢-٢-٤ صياغة أوراق علمية.

٢-٢-٥ تقييم المخاطر فى الممارسات المهنية.

٢-٢-٦ التخطيط لتطوير الأداء فى مجال التخصص.

٢-٢-٧ إتخاذ القرارات المهنية فى سياقات مهنية مختلفة.

٢-٢-٨ الإبتكار / الإبداع.

٢-٢-٩ الحوار والنقاش المبنى على البراهين والأدلة.

٢-٣ *المهارات المهنية*

بانتهاء دراسة برنامج الدكتوراه يجب ان يكون الخريج قادرا على:

٢-٣-١ إتقان المهارات الأساسية والحديثة فى مجال التخصص.

٢-٣-٢ كتابة وتقييم التقارير المهنية.

٢-٣-٣ تقييم وتطوير الطرق والأدوات القائمة فى مجال التخصص.

٢-٣-٤ إستخدام الوسائل التكنولوجية بما يخدم الممارسة المهنية.

٢-٣-٥ التخطيط لتطوير الممارسة المهنية وتنمية آداء الآخرين.

٢-٤ *المهارات العامة والمنتقلة* :

بانتهاء دراسة برنامج الدكتوراه يجب ان يكون الخريج قادرا على:

٢-٤-١ التواصل الفعال بأنواعه المختلفة.

٢-٤-٢ إستخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية.

٢-٤-٣ تعليم الآخرين وتقييم أداءهم.

٢-٤-٤ التقييم الذاتى والتعلم المستمر.

٢-٤-٥ إستخدام المصادر المختلفة للحصول على المعلومات والمعارف.

٢-٤-٦ العمل فى فريق وقيادة فرق العمل.

٢-٤-٧ إدارة اللقاءات العلمية والقدرة على إدارة الوقت.

ملحق (٣): مصفوفة المعايير الأكاديمية للبرنامج مع المعايير القياسية للدراسات العليا الصادرة عن الهيئة

- مواصفات الخريج:

مواصفات الخريج بالمعايير القياسية للدراسات العليا (درجة الدكتوراة)	مواصفات الخريج بالمعايير الأكاديمية للبرنامج
خريج برنامج الدكتوراة في اى تخصص يجب ان يكون قادرا على : ١-١ اتقان اساسيات ومنهجيات البحث العلمى.	1-1
١-٢العمل المستمر على الاضافة للمعارف فى مجال التخصص.	1-1
١-٣ تطبيق المنهج التحليلى والناقد للمعارف فى مجال التخصص والمجالات ذات العلاقة.	1-2
١-٤ دمج المعارف المتخصصة مع المعارف ذات العلاقة مستنبطا ومطورا للعلاقات البينية بينها .	1-3
١-٥ اظهار وعيا عميقا بالمشاكل الجارية والنظريات الحدية فى مجال التخصص.	1-4

١-٦ تحديد المشكلات المهنية وايجاد حلولا مبتكرة لحلها.	1-4
١-٧ اتقان نطاقا واسعا من المهارات المهنية فى مجال التخصص.	1-3
١-٨ التوجة نحو تطوير طرق وادوات واساليب جديدة للمزاولة المهنية .	1-5
١-٩ استخدام الوسائل التكنولوجية المناسبة بما يخدم ممارستة المهنية.	1-5
١-١٠ التواصل بفاعلية وقيادة فريق عمل فى سياقات مهنية مختلفة.	1-6
١-١١ اتخاذ القرار فى ضل المعلومات المتاحة.	1-4
١-١٢ توظيف الموارد المتاحة بكفاءة وتنميتها والعمل على ايجاد موارد جديدة.	1-6
١-١٣ الوعى بدوره فى تنمية المجتمع والحفاظ على البيئة.	1-6
١-١٤ التصرف بما يعكس الالتزام بالنزاهة والمصداقية وقواعد المهنة.	1-6
١-١٥ الالتزام بالتنمية الذاتية المستمرة ونقل علمه وخبراته للاخرين .	1-6

أ ـ المعرفة والفهم:

المعايير القياسية العامة (Generic) للدراسات العليا (درجة الدكتوراة)	المعايير الأكاديمية للبرنامج
بأنتهاء دراسة برنامج الدكتوراة يجب ان يكون الخريج على فهم ودراية بكل من: ٢ـ١ـ١ النظريات والاساسيات والحديث من المعارف فى مجال التخصص والمجالات ذات العلاقة.	2.a.1. , 2.a.2., 2.a.3.
٢ـ١ـ٢ اساسيات ومنهجيات واخلاقيات البحث العلمى واداواته المختلفة.	2.a.4., 2.a.6.
٢ـ١ـ٣ المبادئ الأخلاقية والقانونية للممارسة المهنية فى مجال التخصص.	2.a.4., 2.a.8
٢ـ١ـ٤ مبادئ وأساسيات الجودة فى الممارسة فى مجال التخصص.	2.a.2., 2.a.6.
٢ـ١ـ٥ المعارف المتعلقة بأثار ممارسته المهنية على البيئة وطرق تنمية البيئة وصيانتها.	2.a.7., 2.a.8

ب ـ القدرات الذهنية :

المعايير القياسية العامة (Generic) للدراسات العليا (درجة الدكتوراة)	المعايير الأكاديمية للبرنامج
بأنتهاء دراسة برنامج الدكتوراة يجب ان يكون الخريج على فهم ودراية بكل من : ٢ـ٢ـ١ تحليل وتقييم المعلومات فى مجال التخصص والقياس عليها والاستنباط منها.	2.b.1.

٢-٢-٢ حل المشاكل المتخصصة استنادا على المعطيات المتاحة.	2.b.2.
٢-٢-٣- إجراء دراسات بحثية تضيف إلى المعارف.	2.b.3., 2.b.4.
٢-٢-٤ صياغة أوراق علمية	2.b.4.
٢-٢-٥ تقييم المخاطر فى الممارسات المهنية.	2.b.5.
٢-٢-٦ التخطيط لتطوير الأداء فى مجال التخصص.	2.b.7.
٢-٢-٧ إتخاذ القرارات المهنية فى سياقات مهنية مختلفة.	2.b.5., 2.b.6.
٢-٢-٨ الإبتكار / الإبداع.	2.b.3., 2.b.7.
٢-٢-٩ الحوار والنقاش المبنى على البراهين والأدلة.	2.b.4., 2.b.7. ,

ج. مهارات مهنية وعملية :

المعايير القياسية العامة (Generic) للدراسات العليا (درجة الدكتوراة)	المعايير الأكاديمية للبرنامج
بأنتهاء دراسة برنامج الدكتوراة يجب ان يكون الخريج على فهم ودراية بكل من : ٢-٣-١ إتقان المهارات الأساسية والحديثة فى مجال التخصص.	2.c.1., 2.c.2.
٢-٣-٢ كتابة وتقييم التقارير المهنية.	2.c.3.
٢-٣-٣ تقييم وتطوير الطرق والأدوات القائمة فى مجال التخصص.	2.c.4. , 2.c.5
٢-٣-٤ إستخدام الوسائل التكنولوجية بما يخدم الممارسة المهنية.	2.c.6.

٢-٣-٥ التخطيط لتطوير الممارسة المهنية وتنمية آداء الآخرين	2.c.7

د . مهارات عامة و منتقلة :

المعايير القياسية العامة (Generic) للدراسات العليا (درجة الدكتوراة)	المعايير الأكاديمية للبرنامج
بأنتهاء دراسة برنامج الدكتوراة يجب ان يكون الخريج على فهم ودراية بكل من : ٤-٤-١ التواصل الفعال بأنواعه المختلفة	2.d.1.
٤-٤-٢ إستخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية.	2.d.2.
٤-٢-٣ تعليم الآخرين وتقييم أداءهم.	2.d.5.
٤-٢-٤ التقييم الذاتى والتعلم المستمر.	2.d.4.
٤-٢-٥ إستخدام المصادر المختلفة للحصول على المعلومات والمعارف	2.d.5.
٤-٢-٦ العمل فى فريق وقيادة فرق العمل.	2.d.6.
٤-٢-٧ إدارة اللقاءات العلمية والقدرة على إدارة الوقت	2.d.3.

ملحق (٤) :مضاهاة المعايير الأكاديمية معأهداف و نواتج تعلم البرنامج

أهداف البرنامج	المعايير الأكاديمية لبرنامج الدكتوراة(مواصفات الخريج):
1-1	1.1.Mastering the basicsand methodologiesof scientific research.
1-1	1.2. Continued workto addknowledgein the field ofRheumatology, abilitation and Physical Medicine.
1-2	1-3Application ofthe Analytical approach and criticof knowledgein the field of Rheumatology, rehabilitation and physical medicine andrelated fields such as neurological diseases.
1-3	1-4 Merge specializedknowledgewithknowledgerelated to Rheumatology, Rehabilitation and Physical Medicine to derive and develop their interfaces.
1-4	1.5. Showa deepawareness ofthe current problemsand recent theoriesin the field of Rheumatology, rehabilitation and physical medicine.
1-4	1.6. Identifyingprofessionalproblemsin the field ofRheumatology, Rehabilitation and Physical Medicineand findinginnovative solutions.
1-3	1.7. Masteringa wide range ofprofessionalskills in the field ofRheumatology, Rehabilitation and Physical Medicine.

1-5	1.8. Oriented with development of recent methodsandtools forpracticingRheumatology, Rehabilitation and Physical Medicine.
1-5	1.9.The use of appropriatetechnological meansto serve theprofessionalpractice in the field of Rheumatology, Rehabilitation and Physical Medicine such as using musculoskeletal ultrasound , electromyography and nerve conduction studies.
1-6	1.10. Communicate effectively and lead a team in different professional contexts
1-4	1-11 Decision making in the light of available information.
1-6	1.12. Employ available resources efficiently and its development and work to find new resources.
1-6	1.13. Be aware with his role in community development and provide patients with disability and communication disorders solutions to modify their life.
1-6	1.14.Dispositionreflecting thecommitmentto integrity, credibility and commitment tothe rules ofthe profession.
1-6	1.15. Commitment to continuous self-learning and transfer of knowledge and experience to others.

المعايير الأكاديمية للبرنامج	نواتج تعلم البرنامج							
	المعرفه و الفهم							
	2.a.1.	2.a.2.	2.a.3	2.a.4	2.a.5	2.a.6	2.a.7	2.a.8
By the end of MD program, the candidate should recognize and understand the followings:								
2.1.1 Theories , basics, and modern knowledge in the field of Rheumatology, Rehabilitation and Physical Medicineand related fields such as neurological diseases.	√	√	√					
2.1.2 Basics, methodologies and ethics of scientific research and its various methods.				√		√		
2-1-3 Moral and legal principles of professional practice in the area of Rheumatology, Rehabilitation and Physical Medicine.				√				√
2.1.4. Principles and the basics of quality in professional practice in the area of Rheumatology, Rehabilitation and Physical Medicine.		√				√		
2.1.5knowledge related to the effects							√	√

								ofpracticingRheumatology, Rehabilitation and Physical Medicine on the environmentand ways ofdevelopmentand maintenance ofthe environment.

نواتج تعلم البرنامج							المعايير الأكاديمية للبرنامج
Intellectual skills							المهارات الذهنية
2.b.7	2.b.6	2.b.5	2.b.4	2.b.3	2.b.2.	2.b.1.	
							By the end of MD program, candidate should be able to recognize the following:
						√	2.2.1 Analysis and evaluation of information on the area of Rheumatology, Rehabilitation and Physical Medicine, measurement and inference from it.
					√		2-2-2 Solution of specialized problems based on the available data.
			√	√			2-2-3-Research studies which add to theknowledge.
			√				2.2.4Formulation ofscientific papers.
		√					2.2.5Risk Assessmentin professionalpractices in the area of Rheumatology, Rehabilitation and Physical Medicine.

√							2.2.6Planningfor the improvement ofperformancein the field of Rheumatology, Rehabilitation and Physical Medicine.
√		√					2.2.7 Professional decision-making in a variety of professional contexts.
√				√			2.2.8Innovation /creativity.
√			√				2.2.9 Dialogue and debate which is base on evidence.

نواتج تعلم البرنامج							المعايير الأكاديمية للبرنامج
Practical/Professional skills							المهارات المهنية
2.c.7	2.c.6	2.c.5	2.c.4	2.c.3	2.c.2.	2.c.1.	
					√	√	***By the end of MD program, candidate should accept the followings skills:*** 2.3.1Master the basicand modernskills in the field of Rheumatology, Rehabilitation and Physical Medicine.
				√			2.3.2Writingand evaluation ofprofessionalreports such as reports of musculoskeletal ultrasound, reports of

							electromyography, and nerve conduction studies.
		√	√				2.3.3Evaluate and developmethods and existing toolsinthe area of Rheumatology, Rehabilitation and Physical Medicine and use of technological means to serve the professional practice, such as joint aspiration and injection while using an imaging technique.
		√	√				2.3.4 Using technichal methods that h professional practice, such as jo aspiration and injection under imag techniques.
√							2.3.5. Planning for improvement professional practice and developm of performance of others.

نواتج تعلم البرنامج						المعايير الأكاديمية للبرنامج
General and transferable skill						المهارات العامة والمنتقلة
2.d.6	2.d.5	2.d.4	2.d.3	2.d.2.	2.d.1.	
					√	**By the end of MD program, candidate should accept the following skills:** 2.4.1 Effective communication with its different types.
				√		2.4.2 Use of information technology to serve improvement of the professional practice.
	√					2.4.3 Teach others and evaluate their performance.
		√				2.4.4 Self-assessment and continuous learning.
	√					2.4.5 Use different sources to obtain information and knowledge.
√						2.4.6 Work in a team and leading the team of work.
			√			2.4.7 Management scientific meetings and the ability to manage time.

ملحق (٥)مصفوفة المعارف والمهارات للبرنامج الدراسى

ILOs Courses& Codes		Knowledge & Understanding 2.a.							
1- Applied Anatomy	RHUM 701	1 ■	2	3	4	5	6	7	8
2- Applied Physiology	RHUM 702	■							
3- Rheumatology	RHUM 703/704		■			■	■		
4- Rehabilitation Medicine	RHUM 705/ 706/ 707	■	■	■	■	■	■	■	■

أستاذ المادة رئيس القسم

التوقيع التوقيع

ILOs Courses& Codes		Intellectual Skills 2.b.						
1- Applied Anatomy	RHUM 701	1	2 ■	3	4	5	6	7
2- Applied Physiology	RHUM 702		■					

3- Rheumatology	RHUM 703/704	■		■	■	■		■
4- Rehabilitation Medicine	RHUM 705/706/707	■	■	■	■	■	■	■

أستاذ المادة رئيس القسم

التوقيع: التوقيع :

Courses& Courses	ILOs	Practical & Clinical Skills 2.c.						
		1	2	3	4	5	6	7
1- Applied Anatomy	RHUM 701	■						
2- Applied Physiology	RHUM 702							
3- Rheumatology	RHUM 703/704	■			■		■	■
4- Rehabilitation Medicine	RHUM 705/706/707	■	■	■	■	■	■	■

أستاذ المادة رئيس القسم

التوقيع التوقيع

ILOs Courses& Codes		General & transferable 2.d.					
		1	2	3	4	5	6
1- Applied Anatomy	RHUM 701	■		■		■	
2- Applied Physiology	RHUM 702	■		■		■	
3- Rheumatology	RHUM 703/704	■	■	■	■	■	
4- Rehabilitation Medicine	RHUM 705/707/706706	■	■	■	■	■	■

أستاذ المادة رئيس القسم

التوقيع التوقيع

ملحق ٦: توصيف المقررات

First part
1-Applied Anatomy
2- Applied Physiology
Second part
1- Rheumatology
2- Rehabilitation medicine
3- Pediatric Rehabilitation
4- Geriatrics Rehabilitation
5- SportInjuries
6- Advanced Clinical Immunology
7- Adolescents Rheumatology

Applied Anatomy Course Specification

- **Course Title:** Applied Anatomy,
  - **Code:**RHUM **701**
  - **Department offering the course: Anatomy and Embryology Department,**
- **Academic year of program:** 2013-2014,
- **Department element of program:** Minor,
- **Academic Level:** 1st part,
- **Date of specifications approval:**
  - **Department Council:**2013-2014
  - **Faculty Council:**2013-2014

A- Basic Information:

- **Allocated marks: 150** marks,
- **Course duration:** 15 weeks of teaching,
- **Credit hours:** 3 hours/week = **45** total credit hours

Item	Hours / week	Total hours
1- Lectures	1	15
2- Small group teaching / tutorials	1	15
3- Practical	1	15
Total	3	45

B- Professional Information:

1. Overall Aims of Course

The overall goals of the course are to:

- ***Get*** knowledge of the anatomy and surface landmarks of major joints and soft tissue structures,

- ***Apply*** knowledge of the appropriate system structures relevant to rheumatology and musculoskeletal medicine,
- ***Be qualified*** to make a proper diagnosis of different musculoskeletal disorders of nerves, muscles, joints and central nervous system.
- ***Maintain*** and improve his standards of knowledge by self-education as a researcher and specialist in the field of Rheumatology, Rehabilitation and Physical Medicine.

2. Intended Learning Outcomes of Course (ILOs)

a- Knowledge and Understanding:

By the end of the course, students should be able to:

2.a.1.List different joint types in human body (upper limb, lower limb and vertebral column).

2.a.2.Describe the anatomical structure and biomechanics of different joint types (stability and movements).

2.a.3.Outline nerves and plexuses of the upper and lower limb.

2.a.4.Define the origin and insertion of the muscles of upper, lower limbs and back.

2.a.5.Illustrate cranial nerves.

2.a.6.Memorize cortical areas of the brain and define pyramidal tract & extra pyramidal tract

b- Intellectual skills:

By the end of the course, students should be able to:

2.b.1.Evaluate the outcome of surgical correction,

2.b.2.Interpret basic science of anatomy to connective tissue, bone, joint, and muscle diseases,

2.b.3.Analyze sites of the nerve compression,

2.b.4.Interpret physical tests to evaluate musculoskeletal disorders,

2.b.5.Recognize biomechanical principles of joint function in the prescription of orthoses and prostheses,

2.b.6. ***Solve*** problems of neurological injuries.

c- Practical and Clinical skills:

By the end of the course, students should be able to:

2.c.1.Show the dermatomal and myotomal supply of the body segments,

2.c.2.Identifyaccurate surface marking and anatomical landmarks needed for injecting joints and soft tissue rheumatic disorders,

2.c.3.Make suggestions in calculating the patient age,

2.c.4.Perform correction of different alignment,

2.c.5.Assess the progress of different deformities,

2.c.6.Create physical examination protocols for evaluating musculoskeletal disorders.

d- General and communication skills:

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

2.d.1.Retrieve, ***manage***, ***manipulate*** and ***use*** information and communication technology effectively in the field of anatomy.

3- Course Contents

Subject	**Lectures (hrs)**	**Small group (hrs)**	**Practical (hrs)**	**Total (hrs)**	**% of total**
1) GENERAL ANATOMY Bones. - Joints (classification,	**2**	**2**	**2**	**6**	**13%**

structure& movements). - Muscles (types, features & characters of skeletal muscles) - Nerves (spinal & motor cranial). - Autonomic nervous system (centers, nerves & ganglia). -Ligaments & fasciae.					
(II) NECK AND TRUNK Vertebral canal & vertebral foramina. - Posture. - Body weight transmission. - Ligaments & fasciae. - Muscles. - Joints. - Movements. - Intervertebral disc. - Diaphragm. - Heart	**3**	**3**	**6**	**12**	**27%**

&pericardium. - Respiratory system. - Respiratory muscles movements.					
(III) UPPER AND LOWER LIMBS - Muscles. - Nerves. - Joints. - Ligaments & fasciae. - Stability. - Nerve plexuses. - Development. - Hand. - Foot. - Arches of the foot. - Grip-force transmission. - Mechanisms of walking, running & standing.	**5**	**5**	**3**	**13**	**29%**
4) NEUROANATOMY	**5**	**5**	**4**	**14**	**31%**

- Brain & spinal cord: (blood supply & meninges). - Internal capsule: (afferent & efferent pathways). Nerve plexuses: (formation, relations & branches).					
Total	**15**	**15**	**15**	**45**	**100%**

4-Teaching and Learning Methods

Methods used:

1. **Modified Lectures:** Seminars, scientific meetings and conferences.

2.Small group discussions,

3. **Practical classes**.

Teaching plan:

Lectures: Large group sessions in the lecture theatre at the department using data shows,

Tutorials: Division of students into small groups.

Practical classes: At morgue and museum.

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	1 time/week between 9 am to 10	One hour	**1**

	am		
Practical	1 time/week between 10 am to 12 pm	Three hours	**3**
Tutorial	1 time/week between 1 pm to 2 pm	One hour	**1**
Total	**5**		

5. Student Assessment Methods

5-A) Attendance Criteria: 75% is the minimum acceptable attendance.

5-B) Assessment Tools:

Tool	Purpose (ILOs)
Written examination	To assess knowledge and understanding
Oral examination	To assess knowledge, understanding, intellectual, general and transferable skills
Practical examination	To assess practical and clinical skill

5- C) Time Schedule:

Final Exam	Week
- **Written,** - **Oral,** - **Practical.**	**At week 24** (end of 1st part)

5-D) Weighing System:

Examination	Marks allocated	% of Total Marks

a- Written	100	67%
b- Practical	25	17%
c- Oral	25	17%
Total	**150**	**100%**

Students will pass if they get at least 60% in all the exams.

Formative Assessment:

Sample **exam** closely matching the final **exam** / 3 months and students know their marks after.

5-F) Examinations Description:

Examination	Description
a-Written	Short assay questions,
b- Practical	Pieces to define and discuss,
c- Oral	One Session.

6. List of References

Gray's Anatomy standing et al 2008

6.2. Recommended Books:

Colored Atlas of Human anatomy and Embryology.: T.W2010

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Lecture halls,
- Small group classes,
- Museum, morgue,
- Information technology / AV aids: computers and data shows, CD-ROMs,
- Models.

Course Professor:	Signature & date:
Head of department:	Signature & date:

Applied Physiology Course specification

- **Course Title:** Applied Physiology,
  - **Code:**RHUM **702**
- **Department offering the course:** Physiology Department.
- **Academic year of program:**2013-2014
- **Department element of program:** Minor,
- **Academic Level:** 1st Part,
- **Date of specifications approval:**
  - **Department Council:**2013-2014
  - **Faculty Council:**2013-2014

A- Basic Information:

- **Allocated marks:** 150 marks,
- **Course duration:** 15 weeks of teaching,

- **Credit hours:** 3 hours/week = **45** total credit hours

Item	Hours / week	Total hours
1- Lectures	1	15
2- Small group teaching / tutorials	1	15
3- Practical	1	15
Total	3	45

B- Professional Information:

1. Overall Aims of Course

The overall goals of the course are to:

- ***Respond*** to the educational and research training needs of doctors with a special interest in Rheumatology, Rehabilitation and Physical Medicine.
- ***Prepare*** a Rheumatology, Rehabilitation and Physical Medicine physician oriented with the physiology of muscle and nerve, CNS and endocrine.
- ***Provide*** graduates with enough knowledge about the regulation of body temperature, body fluids and homeostasis.
- ***Maintain*** and improve students' standards of knowledge by self-education as a researcher and specialist in the field of Rheumatology, Rehabilitation and Physical Medicine.

2. Intended Learning Outcomes of Course (ILOs)

a- Knowledge and Understanding:

By the end of the course, students should be able to:

2.a.1.Describethe physiology of the muscle contraction and relaxation.

2.a.2.List the normal physiological changes in exercise.

2.a.3.Defineaction potentials and motor end plate.

2.b.4.Mention the different types of receptors.

2.a.5.Classify the nature of pain and pain control systems.

2.a.6.Name types of nerve and muscle fibers.

2.a.6.List central control of movement and sensations.

2.a.7.Defineelectrodiagnostic tests of nerves and muscles.

b- Intellectual skills:

By the end of the course, students should be able to:

2.b.1.Interpretthe balance of body fluids and electrolyte homeostasis.

2.b.2.Analyzethe difference between the types and nature of pain perceived by the patient. .

2.b.3.Evaluate the patient response to exercise.

2.b.4.Interpretmethods of chronic pain control in different musculoskeletal disorders.

c- Practical and Clinical skills:

By the end of the course, students should be able to:

2.c.1.Write the pathway for each type of sensation.

2.c.2.Recognize model for gate theory in management plan of patients with musculoskeletal disorders.

2.c.3.Predict body response to temperature changes.

2.c.4.Make algorithm for investigational and therapeutic programs in the management of musculoskeletal disorders.

d- General and communication skills:

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

2.d.1.Retrieve, ***manage***, ***manipulate*** and ***use*** information and communication technology effectively in the field of Physiology to conduct researches in Rheumatology, Rehabilitation and Physical Medicine.

3- Course Contents

Subject	**Lectures (hrs)**	**Small group (hrs)**	**Practical (hrs)**	**Total (hrs)**	**% of total**
1) MUSCLES AND NERVES - Nerve, - Skeletal Muscle.	**2**	**2**	**2**	**6**	**13%**
2) CENTRAL NERVOUS SYSTEM - Neurotransmitters, - Receptors, - Synapses, - Somatic sensations, - Sensory areas of cerebral cortex, - Pain & pain control system, - Spinal cord lesions, - Motor areas of cerebral cortex,	**4**	**5**	**3**	**12**	**27%**

- Descending pyramidal & extra-pyramidal tracts, - Stretch reflex & muscle tone, - Basal ganglia, - Cerebellum.					
(3 CIRCULATION - Arterial blood pressure & its regulation, - Capillary circulation, - Edema.	**3**	**2**	**3**	**8**	**18%**
4) RESPIRATION - Hypoxia.	**1**	**1**	**1**	**3**	**7%**
5) BLOOD - Anemia.	**1**	**1**	**1**	**3**	**7%**
6) METABOLISM - Obesity, - Sports physiology.	**1**	**1**	**2**	**4**	**9%**
7) ENDOCRINE - Thyroid hormones. - Parathyroid hormones. - Calcium homeostasis.	**2**	**2**	**2**	**6**	**13%**

8) KIDNEY - Water & electrolytes balance.	**1**	**1**	**1**	**3**	**7%**
Total	**15**	**12**	**15**	**45**	**100%**

4-Teaching and Learning Methods

Methods used:

4. **Modified Lectures**: Seminars, scientific meetings and conferences,
5. **Small group discussions,**
6. **Practical classes.**

Teaching plan:

Lectures: Large group sessions in the lecture theatre at the department using data shows,

Tutorials: Division of students into small groups.

Practical classes: at laboratories.

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	1 time/week between 9 am to 10 am	One hour	**1**
Practical	1 time/week between 10 am to 12 pm	Three hours	**3**
Tutorial	1 time/week between 1 pm to 2 pm	One hour	**1**
Total	**5**		

5. Student Assessment Methods

5-A) Attendance Criteria: 75% is the minimum acceptable attendance.

5-B) Assessment Tools:

Tool	Purpose (ILOs)
Written examination	To assess knowledge and understanding
Oral examination	To assess knowledge, understanding, intellectual, general and transferable skills
Practical examination	To assess practical and clinical skill

5- C) Time Schedule:

Final Exam	Week
- **Written,** - **Oral,** - **Practical.**	**At week 24** (end of 1st part)

5-D) Weighing System:

Examination	Marks allocated	% of Total Marks
a- Written	100	67%
b- Practical	25	17%
c- Oral	25	17%
Total	**150**	**100%**

Students will pass if they get at least 60% in all the exams.

Formative Assessment:

Sample **exam** closely matching the final **exam** / 3 months and students know their marks after.

5-E) Examinations Description:

Examination	Description
a-Written	Short assay questions,
b- Practical	Write a report on an experiment,
c- Oral	One Session.

6. List of References

6.1-Essential Books (Text Books):

Gyuon's textbook. **2008**

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Lecture halls,
- Small group classes,
- Laboratory,
- Information technology / AV aids: computers and data shows, CD-ROMs,

مقرر الفسيولوجى التطبيقى:

Course Professor:	Signature & date:
Head of department:	Signature & date:

Rheumatology Course specification

- **Course Title:** Rheumatic Diseases and Immunology
  - **Code:**RHUM **703, 704**
- **Department offering the course:** Rheumatology, Rehabilitation and Physical Medicine,
- **Academic year of course:**2013-2014
- **Department element of course:** Major,
- **Academic Level:** 2nd part,
- **Date of specifications approval:**
  - **Department Council:**2013-2014
  - **Faculty Council:**2013-2014

A) Basic Information:

- **Allocated marks:220** marks,
- **Course duration:** 45 weeks of teaching,
- **Credit hours:** 6 hours/week = **270** total credit hours

Item	Hours / week	Total hours
1- Lectures	2	**90**
2- Small group teaching / tutorials	1	**45**
3- Clinical	2	**90**
4- Scientific meeting	1	**45**
Total	**6**	**270**

B- Professional Information:

1. Overall Aims of Course

The overall goals of the course are to:

- ***Provide***students with an appropriate background covering rheumatic diseases as regard causes, pathogenesis, diagnosis and management.
- ***Provide***students the ability to list differential diagnoses of rheumatic diseases.
- ***Build up*** thestudents' skill to organize treatment plans for rheumatic diseases.
- ***Allow*** them to have the experience for problem solving and decision-making in atypical clinical situations.
- ***Increase*** the students' trend for evidence-based medicine practice to support up profession in Rheumatology, Rehabilitation and Physical Medicine.
- ***Give***students lifelong learning talent necessary for continuous professional development and research establishment.
- ***Provide*** the students with the professional ethical values essential to demonstrate appropriate attitude towards patients and colleagues.
- ***Allow***students to show skills necessary for proper patients' interrogation and evaluation.
- ***Support*** appropriate professional education necessary for the management and organization of health problems within the community.

2- Intended Learning Outcomes (ILOs)

2.a. Knowledge and Understanding:

By the end of the course, students should be able to:

2.a.1.List current and emerging data on the pathogenesis and management of different rheumatic diseases.

2.a.2.Recognize legal and ethical principles for professional practice consistent with values of proper medical conduct.

2.a.3.Outline common physical and rheumatic emergencies.

2.a.4.Identify objectives for clinical trials and emerging challenges in the field Rheumatology, Rehabilitation and Physical Medicine.

2.a.5.Be aware of an enhanced patients' health outcome through the development and maintenance of a humanized rehabilitation service in the community.

2.b. Intellectual Skills:

By the end of the course, students should be able to:

2.b.1.Analyze symptoms and signs of patients and construct differential diagnoses for the different rheumatic diseases.

2.b.2.Point-out an investigational plan for patients regarding disease presentations and interpret the results of used diagnostic procedures to solve professional problems.

2.b.3.Take part in designing researches for the pathogenesis, diagnosis and treatment of different rheumatic diseases.

2.b.4.Write and ***present*** scientific subjects of recent information related to Rheumatology, Rehabilitation and Physical Medicine.

2.b.5.Identify and ***classify*** the indications and rationale of referring patients to other related specialties according to risks and severity.

2.b.6.Discuss advance in rehabilitation approaches and management of rheumatic diseases based on recent data, evidence-based medicine and professional vision for future developmental plans.

2.c. Practical and Clinical Skills:

By the end of the course, students should be able to:

2.c.1.Demonstrate skills to perform intra-articular, soft tissue and botulinum injections.

2.c.2.Recognize and practice up-and-coming challenges in Rheumatology, Rehabilitation and Physical medicine.

2.c.3.Demonstrate better awareness of current practice and technological means for management of rheumatological emergencies.

2.c.4.Identify prospects for future developments within Rheumatology, Rehabilitation and Physical Medicine.

2.c.5.Contribute specific knowledge and skills of Rheumatology, Rehabilitation and Physical Medicine to other specialties to improve joint communication.

2.d. General and Transferable Skills:

By the end of the course, students should be able to:

2.d.1.Communicate effectively with other health care professionals to discuss and exchange ideas and arguments.

2.d.2.Use sources of biomedical information and communication technology to remain up- to-date with advances in knowledge and practice.

2.d.3.Retrieve, ***manipulate*** and ***present*** scientific information clearly to others in written, electronic and oral forms to improve performance.

2.d.4.Determine and***self-assess*** of personal learning needs required for continuous professional development.

2.d.5.Use the sources of biomedical information and communication technology to teach others and evaluate their clinical practice.

2.d.6.Work effectively with an interdisciplinary team within time-planned shared programs.

3- Course Contents

Subject	Lectures (hrs)	Small group (hrs)	Clinical & Practical (hrs)	Total (hrs)	% of total
1)Approach to painful joints	**2**	**2**	**1**	**5**	**2%**
2) Molecular and cellular basis of immunology ▪ Inflammatory cells, ▪ Mediators of inflammation, ▪ Complement system. ▪ Inflammatory response. ▪ Immune response, ▪ Autoantibodies, ▪ Antinuclear antibodies.	**10**	**5**	**6**	**21**	**8%**
3) Systemic Rheumatic Disease ▪ Rheumatoid Arthritis and associated	**12**	**3**	**16**	**31**	**11%**

syndromes, ▪ Antiphospholipid Syndrome, ▪ Dermatomyositis/ Polymyositis, ▪ Eosinophilia-Myalgia Syndrome, ▪ Eosinophilic Fasciitis, ▪ Mixed Connective-Tissue Disease, ▪ Scleroderma, ▪ Sjogren Syndrome, ▪ Systemic Lupus Erythematosus, ▪ Undifferentiated Connective-Tissue Disease.					
4) Crystal-Induced Arthritis ▪ Calcium Pyrophosphate Deposition Disease, ▪ Gout.	**4**	**2**	**6**	**12**	**4%**
5) Infectious Arthritis ▪ Gonococcal	**7**	**1**	**3**	**11**	**4%**

Arthritis, ▪ Lyme disease, ▪ Nongonococcal Infectious Arthritis, ▪ Viral Arthritis.					
6) Osteoarthritis	**2**	**1**	**1**	**4**	**1%**
7) Metabolic and Bone Disease ▪ Amyloidosis, ▪ Avascular Necrosis, ▪ Hypertrophic osteoarthropathy, ▪ Osteoporosis, ▪ Paget disease.	**8**	**3**	**3**	**12**	**4%**
8) Systemic Diseases Associated with Arthritis	**5**	**1**	**2**	**8**	**3%**
9) Miscellaneous Inflammatory Arthritis ▪ Acute rheumatic fever, ▪ Endocrinal arthropathy, ▪ Arthritis as a manifestation of systemic disease, ▪ Mediterranean fever, ▪ Palindromic rheumatism.	**10**	**4**	**2**	**16**	**6%**
10) Soft Tissue and	**10**	**3**	**8**	**21**	**8%**

Regional Rheumatic Disease ▪ Dupuytren contracture, ▪ Fibromyalgia, ▪ Localized fibro sing disorders, ▪ Non-articular rheumatism/Regional pain syndrome, ▪ Reflex Sympathetic Dystrophy.					
11) Spondyloarthropathies Ankylosing Spondylitis and Undifferentiated Spondyloarthropathy, Enteropathic Arthropathies, Psoriatic Arthritis, Reactive Arthritis.	**10**	**3**	**6**	**19**	**7%**
12) Vasculitides ▪ Behcet Disease, ▪ Henoch Schonlein Purpura, ▪ Churg-Strauss Syndrome,	**15**	**3**	**8**	**23**	**9%**

▪ Cryoglobulinemia, ▪ Giant Cell Arteritis, ▪ Leukocytoclastic Vasculitis, ▪ Microscopic Polyangiitis, ▪ Polyarteritis Nodosa. ▪ Polychondritis, ▪ Polymyalgia Rheumatica, ▪ Serum Sickness, ▪ Takayasu Arteritis, ▪ Wegener Granulomatosis.					
13) Heritable collagen disorders ▪ Marfan syndrome, ▪ Ehlar Danlos syndrome, ▪ Osteogenesis imperfect syndrome, ▪ Benign hypermobility syndrome.	**5**	**3**	**1**	**9**	**3%**

14) Rheumatic manifestation of malignancy	**2**	**1**	**----**	**3**	**1%**
15) Rheumatic manifestation of blood disease	**2**	**1**	**----**	**3**	**1%**
16) Pediatric rheumatology ▪ Idiopathic juvenile arthritis, ▪ Childhood scleroderma, dermatomyositis and systemic lupus erythematosus.	**10**	**4**	**8**	**22**	**8%**
17) Invasive therapeutic technique ▪ Joint aspirations and injections, ▪ Local injections.	**3**	**1**	**3**	**7**	**3%**
18) Rheumatological investigations ▪ Synovial fluid analysis, ▪ Lab studies.	**3**	**-----**	**5**	**8**	**3%**
19) Imaging in	**5**	**----**	**6**	**11**	**4%**

rheumatological diseases ▪ Musculoskeletal plain radiology, CT, magnetic resonance imaging and ultrasound.					
20) Drugs used in rheumatic diseases ▪ Non steroidal anti-inflammatory drugs, ▪ Steroids, ▪ Disease modifying antirheumatic drugs, ▪ Biological treatment.	**10**	**4**	**5**	**19**	**7%**
Total	**135**	**45**	**90**	**270**	**100%**

4-Teaching and Learning Methods

Methods used:

1- **Modified Lectures:** Seminars, scientific meetings and conferences.
2- **Small group discussions,**
3- **Problem solving sessions,**
4- **Self learning:** Projects, case studies, clinical trials,
5- **Clinical and Practical classes**

Teaching plan:

Lectures: Large group sessions in the lecture theatre at the department using data show.

Tutorials: Division of students into small groups.

Clinical and Practical classes: At inpatients wards and outpatient clinics.Every student is expected to present 3 topics and 3 cases.

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	3 times/week between 9 to 10 am	One hour each	3 hours
Clinical and Practical	2 times /week between 10 am to 1 pm	Three hours each	6 hours
Tutorial	One time / week between 1 to 2 pm	One hour	1 hour
Total			**10 hours**

5. Student Assessment Methods

5-A) Attendance Criteria: 75% is the minimum acceptable attendance.

5-B) Assessment Tools:

Tool	Purpose (ILOs)
Written examination	To assess knowledge and understanding
Oral examination	To assess knowledge, understanding, intellectual, general and transferable skills
Clinical and Practical examination	To assess practical and clinical skill

5- C) Time Schedule:

Final Exam	Week
- **Written,** - **Oral,** - **Clinical & Practical.**	**At week 96** (end of 2nd part)

5-D) Weighing System:

Examination	Marks allocated	% of Total Marks
a- Written,	**100**	**45%**
b- Commentary,	**20**	**14%**
c- Clinical and Practical,	**50**	**23%**
d- Oral.	**50**	**23%**
2- Thesis	**----**	**----**
Total	**220**	**100%**

Students will pass if they get at least 60% in all the exams.

Formative Assessment:

Sample **exam** closely matching the final **exam** / 3 months and students know their marks after.

5-E) Examinations Description:

Examination	Description
a- Written,	- Five short assay questions + commentary case,
b- Clinical,	- One long and one short rheumatology cases topresent and discuss,.
c- Practical,	- Five plain x-rays to write a report and discuss.
d- Oral.	- One session.
2- Log Book: completed and signed by the head of the department.	

6. List of References

6.1-Essential Books (Text Books):

- Current diagnosis and treatment of rheumatology,

-. Primer of Rheumatic Diseases by Klipple.

6.2-Recommended Books:

- Arthritis and Allied Conditions by Hollander.
- Manual of rheumatic disease and outpatient orthopedic disorders.

6.3- Periodicals, Web sites, … etc:

- **Periodicals**:
  - Annals of Rheumatic Diseases.
  - Arthritis and Rheumatism.
  - British Journal of Rheumatology.
- **Web Sites:**
  - www.medscape.com,
  - www.emedicine.com,
  - www.gigapedia.com.

7- <u>Facilities required for teaching and learning</u>:

Facilities used for teaching this course include:

- Lecture halls,
- Small group classes,
- Information technology / AV aids: computers and data shows, CD-ROMs.

<u>مقرر الروماتيزم:</u>

Course Professor:	Signature & date:
Head of department:	Signature & date:

Rehabilitation Course specification

- **Course Title:** Rehabilitation, Musculoskeletal and Physical Medicine
  - **Code:**RHUM **705,706,707**
- **Department offering the course:** Rheumatology, Rehabilitation and Physical Medicine
- **Academic year of course:**2013-2014
- **Department element of course:** Major
- **Academic Level:** 2nd part.
- **Date of specifications approval:**
  - **Department Council:**2013-2014
  - **Faculty Council:**2013-2014

A) Basic Information:

- **Allocated marks: 200** marks,
- **Course duration:** 45 weeks of teaching,
- **Credit hours:** 9 hours/week = **405** total credit hours

Item	Hours / week	Total hours
1- Lectures	3	**135**
2- Small group teaching / tutorials	1	**45**
3- Clinical and Practical	3	**135**
4- Scientific meetings	2	**90**
Total	**9**	**405**

B- Professional Information:

1. Overall Aims of Course

The overall goals of the course are to:

- ***Provide*** an appropriate background covering musculoskeletal disorders as regard causes, pathogenesis, diagnosis and management,
- ***Give*** students the ability to list differential diagnoses of musculoskeletal disorders,
- ***Create*** the skill to design rehabilitation programs for musculoskeletal disorders (acute and chronic),
- ***Realize*** expertise for problem solving and decision-making in atypical clinical situations,
- ***Develop*** the trend for evidence-based medicine practice to support up profession in Rheumatology, Rehabilitation and Physical Medicine,
- ***Support*** lifelong learning talent necessary for continuous professional development and research establishment,
- ***Present*** professional ethical values essential to demonstrate appropriate attitude towards patients and colleagues,
- ***Prop up*** communication skills necessary for proper patients' interrogation and evaluation,
- ***Sustain*** appropriate professional education necessary to manage and organize health problems within the community.

2. Intended Learning Outcomes of Course (ILOs)

a- Knowledge and Understanding:

By the end of the course, students should be able to:

2.a.1.List current and emerging data on the pathogenesis and management of different musculoskeletal disorders,

2.a.2.Describe the morbidity and mortality of musculoskeletal disorders and discuss an investigational plan for causes and effective modern physiotherapeutic approaches to recover disability,

2.a.3.Recognize legal and ethical principles for professional practice consistent with values of proper medical conduct,

2.a.4.Outline common physical emergencies and illustrate the clinical outcome in the intensive care unit,

2.a.5.Identify objectives for clinical trials and emerging challenges in the field Rheumatology, Rehabilitation and Physical Medicine,

2.a.6.Be aware of an enhanced patients' health outcome through the development and maintenance of a humanized rehabilitation service in the community.

b- Intellectual skills:

By the end of the course, students should be able to:

2.b.1.Analyze symptoms and signs of patients and construct differential diagnoses for the different musculoskeletal disorders,

2.b.2.Organize an investigational plan for patients regarding disease presentations and interpret the results of used diagnostic procedures to solve professional problems,

2.b.3.Contribute to designing researches for the pathogenesis, diagnosis and treatment of different musculoskeletal disorders,

2.b.4. ***Write*** and present scientific subjects of recent information related to Rheumatology, Rehabilitation and Physical Medicine,

2.b.5.Identify and classify the indications and rationale of referring patients to other related specialties according to risks and severity,

2.b.6.Recognize indications, prescriptions and evaluation of different orthoses and prostheses and estimate their cost benefits in rehabilitation programs,

2.b.7.Discuss advance in rehabilitation approaches and management of rheumatic diseases based on recent data, evidence-based medicine and professional vision for future developmental plans.

c- Practical and Clinical skills:

By the end of the course, students should be able to:

2.c.1.Demonstrate skills to perform intra-articular, soft tissue and botulinum injections,

2.c.2.Prescribe manipulation techniques and therapeutic exercises within the rehabilitation program,

2.c.3.Categorize, ***interpret***, and ***write*** reports of kinesiologic and electromyographic studies,

2.c.4.Recognize and ***practice*** up-and-coming challenges in Rheumatology, Rehabilitation and Physical medicine,

2.c.5.Demonstrate better awareness of current practice and technological means for rehabilitation in emergency cases and critical situations of stroke, acute pain, brain injury, joint infections, spinal injury and sports injury,

2.c.6.Identify prospects for future developments within Rheumatology, Rehabilitation and Physical Medicine,

2.c.7.Contribute specific knowledge and skills of Rheumatology, Rehabilitation and Physical Medicine to other specialties to improve joint communication,

d- General and communication skills:

By the end of the course, students should be able to:

2.d.1.Communicate effectively with other health care professionals to discuss and exchange ideas and arguments,

2.d.2.Use sources of biomedical information and communication technology to remain up- to-date with advances in knowledge and practice,

2.d.3.Retrieve, ***manipulate*** and ***present*** scientific information clearly to others in written, electronic and oral forms to improve performance,

2.d.4.Determine and ***self-assess*** personal learning needs required for continuous professional development,

2.d.5.Use the sources of biomedical information and communication technology to teach others and evaluate their clinical practice,

2.d.6.Work effectively with an interdisciplinary team within time-planned shared programs.

3- Course Contents

Subject	Lectures (hrs)	Small group (hrs)	Clinical & Practical (hrs)	Total (hrs)	% of total
1) Patient Evaluation & Diagnosis ▪ Diagnosis of disability. ▪ Neuromuscular functional evaluation.	**8**	**4**	**3**	**15**	**4%**
2) Musculoskeletal Diseases ▪ Acute trauma and post-care of fracture.	**25**	**6**	**10**	**41**	**10%**

▪ Chronic trauma/overuse. ▪ Fibrositis/myofascial Pain. ▪ Burns. ▪ Back and spine disorders. ▪ Strain/sprains. ▪ Tendonitis/bursitis. ▪ Regional pain syndromes. ▪ Other soft tissue disease.					
<u>3) Diagnostic Procedures</u> ▪ Cardio pulmo nary assess/ Stress test. ▪ Gait analysi s. ▪ Urody namics , ▪ Neurop sychol	**20**	**4**	**5**	**29**	**7%**

ogical evaluations.					
4) Electrodiagnosis ▪ General Electrodiagnosis. ▪ Instrumentation. ▪ Nerve conduction. ▪ Electromyography. ▪ Somatosensory evoked potential. ▪ Neuromuscular transmission. ▪ H Reflex/F Wave. ▪ Special studies.	**20**	**4**	**15**	**39**	**10%**
5) Neuro-rehabilitation ○ Stroke ○ Spinal cord injury ○ Traumatic brain Injury ○ Neuropathies ▪ Mononeuropathies. ▪ Polyneuropathies. ▪ Entrapment Neuropathies. ○ Neurologic disorders ▪ Multiple sclerosis.	**30**	**5**	**15**	**50**	**12%**

▪ Parkinson's disease. ▪ Ataxias ▪ Motor neuron disease. ▪ Poliomyelitis. ▪ Guillain-Barré syndrome. ▪ Cerebral palsy. ▪ Spina bifida. ▪ Muscular dystrophies. ▪ Thoracic outlet syndrome ▪ Plexopathy. ▪ Radiculopathy.					
6) Orthotics and Prosthetics ▪ Upper limb orthoses. ▪ Upper limb prostheses. ▪ Lower limb orthoses. ▪ Lower limb prostheses. ▪ Spinal orthoses.	**25**	**8**	**20**	**53**	**13%**
7) Therapeutic Exercise and Manipulation	**10**	**3**	**6**	**19**	**5%**
8) Rehabilitation Problems ○ Physical Complication	**25**	**6**	**15**	**46**	**11%**

s ▪ Spasticity. ▪ Contracture. ▪ Pressure Ulcer. ▪ Posture/Balance Disorders. ▪ Dysphagia/Aspiration. ▪ Bed Rest/ Deconditioning. ▪ Paralysis/Weakness. ▪ Heterot					

opic Ossification. ▪ Amputation. ▪ Scoliosis. ○ Cognitive/Sensory Dysfunction ▪ Speech and Language Disorders.					
9) Pain ▪ Management of chronic pain.	**5**	**----**	**5**	**10**	**2%**
10) Pharmacologic intervention Analgesics. Anti-seizure. Skeletal muscle relaxants. ▪ Other medications.	**10**	**---**	**8**	**18**	**4%**

11) Procedural/ Interventional ▪ Nerve Blocks. ▪ Anesthetic Injections. Other Procedural/Interventional.	**15**	**2**	**8**	**25**	**6%**
12) Behavioral/ Psychological Modalities ▪ Relaxation Therapy, ▪ Biofeedback, ▪ Behavior Modification, ▪ Psychotherapy/ Counseling, ▪ Education.	**10**	**1**	**10**	**21**	**5%**
13) Organ-System rehabilitation Cardiovascular Ischemic Heart Disease, Peripheral Artery Disease,	**22**	**2**	**15**	**39**	**10%**

Venous Disease, Vascular Disorders, Lymphedema, Other Cardiovascular ○ Pulmonary Disease COPD. Pneumonia. Impaired Ventilation. ○ GU/GI Disorders Neurogenic Bladder. Neurogenic Bowel. ▪ Cancer.					
Total	**225**	**45**	**135**	**405**	**100%**

4-Teaching and Learning Methods

Methods used:

1. **Modified Lectures:** Seminars, scientific meetings and conferences,
2. **Small group discussions,**
3. **Problem solving sessions,**
4. **Self learning:** clinical trials, projects, presentations,
5. **Clinical and Practical classes.**

Teaching plan:

Lectures: Large group sessions in the lecture theatre at the department using data shows.

Tutorials: Division of students into small groups.

Clinical and Practical classes: At inpatients wards and outpatient clinics.Every student is expected to present 3 topic and 3 cases.

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	5 times/week between 9 to 10 am	One hour each	5 hours
Clinical and Practical	3 times /week between 10 am to 1 pm	Three hours each	9 hours
Tutorial	1 times / week between 1 to 2 pm	One hour	1 hour
Total			**15 hours**

5. Student Assessment Methods

5-A) Attendance Criteria: 75% is the minimum acceptable attendance.

5-B) Assessment Tools:

Tool	Purpose (ILOs)
Written examination	To assess knowledge and understanding,
Oral examination	To assess knowledge, understanding, intellectual, general and transferable skills,
Clinical and Practical examination	To assess practical and clinical skill.

5- C) Time Schedule:

Final Exam	Week
- Written, - Oral, - Practical & Clinical	**At week 90** (end of 2nd part)

5-D) Weighing System:

Examination	Marks allocated	% of Total Marks
a- Written, b- Clinical & Practical, c- Oral.	230 110 110	50% 25% 25%
Total	450	100%

Students will pass if they get at least 60% in all the exams.

Formative Assessment:

Sample **exam** closely matching the final **exam** / 3 months and students know their marks after.

5-F) Examinations Description:

Examination	Description
a- Written, b- Clinical, c- Practical,	- Five short assay questions, - One long and one short neurology cases to present and discuss, - Five electromyogram traces to report and discuss. - Five orthotic and or prosthetic devices to identify

d- Oral.	and discuss. - One session.
2- Log Book: completed and signed by the head of the department.	

6. List of References

6.1-Essential Books (Text Books):

- Practical manual of physical medicine and rehabilitation by Jackson C. Tan.
- Krusen's textbook of Physical medicine& Rehabilitation.

6.2-Recommended Books:

- Tidy's massage and therapeutic exercises by porter S.
- Rehabilitation Medicine by DeLisa.

6.3- Periodicals, Web sites, … etc:

- **Periodicals** :
  - Archives of Physical Medicine and Rehabilitation Journal.
  - Spine.
  - Journal of the Egyptian society of rheumatology and Rehabilitation.
- **Web Sites:**
  - www.medscape.com,
  - www.emedicine.com,
  - www.gigapedia.com.

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Lecture halls,
- Small group classes,

- Laboratories for electromyography, nerve conduction studies and gait analysis,
- Information technology / AV aids: computers and data shows, CD-ROMs,
- Rehabilitation equipments and a gym.

- **مقرر التأهيل:**

Course Professor:	Signature & date:
Head of department:	Signature & date:

Pediatric Rehabilitation Course Specification

- **Course Title:** Rehabilitation, Musculoskeletal and Physical Medicine,
  - **Code:**RHUM **709**
- **Department offering the course:** Rheumatology, Rehabilitation and Physical Medicine.
- **Academic year of program**: 2013-2014
- **Department element of program**: Major,
- **Academic Level:**2nd part.
- **Date of specifications approval:**
  - **Department Council:** 2013-2014
  - **Faculty Council:**2013-2014
  - **A) Basic Information:**
  - **Allocated marks: 50** marks,
  - **Course duration:** 45 weeks of teaching,
    - **Credit hours :** 1 hours/week = **45** total credit hours

Item	Hours / week	Total hours
1- Lectures	**3/4**	**38**
3- Clinical	**1/4**	**7**
Total	**1**	**45**

- **B- Professional Information:**

1-Overall Aims of the Program

The overall goals of the course are to:

- **Introduce** the student to the academic components of knowledge and skills that provide a theoretical framework to integrate with practical and problem solving approach in the field pediatric rehabilitation .

- **Provide** the student through acquisition of skills of searching for resources of basic knowledge and information; this is to be applied in normal infant and child growth and development.
- **Explain** problem based learning to identify common pediatric problems prevailing in the community.
- **Apply** innovated problem based solutions and implementing protocols of pediatric physical therapy and rehabilitation.
- **Utilize** the understanding of pathophysiological and pathomechanics mechanisms in evaluation of children disorders.
- **Develop** a relevant plan of physical treatment that addresses the child's needs via problem solving approach.
- **Demonstrate** competence in the application of therapeutic modalities for pediatrics in a safe and effective manner.
- **Develop** effective interpersonal relationships with child, his/her relatives & other health professional.

2- Intended Learning Outcomes (ILOs)

2.a. Knowledge and Understanding:

By the end of the course, students should be able to:

2.a.1.Identify principles of normal motor and mental development related to child health and diseases, which underpin physical therapy.

2.a.2.Recognize biological and physiological changes which developed as normal consequences of aging process and those resulting from pediatric disorders.

2.a.3. Identify the pathological changes, pharmacological interaction and related clinical features of pediatric conditions commonly encountered by

Physical Therapy with their relevant medical treatment in addition to child growth and development.

2.a.4. Diagnose different type of Communication disorder.

2.a.5. Recognize fundamental concepts and definitions of speech therapy science that can be applied to practice.

2.a.6. Identify the pathological changes, pharmacological interaction and related clinical features of conditions commonly encountered by Speech Therapy with their relevant medical and surgical treatment in addition to human growth and development across the life span.

2.a. 7. Arrange a realistic achievable goals taking into consideration pathological underlying mechanism and socioeconomic state.

2.a. 8. List the framework of quality assurance mechanisms within physical therapy practice.

2.b. Intellectual Skills:

By the end of the course, students should be able to:

2.b.1. **Identify** information from a number of sources in order to gain a coherent understanding of a pediatric clinical case..

2.b.2.**Demonstrate** the ability to extract pertinent information for a given pediatric patient through reviewing the provided medical documents.

2.b.3. **Analyze** data about pediatrics using information technology, library and appropriate techniques.

2.c. Practical and Clinical Skills:

By the end of the course, students should be able to:

2.c.1.Describe the potential for competence and attitudes required for professional work including initiative, leadership and team skills in the field of pediatric.

2.c.2.Identify child's parents and health care professionals to establish professional and ethical relationship.

2.c.3. Deal accurately, clearly, confidently, and effectively in when dealing with a pediatric patient.

2.c.4.**Identify**the view of others when dealing with a pediatric patient.

2.d- General and Transferable Skills:

By the end of the course, students should be able to:

2.d.1.Communicate effectively with other health care professionals to discuss and exchange ideas and arguments,

2.d.2.Use sources of biomedical information and communication technology to remain up- to-date with advances in knowledge and practice,

2.d.3.present scientific information clearly to others in written, electronic and oral forms to improve performance,

2.d.4.Determine personal learning needs required for continuous professional development,

2.d.5.Use the sources of biomedical information and communication technology to teach others and evaluate their clinical practice,

2.d.6.Work effectively with an interdisciplinary team within time-planned shared programs.

2.d.7.Use internet critically as a mean of communication and source of information in the field of pediatrics.

3- Course Contents:

- Hydrocephalus and microcephalus
- Rehabilitation of patient with spina bifida
- Traumatic brain injury
- Assessment of gait and motor function

- Pediatric limb deficiency
- Communication disorders
- Orthopedic and assistive devices-
- Hemophilia
- Brachial plexus Palsy-
- Epilepsy
- Muscular Disorders
- Genetic Disorder
- Facial Palsy
- Neonatal care and related problems-
- Juvenile rheumatoid arthritis
- Juvenile systemic lupus
- Juvenile dermatomyositis-
- Hydrocephalus and microcephalus
- Rehabilitation of patient with spina bifida
- Traumatic brain injury
- Assessment of gait and motor function
- Pediatric limb deficiency
- Communication disorders
- Orthopedic and assistive devices.

4-Teaching and Learning Methods

Methods used:

2- **Modified Lectures:** Seminars, scientific meetings and conferences.

3- **Small group discussions,**

4- **Problem solving sessions,**

5- **Self learning:** Projects, case studies, clinical trials,

6- Clinical and Practical classes

Teaching plan:

Lectures: Large group sessions in the lecture theatre at the department using data show.

Tutorials: Division of students into small groups.

Clinical and Practical classes: At inpatients wards and outpatient clinics.Every student is expected to present 3 topics and 3 cases.

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	3 times/week between 9 to 10 am	One hour each	3 hours
Clinical and Practical	One times /week between 10 am to 1 pm	One hours each	2 hours
Tutorial	One time / week between 1 to 2 pm	One hour	1 hour
Total			**5 hours**

5. Student Assessment Methods

5-A) Attendance Criteria: 75% is the minimum acceptable attendance.

5-B) Assessment Tools:

Tool	Purpose (ILOs)
Written examination	To assess knowledge and understanding
Oral examination	To assess knowledge, understanding, intellectual, general and transferable skills
Clinical and Practical examination	To assess practical and clinical skill

5- C) Time Schedule:

Final Exam	Week
- **Written,** - **Oral,** - **Clinical & Practical.**	**At week 96** (end of 2nd part)

5-D) Weighing System:

Examination	Marks allocated	% of Total Marks
b- Written,	**20**	**40%**
c- MCQ	**5**	**10%**
d- Clinical and Practical,	**15**	**30%**
e- Oral.	**10**	**20%**
Total	**50**	**100%**

Students will pass if they get at least 60% in all the exams.

Formative Assessment:

Sample **exam** closely matching the final **exam** / 3 months and students know their marks after.

5-E) Examinations Description:

Examination	Description
a- Written, **b- Clinical,** **c- Practical,** **d- Oral**.	- Five short assay questions + commentary case, - One case topresent and discuss,. - EMG and Orthoses/Prostheses reports One session.

6. List of References

6.1-Essential Books (Text Books):

- Practical manual of physical medicine and rehabilitation by Jackson C. Tan.

- Krusen's textbook of Physical medicine& Rehabilitation.

-Pediatric Rehabilitation, Fourth Edition: Principles & PracticesHardcover – , 2009

6.2-Recommended Books:

- Tidy's massage and therapeutic exercises by porter S.
- Rehabilitation Medicine by DeLisa.

6.3- Periodicals, Web sites, … etc:

- **Periodicals** :
  - Archives of Physical Medicine and Rehabilitation Journal.
  - Spine.
  - Journal of the Egyptian society of rheumatology and Rehabilitation.
- **Web Sites:**
  - www.medscape.com,
  - www.emedicine.com,
  - www.gigapedia.com.

7- <u>Facilities required for teaching and learning</u>:

Facilities used for teaching this course include:

- Lecture halls,
- Small group classes,
- Laboratories for electromyography, nerve conduction studies and gait analysis,
- Information technology / AV aids: computers and data shows, CD-ROMs,
- Rehabilitation equipments and a gym.

مقررتأهيل الأطفال:

Course Professor:	Signature & date:
Head of department:	Signature & date:

Geriatrics Rehabilitation Course Specification

- **Course Title:** Rehabilitation, Musculoskeletal and Physical Medicine,
  - **Code:**RHUM **710**
- **Department offering the course:** Rheumatology, Rehabilitation and Physical Medicine.
- **Academic year of program**: 2013-2014
- **Department element of program**: Major,
- **Academic Level:**2nd part.
- **Date of specifications approval:**
  - **Department Council:**2013-2014
  - **Faculty Council:**2013-2014

- **A) Basic Information:**

- **Allocated marks: 50** marks,
- **Course duration:** 45 weeks of teaching,
  - **Credit hours :** 1 hours/week = **45** total credit hours

Item	Hours / week	Total hours
1- Lectures	**3/4**	**38**
3- Clinical	**1/4**	**7**
Total	**1**	**45**

- **B- Professional Information:**

1-Overall Aims of the Program

The overall goals of the course are to:

- Give methods of assessing the nutritional status and age related disorders

- Identify the older adults who are most at risk for problems related to nutrition and hydration.
- Improve nursing interventions that will help older persons meet their nutrition and hydration needs.
- Develop theory and clinical practice for providing care to the geriatric population.
- Present the nursing actions that can assist the elderly client to safely adjust aging process.

2- Intended Learning Outcomes of the Course (ILOs)

2.a. **Knowledge and Understanding:**

By the end of the program, the candidate should be able to:

2.a.**1.Identify** geriatric rehabilitation principles related to human health and diseases, which underpin physical therapy.

2.a.**2.Describe** biological and physiological changes which developed as normal consequences of aging process

2.a.**3.Explain** the pathological changes, pharmacological interaction and related clinical features of geriatric patients commonly encountered by Physical Therapy with their relevant medical and surgical treatment in addition to human growth and development across the life span.

2.a.**4.Describe** how activity and exercise patterns change with aging

2.a.**5.Discuss** the effects of disease processes on the ability to participate in exercise and activity**.**

2.b.Intellectual Skills:

By the end of the program, the candidate should be able to:

2.b.1.Increase awareness of the great spectrum of health, functional, and cognitive states among individuals as they age.

2.b.2.Identify a patient with a geriatric syndrome, and develop a rational approach to the work-up and management.

2.b.3. Analyze medication history from a geriatric patient, and recognize common drug-related problems in older patients.

2.b.4.Discuss an approach to a patient with possible cognitive impairment including clinical exam, lab testing, and imaging.

2.b.5.List treatments for dementia and describe their use

2.b.6.List hazards of hospitalization and strategies to minimize their occurrence

2.b.7.Explain similarities and differences between assisted living, post-hospital rehabilitation, and a dementia unit, and the patient characteristics associated with each

2.b.8.Describe elements of a patient discharge plan with a focus on patient safety.

2.b.9.Conduct a basic functional and cognitive assessment of a patient

2.c. Practical and Clinical Skills:

By the end of the program, the candidate should be able to:

2.c.1. Analyze information from a number of sources in order to gain a coherent understanding of a clinical case.

2.c.2. **Demonstrate** the ability to extract pertinent information for a given geriatric patient through reviewing the provided medical documents.

2.c.3. **Write** data using information technology, library and appropriate techniques.

2.c.4. **Improve** clinical skills for dealing with older patients and to address preventative interventions in healthy aging

2.c.5. **Perform** a functional assessment on an older adult.

2.c.6. **Describe** modifications needed for activities of daily living for some older adults.

2.c.7. **Explain** why drug dosage adjustments may be needed for older Persons

2.d- General and Transferable Skills:

By the end of the program, the candidate should be able to:

2.d.1.Demonstrate competence in the use of computer based information handling and data processing tools.

2.d.2.Use internet critically as a mean of communication and source of information.

2.d.3.Work effectively as a member of a team and participate constructively in groups.

2.d.4.Assess the relevance and importance of the ideas of others.

2.d.5.Display the potential for competence and attitudes required for professional work including initiative, leadership and team skills.

2.d.6.Communicate effectively with patient relatives and health care professionals establishing professional and ethical relationship.

2.d.7. Communicate accurately, clearly, confidently, and effectively in writing and orally.

2.d.8.Listen to appreciating and evaluating the view of others.

3-Course contents:

- Anatomical and physiological considerations in geriatric individuals:
  - Skeletal muscle function in geriatric, effect of aging on organ systems
- Rehabilitation of musculoskeletal disorders in geriatric individuals:
  - Osteoporosis
  - Total hip, knee arthroplasty

- Disorders of geriatric cervical, thoracic, lumbar, sacral spine

- Rehabilitation of neurological disorders
    - Rehabilitation of patient with cancer
    - Rehabilitation of ICU patients
    - Rehabilitation of patients with diabetes, wound care, amputation
    - Aging and the pathological sensorium
    - Cardiopulmonary rehabilitation
    - Rehabilitation of specific problems: dysphagia, urine and stool incontinence, communication disorders
    - Overweight and obesity

4-Teaching and Learning Methods

Methods used:

-Modified Lectures: Seminars, scientific meetings and conferences.

-Small group discussions,

-Problem solving sessions,

-Self learning: Projects, case studies, clinical trials,

-Clinical and Practical classes

Teaching plan:

Lectures: Large group sessions in the lecture theatre at the department using data show.

Tutorials: Division of students into small groups.

Clinical and Practical classes: At inpatients wards and outpatient clinics.Every student is expected to present 3 topics and 3 cases.

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	3 times/week	One hour each	3 hours

	between 9 to 10 am		
Clinical and Practical	One times /week between 10 am to 1 pm	One hours each	2 hours
Tutorial	One time / week between 1 to 2 pm	One hour	1 hour
Total			**5 hours**

5. Student Assessment Methods

5-A) Attendance Criteria: 75% is the minimum acceptable attendance.

5-B) Assessment Tools:

Tool	Purpose (ILOs)
Written examination	To assess knowledge and understanding
Oral examination	To assess knowledge, understanding, intellectual, general and transferable skills
Clinical and Practical examination	To assess practical and clinical skill

5- C) Time Schedule:

Final Exam	Week
- **Written,** - **Oral,** - **Clinical & Practical.**	**At week 96** (end of 2nd part)

5-D) Weighing System:

Examination	Marks allocated	% of Total Marks
f- Written,	**20**	**40%**

g- MCQ	**5**	**10%**
h- Clinical and Practical,	**15**	**30%**
i- Oral.	**10**	**20%**
3- Thesis	**----**	**----**
Total	**50**	**100%**

Students will pass if they get at least 60% in all the exams.

Formative Assessment:

Sample **exam** closely matching the final **exam** / 3 months and students know their marks after.

5-E) Examinations Description:

Examination	Description
a- Written,	- Five short assay questions + commentary case,
b- Clinical,	- One case topresent and discuss,
c- Practical,	- EMG and Orthoses/Prosthese to write a report and discuss.
d- Oral.	- One session.

6. List of References

6.1-Essential Books (Text Books):

- Practical manual of physical medicine and rehabilitation by Jackson C. Tan.
- Krusen's textbook of Physical medicine& Rehabilitation.
-Geriatric rehabilitation MANUAL 2007

6.2-Recommended Books:

- Tidy's massage and therapeutic exercises by porter S.
- Rehabilitation Medicine by DeLisa.

6.3- Periodicals, Web sites, … etc:

- **Periodicals** :

Archives of Physical Medicine and Rehabilitation Journal. -

- Spine.
- Journal of the Egyptian society of rheumatology and Rehabilitation.

- **Web Sites:**
  - www.medscape.com,
  - www.emedicine.com,
  - www.gigapedia.com.

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Lecture halls,
- Small group classes,
- Laboratories for electromyography, nerve conduction studies and gait analysis,
- Information technology / AV aids: computers and data shows, CD-ROMs,

Rehabilitation equipments and a gym.

مقرر تأهيل المسنين:

Course Professor:	Signature & date:
Head of department:	Signature & date:

Rehabilitation Of SportInjuries Course Specification

- **Course Title:** Rehabilitation, Musculoskeletal and Physical Medicine,
  - **Code:**RHUM **711**
  - **Department offering the course:** Rheumatology, Rehabilitation and Physical Medicine.
- **Academic year of program**: 2013-2014
- **Department element of program**: Major,
- **Academic Level:**2nd part.
- **Date of specifications approval:**
  - **Department Council:** 2013-2014
  - **Faculty Council:**2013-2014

A) Basic Information:

- **Allocated marks: 50** marks,
- **Course duration:** 45 weeks of teaching,
- **Credit hours :** 1 hours/week = **45** total credit hours

Item	Hours / week	Total hours
1- Lectures	**3/4**	**38**
3- Clinical	**1/4**	**7**
Total	**1**	**45**

- **B- Professional Information:**

1-Overall Aims of the Program

The overall goals of the course are to:

- **Enhance** the student's understanding of sports medicine, including injury prevention, injury mechanism, diagnosis and acute management, rehabilitation and return to sport.
- **Develop** a critical understanding of the concepts, theories, principles and practices of Sports Therapy.
- **Help** the student to develop their own academic, personal and professional potential in the context of lifelong learning.
- **Provide** a rigorous intellectual programme of study in the cognate areas of sports therapy and sports science, through an academic and applied experience which develops students' theoretical understanding and its range of application.
- **Prepare** students for undertaking research and to develop research skills, by the encouragement of analytical thinking, through a variety of learning modes within the context of Sports Therapy.
- **Provide** a stimulating and caring learning environment in which students feel secure and motivated to learn.
- **Contribute** to the enhancement of knowledge and clinical skills to enable the students to be safe and effective practitioners of sports medicine at a high level.
- **Enable** students to improve their own performance in technical, supervisory and management skills within the context of Sports Therapy.

2-Intended Learning Outcomes (ILOs)

2.a. Knowledge and Understanding:

By the end of the program, the candidate should be able to:

***2.a*.1. Interpret** information from a wide range of sources to inform professional practice.

***2.a*.2. Provide** critical discourse of theoretical and research evidence underpinning the management of sports injuries through written and spoken language.

***2.a*.3 .Analyze** critically the professional role within the context of sports medicine.

***2.a* .4.Demonstrate** by means of an independent research project their ability to produce a piece of work which displays conceptual, organizational and analytical qualities and informs their clinical practice.

***2.a* .5.Identify** relationship between exercise and health

***2.a* .6.Recognize** effectively, evaluate, diagnose and manage sports injuries.

***2.a* .7.Plan** effectively rehabilitation programs.

***2.a* .8.Demonstrate** an understanding of the ethical and legal issues which underpin professional practice.

***2.a* .9.Demonstrate** the ability to provide emergency care for sports related trauma in the recreational, training and competitive environment.

2.b. Intellectual Skills:

By the end of the program, the candidate should be able to:

2.b.1.Prescribing action to enhance the learning and performance of the component elements of sport.

2.b.2.Assess evidence to develop reasoned and informed argument in Sports Therapy context.

2.b.3.Describe data using a variety of appropriate techniques specific to Sports Therapy.

2.b.4.Use knowledge and information to solve problems in theoretical and Sport Therapy practical contexts.

2.b.5. Discusstheory and research paradigms in the field of sports therapy.

2.b.6. Apply existing Sports Therapy theories, concepts and techniques to solve new problems.

2.b.7.Demonstrate a high level of clinical reasoning in the management of sports injuries, which will inform improvements in clinical practice.

2.b.8.Demonstrate an evaluative approach to the application of practical clinical skills relevant to the practice of sports medicine, including sports massage, taping and the management of sports injuries from the acute stage until the return to sport.

2.b.9. Plan practical activities using appropriate techniques and procedures.

2.b.10.Analyse health issues, and health information and data that may be drawn from wide range of disciplines.

2.b.11.Provide coherent arguments from a range of contesting theories relating to health and health issues.

2.b.12.Recognise moral, ethical and safety issues which directly pertain to sports therapy, including professional codes of conduct.

2.c. Practical and Clinical Skills:

By the end of the program, the candidate should be able to:

2.c.1. Analyze information from a number of sources in order to gain a coherent understanding of a clinical case.

2.c.2. Use a range of diagnostic methods, tests and techniques for the assessment of sports injuries.

2.c.3. Demonstrate vocationally relevant skills in operating and managing human and technical resources in order to perform sport therapies and solve problems.

2.c.4. Prescribe suitable rehabilitation programs for specific populations.

2.c.5. Demonstrate effective communication with athletes and other members of the athlete support team where appropriate.

2.c.6. Improve emergency care for sports related trauma in the recreational, training and competitive sporting environment.

2.d- General and Transferable Skills:

By the end of the program, the candidate should be able to:

2.d.1.Use the Internet and data bases to identify retrieve and evaluate information

2.d.2.Use oral and written communication skills to effectively communicate complex arguments

2.d.3.Work effectively as a member of a team to achieve agreed objectives

2.d.4.Work independently using effective planning and time management skills

2.d.5.Evaluate own performance through self-appraisal and reflection

2.d.6.Use appropriate statistical methods to analyze and evaluate data

2.d.7.Use ICT skills to assemble analyze, present and communicate ideas

2.d.8.Select and manage information using appropriate ICT, including the internet, word processing, spreadsheets and statistical software packages.

2.d.9.Select appropriate quantitative and qualitative techniques for data collection, presentation, analysis and problem solving.

2.d.10.Listen to appreciating and evaluating the view of others.

3-Course contents:

- Sport physiology,
- Tissue injury and healing,
- Stretching and injury prevention,
- Different types of sport injuries,
- Rehabilitation of sport injuries.

4-Teaching and Learning Methods

Methods used:

-Modified Lectures: Seminars, scientific meetings and conferences.

-Small group discussions,

-Problem solving sessions,

-Self learning: Projects, case studies, clinical trials,

-Clinical and Practical classes

Teaching plan:

Lectures: Large group sessions in the lecture theatre at the department using data show.

Tutorials: Division of students into small groups.

Clinical and Practical classes: At inpatients wards and outpatient clinics.Every student is expected to present 3 topics and 3 cases.

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	3 times/week between 9 to 10 am	One hour each	3 hours
Clinical and Practical	One times /week between 10 am to 1 pm	One hours each	2 hours
Tutorial	One time / week	One hour	1 hour

	between 1 to 2 pm		
Total			**5 hours**

5. Student Assessment Methods

5-A) Attendance Criteria: 75% is the minimum acceptable attendance.

5-B) Assessment Tools:

Tool	Purpose (ILOs)
Written examination	To assess knowledge and understanding
Oral examination	To assess knowledge, understanding, intellectual, general and transferable skills
Clinical and Practical examination	To assess practical and clinical skill

5- C) Time Schedule:

Final Exam	Week
- **Written,** - **Oral,** - **Clinical & Practical.**	**At week 96** (end of 2nd part)

5-D) Weighing System:

Examination	Marks allocated	% of Total Marks
1. Written,	**20**	**40%**
2. MCQ	**5**	**10%**
3. Clinical and Practical,	**15**	**30%**
4. Oral.	**10**	**20%**
Total	**50**	**100%**

Students will pass if they get at least 60% in all the exams.

Formative Assessment:

Sample **exam** closely matching the final **exam** / 3 months and students know their marks after.

5-E) Examinations Description:

Examination	Description
a- Written,	- Five short assay questions + commentary case,
b- Clinical,	- One case topresent and discuss,
c- Practical,	- Five plain x-rays to write a report and discuss.
d- Oral.	- One session.

6. List of References

6.1-Essential Books (Text Books):

- Practical manual of physical medicine and rehabilitation by Jackson C. Tan.

- Krusen's textbook of Physical medicine& Rehabilitation.

6.2-Recommended Books:

- Tidy's massage and therapeutic exercises by porter S.

- Rehabilitation Medicine by DeLisa.

-Sports Injury: Prevention & Rehabilitation

Eric Shamus, Jennifer Shamus,2001.

-Sports Medicine and Rehabilitation: by Ralph Buschbacher MD, Nathan Prahlow MD Second edition

6.3- Periodicals, Web sites, … etc:

- **Periodicals** :
  - Archives of Physical Medicine and Rehabilitation Journal.

- Journal of the Egyptian society of rheumatology and Rehabilitation.

- **Web Sites:**
  - www.medscape.com,
  - www.emedicine.com,
  - www.gigapedia.com.

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Lecture halls,
- Small group classes,
- Laboratories for electromyography, nerve conduction studies and gait analysis,
- Information technology / AV aids: computers and data shows, CD-ROMs,
- Rehabilitation equipments and a gym.

مقرر الإصابات الرياضية:

Course Professor:	Signature & date:
Head of department:	Signature & date:

Advanced Clinical Immunology Course specification

- **Course Title:** Advanced Clinical Immunology
  - **Code:** RHUM**712**,
- **Department offering the course:** Rheumatology, Rehabilitation and Physical Medicine
- **Academic year of course:** 2013-2014
- **Department element of course:** Major,
- **Academic Level:** 2nd part,
- **Date of specifications approval:**
  - **Department Council:** 2013-2014
  - **Faculty Council:** 2013-2014

A) Basic Information:

- **Allocated marks: 50** marks,
- **Course duration:** 45 weeks of teaching,
- **Credit hours :** 1 hours/week = **45** total credit hours

Item	Hours / week	Total hours
1- Lectures	**3/4**	**38**
3- Clinical	**1/4**	**7**
Total	**1**	**45**

B- Professional Information:

1. Overall Aims of Course

The overall goals of the course are to:

- **Provide** specialized knowledge in immunology and integrate with the knowledge of the relationship in professional practice of rheumatology.
- **Give** students the appropriate scale of the professional skills, and use appropriate technological means to serve the professional practice.
- **Use** the resources available to achieve the highest benefit.
- **Allow** students to behave in a manner reflecting the commitment to integrity, credibility and commitment to the rules of the profession.
- **Develop** performance academically and professionally and be able to

continuous learning**.**

- **Allow** them to have the experience for problem solving and decision-making in atypical clinical situations.
- **Support** appropriate professional education necessary for the management and organization of health problems within the community
- **Increase** the students' trend for evidence-based medicine practice to support up profession in Rheumatology, Rehabilitation and Physical Medicine.
- **Give**students lifelong learning talent necessary for continuous professional development and research establishment.**Allow**students to show skills necessary for proper patients' interrogation and evaluation.

3- Intended Learning Outcomes (ILOs)

By the end of the course, the students will be able to:

2.a. Knowledge and Understanding:

By the end of the course, students should be able to:

2.a.1.List current and emerging data on the pathogenesis and management of different rheumatic diseases.

2.a.2.Identify theories and fundamentals related to the physiology of musculoskeletal system and the immune system of human and its response

2.a.3.*Outline* clinical and molecular genetics, etiology, pathogenesis, and basic mechanisms of rheumatic diseases and related disorders**.**

2.a.4. Recognize the scientific basis of the methodology, and list indications of laboratory tests, physical tests and imaging procedures used in diagnosis and monitoring of different rheumatic, orthopedic, neurologic disorders and others in need for rehabilitation.

2.a.5.Be aware of an enhanced patients' health outcome through the development and maintenance of a humanized rehabilitation service in the community.

2.b. Intellectual Skills:

By the end of the course, students should be able to:

2.b.1. Analyze and evaluate the information of the body physiology and immunology and analogies to solve rheumatological and musculoskeletal problems**.**

2.b.2. Point-out basic science of pathology, genetics, immunology, and biochemistry of connective tissue, bone, joint, and muscle with clinical care of patients with rheumatic disorders and/or patients in rehabilitation setting.

2.b.3. Identifyfrom different diagnostic alternatives and interpret various diagnostic procedures to reach a final diagnosis.

2.b.4.Point-out an investigational plan for patients regarding disease presentations and interpret the results of used diagnostic procedures to solve professional problems.

2.b.5.Discuss advance in investigational technique in rheumatic diseases

2.c. Practical and Clinical Skills

By the end of the course, students will be able to:

2.c.1. **Investigate** immune system by proper laboratory and immunological tests for accurate diagnosis and management of autoimmune rheumatic diseases and use professionally the immune therapy for some rheumatological diseases.

2.c.2.Demonstrate better awareness of current practice and technological means for management of rheumatological emergencies.

2.c.3.Identify prospects for future developments within Rheumatology, and immunology.

2.c.4.Contribute specific knowledge and skills of Rheumatology, and immunology to other specialties to improve communication.

2.d. General and Transferable Skills

By the end of the course, students will be able to:

2.d.1. Communicate effectively with other health care professionals to discuss and exchange ideas and arguments,

2.d.2. Use sources of biomedical information and communication technology to remain up- to-date with advances in knowledge and practice,

2.d.3. Retrieve scientific information clearly to others in written, electronic and oral forms to improve performance,

2.d.4. Determine personal learning needs required for continuous professional development,

2.d.5. Use the sources of biomedical information and communication technology to teach others and evaluate their clinical practice,

2.d.6. Work effectively with an interdisciplinary team within time-planned shared programs.

3- Course Contents:

- Inflammation:

-Inflammatory cells,

-Inflammatory response

-Mediators of inflammation

- Major histocombitability complex
- Antigen presentation
- Complement system.
- Immune response,
- Apoptosis
- chemokines
- Immunoglobulins
- Auto antibodies,
- Antinuclear antibodies.
- Assessment of acute phase response
- Serological investigations of autoimmune disorders

Immunological investigations

Antibody assays,

4-Teaching and Learning Methods

Methods used:

1- **Modified Lectures:** Seminars, scientific meetings and conferences.

2- **Small group discussions,**

3- **Problem solving sessions,**

4- **Self learning:** Projects, case studies, clinical trials,

5- Clinical and Practical classes

Teaching plan:

Lectures: Large group sessions in the lecture theatre at the department using data show.

Tutorials: Division of students into small groups.

Clinical and Practical classes: At inpatients wards and outpatient clinics.Every student is expected to present 3 topics and 3 cases.

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	3 times/week between 9 to 10 am	One hour each	3 hours
Clinical and Practical	One times /week between 10 am to 1 pm	One hours each	2 hours
Tutorial	One time / week between 1 to 2 pm	One hour	1 hour
Total			**5 hours**

5. Student Assessment Methods

5-A) Attendance Criteria: 75% is the minimum acceptable attendance.

5-B) Assessment Tools:

Tool	Purpose (ILOs)
Written examination	To assess knowledge and understanding
Oral examination	To assess knowledge, understanding, intellectual, general and transferable skills
Clinical and Practical examination	To assess practical and clinical skill

5- C) Time Schedule:

Final Exam	Week
- Written, - Oral, - Clinical & Practical.	**At week 96** (end of 2nd part)

5-D) Weighing System:

Examination	Marks allocated	% of Total Marks
a- Written,	**20**	**40%**
b- MCQ	**5**	**10%**
c- Clinical and Practical,	**15**	**30%**
d- Oral.	**10**	**20%**
Total	**50**	**100%**

Students will pass if they get at least 60% in all the exams.

Formative Assessment:

Sample **exam** closely matching the final **exam** / 3 months and students know their marks after.

5-E) Examinations Description:

Examination	Description
a- Written,	- Five short assay questions + commentary case,
b- Clinical,	- One case topresent and discuss,.
c- Practical,	- A report to discuss.
d- Oral.	- One session.

6. List of References

6.1- 6.1-Hand books: ……Basic immunology handbook. ……

6.2- Text books: -Cellular and Molecular Immunology Text book

- Rheumatology and clinical immunology book **2008 Royal collegg of physicians of London second edition**

- Rheumatology and Immunology Hardcover – November, 1986

6.3- Journals: …… Journal of clinical Immunology……..

6.4-Websites:……http://immunology.org/……

Periodicals:

- Annals of Rheumatic Diseases.
- Arthritis and Rheumatism.
- British Journal of Rheumatology.

- **Web Sites:**
  - www.medscape.com,
  - www.emedicine.com,
  - www.gigapedia.com.

7- <u>Facilities required for teaching and learning</u>:

Facilities used for teaching this course include:

- Lecture halls,
- Small group classes,
- Information technology / AV aids: computers and data shows, CD-
- -Laptop for lectures presentation –
- Data show projector
- Laser pointer and white board
- Comfortable well prepared classroom ROMs.

<u>مقرر المناعة المتقدمة:</u>

Course Professor:	Signature & date:
Head of department:	Signature & date:

Adolescent Rheumatology Course specification

- **Course Title:** Rheumatic Diseases and Immunology
  - **Code:**RHUM **713**
- **Department offering the course:** Rheumatology, Rehabilitation and Physical Medicine,
- **Academic year of course:** 2013-2014,
- **Department element of course:** Major,
- **Academic Level:** 2nd part,
- **Date of specifications approval:**
  - **Department Council:**3 / 9 / 2013, No. (201).
  - **Faculty Council:15**/ 9 / 2013, No. (356).

A) Basic Information:

A) Basic Information:

- **Allocated marks: 50** marks,
- **Course duration:** 45 weeks of teaching,
- **Credit hours :** 1 hours/week = **45** total credit hours

Item	Hours / week	Total hours
1- Lectures	**3/4**	**38**
3- Clinical	**1/4**	**7**
Total	**1**	**45**

B- Professional Information:

1. Overall Aims of Course

The overall goals of the course are to:

- ***Provide***students with an appropriate background covering rheumatic diseases as regard causes, pathogenesis, diagnosis and management.
- ***Provide***students the ability to list differential diagnoses of rheumatic diseases.

- ***Build up*** thestudents' skill to organize treatment plans for rheumatic diseases.
- ***Allow*** them to have the experience for problem solving and decision-making in atypical clinical situations.
- ***Increase*** the students' trend for evidence-based medicine practice to support up profession in Rheumatology, Rehabilitation and Physical Medicine.
- ***Give***students lifelong learning talent necessary for continuous professional development and research establishment.
- ***Provide*** the students with the professional ethical values essential to demonstrate appropriate attitude towards patients and colleagues.
- ***Allow***students to show skills necessary for proper patients' interrogation and evaluation.
- ***Support*** appropriate professional education necessary for the management and organization of health problems within the community.

2- Intended Learning Outcomes (ILOs)

2.a. Knowledge and Understanding:

By the end of the course, students should be able to:

2.a.1.List current and emerging data on the pathogenesis and management of different rheumatic diseases.

2.a.2.Recognize legal and ethical principles for professional practice consistent with values of proper medical conduct.

2.a.3.Outline common physical and rheumatic emergencies.

2.a.4.Identify objectives for clinical trials and emerging challenges in the field Rheumatology, Rehabilitation and Physical Medicine.

2.a.5.Recognize an enhanced patients' health outcome through the development and maintenance of a humanized rehabilitation service in the community.

2.b. Intellectual Skills:

By the end of the course, students should be able to:

2.b.1.Analyze symptoms and signs of patients and construct differential diagnoses for the different rheumatic diseases.

2.b.2.Point-out an investigational plan for patients regarding disease presentations and interpret the results of used diagnostic procedures to solve professional problems.

2.b.3.Writea design for the pathogenesis, diagnosis and treatment of different rheumatic diseases.

2.b.4.Analyze scientific subjects of recent information related to Rheumatology, Rehabilitation and Physical Medicine.

2.b.5.Classify the indications and rationale of referring patients to other related specialties according to risks and severity.

2.b.6.Discuss advance in rehabilitation approaches and management of rheumatic diseases based on recent data, evidence-based medicine and professional vision for future developmental plans.

2.c. Practical and Clinical Skills:

By the end of the course, students should be able to:

2.c.1.Demonstrate skills to perform intra-articular, soft tissue and botulinum injections.

2.c.2.Recognize and practice up-and-coming challenges in Rheumatology, Rehabilitation and Physical medicine.

2.c.3.Demonstrate better awareness of current practice and technological means for management of rheumatological emergencies.

2.c.4.Identify prospects for future developments within Rheumatology, Rehabilitation and Physical Medicine.

2.c.5.Identify specific knowledge and skills of Rheumatology, Rehabilitation and Physical Medicine to other specialties to improve joint communication.

2.d. General and Transferable Skills:

By the end of the course, students should be able to:

2.d.1.Communicate effectively with other health care professionals to discuss and exchange ideas and arguments.

2.d.2.Use sources of biomedical information and communication technology to remain up- to-date with advances in knowledge and practice.

2.d.3.Retrieve scientific information clearly to others in written, electronic and oral forms to improve performance.

2.d.4.Determine personal learning needs required for continuous professional development.

2.d.5.Use the sources of biomedical information and communication technology to teach others and evaluate their clinical practice.

2.d.6.Work effectively with an interdisciplinary team within time-planned shared programs.

3-Course contents:

- Joint development
- Infection, arthritis and adolescent
- Adolescent arthritides and adolescent systemic connective tissue diseases.

4-Teaching and Learning Methods

Methods used:

-Modified Lectures: Seminars, scientific meetings and conferences.

-Small group discussions,

-Problem solving sessions,

-Self learning: Projects, case studies, clinical trials,

-Clinical and Practical classes

Teaching plan:

Lectures: Large group sessions in the lecture theatre at the department using data show.

Tutorials: Division of students into small groups.

Clinical and Practical classes: At inpatients wards and outpatient clinics.Every student is expected to present 3 topics and 3 cases.

Time plan:

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5. Student Assessment Methods

5-A) Attendance Criteria: 75% is the minimum acceptable attendance.

5-B) Assessment Tools:

Tool	Purpose (ILOs)
Written examination	To assess knowledge and understanding
Oral examination	To assess knowledge, understanding, intellectual, general and transferable skills
Clinical and Practical examination	To assess practical and clinical skill

5- C) Time Schedule:

Final Exam	Week

- **Written,** - **Oral,** - **Clinical & Practical,**	**At week 96** (end of 2nd part)

5-D) Weighing System:

Examination	Marks allocated	% of Total Marks
a- Written,	**20**	**40%**
b- MCQ	**5**	**10%**
c- Clinical and Practical,	**15**	**30%**
d- Oral.	**10**	**20%**
Total	**50**	**100%**

Students will pass if they get at least 60% in all the exams.

Formative Assessment:

Sample **exam** closely matching the final **exam** / 3 months and students know their marks after.

5-E) Examinations Description:

Examination	Description
a- Written, **b- Clinical,** **c- Practical,** **d- Oral**.	- Five short assay questions + commentary case, - One long and one short rheumatology cases topresent and discuss,. - Five plain x-rays to write a report and discuss. - One session.
2- Log Book: completed and signed by the head of the department.	

6. List of References

6.1-Essential Books (Text Books):

Adolescent rheumatology:1999 by David A. Isenber

- **Web Sites:**

- www.medscape.com,
- www.emedicine.com,
- www.gigapedia.com.

7- <u>Facilities required for teaching and learning</u>:

Facilities used for teaching this course include:

- Lecture halls,
- Small group classes,
- Information technology / AV aids: computers and data shows, CD-ROMs,

<u>مقرر روماتيزم البالغين:</u>

Course Professor:	Signature & date:
Head of department:	Signature & date:

We certify that all information required to deliver this program is contained in the above specification and will be implemented. All course specification for this program are in place.	
Program coordinators: Name: **Dr. Nashwa I Hashaad,** **Dr. Rasha M Fawzy .**	Signature & date:
Head of department: Name: **Prof. Dr. Monir Serag El-Deen**	Signature & date:
Dean: Name:	Signature & date:
Executive director of the quality assurance unit: Name:	Signature & date: