جامعة بنها
كلية الطب البشرى
قسم الروماتيزم والتأهيل والطب الطبيعى

توصيف برنامج دبلوم الروماتيزم والتأهيل والطب الطبيعى
(عام٢٠١٣ -٢٠١٤)

* معلومات أساسية : A- Basic Information

١ ـ اسم البرنامج : **Diploma Rheumatology, Rehabilitation & Physical Medicine**

٢ ـ طبيعة البرنامج : Multiple (متعدد)

٣ـ الأقسام المسئولة عن البرنامج:

- القسم المانح للدرجه: - Rheumatology, Rehabilitation & Physical Medicine Department,
- ا الاقسام المشتركه:
  - Internal Medicine Department,
  - Anatomy and Embroylogy Department
  - Physiology Department.

٤ـ تاريخ إقرار البرنامج فى مجلس القسم : ٣ـ٩ـ٢٠١٣ (٢٠١)

٥ـ تاريخ إقرار البرنامج فى مجلس الكلية: ١٥ـ٩ـ٢٠١٣ (٣٥٦)

٦ـ منسق البرنامج: **Dr. Nashwa I. Hashaad**

Dr. Rasha M. Fawzy

٧ـ المراجعة الداخلية للبرنامج:

Prof. Dr. Samia M Abdelmonem

8- المراجع الخارجى:

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- Overall Aims of the Program:

The overall aims of the program are to:

1.1. ***Provide*** students with basic knowledge of normal and abnormal biomechanics of the musculoskeletal system,

1.2.***Give*** students background covering musculoskeletal disorders as regard causes, clinical presentation, diagnosis and management.

1.3. ***Allow*** issues covering the common and important areas in the field of physical therapy and physiotherapeutic modalities, electrodiagnostic procedures, connective tissue diseases and emergencies.

1.4. ***Support*** analysis of professional problems and planning for their management in the area of Rheumatology, Rehabilitation and Physical medicine.

1.5. ***Use*** of modern resources for organization of specialized professional skills in problem solving and decision-making.

1.6. ***Provide*** appropriate ethical education necessary for establishment of excellent communication with patients and colleague.

1.7.***Build-up*** lifelong learning competencies necessary for continuous professional development.

1.8. ***Allow*** role for practice and application of students' profession in community development.

٢ ـ المخرجات التعليمية المستهدفة من البرنامج :

2-Intended Learning Outcomes (ILOS):

٢.أ ـ المعرفة والفهم :

2.a. Knowledge and Understanding

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

2.a.1. Understand the normal structure and function of the body's musculoskeletal and neurological systems.

2.a.2. Know common causes and complications of arthritis and musculoskeletal disorders (acute and chronic) as well as the pathogenesis and management of rheumatic diseases.

2.a.3. Describe physical disability of musculoskeletal diseases, its burden on the community and its management (physical therapy and rehabilitation measures).

2.a.4. Recognise the common causes of chronic pain, the complication of inactivity and common emergencies occurring at the rehabilitation unit.

2.a.5. Recognize physical methods for pain relief in different musculoskeletal disorders.

2.a.6. Describe the principles of electrodiagnostic procedures in clinical practice.

2.a.7. Recognize the basic principles of the function of the immune system and specific investigational plans for the diagnosis of different rheumatic diseases.

2.a.8. Describe the basic issues of patients' health and safety while providing physical therapy, rehabilitation programs or management of musculoskeletal disorders.

2.a.9. Highlight the importance of physical therapy and rehabilitation including complementary and alternative approaches in health care services to improve medical practice within the community.

2.a.10. Highlight the patients' emotional concern and outline relevant ethical and legal requirements in the management of patients.

٢. ب ـ القدرات الذهنية :

2.b. Intellectual Skills:-

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

2.b.1. **Develop** the basic principles of formulating specific clinical sheets and the art of utilizing sources of information for the diagnosis, differential diagnosis, and problem solving in musculoskeletal and rheumatic diseases.

2.b.2. Analyze the clinical and investigational immunologic database to problem solving of atypical clinical presentations.

2.b.3. Interpret patient symptoms and physical findings in terms of their anatomic, physiologic, pathologic and functional diagnostic importance.

2.b.4. create a list of initial diagnostic hypotheses (differential diagnosis) for each problem.

2.b.5. Analyze and present researches ideas as well as recent subjects related to the Rheumatology, Physical Medicine and Rehabilitation.

2.b.6. Interpret risk factors for disease or injury and determine strategies for appropriate management.

2.b.7. Formulate appropriate management plans for patients with rheumatic or musculoskeletal diseases (acute and chronic), including medical, physical and surgical approaches.

2.b.8. Analyze basic approaches to avoid and manage physical disability within the community.

2.b.9. Evaluate indications and prescription of orthoses and prostheses of different parts of body.

٢.ج . مهارات مهنية وعملية :

2.c. Practical and professional Skills:-

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

2.c.1. **Take** a complete and focused medical history and formulates specific clinical database to record common medical problems.

2.c.2. Identify tests of evaluation of motor function and musculoskeletal disorders.

2.c.3. Perform technical procedures, diagnostic and therapeutic in the field of Rheumatology, Rehabilitation and Physical medicine including electrodiagnostic tests.

2.c.4. Apply physical assessment and evaluation for patients with anatomical deformities and different disabilities.

2.c.5. Perform routine therapeutic procedures such as local injections, joint aspiration, tractions and manipulation.

2.c.6. Write comments on electromyography and nerve conduction studies.

2.c.7. Write complete prescriptions of different types of orthoses and prostheses suitable for any age group (child, adult or elderly).

٢.د . مهارات عامة ومنتقلة :

2.d. General and transferable skills:-

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

2.d.1. Establish effective interpersonal relationship to communicate ideas and arguments with other health care professionals,

2.d.2. Retrieve scientific information clearly in written, electronic and oral forms,

2.d.3. **Determine** personal learning needs necessary for continuous learning,

2.d.4. Use all sources of biomedical information and communication technology to remain up- to-date with advances in knowledge and practice,

2.d.5. Work effectively with an interdisciplinary team within time-planned programs,

2.d.6. Establish life-long self-learning required for continuous professional development.

3- Academic Standards of Diploma degree Rheumatology, Rehabilitation & Physical Medicine, approved in department council September 2013 and in faculty council September 2013, ٣- المعايير الأكاديمية للبرنامج:

(ملحق1)

a) المعايير القياسية لبرامج الدراسات العليا (درجة الماجستير)الصادرة عن الهيئة القومية لجودة التعليم والإعتماد (مارس ٢٠٠٩)

- **Academic Reference Standards (ARS) of Master Program,** which were issued by the National Authority for Quality Assurance & Accreditation NAQAA**E** (2009), **(ملحق ٢)**

5) Program structure and contents: 5 ـ هيكل ومكونات البرنامج

أ ـ مدة البرنامج : سنه و نصف

<u>One and half year to pass the Diploma degree:</u>

- **1st part:** One Semester.
- **2nd part:** Two Semesters.

Program structure ب ـ هيكل البرنامج:

- **Total hours of program 34 credit hours**

- **Theoretical : 18 hours**
- **Practical: 5 hours**
- **Logbook:5 hours**
- **University and faculty requirement:6 hours**

ج- مستويات ومقررات البرنامج:

Compulsory

البند	المقرارات	الكود	الساعات المعتمدة
متطلبات	**الجامعة والكلية**	**UNIV 501**	**٦ ساعات**
الجزء الأول	يشمل الآتي:		**٧ ساعات**
	مقرر علمي في التشريح التطبيقي فيما يختص بالجهاز الحركي والعصبي والنفسي	**RHUM 501**	**١.٥ ساعة**
	مقرر علمي وعملي في الفسيولوجيا التطبيقية فيما يختص بالجهاز الحركي والعصبي والدورة الدموية والتنفس والغدد الصماء	**RHUM 502**	**١.٥ ساعة**
	مقرر طبي وإكلينيكي في الأمراض الباطنة العامة وتخصصاتها	**RHUM 503**	**١.٥ ساعة**
	مقرر نظرى وشفهى فى الطبيعة التطبيقية	**RHUM 504**	**١.٥ ساعة**
	مشاهدات تطبيقية بقسم الروماتيزم والتأهيل لما درس بالمواد السابقة	**RHUM 505**	**١ساعة**
كراسة الأنشطة	تسجل بها الأنشطة المختلفة مثل حضور الندوات العلمية والمؤتمرات والدورات		**٥ ساعات**

	التدريبية وإجراء أبحاث إضافية		
الجزء الثانى	يشمل الآتي:		**١٦ ساعة**
	مقرر علمي في الأمراض الروماتيزمية والعلاج الدوائي والجراحي	**RHUM 506**	**٣ ساعة**
	مقرر علمي وعملي في أمراض الجهاز الحركي الأخري	**RHUM 507**	**٣ ساعة**
	مقرر علمي وعملي في أمراض المناعة	**RHUM 508**	**٣ ساعة**
	مقرر علمي وعملي في الإستعمالات الإكلينيكية للوسائل الطبيعية في التشخيص والعلاج	**RHUM 509**	**٣ ساعة**
	مقرر علمي وعملي في التأهيل والأطراف الصناعية والأجهزة التعويضية	**RHUM 510**	**٢ ساعة**
	تدريب عملي وإكلينيكي لما جاء بالبنود السابقة	**RHUM 511**	**٢ ساعة**
الاجمالى			**٣٤ ساعة**

First part (one semester)

a- Compulsory courses:

Course Title	Course Code	No. of hours/week			Total teaching hours
		Theoretical	Practical	Total/W	
Applied Anatomy	RHUM 501	1	½	1½	22½
Applied Physiology	RHUM 502	1	½	1½	22½

Internal Medicine	RHUM 503	1	½	1½	22½
Applied Physics	RHUM 504	1	½	1½	22½
Total		4	2	6	90

b- Elective courses: none

Second part (two semesters)

a- Compulsory courses:

Course Title	Code	No. of hours/week			Total teaching hours
		Theoretical	Clinical	Total	
Rheumatology (Rheumatic Disease /Immunology)	RHUM 506/508	4	2	6	180
Rehabilitation Medicine (Musculoskeletal Disorders/ Physica Medicine/ Rehabilitation Medicine)	RHUM 507/509/510	5	3	8	240
Practical	RHUM 511	2			60
Log Book Activities					5

Total	485

b- Elective courses: none.

٦- محتويات المقرات (راجع توصيف المقررات).

7- Program admission requirements ٧ ـ متطلبات الإلتحاق بالبرنامج

مادة (١٥) : شروط القيد بإحدى دبلومات التخصص يشترط فى قيد الطالب للدراسة الخاصة بإحدى دبلومات التخصص أن يكون حاصلا على درجة البكالوريوس فى الطب والجراحة من إحدى جامعات ج . م . ع أو على درجة معادلة لها من معهد علمى معروف من الجامعة .

١- أن يكون قد أمضى السنة التدريبية أو ما يعادلها .

٢- أن يتفرغ للدراسة لمدة سنة على الأقل فى الجزء الثانى (فصلين دراسيين).

٨ـ القواعد المنظمة لإستكمال البرنامج : (طبقاً لما هو مذكور فى اللائحة)

مادة (١٦) : يشترط فى الطالب لنيل دبلوم التخصص :

أ – حضور المقررات الدراسية والتدريبات الإكلينيكية والعملية بصفة مرضية طبقا للساعات المعتمدة

ب– أن يقوم بالعمل كطبيب مقيم أصلى أو زائر لمدة سنة على الأقل فى قسم التخصص ٠

جـ– أن ينجح فى امتحان القسمين الأول والثانى ٠

مادة (١٩) : الطالب المقيد لدرجة الماجستير ونجح فى امتحان القسم الأول والثانى ولم يستكمل الرسالة خلال مدة القيد المحددة باللائحة يمكنه أن يحصل على شهادة دبلوم التخصص ٠

مادة (٢٠) : يكون التقدم للقيد لدبلومات التخصص مرة واحدة فى السنة بنفس نظام الماجستير (مادة ٥) ٠

مادة (٢١) : نظام الامتحان للدبلومات نفس نظام امتحان الماجستير (مادة ٩) ٠

مادة (٢٢) : تبين الجداول فى الباب الرابع (مادة ١٣) مقررات الدراسة والساعات المعتمدة التى تدرس لنيل دبلومات التخصص ويحدد مجلس الكلية بعد أخذ رأى مجالس الأقسام المختصة الموضوعات التى تدرس فى كل مقرر ٠

كما تبين للدبلوم أيضا الاختبارات التحريرية والإكلينيكية والشفوية والعملية للدبلوم (المقررات الدراسية ونظام الامتحان للدبلوم والماجستير واحدة ما عدا الرسالة للماجستير فقط)٠

9- Students Assessment Method

٩- طرق وقواعد تقييم الملتحقين بالبرنامج

م	الطريقة	ما تقيسة من مخرجات التعلم المستهدفة
١	**Written examination**	To assess knowledge & understanding and intellectual skills. **2.a.1.→ 2.a.10, 2.b.1. → 2.b.9.**
٢	**Oral examination**	To assess knowledge & understanding , intellectual skills & general & transferable skills. **2.a.1.→ 2.a.10, 2.b.1. → 2.b.9, 2.d.1. → 2.d.6.**
٣	**Practical examination**	To assess knowledge & understanding , intellectual skills, practical & clinical skills and general & transferable skills. **2.a.1.→ 2.a.10, 2.b.1. → 2.b.9, 2.c.1. → 2.c.7, 2.d.1. → 2.d.6**

First part:

المقرر	الاختبار	الـــدرجة				إجمالي
		تحريري	شفهي	عملي	إكلينيكي	

مقـــرر التشـــريح التطبيقي	إختبار تحريري مدته ٣ ساعات +مع إختبار شفوي.	٢٥	٥٠	---	٧٥
مقـــــــــــرر الفســـــيولوجيا التطبيقية	إختبار تحريري مدته ٣ ساعات + إختبار شفهي.	٢٥	٥٠	----	٧٥
مقررالأمـــــراض الباطنة العامة	إختبار تحريري مدته ثلاث ساعات + إختبـــار إكلينيكـــى + إختبـــار شفهي.	٢٥	٢٥	٢٥	٧٥
مقرر الطبيعة التطبيقية	إختبار تحريري مدته ثلاث ساعات + إختبار عملى + اختبار شفهي	٢٥	٢٥	٢٥	٧٥
إجمالي الدرجات					٣٠٠

Second part:

المقرر	الاختبار	إجمالي			
		تحريري	شفهي	إكلينيكي عملي	
مقررالأمراض الروماتيزمية وأمراض المناعة	اختبار تحريري مدته٣ ساعات + إختبار إكلينيكي+ إختبار عملى+ إختبار شفهي	١٥٠	٣٠	١٢٠	٣٠٠
أمراض الجهاز الحركي الأخري والطب الطبيعي والتأهيل والأطراف الصناعية والأجهزة التعويضية والإستعمالات	إختبار تحريري مدته ٣ ساعات في أمراض الجهاز الحركي الأخري والطب الطبيعي والتأهيل والأطراف الصناعية والأجهزة التعويضية + إختيار عملي + شفوي + إكلينيكى	٢٠٠	٥٠	١٥٠	٤٠٠

الإكلينيكية للوسائل الطبيعية في التشخيص والعلاج					
الاجمالي		٧٠٠			

10- Evaluation of Program: ١٠ ـ طرق تقويم البرنامج:

Evaluator	Tools	Sample
Internal evaluator(s) مقييم داخلى **Prof. Dr. Sahar Saad Ganeb**	**Focus group discussion Meetings**	**report ٢-١**
External Evaluator(s) مقييم خارجى **Prof. Dr. Abdel-Samad I El Hawala**	**Reviewing according to external evaluator checklist report of NAQAA.**	**٢-١ report**
Senior student (s) طلاب السنة النهائية	مقابلات , استبيان	**all**
Alumni الخريجون	مقابلات ،استبيان	**Not less than 50% From the last 3 ye**
Stakeholder (s) أصحاب العمل	مقابلات ،استبيان	**Samples represent From all sectors**

١١- استراتيجيات التعليم و التعلم:

١-استراتيجة التعلم النشط
٢- استراتيجة التعليم المبني على المخرجات
٣- استراتيجة التعليم المبني على حل المشاكل

المسئول عن البرنامج : التوقيع التاريخ : / /

Program Coordinator:

Name Dr ……..... Signature……..Date ……

الملحقات

ملحق ١: Academic standards of the program (الوثيقة).

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

ملحق 3: مصفوفة المعايير الأكاديمية للبرنامج مع المعايير القياسية للدراسات العليا الصادرة عن الهيئة.

ملحق ٤: مصفوفة المضاهاه بين المعايير المتبناه لبرنامج ماجستير الروماتيزم و التأهيل مع أهداف و نواتج تعلم البرنامج.

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

ملحق ٦: توصيف المقررات.

Academic standard of the program: ملحق (١)

جامعة بنها
كلية الطب
قسم الروماتيزم والتأهيل والطب الطبيعى

وثيقة المعايير الأكاديمية المرجعية لبرنامج الماجستير

Academic Reference Standards (ARS) for Diploma Degree in Rheumatology, Rehabilitation and Physical Mdicine

1. Graduate Attributes:

1-1 Application of specialized knowledge gained in the professional practice.

1-2 Identifying professional problems and propose solutions for their management in the area of Rheumatology, rehabilitation and physical medicine.

1-3 Mastery of professional skills and the use of appropriate technological means in professional practice in Rheumatology, rehabilitation and physical medicine.

1-4 Communication and lead teams through systemic employment and build up lifelong learning competencies necessary for continuous professional development in the field of Rheumatology, rehabilitation and physical medicine.

1-5 Decision in the light of the available information and allow issues covering the common and important areas in the field of physical therapy and connective tissue diseases and emergencies.

1-6 Employ available resources efficiently for management of rheumatological cases and support patients with disability.

1-7 To be aware with his role in community development and provide

patients with disability and communication disorders solutions to modify their life.

1-8 Disposition reflecting integrity and credibility of the profession and the rules and accept accountability.

1-9 Recognize the need for life long learning for continuous professional development in Rheumatology, rehabilitation and physical medicine

2. Academic Standards:

2.1. Knowledge and understanding:

By the end of Master program, the graduate should recognize and understand the followings:

2.1.1 Theories, basic and specialized knowledge in the field of Rheumatology, Rehabilitation and Physical Medicine as well as some neurological conditions

2.1.2 Moral and legal principles of professional practice in the area of Rheumatology, Rehabilitation and Physical Medicine.

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

2.1.4 The impact of professional practice of rheumatology, rehabilitation and physical medicine on the environment and work to preserve the environment through outline the basic issues of patients' health and safety while providing physical therapy, rehabilitation programs or management of musculoskeletal disorders.

2.2. Intellectual skills:

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

2.2.1 Identify and analyze problems in the field of Rheumatology, Rehabilitation and Physical Medicine, arranged according to their own

priorities , formulating specific clinical sheets and utilizing sources of information for the diagnosis, differential diagnosis, and problem solving in musculoskeletal and rheumatic diseases.

2.2.2 Solve specialized problems in the field in the field of Rheumatology, Rehabilitation and Physical Medicineand make an investigational immunologic database to solve problems of atypical clinical presentations.

2.2.3 Analytical reading and research topics related to Rheumatology, Rehabilitation and Physical Medicineand interpret patient symptoms and physical findings in terms of their anatomic, physiologic, pathologic and functional diagnostic importance.

2.2.4 Risk assessment for disease or injury and determine strategies for ppropriate management.

2.2.5 Professional decision-making in the light of the available information such as prescription of orthoses and prostheses of different parts of body.

2.3. Practical/Professional skills

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

2.3.1 Application of professional skills in the field of Rheumatology, Rehabilitation and Physical Medicine,

2.3.2 Writing professional reports through physical assessment and evaluation for patients with anatomical deformities, evaluation of motor function and different disabilities

2.4. Communication and transferable skills:

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

2.3.1 Application of professional skills in the field of Rheumatology, Rehabilitation and Physical Medicine,

2.3.2 Writing professional reports through physical assessment and evaluation for patients with anatomical deformities, evaluation of motor function and different disabilities

اعتماد مجلس القسم رقم (200) بتاريخ 8/7/2103

رئيس مجلس القسم

اعتماد مجلس الكلية

ملحق (٢) :المعايير القياسية العامة للدراسات العليا الصادرة عن الهيئة

برامج الدبلوم

١- موصفات الخريج

خريج برامج دبلومه الدراسات العليا فى أي تخصص يجب أن يكون قادرا على :

١-١ تطبيق المعارف المتخصصة التى اكتسبها فى ممارسته المهنية .

١-٢ تحديد المشكلات المهنية واقتراح حلولا لها.

١-٣ إتقان المهارات المهنية واستخدام الوسائل التكنولوجية المناسبة فى ممارسته المهنية .

١-٤ التواصل وقيادة فرق العمل من خلال العمل المهنى المنظومي

١-٥ اتخاذ القرار فى ضوء المعلومات المتاحة

١-٦ توظيف الموارد المتاحة بكفاءة

١-٧ الوعى بدوره فى تنمية المجتمع والحفاظ على البيئة

١-٨ التصرف بما يعكس الالتزام بالنزاهة والمصداقية وقواعد المهنة وتقبل المسائلة والمحاسبة

١-٩ إدراك ضرورة تنمية ذاته والانخراط فى التعليم المستمر

٢- ٢- المعايير القياسية العامة:

٢-١ المعرفة والفهم:

بانتهاء دراسة برامج دبلومه الدراسات العليا يجب أن يكون الخريج قادرا على فهم واستيعاب كل من :

٢-١-١ النظريات والاساسيات والمعارف المتخصصة فى مجال التعلم وكذا العلوم ذات العلاقة بممارسته المهنية

٢-١-٢ المبادئ الأخلاقية والقانونية للممارسة المهنية فى مجال التخصص

٢-١-٣ مبادئ وأساسيات الجودة فى الممارسة المهنية فى مجال التخصص

٢-١-٤ تأثير الممارسة المهنية على البيئة والعمل على الحفاظ على البيئة وصيانتها

٢-٢ المهارات الذهنية :

بانتهاء دراسة برنامج دبلومه الدراسات العليا يجب أن يكون الخريج قادرا على :

٢-٢-١ تحديد وتحليل المشاكل فى مجال التخصص وترتيبها وفقا لأولوياتها

٢-٢-٢ حل المشاكل المتخصصة فى مجال مهنته

٢-٢-٣ القراءة التحليلية للأبحاث والمواضيع ذات العلاقة بالتخصص

٢-٢-٤ تقييم المخاطر فى الممارسات المهنية

٢-٢-٥ اتخاذ القرارات المهنية فى ضوء المعلومات المتاحة

٢-٣ المهارات المهنية :

بانتهاء دراسة برنامج دبلومه الدراسات العليا يجب أن يكون الخريج قادرا على :

٢-٣-١ تطبيق المهارات المهنية فى مجال التخصص

٢-٣-٢ كتابة التقارير المهنية

٢-٤ المهارات العامة والمنتقلة:

بانتهاء دراسة برنامج دبلومه الدراسات العليا يجب أن يكون الخريج قادرا على :

٢-٤-١ التواصل الفعال بأنواعه المختلفة

٢-٤-٢ استخدام تكنولوجيا المعلومات بما يخدم تطوير الممارسة المهنية

٢-٤-٣ التقييم الذاتى وتحديد احتياجاته التعليمية الشخصية

٢-٤-٤ استخدام المصادر المختلفة للحصول على المعلومات والمعارف

٢-٤-٥ العمل فى فريق وادارة الوقت

٢-٤-٦ قيادة فريق فى سياقات مهنية مألوفة

٢-٤-٧ التعلم الذاتى والمستمر.

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

مواصفات الخريج:

مواصفات الخريج بالمعايير القياسية للدراسات العليا (درجة اماجستير)	مواصفات الخريج بالمعايير الأكاديمية للبرنامج
خريج برامج دبلومه الدراسات العليا فى أي تخصص يجب أن يكون قادرا على : ١-١ تطبيق المعارف المتخصصة التى اكتسبها فى ممارسته المهنية.	**1.1., 1.3.**
١-٢ تحديد المشكلات المهنية واقتراح حلولا لها.	**1.4., 1.8.**
١-٣ إتقان المهارات المهنية واستخدام الوسائل التكنولوجية المناسبة فى ممارسته المهنية .	**1.5., 1.8.**
١-٤ التواصل وقيادة فرق العمل من خلال العمل المهنى المنظومي .	**1.5., 1.6.**
١-٥ اتخاذ القرار فى ضوء المعلومات المتاحة .	**1.3.**
١-٦ توظيف الموارد المتاحة بكفاءة	**1.2.**
١-٧ الوعى بدوره فى تنمية المجتمع والحفاظ على البيئة.	**1.7., 1.8.**

١-٨ التصرف بما يعكس الالتزام بالنزاهة والمصداقية وقواعد المهنة وتقبل المسائلة والمحاسبة .	**1.7., 1.8.**
١-٩ إدراك ضرورة تنمية ذاته والانخراط فى التعليم المستمر.	**1.5., 1.7., 1.8.**

أ ـ المعرفة والفهم:

A-Knowledge and Understanding:

المعايير القياسية العامة (Generic) لبرامج الدراسات العليا (درجة الدبلوم)	المعايير الأكاديمية للبرنامج
٢-١-٢ المبادئ الأخلاقية والقانونية للممارسة المهنية فى مجال التخصص.	**2.a.10.**
٢-١-٣ مبادئ وأساسيات الجودة فى الممارسة المهنية فى مجال التخصص.	**2.a.5., 2.a.6., 2.a.7.**
٢-١-٤ تأثير الممارسة المهنية على البيئة والعمل على الحفاظ على البيئة وصيانتها.	**2.a.9.**

ب ـ القدرات الذهنية :

B- Intellectual Skills:

المعايير الأكاديمية للبرنامج	المعايير القياسية العامة (Generic) لبرامج الدراسات العليا (درجة الدبلوم)
2.b.2., 2.b.3., 2.b.4.	بانتهاء دراسة برنامج الماجستير يجب ان يكون الخريج قادرا على : ٢-٢-١ تحديد وتحليل المشاكل فى مجال التخصص وترتيبها وفقا لأولوياتها.
2.b.1.	٢-٢-٢ حل المشاكل المتخصصة فى مجال مهنته.
2.b.5.	٢-٢-٣ القراءة التحليلية للأبحاث والمواضيع ذات العلاقة بالتخصص.
2.b.6.	٢-٢-٤ تقييم المخاطر فى الممارسات المهنية.
2.b.7., 2.b.8., 2.b.9.	٢-٢-٥ اتخاذ القرارات المهنية فى ضوء المعلومات المتاحة.

ج- مهارات مهنية وعملية

C- Practical and professional Skills:

المعايير الأكاديمية للبرنامج	المعايير القياسية العامة (Generic) لبرامج الدراسات العليا (درجة الدبلوم)

بانتهاء دراسة برنامج الماجستير يجب ان يكون الخريج قادرا على: ٢-٣-١ تطبيق المهارات المهنية فى مجال التخصص.	2.c.1., 2.c.2., 2.c.3., 2.c.5.
٢-٣-٢ كتابة التقارير المهنية.	2.c.6., 2.c.7.

مهارات عامة : د .

D- General and Transferable Skills:

المعايير القياسية العامة (Generic) لبرامج الدراسات العليا (درجة الدبلوم)	المعايير الأكاديمية للبرنامج
بانتهاء دراسة برنامج الدبلوم يجب ان يكون الخريج قادرا على: ٢-٤-١ التواصل الفعال بأنواعه المختلفة.	2.d.1.
٢-٤-٢ استخدام تكنولوجيا المعلومات بما يخدم تطوير الممارسة المهنية.	2.d.2.
٢-٤-٣ التقييم الذاتى وتحديد احتياجاته التعليمية الشخصية.	2.d.3.
٢-٤-٤ استخدام المصادر المختلفة للحصول على المعلومات والمعارف.	2.d.4.
٢-٤-٥ العمل فى فريق وادارة الوقت.	2.d.5.
٢-٤-٦ قيادة فريق فى سياقات مهنية مألوفة	2.d.6.
٢-٤-٧ التعلم الذاتى والمستمر.	2.d.6.

ملحق (٤): مصفوفة مضاهاة المعايير الأكاديمية للبرنامج و أهداف و نواتج تعلم البرنامج

أهداف البرنامج	المعايير الأكاديمية للبرنامج (مواصفات الخريج):
1.1., 1.3.	1.1.Application of specialized knowledge gained in the professional practice.
1.4., 1.8.	1-2 Identifying professional problems and propose solutions for their management in the area of Rheumatology, rehabilitation and physical medicine
1.5., 1.8.	1-3 Mastery of professional skills and the use of appropriate technological means in professional practice in Rheumatology, rehabilitation and physical medicine. .
1.5., 1.6.	1-4 Communication and lead teams through systemic employment and build up lifelong learning competencies necessary for continuous professional development in the field of Rheumatology, Rehabilitation and Physical Medicine
1.3.	1-5 Decision in the light of the available information and allow issues covering the common and important areas in the field of physical therapy and connective tissue diseases and emergencies.
1.2.	1-6 Employ available resources efficiently for management of rheumatological cases and support patients with disability.
1.7., 1.8.	1-7 To be aware with his role in community development and provide patients with disability and communication disorders solutions to modify their life.
1.7., 1.8.	1-8 Disposition reflecting integrity and credibility of the profession and the rules and accept accountability.
1.5., 1.7.,	1-9 Recognize the need for life long learning for continuous professional development in Rheumatology, Rehabilitation and Physical Medicine .

1.8.	

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	2.a.9	2.a.10
By the end of DIPLOMA program, the candidate should recognize and understand the followings: 2.1.1 Theories, basic and specialized knowledge in the field of Rheumatology, Rehabilitation and Physical Medicine as well as some neurological conditions	√		√		√		√	√		
2.1.2 Moral and legal principles of professional practice in the area of rheumatology, rehabilitation and physical medicine.						√		√		
2.1.3 Principles and the basics of quality in professional practice in the area of rheumatology, rehabilitation and physical medicine.		√						√	√	
2.1.4 The impact of professional practice of rheumatology, rehabilitation and physical medicine on the environment and work to preserve the environment through outline the basic issues of patients' health				√				√		√

									and safety while providing physical therapy, rehabilitation programs or management of musculoskeletal disorders.

نواتج تعلم البرنامج									المعايير الأكاديمية للبرنامج
Intellectual skills									المهارات الذهنية
2.b.9	2.b.8	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 DIPLOMA program, candidate should be able to recognize the followings:***
									2.2.1 Identify and analyze problems in the field of rheumatology, rehabilitation and physical medicine, arranged according to their own priorities , formulating specific clinical sheets and utilizing sources of information for the diagnosis, differential diagnosis, and problem solving in musculoskeletal and rheumatic diseases.
				√	√	√		√	2.2.2 Solve specialized problems in the field in the field of rheumatology, rehabilitation and physical medicine and make an investigational immunologic database to solve problems of atypical clinical presentations.

				√	√	√			2.2.3 Analytical reading and research topics related to rheumatology, rehabilitation and physical medicine and interpret patient symptoms and physical findings in terms of their anatomic, physiologic, pathologic and functional diagnostic importance.
√		√	√						2.2.4 Risk assessment for disease or injury and determine strategies for appropriate management.
	√		√	√	√	√	√		2.2.5 Professional decision-making in the light of the available information such as prescription of orthoses and prostheses of different parts of body.

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 DIPLOMA program, candidate should accept the followings skills:***. 2.3.1 Application of professional skills in the field of Rheumatology, Rehabilitation and Physical Medicine.
√							2.3.2 Writing professional reports through physical assessment and evaluation for patients with anatomical deformities, evaluation of motor function and different disabilities

المعايير الأكاديمية للبرنامج المهارات العامة والمنتقلة	نواتج تعلم البرنامج General and transferable skill				
	2.d.1.	2.d.2.	2.d.3	2.d.4	2.d.5
2.4.2 Use of information technology and communication technology to remain up- to-date with advances in knowledge and practice	√	√		√	
2.4.3 Self-assessment and identify personal educational needs for continuous learning.			√		
2.4.4 Use different sources to get the information and knowledge				√	
2.4.5 Work in a team and time management.					√
2.4.6 Lead a team in professional familiar contexts.					√
2.4.7 Self and continuous learning for professional practice in the field of Rheumatology, Rehabilitation and Physical Medicine.					√

ملحق (٥): مصفوفة المعارف والمهارات للبرنامج الدراسى

Courses & Codes / ILOs		Knowledge & Understanding 2.a.									
		1	2	3	4	5	6	7	8	9	10
1- Applied Anatomy	RHUM 501	■									
2- Applied Physiology	RHUM 502	■			■						
3- Internal Medicine	RHUM 503		■	■	■						
4- Applied Physics	RHUM 504			■		■				■	
5- Rheumatology	RHUM 506/508		■	■				■			■
6- Rehabilitation Medicine	RHUM 507/509/ 510		■	■	■	■	■		■	■	■

رئيس القسم

أستاذ المادة

التوقيع:

التوقيع :

ILOs / Courses & Codes		Intellectual Skills 2.b.								
		1	2	3	4	5	6	7	8	9
1- Applied Anatomy	RHUM 501			■						
2- Applied Physiology	RHUM 502			■						
3- Internal Medicine	RHUM 503	■	■	■	■			■		
4- Applied Physics	RHUM 504					■		■		
5- Rheumatology	RHUM 506/508	■	■	■	■	■	■	■		
6- Rehabilitation Medicine	RHUM 507/509/510	■		■	■	■	■	■	■	■

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 501				■	■		
2- Applied Physiology	RHUM 502		■					
3- Internal Medicine	RHUM 503	■						
4- Applied Physics	RHUM 504	■	■	■		■		
5- Rheumatology	RHUM 506/508	■				■	■	■
6- Rehabilitation Medicine	RHUM 507/509/510	■	■	■	■	■	■	■

.

رئيس القسم

التوقيع:

أستاذ المادة

التوقيع:

ILOs / Courses& Codes		General & transferable 2.d.					
		1	2	3	4	5	6
1- Applied Anatomy	RHUM 501				■		■
2-Applied Physiology	RHUM 502				■		■
3- Internal Medicine	RHUM 503				■	■	■
4- Applied Physics	RHUM 504				■		
5- Rheumatology	RHUM 506/508	■	■	■	■	■	■
6- Rehabilitation Medicine	RHUM 507/509/51(	■	■	■	■	■	■

رئيس القسم **أستاذ المادة**

التوقيع : **التوقيع:**

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:

توصيف المقررات

Courses Specifications

First part
1- Applied Anatomy

2- Applied Physiology
3- Internal medicine
4- Applied Physics
Second part
5-Rheumatology
6- Rehabilitation medicine

Applied Anatomy Course Specification

- **Course Title:** Applied Anatomy,
- **Code:** RHUM **501**
- **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: 3/9/2013, No. (201).
  - Faculty Council: 15-9-2013 , No.(356).

A) Basic Information:

- **Allocated marks: 75 marks**,
- **Course duration: 15 weeks** of teaching,
- **Credit hours:** One and half hour/week = **22½ total credit hours**

Item	Hours / week	Total hours
1- Lectures	½/week	7½
2- Small group teaching / tutorials	½/week	7½
3- Practical	½/week	7½
Total	1½/week	**22½**

B- Professional Information:

1. Overall Aims of Course

The overall goals of this course are to:

- ***Demonstrate*** 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.
- ***Demonstrate*** ability to understand and utilize knowledge of musculoskeletal anatomy pertinent to the evaluation of patients with rheumatic and musculoskeletal disorders.

2. Intended Learning Outcomes of Course (ILOs)

2.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. Identify the origin and insertion of the muscles of upper, lower limbs and back.

2.a.5. Describe cranial nerves.

2.a.6. Define cortical areas of the brain , pyramidal tract and extra pyramidal tract

2.B. Intellectual skills:

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

2.b.1. Identify the outcome of surgical correction.

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

2.b.3. Assess sites of the nerve compression.

2.b.4. Identify physical tests to evaluate musculoskeletal disorders.

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

2.b.6. Analyze sites of neurological injuries.

2.c. Professional and Practical skills:

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

2.c.1. Demonstrate the dermatomal and myotomal supply of the body.

2.c.2. Draw the accurate surface marking and anatomical landmarks needed for injecting joints and soft tissue rheumatic disorders.

2.c.3. Make algorithm in calculating the patient age.

2.c.4. Practice how to correct different alignment.

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

2.c.6. Prescribe examination protocols in evaluating musculoskeletal disorders**.**

2.d. General and communication skills:

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

2.d.1. ***Retrieve*** 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, structure& movements), - Muscles (types, features & characters of skeletal muscles), - Nerves (spinal & motor cranial), - Autonomic nervous system (centers, nerves & ganglia), -Ligaments & fasciae.	**1½**	**1½**	**1½**	**4½**	**20%**
2) NECK AND TRUNK - Vertebral canal &	**1½**	**1½**	**2½**	**5½**	**24%**

vertebral foramina, - Posture, - Body weight transmission, - Ligaments & fasciae, - Muscles, - Joints, - Movements, - Intervertebral disc, - Diaphragm, - Heart & pericardium, - Respiratory system, - Respiratory muscles movements.					
<u>3) UPPER AND LOWER LIMBS</u> - Muscles, - Nerves, - Joints, - Ligaments & fasciae, - Stability, - Nerve plexuses, - Development, - Hand, - Foot, - Arches of the foot, - Grip-force	**2½**	**2**	**2**	**6½**	**29%**

transmission, - Mechanisms of walking, running & standing.					
4) NEUROANATOMY - Brain & spinal cord: (blood supply & meninges), - Internal capsule: (afferent & efferent pathways), Nerve plexuses: (formation, relations & branches).	**2**	**2½**	**1½**	**6**	**27%**
Total	**7½**	**7½**	**7½**	**22½**	**100%**

4-Teaching and Learning Methods

Methods used:

1. Lectures,
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 am	½ hour	½
Practical	1 time/week between 10 am to 12 pm	1½ hour	**1½**
Tutorial	1 time/week between 1 pm to 2 pm	½ hour	½
Total	**2½**		

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 & transferable skills
Practical examination	To assess knowledge, intellectual skills, practical & clinical skills and General & transferable skills

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	25	**33%**
b- Practical	25	**33%**
c- Oral	25	**33%**
Total	**75**	**100%**

Students will pass if they get at least 50% in the written exam and at least 60% in all the exams.

Formative Assessment:

Sample **exam**s 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	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

6.4- Periodicals, Web sites, … etc:

7- Facilities required for teaching and learning:

- Lecture halls,
- Small group classes,
- Museum, morgue,

- Information technology / AV aids: computers, data shows and CD-ROMs,
- Models.

مقرر التشريح التطبيقى:

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

Applied Physiology Course Specification

- **Course Title:** Applied Physiology,
- **Code:** RHUM **502**
- **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:** 3/9/2013, No. (201).
  - Faculty Council: 15-9-2013 , No.(356).
  - **A- Basic Information:**
    - **Allocated marks:** 75 marks,
    - **Course duration:** 15 weeks of teaching,
- **Credit hours:** One and half hour/week = **22½** total credit hours

Item	Hours / week	Total hours
1- Lectures	½/week	7½
2- Small group teaching / tutorials	½/week	7½
3- Practical	½/week	7½
Total	1½/week	**22½**

B- Professional Information:

1. Overall Aims of Course

The overall goals of this course are to:

- ***Respond*** to the educational and training needs of doctors with 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 physiology of endocrinal system.
- ***Provide*** graduates with enough knowledge about the regulation of body temperature, body fluids and homeostasis.
- ***Maintain*** students' standards of knowledge.
- ***Improve*** their knowledge by continuous self-education as a specialist in the field of Rheumatology, Rehabilitation and Physical Medicine.

2. Intended Learning Outcomes of Course (ILOs)

2.a. Knowledge and Understanding:

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

2.a.1. Describe the physiology of the muscle contraction and relaxation,

2.a.2. Write the normal physiological changes in exercise,

2.a.3. Identify action potentials and motor end plate,

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

2.a.5. Describe the nature of pain and pain control systems,

2.a.6. List types of nerve and muscle fibers,

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

2.a.7. Recognize electrodiagnostic tests of nerves and muscles.

2.b. Intellectual skills:

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

2.b.1. Assess the balance of body fluids and electrolyte homeostasis.

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

2.b.3. Evaluate patients' response of exercise.

2.b.4. Describe methods of chronic pain control in different musculoskeletal disorders**.**

2.C. **Practical and professional Skills**

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

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

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

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

2.c.4. Plan investigational and therapeutic programs in the management of musculoskeletal disorders.

2.d. General and communication skills:

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

2.d.1. Retrieve information and communication technology effectively in the field of Physiology.

3- Course Contents

Topic	Lectures (hrs)	Small group (hrs)	Practical (hrs)	Total (hrs)	% of total
1) MUSCLES AND NERVES - Nerve, - Skeletal Muscle.	**1**	**1½**	**1½**	**4**	**18%**
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, - Descending pyramidal & extra-pyramidal tracts - Stretch reflex & muscle tone, - Basal ganglia, - Cerebellum.	**2 ½**	**2**	**2**	**6½**	**29%**
3) CIRCULATION - Arterial blood pressure & its regulation, - Capillary circulation, - Edema.	**1½**	**1**	**1**	**3½**	**16%**
4) RESPIRATION - Hypoxia.	**½**	**½**	**½**	**1½**	**7%**

5) BLOOD - Anemia.	½	½	½	**1½**	**7%**
5) METABOLISM - Obesity, - Sports physiology.	½	½	**1**	**2**	**9%**
6) ENDOCRINE - Thyroid hormones, - Parathyroid hormones, - Calcium homeostasis.	½	**1**	½	**2**	**9%**
7) KIDNEY - Water & electrolytes balance.	½	½	½	**1½**	**7%**
Total	**7½**	**7½**	**7½**	**22½**	**100%**

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 laboratory.

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	1 time/week, between 9 am to 10 am	½ hour	½
Practical	1 time/week between 10 am to 12 pm	1½ hour	**1**½
Tutorial	1 time/week between 1 pm to 2 pm	½ hour	½
Total	**2**½		

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 knowledge & understanding, intellectual skills, practical & clinical skills and general & transferable skills

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	25	**33%**
b- Practical	25	**33%**
c- Oral	25	**33%**
Total	**75**	**100%**

Students will pass if they get at least 50% in the written exam and at least 60% in all 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	Experiment to report and discuss,
c- Oral	One Session

6. List of References

6.1- Essential Books (Text Books)

Gyuton's Textbook**. 2008**

7- Facilities required for teaching and learning:

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

مقرر الفسيولوجى التطبيقى:

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

Internal Medicine Course Specification

- **Course Title:** Internal Medicine.
- **Code:** RHUM **503**
- **Department offering the course:** Internal Medicine Department,
- **Academic year of program:** 2013-2014,

- **Department element of program**: Minor,
- **Academic Level:** 1st Part.
- **Date of specifications approval:**
  - **Department Council:** 3/9/2013, No. (201).
  - **Faculty Council:** 15-9-2013 , No.(356).
  - **A- Basic Information:**
    - **Allocated marks: 75 marks**,
    - **Course duration: 15 weeks** of teaching,
    - **Credit hours:** One and half hour/week = **22½** total credit hours

Item	Hours / week	Total hours
1- Lectures	½/week	7½
2- Small group teaching / tutorials	½/week	7½
3- Practical	½/week	7½
Total	1½/week	22½

B- Professional Information:

1. Overall Aims of Course

The overall goals of this course are:

- ***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 capable of making a proper diagnosis of different rheumatic diseases on the basis of adequate history, physical examination and interpretation of supportive investigation.
- ***Provide*** graduates with enough knowledge about disorders of internal organs relevant to systemic rheumatic diseases.
- ***Maintain*** and improve students' standards of awareness of self-education as researchers and specialists in the field of Rheumatology, Rehabilitation and Physical Medicine.

2. Intended Learning Outcomes of Course (ILOs)

2.a- Knowledge and Understanding:

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

2.a.1. Discuss cardiovascular system: heart rate, rheumatic fever, coronary heart disease, hypertension, infective endocarditis, pulmonary embolism, pulmonary hypertension and blood disease (anemia and Bleeding diathesis).

2.a.2. Define gastrointestinal hemorrhage, dyspepsia, chronic diarrhea, hepatitis (acute and chronic), Jaundice, inflammatory bowel diseases, renal failure, glomerulonephritis, nephritic, nephritic syndrome,

2.a.3. Classify endocrinal disorders of the pituitary, thyroid, suprarenal and parathyroid glands

2.b.4. Identify causes and presentations of asthma, pneumonia, obstructive pulmonary disease, pleural effusion, infection in the immune compromised host.

2.a.5. Define ethical and medico-legal basics of internal medicine related to Rheumatology, Rehabilitation and Physical Medicine.

2.a.6. Identify professional knowledge, and theories in the field of internal medicine relevant to Rheumatology, Rehabilitation and Physical Medicine.

2.a.7. Define basics of quality and professional performance.

2.a.8. Describe effect of professional performance on community health and environment protection.

2.b- Intellectual skills:

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

2.b.1. Explain the scientific basis of patients' evaluation in the differential diagnosis of rheumatic diseases**.**

2.b.2. List indications and interpret laboratory tests and imaging procedures used in diagnosis and management of rheumatic diseases.

2.b.3. Evaluate risk factors, problems, in chronological manner.

2.b.4. Evaluate specific problems in atypical situations.

2.b.5. Organize practical decisions according to available knowledge.

2.c- **Practical and professional Skills *:***

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

2.c.1. Examine patients including specific examinations of structure and function of musculoskeletal and neurological systems.

2.c.2. Design clinical trials in rheumatic diseases.

2.c.3. Apply medical practical skills and recent techniques in the field of Rheumatology, Rehabilitation and Physical Medicine.

2.c.4. Construct practical reports, investigational and therapeutic programs in the management of rheumatic and musculoskeletal disorders.

2.d- General and communication skills:

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

2.d.1. Retrieve information and communication technology effectively in the field of Internal Medicine to conduct researches in Rheumatology, Rehabilitation and Physical Medicine.

2.d.2. Categorize continuous self-learning requirements following updates in the practice of Internal Medicine.

2.d.3. Communicate ideas effectively with other specialties.

2.d.4. Organize scientific meetings with different sources for achieving knowledge and information.

2.d.5. Apply working in a team and time mapping, operate with other rheumatologists and be able to analyze their performance.

3- Course Contents:

Topic	Lectures (hrs)	Small group (hrs)	Clinical (hrs)	Total (hrs)	% of total
1) NEUROLOGY - Hemiplegia, - Paraplegia, - Peripheral neuropathy, - Myopathy, - Cranial nerves, - Parkinsonism.	**1½**	**1½**	**1½**	**4½**	**20%**

2) CARDIOLOGY - Hypertension, - Heart failure, - Pericardial effusion, - Ischemic heart disease.	**1**	**1½**	**1½**	**4**	**18%**
3) NEPHROLOGY. - Glomerulonephritis, - Nephrotic syndrome, - Renal failure, - Heamaturia.	**½**	**1**	**---**	**1½**	**7%**
4) CHEST DISEASES - Tuberculosis**,** - Pleural diseases, - Bronchial asthma, - Chronic obstructive pulmonary disease (COPD), - Interstitial pulmonary disease,	**1**	**1**	**2**	**4**	**18%**
5) BLOOD DISEASES - Anemia, - Hemorrhagic blood diseases, - Iron overload**.**	**½**	**½**	**-----**	**1**	**4%**
6) ENDOCRINE DISEASES - Diabetes, - Thyroid diseases, - Suprarenal gland diseases**.**	**1½**	**½**	**1**	**3**	**13%**
7) RHEUMATOLOGY - Gout	**½**	**½**	**½**	**1½**	**7%**
8) ACID-BASE BALANCE	**½**	**½**	**½**	**1½**	**7%**
9) Na^+ & K^+ ABNORMALITIES	**½**	**½**	**½**	**1½**	**7%**

Total	**7½**	**7½**	**7½**	**22½**	**100%**

4-Teaching and Learning Methods

Methods used:

1- Lectures,

2- Small group discussions,

3- Problem solving sessions,

4- 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 classes: At in-patients wards.

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	1 time/week, between 9 am to 10 am	½ hour	½
Practical	1 time/week between 10 am to 12 pm	1½ hour	**1**½
Tutorial	1 time/week between 1 pm to 2 pm	½ hour	½
Total	**2**½		

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 & understanding
Oral examination	To assess knowledge& understanding, intellectual skills and general & transferable skills
Clinical examination	To assess intellectual , practical & clinical skills and general &transferable skills

5-C) Time Schedule:

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

5-D) Weighing System:

Examination	Marks allocated	% of Total Marks
a- Written	25	**33%**
b- Practical	25	**33%**
c- Oral	25	**33%**
Total	**75**	**100%**

Students will pass if they get at least 50% in the written exam and 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- Clinical	A short case to present and discuss,
c- Oral	One Session

6. List of References

6.1- Essential Books (Text Books):): Davidson, s principles& practice of medicine 21 edition

6.2- Periodicals, Web sites, … etc..

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

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

مقرر الباطنة العامة:

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

Applied Physics Course Specification

- **Course Title:** Applied Physics.
- **Code: RHUM 504**
- **Department offering the course** Rheumatology, Rehabilitation and Physical Medicine
- **Academic year of program:** 2013-2014,

- **Department element of program**: Minor,
- **Academic Level:** 1st Part.
- **Date of specifications approval:**
  - **Department Council:** 3/9/2013, No. (201).
  - Faculty Council: 15-9-2013 , No.(356).
  - **A- Basic Information:**
    - **Allocated marks:75 marks**,
    - **Course duration: 15 weeks**,
    - **Credit hours:** One and half hour/week = **22½** total **credit** hours

Item	Hours / week	Total hours
1- Lectures	½/week	7½
2- Small group teaching / tutorials	½/week	7½
3- Practical	½/week	7½
Total	1½/week	**22½**

B- Professional Information

5- Overall aims of the course:

The overall goals of the course are to:

- ***Respond*** to the educational training needs of doctors with a special interest in Rheumatology, Rehabilitation and Physical Medicine.
- ***Make*** candidates qualified in perception and integration of progress in Rehabilitation and Physical Medicine.
- ***Maintain*** students' standards of knowledge as specialists in the field of Rheumatology, Rehabilitation and Physical Medicine by self-education and continuous learning.
- ***Improve*** students' standards of knowledge.

2- Intended Learning Outcomes of the Course (ILOs)

2.a- Knowledge and Understanding:

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

2.a.1. Recognize different therapeutic electrical currents (Faradic, Galvanic, Didynamic, Interferential and Transcutaneous Electrical Nerve Stimulation),

2.a.2. Identify the electromagnetic spectrum,

2.a.3. Identify types and therapeutic applications of cryotherapy and LASER,

2.b.4. Discuss resistance, capacitance, inductance, impedance and magnetism,

2.a.5. Describe ultrasonic, short and micro- waves,

2.a.6. Illustrate different therapeutic heating modalities (superficial and deep),

2.a.6. Recognize electrodiagnostic tests of nerves and muscles.

2. b- Intellectual Skills:

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

2.b.1. Recognize indications to prescribe different physical modalities in rehabilitation medicine,

2.b.2. Assess the role of electrotherapy programs in patients with rheumatic, neurological, orthopedic and other medical disorders.

2.b.3. Recognize outcome of use of electrical stimulation modalities in rehabilitation medicine.

2.c- Practical and professional Skills*:*

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

2.c.1. Describe programs for management of musculoskeletal disorders using different physical modalities.

2.c.2. Construct clinical trials relevant to the practice of Rehabilitation and Physical Medicine utilizing physical modalities.

2.d- General and Communication Skills:

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

2.d.1. Retrieve information and communication technology effectively in the field of Physics,

2.d.2. Communicate ideas effectively,

2.d.3. Work effectively within a team.

3- Course Contents

Topic	Lectures (hrs)	Small group (hrs)	Practical (hrs)	Total (hrs)	% of total
1) SCIENTIFIC BASIS - Physiology of Pain, -Heating of Biological Tissues.	½	½	½	1½	7%
2) ELECTROTHERAPY - The Faradic and Sinusoidal Currents, - The Constant and Modified Direct Current, - Interferential Current. - Transcutaneous Electrica Nerve Stimulation (TENS), - Didynamic Current, - Functional Electrical Stimulation.	2	2	2	6	27%
3) DEEP HEATING MODALITIES - Shortwave Diathermy, - Microwave Diathermy, - Ultrasound Therapy.	1½	2	1½	5	22%
4) SUPERFICIAL HEATING MODALITIES - Infra-Red radiations, -Hot Packs and Paraffin baths.	1	1	1	3	13%
5) COLD THERAPY	1	½	½	2	9%
6) LIGHT THERAPY (LASER)	½	½	½	1½	7%
7) MAGNETIC FIELD	1	1	1½	3½	16%

THERAPY					
Total	**7½**	**7½**	**7½**	**22½**	**100%**

4-Teaching and Learning Methods

Methods used:

1- Lectures,

2- Small group discussions,

3- 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,

Practical classes: At the Physiotherapy unit.

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	1 time/week, between 9 am to 10 am	½ hour	½
Practical	1 time/week between 10 am to 12 pm	1½ hour	**1**½
Tutorial	1 time/week between 1 pm to 2 pm	½ hour	½
Total	**2**½		

5. Student Assessment Methods

5-A) Attendance Criteria: 75% of credit hours 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 intellectual skills, practical & clinical skill and general &transferable skills

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	25	**33%**
b- Practical	25	**33%**
c- Oral	25	**33%**
Total	**75**	**100%**

Students will pass if they get at least 50% of written exams and 60% of 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	Discussion on equipments,
c- Oral	One/two Sessions.

6. List of References

6.1- *Essential Text Books:*

- Electrotherapy explained: principles and practice by V Robertson (2006),
- Clayton's electrotherapy by Kitchen and Bazin (1996),
- Therapeutic modalities by W E Prentice (2002),
- Principles and practice of electrotherapy by J Kahn (2000).

7- Facilities for teaching and learning:

Facilities used for teaching this course include:

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

مقرر الطبيعة التطبيقية:

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

Rheumatology Course Specification

- **Course Title:** Rheumatic diseases and Immunology.
- **Code:** RHUM **506, 508**
- **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:** 3/9/2013, No. (201).
  - **Faculty Council:** 15-9-2013 , No.(356).
  - **A) Basic Information:**
    - **Allocated marks**: 300 marks,
    - **Course duration:** 30 weeks of teaching,
    - **Credit hours:** 6 hours/week = **180** total **credit** hours

Item	Hours / week	Total hours
1- Lectures	**2**	**60**
2- Small group teaching / tutorials	**1**	**30**
3- Clinical	**2**	**60**
4- Scientific meeting	**1**	**30**
Total	**6**	**180**

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,
- ***Give*** students the ability to list differential diagnoses of rheumatic diseases,
- ***Develop*** their skill to organize treatment plans for rheumatic diseases,
- ***Allow*** students to experience problem solving and decision-making in atypical clinical situations,
- ***Raise*** students' trend for evidence-based medicine practice to support up profession in Rheumatology, Rehabilitation and Physical Medicine,

- ***Support*** students' lifelong learning talent necessary for continuous professional development and research establishment,
- ***Provide*** students with the professional ethical values essential to demonstrate appropriate attitude towards patients and colleagues,
- ***Allow*** students to communicate skills necessary for proper patients' interrogation and evaluation,
- ***Give*** students the appropriate professional education necessary to manage and organize health problems within the community.

2- Intended Learning Outcomes (ILOs)

2.a. Knowledge and Understanding:

By the end of the course, the students will 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 of Rheumatology, Rehabilitation and Physical Medicine,

2.a.5. *Recognize* how to enhance 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. Identify the indications and rationale of referring patients to other related specialties according to risks and severity,

2.b.4. 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 professional *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 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. Plan 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 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

Subject	Lectures (hrs)	Small group (hrs)	Clinical & Practical (hrs)	Total (hrs)	% of total
1. Approach to painful joints	**2**	**1**	**1**	**4**	**2%**
2. Molecular and cellular basis of immunology ▪ Inflammatory cells, ▪ Mediators of inflammation, ▪ Complement system. ▪ Inflammatory response, ▪ Immune response, ▪ Autoantibodies, ▪ Antinuclear antibodies.	**10**	**4**	**6**	**20**	**11%**
3. Systemic Rheumatic Disease ▪ Rheumatoid Arthritis and associated syndromes, ▪ Antiphospholipid Syndrome, ▪ Dermatomyositis/ Polymyositis, ▪ Eosinophilia-Myalgia	**12**	**2**	**16**	**30**	**17%**

Syndrome, ▪ Eosinophilic Fasciitis, ▪ Mixed Connective-Tissue Disease, ▪ Scleroderma, ▪ Sjogren Syndrome, ▪ Systemic Lupus Erythematosus, ▪ Undifferentiated Connective-Tissue Disease.					
4. <u>Crystal-Induced Arthritis</u> ▪ Calcium Pyrophosphate Deposition Disease, ▪ Gout.	**3**	**1**	**4**	**8**	**4%**
5. <u>Infectious Arthritis</u> ▪ Gonococcal Arthritis, ▪ Lyme disease, ▪ Nongonococcal Infectious Arthritis, ▪ Viral Arthritis.	**5**	**---**	**3**	**8**	**4%**
<u>6. Osteoarthritis</u>	**1**	**1**	**1**	**3**	**2%**
<u>7. Metabolic and Bone Disease</u> ▪ Amyloidosis, ▪ Avascular Necrosis, ▪ Hypertrophic osteoarthropathy, ▪ Osteoporosis, ▪ Paget disease.	**3**	**2**	**3**	**8**	**8%**
8. <u>Systemic Diseases Associated with Arthritis</u>	**3**	**---**	**2**	**5**	**3%**
9. <u>Miscellaneous</u>	**10**	**3**	**2**	**15**	**8%**

Inflammatory Arthritis ▪ Acute rheumatic fever, ▪ Endocrinal arthropathy, ▪ Arthritis as a manifestation of systemic disease, ▪ Mediterranean fever, ▪ Palindromic rheumatism.					
10. Soft Tissue and Regional Rheumatic Disease ▪ Dupuytren contracture, ▪ Fibromyalgia, ▪ Localized fibrosing disorders, ▪ Non-articular rheumatism/Regional pain syndrome, ▪ Reflex Sympathetic Dystrophy.	**6**	**2**	**2**	**10**	**5%**
11. Spondyloarthropathies ▪ Ankylosing Spondylitis and Undifferentiated Spondyloarthropathy, ▪ Enteropathic Arthropathies, ▪ Psoriatic Arthritis, ▪ Reactive Arthritis.	**5**	**1**	**2**	**8**	**4%**
12. Vasculitides ▪ Behcet Disease, ▪ Henoch Schonlein Purpura, ▪ Churg-Strauss Syndrome, ▪ Cryoglobulinemia, ▪ Giant Cell Arteritis, ▪ Leukocytoclastic Vasculitis	**6**	**2**	**2**	**10**	**5%**

▪ Microscopic Polyangiitis, ▪ Polyarteritis Nodosa. ▪ Polychondritis, ▪ Polymyalgia Rheumatica, ▪ Serum Sickness, ▪ Takayasu Arteritis, ▪ Wegener Granulomatosis.					
13. <u>Heritable collagen disorders</u> ▪ Marfan syndrome, ▪ Ehlar Danlos syndrome, ▪ Osteogenesis imperfect syndrome, ▪ Benign hypermobility syndrome.	**2**	**1**	**1**	**4**	**2%**
<u>14. Rheumatic manifestation of malignancy</u>	**1**	**1**	**----**	**2**	**1%**
<u>15. Rheumatic manifestation of blood disease</u>	**1**	**1**	**----**	**2**	**1%**
16. <u>Pediatric rheumatology</u> ▪ Idiopathic juvenile arthritis, ▪ Childhood scleroderma, dermatomyositis and systemic lupus erythematosus.	**6**	**3**	**4**	**13**	**7%**
<u>17. Invasive therapeutic technique</u> ▪ Joint aspirations and injections, ▪ Local injections.	**2**	**1**	**3**	**6**	**3%**
<u>18. Rheumatological investigations</u>	**2**	**-----**	**3**	**5**	**3%**

▪ Synovial fluid analysis, ▪ Lab studies.					
19. Imaging in rheumatological diseases ▪ Musculoskeletal plain radiology, CT scan, magnetic resonance imaging and ultrasound.	**2**	**----**	**3**	**5**	**3%**
20. Drugs used in rheumatic diseases ▪ Non steroidal anti-inflammatory drugs. ▪ Steroids. ▪ Disease modifying antirheumatic drugs, ▪ Biological treatment.	**8**	**4**	**2**	**14**	**8%**
Total	**90**	**30**	**60**	**180**	**100%**

4-Teaching and Learning Methods

Methods used:

1. **Modified Lectures**: Seminars, scientific meetings and conferences,
2. **Small group discussions,**
3. **Problem solving Cases,**
4. **Self learning:** Projects, case studies, clinical cases,
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 one topic and 3 cases.

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	One hour each between 9 am to 10 am	3 times/week	3 hours
Clinical and Practical	Three hours each between 10 am to 1 pm	2 times /week	6 hours
Tutorial	One hour between 1 pm to 2 pm	One time/week	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 skills and general & transferable skills,
Clinical and Practical examination	To assess intellectual skills and practical &clinical skill
MCQs	To assess knowledge, understanding, intellectual, general and transferable skills.

5- C) Time Schedule:

Final Exam	Week

- **written,** - **Clinical & Practical,** - **Oral.**	**At week 72** (end of 2nd part)

5-D) Weighing System:

Examination	Marks allocated	% of Total Marks
a- Written,	**135**	**46%**
b- MCQ	**15**	**4%**
c- Clinical and Practical,	**120**	**39%**
d- Oral.	**30**	**11%**
Total	**300**	**100%**

Students will pass if they get at least 50% in the written exam and 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,** **c- Oral**.	- Short assay questions, MCQs, - One long and one short rheumatology cases to present 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):

- Current diagnosis and treatment of rheumatology.

-. Primer of Rheumatic Diseases by Klipple (2012).

6.2- Recommended Books:

- Arthritis and Allied Conditions by Hollander (2009).
- Manual of rheumatic disease and outpatient orthopedic disorders (2010).

6.3- Periodicals, Web sites, CD-ROMs … 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- Facilities required for teaching and learning:

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

مقرر الروماتيزم:

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

Rehabilitation Course Specification

- **Course Title:** Rehabilitation, Musculoskeletal and Physical Medicine,
- **Code:** RHUM **507, 509, 510**
- **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:** 3/9/2013, No. (201).
  - Faculty Council: 15-9-2013 , No.(356).
  - **A) Basic Information:**
    - **Allocated marks: 400** marks,
    - **Course duration:** 30 weeks of teaching,
    - **Credit hours :** 8 hours/week = **240** total credit hours

Item	Hours / week	Total hours
1- Lectures	**2**	**60**
2- Small group teaching / tutorials	**1**	**30**
3- Clinical	**3**	**90**
4- Scientific meeting	**2**	**60**
Total	**8**	**240**

B- Professional Information:

1- Overall Aims of the Program

The overall goals of the course are to:

- ***Raise*** the students' skill to design rehabilitation programs for different musculoskeletal disorders (acute and chronic),
- ***Support*** the students' expertise for problem solving and decision-making in atypical clinical situations,

- ***Provide*** the students with the trend for evidence-based medicine practice to support up profession in Rheumatology, Rehabilitation and Physical Medicine,
- ***Support*** the students' lifelong learning talent necessary for continuous professional development,
- ***Give*** the students the professional ethical values essential to demonstrate appropriate attitude towards patients and colleagues,
- ***Allow*** the students to communicate the skills necessary for proper patients' interrogation and evaluation,
- ***Provide*** the students with the appropriate professional education necessary to manage and organize 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 management of different musculoskeletal disorders,

2.a.2. Describe effective modern physiotherapeutic approaches to recover disability,

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

2.a.4. Illustrate the clinical outcome in the intensive care unit,

2.a.5. Recognize the value 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 rehabilitation plans for the different musculoskeletal disorders,

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

2.b.3. Recognize indications, prescriptions and evaluation of different orthoses and prostheses and estimate their cost benefits in rehabilitation programs,

2.b.4. Interpret advances in the rehabilitation approaches and management of musculoskeletal disorders based on recent data, evidence-based medicine and professional vision for future developmental plans.

2.c. Practical and professional *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. write reports of kinesiologic and electromyographic studies,

2.c.4. Recognize 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.

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,

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

2.d.5. Use 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.	**1**	**1**	**3**	**5**	**2%**
2) Musculoskeletal Diseases ▪ Acute trauma and post-care of fracture. ▪ Chronic trauma/overuse. ▪ Fibrositis/myofascial Pain.	**16**	**4**	**10**	**30**	**13%**

▪ Burns. ▪ Back and spine disorders. ▪ Strain/sprains. ▪ Tendonitis/bursitis. ▪ Regional pain syndromes. ▪ Other soft tissue disease.					
3) Diagnostic Procedures ▪ Cardiopulmonary assess/Stress test. ▪ Gait analysis. ▪ Urodynamics, ▪ Neuropsychological evaluations.	**13**	**2**	**5**	**20**	**8%**
4) Electrodiagnosis ▪ General Electrodiagnosis ▪ Instrumentation. ▪ Nerve conduction. ▪ Electromyography. ▪ Somatosensory evoked potential. ▪ Neuromuscular transmission. ▪ H Reflex/F Wave. ▪ Special studies.	**8**	**1**	**9**	**18**	**8%**
5) Neuro-rehabilitation ○ Stroke ○ Spinal cord injury ○ Traumatic brain Injury ○ Neuropathies ▪ Mononeuropathies. ▪ Polyneuropathies. ▪ Entrapment Neuropathies. ○ Neurologic disorders	**15**	**5**	**12**	**32**	**13%**

▪ Multiple sclerosis. ▪ 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.	**19**	**6**	**10**	**35**	**15%**
7) Therapeutic Exercise and Manipulation	**5**	**2**	**3**	**10**	**4%**
8) Rehabilitation Problems ○ Physical Complications ▪ Spasticity. ▪ Contracture. ▪ Pressure Ulcer. ▪ Posture/Balance Disorders. ▪ Dysphagia/Aspiration. ▪ Bed Rest/ Deconditioning. ▪ Paralysis/Weakness.	**15**	**5**	**10**	**30**	**13%**

▪ Heterotopic Ossification. ▪ Amputation. ▪ Scoliosis. ○ Cognitive/Sensory Dysfunction ▪ Speech and Language Disorders.					
9) Pain ▪ Management of chronic pain.	**2**	**----**	**3**	**5**	**2%**
10) Pharmacologic intervention ▪ Analgesics. ▪ Anti-seizure. ▪ Skeletal muscle relaxants. ▪ Other medications.	**5**	**---**	**5**	**10**	**4%**
11) Procedural/ Interventional ▪ Nerve Blocks. ▪ Anesthetic Injections. ▪ Other Procedural/Interventional.	**5**	**1**	**4**	**10**	**4%**
12) Behavioral/ Psychological Modalities ▪ Relaxation Therapy, ▪ Biofeedback, ▪ Behavior Modification, ▪ Psychotherapy/ Counseling, ▪ Education.	**3**	**1**	**6**	**10**	**4%**
13) Organ-System rehabilitation ○ Cardiovascular	**13**	**2**	**10**	**25**	**10%**

▪ Ischemic Heart Disease, ▪ Peripheral Artery Disease, ▪ Venous Disease, ▪ Vascular Disorders, ▪ Lymphedema, ▪ Other Cardiovascular ○ Pulmonary Disease ▪ COPD. ▪ Pneumonia. ▪ Impaired Ventilation. ○ GU/GI Disorders ▪ Neurogenic Bladder. ▪ Neurogenic Bowel. ▪ Cancer.					
Total	**120**	**30**	**90**	**240**	**100%**

4-Teaching and Learning Methods

Methods used:

1- **Modified Lectures,** Seminars, scientific meetings and conferences.
2- **Small group discussions,**
3- **Self learning:** Projects, case studies, clinical trials**,**
4- **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 2 topic and 2 cases.

Time Plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	One hour each between 9 am to 10 am	4 times/week	4 hours
Clinical and Practical	Three hours each between 10 am to 1 pm	3 times /week	9 hours
Tutorial	One hour between 1 pm to 2 pm	One time/ week	1 hour
Total			**14 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 & understanding.
Oral examination	To assess knowledge& understanding, intellectual skills and general& transferable skills
Clinical and Practical examination	To assess practical and clinical skill, intellectual skills and general& transferable skills
MCQs	To assess knowledge& understanding, intellectual skills and general& transferable skills

5- C) Time Schedule:

Final Exam	Week

- **Written,** - **MCQ,** - **Clinical & Practical,** - **Oral.**	**At week 72** (end of 2nd part)

5-D) Weighing System:

Examination	Marks allocated	% of Total Marks
a- Written,	**185**	**46%**
b- MCQ	**15**	**4%**
c- Clinical and Practical,	**150**	**39%**
d- Oral.	**50**	**11%**
Total	**400**	**100%**

Students will pass if they get at least 50% in the written exam and 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**.	- Short assay questions, MCQs, - One long and one short neurology/musculoskeletal cases to present and discuss, - Five electromyogram traces to write a report and discuss. - Five orthotic/ prosthetic devices to identify and discuss. One session.
- 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 (2008).

- Krusen's textbook of Physical medicine& Rehabilitation (2010).

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.
  - www.gigapedia.com.

7- Facilities required for teaching and learning:

- Lecture halls,
- Small group classes,
- Electromyography and gait Laboratories,
- Models for orthoses / prostheses
- Information technology / AV aids: computers, data shows and CD-ROMs,
- Rehabilitation equipments and gym.

مقرر التأهيل:

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:	Signature & date:
Dean: Name:	Signature & date:
Executive director of the quality assurance unit: Name:	Signature & date: