



توصيف برنامج الدكتوراه في الطب الرياضي





جامعة بنها
كلية الطب البشري
قسم الطب الرياضي

توصيف برنامج دكتوراه في الطب الرياضي
(عام دراسي 2020-2021)

Basic information

أ. معلومات أساسية :

- 1- **Name of the program:** M.D. in Sports Medicine
- 2- **Nature of the program:** single
- 3- **Departments:**
 - **Responsible Department:** Sports Medicine
 - **Participating Departments:** Anatomy, Physiology, Biochemistry, Pharmacology, Community, environmental and occupational medicine, internal medicine, Orthopedic surgery, and neuropsychiatry departments
- 4- **Coordinator:** Dr. Hosny Abd El-Rahman
Professor of Community, environmental and occupational Medicine.
- 5- **Internal evaluation of program specification:** Dr. Abd El-Sameea Halawa
Professor of Orthopedic Surgery, Benha University.
- 6- **External evaluation of program specification:** Dr. Maha Saber
National Research Center
- 7- **Date of approval of program specification:** Department Council
September/2020 and Faculty Council 15/9/2020.



Professional information

1 - الأهداف العامة للبرنامج:

1- Overall Aims of the Program:

The overall aims of the program are to:

- 1.1. **Provide** student with an appropriate background covering the field of Sports Medicine as regard causes, pathogenesis, diagnosis, and management of related conditions.
- 1.2. **Increase** the students ability to apply basics of scientific research,
- 1.3. **Build-up** the students' skill to organize treatment plans as well as to design rehabilitation programs for musculoskeletal disorders.
- 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 and recent tools in Sports Medicine,
- 1.6. **Increase** the students' professional ethical values essential to demonstrate appropriate attitude towards patients and colleagues and lead a team effectively.
- 1.7. **Use** of the available resources for establishment of specialized professional skills and continuous self-learning, find new resources.



2 - المخرجات التعليمية المستهدفة من البرنامج :

2-Intended Learning Outcomes (ILOS):

2.a. Knowledge and

أ.2 - المعرفة والفهم:

Understanding

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

2.a.1. Understand the anatomy, physiology and biomechanics of the musculoskeletal and neuromuscular systems of the human body,

2.a.2. Discuss basic data on commonly used drugs and performance enhancing drugs in the field of sports medicine.

2.a.3. Recognize basics of pathogenesis and management of different internal medicine, psychological and injuries related to the field.

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. Know the essential investigational plans of sports related problems as integrated with values of proper medical ethics,

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

2.a.7. Identify objectives for clinical trials, statistical analysis, scientific research and emerging challenges in the field of sports Medicine.

2.a.8. Discuss an enhanced patients' health outcome through the development and maintenance of a humanized rehabilitation service in the community with care of the special categories; women, geriatric and handicapped.



2. b. Intellectual Skills:

2. ب - 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 different 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 he field of sports medicine.

2.b.4. Present scientific subjects of basic and recent information related to Sports 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 drugs, performance enhancing drugs, vaccinations and interventions and estimate their cost benefits in rehabilitation programs,

2.b.7. Evaluate advances in rehabilitation measures and management of sports related diseases or injuries based on recent data, evidence-based medicine and professional vision for future developmental plans.

2. 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. Demonstrate skills to perform first aid interventions in the field of sports medicine.



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 data either basic or advanced data.

2.c.4. Practice up-coming challenges in sports medicine,

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

2.c.6. Plan and contribute prospects for future developments within Sports Medicine,

2.c.7. Use and master specific skills and technologies of sports Medicine practice to contribute to other specialties.

2.d. 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.



3- Academic Standards

3 - المعايير الأكاديمية للبرنامج:

-Academic Reference Standards (ARS) of MD Degree of Sports Medicine. (ملحق 1)

4- العلامات المرجعية:

4- Reference standards:

- المعايير القياسية العامة لبرامج الدراسات العليا (درجة الدكتوراه) الصادرة عن الهيئة القومية لجودة التعليم والاعتماد (مارس 2009). (ملحق 2)
- مصفوفة مقارنة المعايير القياسية لبرامج الدراسات العليا (درجة الدكتوراه) الصادرة عن الهيئة القومية لجودة التعليم والاعتماد مع ال ARS. (ملحق 3)
- مصفوفة المضاهاة بين المعايير المتبناة لبرنامج الدكتوراه في الطب الرياضي مع أهداف ونواتج تعلم البرنامج. (ملحق 4)

(5) Program structure and

5 - هيكل ومكونات البرنامج
contents:

أ - مدة البرنامج

Three years to pass Doctoral (MD) degree:

- **1st part:** One Semester. (6 months)
- **2nd part:** Four Semesters. (Two years)
- **Thesis.**

تسجل بعد اجتياز الجزء الأول ابتداء من الفصل الدراسي الثاني ولمدة لا تقل عن عامين (أربع فصول دراسية) وتتم مناقشة الرسالة بعد ستة اشهر من تاريخ دور امتحان الجزء الثاني الذي اجتازه الطالب بنجاح.



a) Program structure

ب - هيكل

البرنامج :

- Total hours of program: 65 credit hours
- Theoretical: 44 credit hours
- Practical: 6 credit hours
- Thesis: 15 hours

المناهج			
الساعات المعتمدة	الكود	المقررات الدراسية	
		المنهج	
٣	Sms 701	مقرر علمى فى التشريح فيما يخص الطب الرياضى	الجزء الاول
٣	Sms 702	مقرر فى الفسيولوجيا الرياضيه	
١	Sms 703	مقرر علمى فى الكيمياء الحيويه فيما يخص الطب الرياضى	
١	Sms 704	مقرر علمى فى الفارماكولوجى فيما يخص الطب الرياضى	
١	Sms 705	صحة لمسار تسجيل التحصينات و طب المستويات الدوائيه	
١	Sms 706	طرق البحث و الاحصاء الطبى و طرق عمل رساله و او بحث علمى	
١٨	Sms 707	مقرر علمى (نظرى و اكلينيكى) فى الامراض الباطنه فيما يخص الطب الرياضى و يشمل القلب - الصدر - الجهاز الهضمى - السكر - غدد صماء - امراض الدم و المناعه	الجزء الثانى
٢	Sms 708	الطب النفسى الرياضى	
٢	Sms 709	طب رياضى للمجاميع الخاصه و يشمل السيدات و المعوقين	
٢	Sms 710	المنشطات و القوانين المنظمه لها	
٢	Sms 711	ميكانيكا حيويه فيما يخص الطب الرياضى	
١٤	Sms 712	اصابات الملاعب و العلاج الطبيعى	
١٥		الرساله	
65			المجموع

c- Teaching plan

ج) خطة التدريس

First part (one semester)

a- Compulsory courses:



Course Title	Course Code	No. of theoretical hours/week	No. of practical hours/week	Total hours /week	Total teaching hours (one semester)
التشريح فيما يخص الطب الرياضي	Sms 701	2.5	1	3.5	52.5
الفسولوجيا الرياضية	Sms 702	2.5	1	3.5	52.5
الكيمياء الحيوية فيما يخص الطب الرياضي	Sms 703	0.5	1	1.5	22.5
الفارماكولوجي فيما يخص الطب الرياضي	Sms 704	0.5	1	1.5	22.5
صحة لمسار تسجيل التحصينات وطب المستويات الدوائية	Sms 705	0.5	1	1.5	22.5
طرق البحث والإحصاء الطبي	Sms 706	0.5	1	1.5	22.5
Total		7	6	13	195

b- Elective courses: none

c- Selective courses: none



Second part (four semesters)

a- Compulsory courses:

Course Title	Course Code	No. of theoretical hours/week	No. of practical hours/week	Total hours /week	Total teaching hours (4 semesters)
الأمراض الباطنة	Sms 707	15	6	21	1260
الطب النفسي الرياضي	Sms 708	2	-	2	120
طب رياضي للمجاميع الخاصة	Sms 709	2	-	2	120
المنشطات والقوانين المنظمة لها	Sms 710	2	-	2	120
ميكانيكا حيوية فيما يخص الطب الرياضي	Sms 711	2	-	2	120
إصابات الملاعب والعلاج الطبيعي	Sms 712	12	4	16	960
Total		35	10	45	2700

b- Elective courses: none.

c- Selective courses: none.

6- محتويات المقررات: راجع توصيف المقررات (ملحق 6)

- كود أو رقم المقرر:
- اسم المقرر:
- المحتويات: (طبقاً لما هو مذكور في اللائحة)

7 - متطلبات الالتحاق بالبرنامج

- مادة (18) : يشترط في قيد الطالب لدرجة الدكتوراه:



أ - أن يكون حاصلًا على درجة الماجستير في مادة التخصص أو إحدى المواد الأساسية المتصلة بها بتقدير جيد على الأقل من إحدى جامعات جمهورية مصر العربية أو على درجة معادلة لها من معهد علمي آخر معترف به ومعتمدة من المجلس الأعلى للجامعات.

ب - موافقة جهة العمل.

ج - أن يتفرغ للدراسة لمدة سنة على الأقل في الجزء الثاني (فصلين دراسيين) وحسب متطلبات التدريب التي يقرها القسم المختص وموافقة مجلس الكلية.

د - تسديد الرسوم ومصاريف التدريب واستهلاك الأجهزة

• مادة (19) : مواعيد القيد وبدأ الدراسة :

يكون التقدم للقيد لدرجة الدكتوراه مرتين في السنة خلال شهري مارس وأكتوبر من كل عام.

8 - القواعد المنظمة لإستكمال البرنامج :

ماده (36)

يشترط في الطالب لنيل درجة الدكتوراه في الطب أو الجراحة أو العلوم الطبية الأساسية ما يلي :

1. حضور المقررات الدراسية والتدريبات الإكلينيكية والعملية والمعملية بصفة مرضية طبقا للساعات المعتمدة على ألا يقل عن 75%.
2. أن يقوم ببحث في موضوع تفره الجامعة بعد موافقة مجلس الكلية والقسم لمدة سنتان على الأقل.
3. أن يتقدم بنتائج البحث في رسالة تقبلها لجنة الحكم بعد مناقشة علنية للرسالة بعد نشر بحث مشتق من الرسالة في مجلة علمية معترف بها ولها موقع الكتروني ومسجلة بقائمة مجلات النشر بالكلية.
4. اجتياز الطالب للدورات الآتية من داخل جامعة بنها وذلك قبل مناقشة الرسالة:
(المبادئ القانونية و الأخلاقية لممارسة المهنة - النشر الدولي للبحث العلمي - تسويق البحث العلمي)
5. اجتياز اختبار التوفيل بمستوى لا يقل عن 500 وحدة وذلك قبل مناقشة الرسالة من احد الجهات المعتمدة طبقا لمتطلبات الجامعة (يستثنى من ذلك الطالب الحاصل على شهادة توفيل سابقة بمجموع 500 وحدة وصلاحياتها مازالت سارية).
6. أن يجتاز بنجاح الاختبارات التحريرية والإكلينيكية والشفهية المقررة وفقا لما هو مبين باللائحة.

9- طرق وقواعد تقييم الملتحقين بالبرنامج

9- Students Assessment Methods

م	الوسيلة	مخرجات التعلم المستهدفة
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To assess knowledge & intellectual skills. 2.a.1. → 2.a.8, 2.b.1. → 2.b.7.	Written examination	1
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.	Oral examination	2
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.	Practical examination	3
To assess knowledge & understanding, intellectual skills, practical & clinical skills and 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.	Thesis discussion	4

مجموع المرحلات	الكليتي الدرجة	شعري الدرجة	علمي الدرجة	التعبيري			الساعات المعتمدة	الكود	المقررات الدراسية	المرجع
				الدرجة	عدد الأوراق	نوع الامتحان				
150		25	25	100	3	1	3	Sms 701	مقرر علمي في التشريح فيما يخص الطب الرياضي	الجزء الأول
150		25	25	100	3	1	3	Sms 702	مقرر في الفسيولوجيا الرياضية	
50		20	30	2	1	1	1	Sms 703	مقرر علمي في الكيمياء الحيوية فيما يخص الطب الرياضي	
50		20	30	2	1	1	1	Sms 704	مقرر علمي في الفارماكولوجي فيما يخص الطب الرياضي	
50		20	30	2	1	1	1	Sms 705	سبعة أسس لتسجيل التمارين وطب المستويات التدريبية	
50		20	30	2	1	1	1	Sms 706	طرق البحث و الإحصاء العلمي وطرق عمل رسالة و اثر بحث علمي	
900	150	150		100	3	1	18	Sms 707	مقرر علمي (نظري و تطبيقي) في الامراض المتعلقة فيما يخص الطب الرياضي ويشمل القلب - الصدر - الجهاز الهضمي - السكر - غدد صماء - امراض الدم و المناعة	الجزء الثاني
100		20		50	1	1	2	Sms 708	الطب النفسي الرياضي	
100		20		50	1	1	2	Sms 709	طب رياضي للخدمات القاسية ويشمل السنيات و المعرفين	
100		20		50	1	1	2	Sms 710	المنشآت و القوانين المنتمية لها	
100		20		50	1	1	2	Sms 711	ميكانيكا حيوية فيما يخص الطب الرياضي	
700	100	100		500	2	2	18	Sms 712	اصابات الملاعب و العلاج الطبيعي	
2500	250	500	50	1700			10		الرسالة	



Third part: Thesis: Pass or fail according to the committee decision and approved by department council, Faculty council and University council.

10 - طرق تقويم البرنامج:

10- Evaluation of Program:

Evaluator	Tools	sample
Internal evaluator (s) مقيم داخلي	Report	1-2 Report
External Evaluator (s) مقيم خارجي	Report	1-2 Report
Senior student (s) طلاب السنة النهائية	Interview, questionnaire s	all
Alumni الخريجون	Interview, questionnaire s	Not less than 50% from the last 3 years
Stakeholder (s) أصحاب العمل	Interview, questionnaire s	Representative samples from all sectors

11- استراتيجيات التعليم و التعلم علي مستوى البرنامج:

1. استراتيجيات التعلم التفاعلي Interactive learning
2. استراتيجيات التعليم المبني على المخرجات Outcome based learning
3. استراتيجيات التعلم عن طريق دراسة الحالة Case based learning
4. التعلم باستخدام تكنولوجيا المعلومات E-learning

المسئول عن البرنامج :
التاريخ :



الملحقات

- ملحق (1) :

Academic Reference Standards (ARS) of MD Program of Sports Medicine.

- ملحق (2) :

المعايير القياسية العامة لبرامج الدراسات العليا (درجة الدكتوراه) الصادرة عن الهيئة القومية لجودة التعليم والاعتماد (مارس 2009).

- ملحق (3) : مصفوفة مقارنة المعايير القياسية العامة لبرامج الدراسات العليا (درجة الدكتوراه)

الصادرة عن الهيئة القومية لجودة التعليم والاعتماد مع ال ARS.

- ملحق (4) : مصفوفة مضاهاة المعايير الأكاديمية للبرنامج وأهداف ونواتج تعلم البرنامج

- ملحق (5) : مصفوفة المقررات مع أهداف ونواتج تعلم البرنامج.

(Program courses and ILOs matrix)

- ملحق (6) : توصيف المقررات.



ملحق (1)

Academic Reference Standards (ARS) of MD Degree of Sports Medicine. (ملحق 1)

جامعة بنها
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قسم الطب الرياضى

وثيقة المعايير الأكاديمية المرجعية لبرنامج الدكتوراه

Academic Reference Standards (ARS) for MD Degree in Sports Medicine

1. Graduate Attributes:

- 1-1 Mastering the basics and methodologies of scientific research.
- 1-2 Continued work to add knowledge in the field of Sports Medicine.
- 1-3 Application of the analytical approach and critic of knowledge in the field of Sports medicine and related fields such as neurological diseases.
- 1-4 Merge specialized knowledge with knowledge related to Sports Medicine to derive and develop their interfaces.
- 1-5 Show a deep awareness of the current problems and recent theories in the field of Sports medicine.
- 1-6 identifying professional problems in the field of Sports Medicine and finding innovative solutions.
- 1-7 Mastering a wide range of professional skills in the field of Sports Medicine.



1-8 Oriented with development of recent methods and tools for practicing Sports Medicine.

1-9 The use of appropriate technological means to serve the professional practice in the field of Sports Medicine.

1-10 Communicate effectively and lead a team in different professional contexts.

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.

1-14 Disposition reflecting the commitment to integrity, credibility, and commitment to the rules of the profession.

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

2. Academic Standards:

2.1. Knowledge and understanding:

2.1.1 Theories, basics, and modern knowledge in the field of Sports 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 Sports Medicine.

2.1.4. Principles and the basics of quality in professional practice in the area of Sports Medicine.



2.1.5 knowledge related to the effects of practicing Sports Medicine on the environment and ways of development and maintenance of the 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 Sports 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 the knowledge.

2.2.4 Formulation of scientific papers.

2.2.5 Risk Assessment in professional practices in the area of Sports Medicine.

2.2.6 Planning for the improvement of performance in the field of Sportd Medicine.

2.2.7 Professional decision-making in a variety of professional contexts.

2.2.8 Innovation /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:

2.3.1 Master the basic and modern skills in the field of Sports Medicine.

2.3.2 Writing and evaluation of professional reports such as reports of musculoskeletal ultrasound, reports of electromyography, and nerve conduction studies.

2.3.3 Evaluate and develop methods and existing tools in the area of Sports Medicine.



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

2.3.4. Planning for improvement of professional practice and developing 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.

2.4.2 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.



ملحق (2)

المعايير القياسية العامة ومواصفات الخريج

1- مواصفات الخريج :

- خريج برنامج الدكتوراة فى اى تخصص يجب ان يكون قادرا على
- 1-1 اتقان اساسيات ومنهجيات البحث العلمى
- 2-1 العمل المستمر على الاضافة للمعارف فى مجال التخصص
- 3-1 تطبيق المنهج التحليلى والناقد للمعارف فى مجال التخصص والمجالات ذات العلاقة
- 4-1 دمج المعارف المتخصصة مع المعارف ذات العلاقة مستنبطا ومطورا للعلاقات البينية بينها
- 5-1 اظهار وعيا عميقا بالمشاكل الجارية والنظريات الحديثة فى مجال التخصص
- 6-1 تحديد المشكلات المهنية وايجاد حلول مبتكرة لحلها
- 7-1 اتقان نطاقا واسعا من المهارات المهنية فى مجال التخصص
- 8-1 التوجة نحو تطوير طرق وادوات واساليب جديدة للمزاولة المهنية
- 9-1 استخدام الوسائل التكنولوجية المناسبة بما يخدم ممارسته المهنية
- 10-1 التواصل بفاعلية وقيادة فريق عمل فى سياقات مهنية مختلفة
- 11-1 اتخاذ القرار فى ضل المعلومات المتاحة
- 12-1 توظيف الموارد المتاحة بكفاءة وتنميتها والعمل على ايجاد موارد جديدة
- 13-1 الوعى بدوره فى تنمية المجتمع والحفاظ على البيئة
- 14-1 التصرف بما يعكس الالتزام بالنزاهة والمصداقية وقواعد المهنة
- 15-1 الالتزام بالتنمية الذاتية المستمرة ونقل علمه وخبراته للآخرين

2- المعايير القياسية

- 1-2 المعرفة والفهم
- بانتهاج دراسة برنامج الدكتوراة يجب ان يكون الخريج قادرا على الفهم والدراية بكل من
- 1-1-2 النظريات والاساسيات والحديث من المعارف فى مجال التخصص والمجالات ذات العلاقة
- 2-1-2 اساسيات ومنهجيات واخلاقيات البحث العلمى وادواته المختلفة
- 3-1-2 المبادئ الاخلاقية والقانونية للممارسة المهنية فى مجال التخصص
- 4-1-2 مبادئ واساسيات الجودة فى الممارسة فى مجال التخصص
- 5-1-2 المعارف المتعلقة بأثار ممارسته المهنية على البيئة وطرق تنمية البيئة وصيانتها

2-2 المهارات الذهنية

- بانتهاج دراسة برنامج الدكتوراه يجب ان يكون الخريج قادرا على
- 1-2-2 تحليل وتقييم المعلومات فى مجال التخصص والقياس عليها والاستنباط منها



- 2-2-2 حل المشاكل المتخصصة استنادا على المعطيات المتاحة
- 3-2-2 اجراء دراسات بحثية تضيف الى المعارف
- 4-2-2 صياغة أوراق علمية
- 5-2-2 تقييم المخاطر فى الممارسات المهنية
- 6-2-2 التخطيط لتطوير الاداء فى مجال التخصص
- 7-2-2 اتخاذ القرارات المهنية فى سياقات مهنية مختلفة
- 8-2-2 الابتكار/الابداع
- 9-2-2 الحوار والنقاش المبني على البراهين والادلة

3-2 المهارات المهنية

- بانتهاج دراسة برنامج الدكتوراه يجب ان يكون الخريج قادرا على
- 1-3-2 اتقان المهارات المهنية الاساسية والحديثة فى مجال التخصص
- 2-3-2 كتابة وتقييم التقارير المهنية
- 3-3-2 تقييم وتطوير الطرق والادوات القائمة فى مجال التخصص
- 4-3-2 استخدام الوسائل التكنولوجية بما يخدم الممارسة المهنية
- 5-3-2 التخطيط لتطوير الممارسة المهنية وتنمية اداء الاخرين

4-2 المهارات العامة والمنتقلة

- بانتهاج دراسة برنامج الدكتوراه يجب أن يكون الخريج قادرا على
- 1-4-2 التواصل الفعال بأنواعه المختلفة
- 2-4-2 استخدام تكنولوجيا المعلومات بما يخدم تطوير الممارسة المهنية
- 3-4-2 تعليم الاخرين وتقييم ادائهم
- 4-4-2 التقييم الذاتى والتعليم المستمر
- 5-4-2 استخدام المصادر المختلفة للحصول على المعلومات والمعارف
- 6-4-2 العمل فى فريق وقيادة فرق العمل
- 7-4-2 ادارة اللقاءات العلمية والقدرة على ادارة الوقت



ملحق (3)

مصفوفة مقارنة المعايير القياسية العامة لبرامج الدراسات العليا (درجة الدكتوراه)
الصادرة عن الهيئة القومية لجودة التعليم والاعتماد مع ال المعايير الأكاديمية
للبرنامج ARS

- مواصفات الخريج:

مواصفات الخريج بالمعايير الأكاديمية للبرنامج	مواصفات الخريج بالمعايير القياسية للدراسات العليا (درجة الدكتوراه)
1-1	خريج برنامج الدكتوراه فى اى تخصص يجب ان يكون قادرا على : 1-1 اتقان اساسيات ومنهجيات البحث العلمى.
1-2	2-1 العمل المستمر على الاضافة للمعارف فى مجال التخصص.
1-3	3-1 تطبيق المنهج التحليلى والناقد للمعارف فى مجال التخصص والمجالات ذات العلاقة.
1-4	4-1 دمج المعارف المتخصصة مع المعارف ذات العلاقة مستنبطا ومطورا للعلاقات البينية بينها.
1-5	5-1 اظهار وعيا عميقا بالمشاكل الجارية والنظريات الحديثة فى مجال التخصص.
1-6	تحديد المشكلات المهنية وايجاد حلولاً مبتكرة لحلها.
1-7	اتقان نطاقا واسعا من المهارات المهنية فى مجال التخصص.
1-8	التوجه نحو تطوير طرق وادوات واساليب جديدة للمزاولة المهنية .
1-9	استخدام الوسائل التكنولوجية المناسبة بما يخدم ممارسة المهنة.
1-10	1 التواصل بفاعلية وقيادة فريق عمل فى سياقات مهنية مختلفة.



1-11	11-1 اتخاذ القرار في ضل المعلومات المتاحة.
1-12	توظيف الموارد المتاحة بكفاءة وتنميتها والعمل على ايجاد موارد جديدة.
1-13	13-1 الوعي بدوره في تنمية المجتمع والحفاظ على البيئة.
1-14	التصرف بما يعكس الالتزام بالنزاهة والمصداقية وقواعد المهنة.
1-15	الالتزام بالتنمية الذاتية المستمرة ونقل علمه وخبراته للآخرين .

أ - المعرفة والفهم:

المعايير الأكاديمية للبرنامج	المعايير القياسية العامة (Generic) للدراسات العليا (درجة الدكتوراة)
2.1.1	بأنتهاء دراسة برنامج الدكتوراة يجب ان يكون الخريج على فهم ودراية بكل من: 1-1-2 النظريات والاساسيات والحديث من المعارف في مجال التخصص والمجالات ذات العلاقة.
2.1.2	2-1-2 اساسيات ومنهجيات و اخلاقيات البحث العلمى وادواته المختلفة.
2-1-3	3-1-2 المبادئ الأخلاقية والقانونية للممارسة المهنية في مجال التخصص.
2.1.4.	4-1-2 مبادئ وأساسيات الجودة في الممارسة في مجال التخصص.
2.1.5	5-1-2 المعارف المتعلقة بأثار ممارسته المهنية على البيئة وطرق تنمية البيئة وصيانتها.

ب - القدرات الذهنية :



المعايير الأكاديمية للبرنامج	المعايير القياسية العامة (Generic) للدراسات العليا (درجة الدكتوراة)
2.2.1	بأنتهاء دراسة برنامج الدكتوراة يجب ان يكون الخريج على فهم ودراية بكل من : 1-2-2 تحليل وتقييم المعلومات فى مجال التخصص والقياس عليها والاستنباط منها.
2-2-2	2-2-2 حل المشاكل المتخصصة استنادا على المعطيات المتاحة.
2-2-3	3-2-2- إجراء دراسات بحثية تضيف إلى المعارف.
2.2.4	4-2-2 صياغة أوراق علمية
2.2.5	5-2-2 تقييم المخاطر فى الممارسات المهنية.
2.2.6	6-2-2 التخطيط لتطوير الأداء فى مجال التخصص.
2.2.7	7-2-2 إتخاذ القرارات المهنية فى سياقات مهنية مختلفة.
2.2.8	8-2-2 الإبتكار / الإبداع.
2.2.9	9-2-2 الحوار والنقاش المبني على البراهين والأدلة.

ج. مهارات مهنية وعملية :



المعايير الأكاديمية للبرنامج	المعايير القياسية العامة (Generic) للدراسات العليا (درجة الدكتوراة)
2.3.1	بإنهاء دراسة برنامج الدكتوراة يجب ان يكون الخريج على فهم ودراية بكل من : 1-3-2 إتقان المهارات الأساسية والحديثة في مجال التخصص.
2.3.2	2-3-2 كتابة وتقييم التقارير المهنية.
2.3.3	3-3-2 تقييم وتطوير الطرق والأدوات القائمة في مجال التخصص.
2.4.4	4-3-2 إستخدام الوسائل التكنولوجية بما يخدم الممارسة المهنية.
2.3.4.	5-3-2 التخطيط لتطوير الممارسة المهنية وتنمية أداء الآخرين

د . مهارات عامة و منتقلة:

المعايير الأكاديمية للبرنامج	المعايير القياسية العامة (Generic) للدراسات العليا (درجة الدكتوراة)
2.4.1	بإنهاء دراسة برنامج الدكتوراة يجب ان يكون الخريج على فهم ودراية بكل من : 1-4-2 التواصل الفعال بأنواعه المختلفة
2.4.2	2-4-2 إستخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية.
2.2.3	3-2-2 تعليم الآخرين وتقييم أداءهم.
2.2.4	4-2-2 التقييم الذاتي والتعلم المستمر.
2.2.5	5-2-2 إستخدام المصادر المختلفة للحصول على المعلومات والمعارف
2.2.6	6-2-2 العمل في فريق وقيادة فرق العمل.
2.2.7	7-2-2 إدارة اللقاءات العلمية والقدرة على إدارة الوقت



ملحق (4)

مصفوفة مضاهاة المعايير الأكاديمية مع أهداف ونواتج تعلم البرنامج

أهداف البرنامج	المعايير الأكاديمية لبرنامج الدكتوراة (مواصفات الخريج)
1-2	1.1.
1-1	1-2
1-2	1-3
1-3	1-4
1-4	1.5.
1-4	1.6.
1-3	1.7.
1-5	1.8.
1-5	1.9.
1-6	1.10.
1-4	1.11
1-7	1.12.
1-6	1.13.
1-6	1.14.
1-7	1.15.



نواتج تعلم البرنامج								المعايير الأكاديمية للبرنامج
المعرفة 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.	
	√	√		√				<i>By the end of MD program, the candidate should recognize and understand the followings:</i>
								2.1.1
			√			√		2.1.2
			√					2-1-3
	√				√		√	2.1.4.
	√					√		2.1.5



نواتج تعلم البرنامج							المعايير الأكاديمية للبرنامج المهارات الذهنية
Intellectual skills							
2.b.1.	2.b.2.	2.b.3.	2.b.4.	2.b.5.	2.b.6.	2.b.7.	
	√				√		<i>By the end of MD program, candidate should be able to recognize the following:</i> 2.2.1
						√	2-2-2
			√	√			2-2-3-
			√				2.2.4
		√			√		2.2.5
√							2.2.6
√		√					2.2.7
√				√			2.2.8
√			√				2.2.9



نواتج تعلم البرنامج							المعايير الأكاديمية للبرنامج المهارات المهنية
Practical/Professional skills							
2.c.1.	2.c.2.	2.c.3.	2.c.4.	2.c.5.	2.c.6.	2.c.7.	
✓	✓				✓	✓	
		✓					
			✓	✓			
	✓		✓				
						✓	

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

2.3.1

2.3.2

2.3.3

2.3.4

2.3.5.

نواتج تعلم البرنامج							المعايير الأكاديمية للبرنامج المهارات العامة والمنتقلة
General and transferable skill							
2.d.1.	2.d.2.	2.d.3.	2.d.4.	2.d.5.	2.d.6.	2.d.7.	
			✓				
		✓					
	✓						
						✓	
		✓			✓		
		✓					

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

2.4.1

2.4.2

2.4.3

2.4.4

2.4.5

2.4.6

2.4.7



ملحق (5)

مصفوفة المقررات مع أهداف ونواتج تعلم البرنامج

(Program courses and ILOs matrix)

Courses & Codes		Knowledge & Understanding 2.a.							
		1	2	3	4	5	6	7	8
التشريح فيما يخص الطب الرياضي	Sms 701	*							
الفسولوجيا الرياضية	Sms 702	*							
الكيمياء الحيوية فيما يخص الطب الرياضي	Sms 703	*							
الفارماكولوجي فيما يخص الطب الرياضي	Sms 704		*						
صحة لمسار تسجيل التحصينات وطب المستويات الدوائية	Sms 705		*						
طرق البحث والإحصاء الطبي	Sms 706							*	
الأمراض الباطنة	Sms 707			*	*	*			
الطب النفسي الرياضي	Sms 708			*					
طب رياضي للمجاميع الخاصة	Sms 709								*
المنشطات والقوانين المنظمة لها	Sms 710		*						
ميكانيكا حيوية فيما يخص الطب الرياضي	Sms 711	*							
إصابات الملاعب والعلاج الطبيعي	Sms 712			*	*	*	*		



Courses & Codes		Intellectual Skills 2.b.						
		1	2	3	4	5	6	7
التشريح فيما يخص الطب الرياضي	Sms 701				*			
الفسولوجيا الرياضية	Sms 702		*		*			
الكيمياء الحيوية فيما يخص الطب الرياضي	Sms 703				*			
الفارماكولوجي فيما يخص الطب الرياضي	Sms 704						*	
صحة لمسار تسجيل التحصينات وطب المستويات الدوائية	Sms 705						*	
طرق البحث والإحصاء الطبي	Sms 706			*				
الأمراض الباطنة	Sms 707	*	*			*		
الطب النفسي الرياضي	Sms 708	*	*					
طب رياضي للمجاميع الخاصة	Sms 709	*	*					
المنشطات والقوانين المنظمة لها	Sms 710						*	
ميكانيكا حيوية فيما يخص الطب الرياضي	Sms 711						*	*
إصابات الملاعب والعلاج الطبيعي	Sms 712	*	*					



Courses & Courses		Practical & Clinical Skills 2.c.						
		1	2	3	4	5	6	7
التشريح فيما يخص الطب الرياضي	Sms 701			*				
الفسولوجيا الرياضية	Sms 702			*				
الكيمياء الحيوية فيما يخص الطب الرياضي	Sms 703			*				
الفارماكولوجي فيما يخص الطب الرياضي	Sms 704			*				
صحة لمسار تسجيل التحصينات وطب المستويات الدوائية	Sms 705			*				
طرق البحث والإحصاء الطبي	Sms 706			*				
الأمراض الباطنة	Sms 707	*	*	*				
الطب النفسي الرياضي	Sms 708							
طب رياضي للمجاميع الخاصة	Sms 709							
المنشطات والقوانين المنظمة لها	Sms 710							
ميكانيكا حيوية فيما يخص الطب الرياضي	Sms 711							
إصابات الملاعب والعلاج الطبيعي	Sms 712	*	*	*	*	*	*	*



Courses & Codes		General & transferable 2.d.					
		1	2	3	4	5	6
التشريح فيما يخص الطب الرياضي	Sms 701				*	*	
الفسولوجيا الرياضية	Sms 702		*			*	
الكيمياء الحيوية فيما يخص الطب الرياضي	Sms 703				*		
الفارماكولوجي فيما يخص الطب الرياضي	Sms 704		*		*		
صحة لمسار تسجيل التحصينات وطب المستويات الدوائية	Sms 705	*		*			
طرق البحث والإحصاء الطبي	Sms 706					*	*
الأمراض الباطنة	Sms 707		*	*			
الطب النفسي الرياضي	Sms 708			*			
طب رياضي للمجاميع الخاصة	Sms 709	*				*	
المنشطات والقوانين المنظمة لها	Sms 710						*
ميكانيكا حيوية فيما يخص الطب الرياضي	Sms 711			*			*
إصابات الملاعب والعلاج الطبيعي	Sms 712	*		*			*



ملحق (6): توصيف المقررات

Course Specifications

First part
التشريح فيما يخص الطب الرياضي
الفسولوجيا الرياضية
الكيمياء الحيوية فيما يخص الطب الرياضي
الفارماكولوجي فيما يخص الطب الرياضي
صحة لمسار تسجيل التحصينات وطب المستويات الدوائية
طرق البحث والإحصاء الطبي
Second part
الأمراض الباطنة
الطب النفسي الرياضي
طب رياضي للمجاميع الخاصة
المنشطات والقوانين المنظمة لها
ميكانيكا حيوية فيما يخص الطب الرياضي
إصابات الملاعب والعلاج الطبيعي



جامعة بنها
كلية الطب البشري
قسم التشريح الأدمى وعلم الأجنة

توصيف مقرر التشريح التطبيقي
لدكتوراه طب الرياضى

1. بيانات المقرر		
الفرقة / المستوى : جزء أول	اسم المقرر : مقرر علمي في التشريح التطبيقي	الرمز الكودي : Sms 701
عدد الوحدات الدراسية : نظري 3 credit hours		التخصص :
0. Understand the anatomy and surface landmarks of major joints and soft tissue structures, 1. Apply knowledge of the appropriate system structures relevant to rheumatology and musculoskeletal medicine, 2. Succeed to make a proper diagnosis of different musculoskeletal disorders of nerves, muscles, joints and central nervous system. 3. Improve the standards of knowledge by self-education as a researcher and specialist in the field of Rheumatology, Rehabilitation and Physical Medicine		2. هدف المقرر: ر:
3. المستهدف من تدريس المقرر :		
By the end of the course, the student 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. Discuss cortical areas of the brain and define pyramidal tract & extra pyramidal tract	أ- المعرفة والفهم:	
2.b.1. Evaluate the outcome of surgical correction, 2.b.2. Correlate basic science of anatomy to connective tissue, bone, joint, and muscle diseases, 2.b.3. classify sites of the nerve compression, 2.b.4. Interpret physical tests to evaluate musculoskeletal disorders, 2.b.5. Analyze biomechanical principles of joint function in the prescription of orthoses and prostheses, 2.b.6. Interpret sites of neurological injuries.	ب- المهارات الذهنية:	



<p>By the end of the course, students should be able to:</p> <p>2.c.1. <i>Demonstrate</i> the dermatomal and myotomal supply of the body.</p> <p>2.c.2. <i>Draw</i> the accurate surface marking and anatomical landmarks needed for injecting joints and soft tissue rheumatic disorders.</p> <p>2.c.3. <i>Make</i> algorithm in calculating the patient age.</p> <p>2.c.4. <i>Practice</i> how to correct different alignment.</p> <p>2.c.5. <i>Assess</i> the progress of different deformities</p> <p>2.c.6. <i>Prescribe</i> examination protocols in evaluating musculoskeletal disorders.</p>	<p>جـ - المهارات المهنية الخاصة بالمقرر:</p>
<p>2.d.1. use information and communication technology effectively in the field of anatomy</p>	<p>د - المهارات العامة:</p>
<p>4. محتوى المقرر:</p>	



ILOs	% of total	Total (hrs)	Small group (hrs)	Lectures (hrs)	Subject
2.a.1, 2.a.2,, 2.a.3,, 2.a.4., 2.a.5, 2.b.2, 2.b.3,2.c.1,2.c.2, 2.c.3					<u>1) GENERAL ANATOMY</u> Bones :- Functions , classifications , structure of living bone , general features , growth and blood supply -Cartilages : general features , types -Joints :classifications (fibrous , cartilaginous , synovial) , types of synovial joints , structure of synovial joints , movements -Skeletal muscles : characters , functions -Fascia : types , characters , derivatives -Spinal nerves : classification , origin ,course and structure
2.a.3,2.a.6 2.b.1. , 2.c.4, 2.c.6., 2.d.1, 2.b.3					<u>2) NECK AND TRUNK</u> -Muscles of facial expression , muscles of mastication and tempromandibular joint (T.M.J.) -Muscles of neck :suprahyoid& Infrahyoid muscles , scalene muscles, prevertebral muscles , muscles of back of neck -Joints , ligaments and movements of vertebral column -Nerves of head and neck :-Cranial nerves ,cervical plexus -
					<u>3) UPPER, LOWER LIMBS AND THORAX</u> Upper limb :--Muscles of: pectoral region , shoulder ,back of trunk ,arm ,forearm and hand -Joints ,ligaments and movements of upper limb -Nerves : brachial plexus ,nerves of upper limb *Lower limb : Muscles of : front ,medial and back of the



1. Lectures
2. Tutorials
3. On line lectures : BU-LMS benha university learning management system

مصفوفة طرق التدريس مع نواتج التعلم لمقرر
التشريح التطبيقي

5.
أسالي
ب
التعليم
والتعل
م

طرق التدريس			نواتج التعلم للمقرر	
Seminars	Tutorial	Modified Lectures		
■		■	2.a.1	المعرفة والفهم
■		■	2.a.2	
■		■	2.a.3	
■	■	■	2.a.4	
■		■	2.a.5	
■		■	2.a.6	
■		■	2.b.1	المهارات الذهنية
■	■	■	2.b.2	
■		■	2.b.3	
■		■	2.b.4	
■		■	2.b.5	
■	■	■	2.b.6	
■		■	2.c.1	المهارات المهنية
■		■	2.c.2	
■		■	2.c.3	
■		■	2.c.4	
■		■	2.c.5	
■	■	■	2.c.6	
		■	2.d.1	المهارات العامة

6- تقويم الطلاب :



1. **Written exams:** Assess knowledge & understanding and intellectual skills.
2. **Structured oral exams:** to assess knowledge and understanding, intellectual, professional and general and transferable skills.
3. **Practical Exams**

أ-
الأساليب
المستخدمة

مصنوفة طرق التقويم مع نواتج التعلم لمقرر
التشريح التطبيقي

Practical Exam	طرق التقويم		نواتج التعلم للمقرر	
	Structured Oral Exam	Written exam		
	■	■	2.a.1	المعرفة والفهم
	■	■	2.a.2	
	■	■	2.a.3	
	■	■	2.a.4	
	■	■	2.a.5	
	■	■	2.a.6	
	■	■	2.b.1	المهارات الذهنية
	■		2.b.2	
		■	2.b.3	
		■	2.b.4	
		■	2.b.5	
	■		2.b.6	
	■		2.c.1	المهارات المهنية
■			2.c.2	
■			2.c.3	
■			2.c.4	
■			2.c.5	
■			2.c.6	
■	■		2.d.1	المهارات العامة

- Final exam at May or November

ب-
التوقيت



Examination : Marks allocated a- Written: 100 b- Oral: 25 d- Practical: 25	ج- توزيع الدرجات
7- قائمة الكتب الدراسية والمراجع :	
• Lectures notes	أ- مذكرات
Gray's Anatomy 42nd Edition The Anatomical Basis of Clinical Practice Editor in Chief: Susan Standing eBook ISBN: 9780702077104 Hardcover ISBN: 9780702077050 Paperback ISBN: 9780702077067 Imprint: Elsevier Published Date: 21st October 2020 Page Count: 1606 Standing, S. (Ed.). (2020). <i>Gray's anatomy e-book: the anatomical basis of clinical practice</i> . Elsevier Health Sciences.	ب- كتب ملزمة
Hole's Human Anatomy & Physiology 15th Edition by David Shier (Author), Jackie Butler (Author), Ricki Lewis (Author)	ج- كتب مقترحة
Hole, J. W., Shier, D., Butler, J., & Lewis, R. (2019). <i>Hole's essentials of human anatomy & physiology</i> . Boston.	
https://www.coursera.org/specializations/anatomy	د - دوريات علمية أو نشرات



Course Contents/ILOs Matrix

ILOs	2.a. Knowledge and understanding						2.b. Intellectual Skills						2.c.3. Practical & Clinical skills						2d.General transferable Skills
	2.a.1	2.a.2	2.a.3	2.a.4	2.a.5	2.a.6	2.b.1	2.b.2	2.b.3	2.b.4	2.b.5	2.b.6	2.c.1	2.c.2	2.c.3	2.c.4	2.c.5	2.c.6	2.d.1
1) General anatomy	x	x	x	x	x			x	x				x		x				
2)Head and neck Disease			x			X	x		x							x		x	x
3) UPPER, LOWER LIMBS AND THORAX				x			x		x		x	x					x		x
4) NEUROANATOMY			x						x			X							

رئيس مجلس القسم

العلمي

ا.د. عصام محمد

عبد



Benha university

Faculty of Medicine.

Department of sport medicine.

Course Specifications

مقرر فسيولوجيا الرياضة

Course title: M.D. of Sports Medicine (Sms 700)

Code: SMs 702

Department offering the course: **PHYSIOLOGY DEPARTMENT**

A- Basic Information

- **Allocated marks: 150 marks.**
- Course duration: 15 weeks
- Teaching hours:

	Hours / day	Total hours
Lectures	2lectures /week for 15 weeks	30 teaching hours = 2 credit hours
Practical	2 hrs / week for 15 weeks	30 teaching hours = 1 credit hour
Total	4 teaching hours /week for 15 weeks	60 teaching hours =3credit hours

B- Professional Information



1 – Overall Aims of Course

1. Provide postgraduate students with the scientific knowledge about the concept of sport physiology.
2. Provide detailed data about the effects of exercise on different body systems.
3. Provide sufficient data on the practical application of skills and knowledge required by today's sports and exercise
4. Evaluate the effects of activity and the environment on bioenergetics, fatigue and recovery.
5. Provides the good stepping-stone to a professional career.
6. Provide postgraduates with an opportunity to formulate research knowledge and presentation skills in these areas.

2 – Intended learning outcomes of course (ILOs)

1.a- Knowledge and understanding:

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

- 1.a1- develop a deeper understanding of the physiological processes relevant to sport, exercise, and performance.
- 1.a2- Memorize important physiological definitions and laws in relation to exercise.
- 1.a4- understand the different mechanisms of homeostasis and how to use it in sport physiology.
- 1.a5- provide excellence in medical education, research in relation to sport physiology.
- 1.a6- understand the professional applications of a MD Certificate in Applied Sport and Exercise Physiology.

1.b- Intellectual skills:

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

1. b.1-. Describe the normal structure and function of the skeletal muscle.
- 1.b2- Identify the physiology of muscle contraction and its deviations .



1.b.3- Translate the consequences of different factors on muscle contraction.

1. b.4- Illustrate simple muscle twitch in the form of simplified diagrams with complete data on it.

1. b.5- Interconnect different branches of physiology to sport physiology.

1.b.6-Analyze and summarize updated physiological information related to sport physiology.

1.c- practical skills:

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

1.c.1- Perform muscle biopsy techniques to study different phases of muscle contraction.

1.c.2- interpret different laboratory tests to detect effect of exercise on metabolism.

1.c.3- asses effect of exercise on respiratory system.

1.c.4- record cardiovascular parameters under different types of exercise.

1.c.5- asses skeletal muscle contraction and factors affecting it.

1.c.6- detect the effect of muscle loading

1. d.- General and transferable skills

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

1. d.1- show discipline and appropriate manners when working in a lab and cooperation with his colleges

1. d.2- respect towards general property and how to handle learning facilities with care.

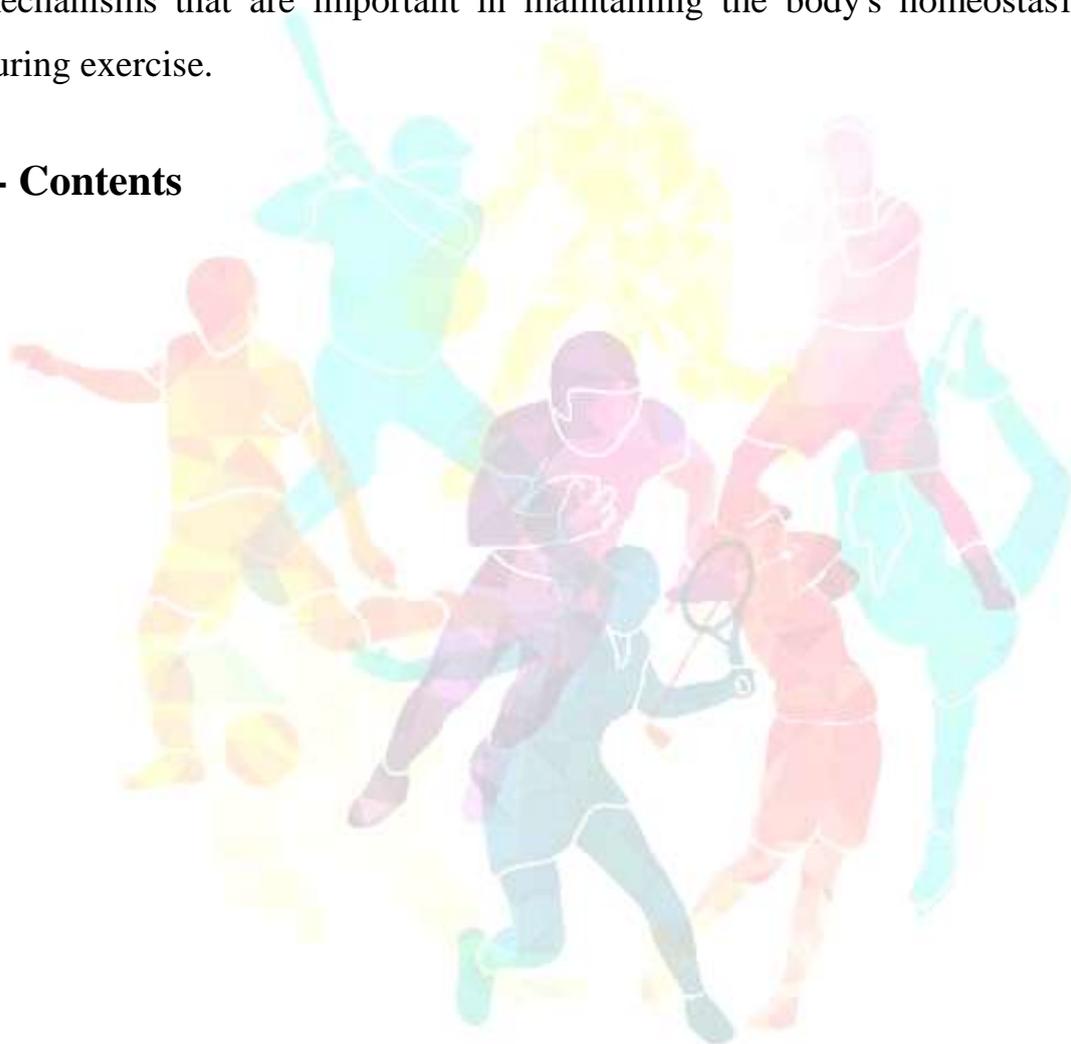


1. d.3- deal properly and cautiously in a lab.

1. d.4- Use the sources of biomedical information to remain current with the advances in knowledge & practice concerning sport physiology.

1. d.5- Perform tests showing the molecular, biochemical, and cellular mechanisms that are important in maintaining the body's homeostasis during exercise.

3- Contents





Contents

1- practical

- 1-Muscle functioning testing (including isometric , isokinetic and isotonic muscle function tests)
- 2- Electromyographic (EMG) analysis of muscle function
- 3- Muscle biopsy techniques and interpretation of results
- 4- Lung function testing at rest and during exercise
- 5- Exercise testing to assess the cardiovascular response to exercise and analysis of oxygen consumption

ILOs

- a-describe and define different phases of simple muscle twitch.
- b- What are the effects of warming, cooling, fatigue on muscle contraction.
- c-discuss effect of muscle loading on simple muscle twitch
- D-Explain the effect of exercise on lung volumes and capacities
- e- explain the effect of exercise on HR, COP and ABP
- f- explain the effect of exercise on blood glucose,lipid profile and calcium levels
- g- explain the effect of exercise on blood levels of endocrine hormones



<u>Lectures</u>	
Structural properties of the muscle	1-Describe structure of skeletal muscle 2- Explain muscle energetic, mechanics and physiological performance. 3-enumerate and compare between types of skeletal muscle fibers
Physiology of muscle contraction	1-discuss neuromuscular junction 2-explain excitation contraction coupling 3-enumerate factors affecting contractility 4- compare between types of contraction
muscle metabolism	1- discuss muscle metabolism during rest and during contraction 2- Explain the phosphagen system 3- compare between aerobic and anaerobic metabolism during exercise 4- explain fueling the energy systems
skeletal muscle blood flow and muscle fatigue	1- explain the characteristics of skeletal muscle blood flow 2- discuss the regulation of skeletal muscle blood flow 3-define and enumerate types of muscle fatigue 4- explain physical fitness
metabolic adaptation to training	1- Explain metabolic rate 2-Explain respiratory quotient 3-discuss thermoregulatory system during exercise 4-explain oxygen dept 5- explain VO ₂ Max 6-discuss heat stroke
EMG activity and muscle function	1- Medical uses of EMG 2- Technique of EMG 3- Surface and intramuscular EMG recording electrodes 4- Limitations of EMG needle 5- Normal and abnormal finding of EMG



Neurophysiology of movement

- 1- The motor neuronal outputs from cortex
- 2- The motor neuronal outputs from spinal cord
- 3- Neurotransmitters in motor neurons
- 4- Important Electrolytes needed for motor function





Gas exchange	<ol style="list-style-type: none">1-Enumerate properties of respiratory membrane2- enumerate properties of respiratory gases3- explain ventilation perfusion ratio
Oxygen transport by blood	<ol style="list-style-type: none">1-explain forms of oxygen transport by blood2- discuss oxygen dissociation curve
Carbon dioxide transport in the blood	<ol style="list-style-type: none">1-explain forms of CO₂ transport by blood2- discuss CO₂ dissociation curve
Pulmonary function testing	<ol style="list-style-type: none">1-Explain static tests2- explain dynamic tests
Ventilatory response during exercise	<ol style="list-style-type: none">1-pulmonary ventilation during exercise2-pulmonary perfusion during exercise3- gas exchange during exercise4-respiratory adaptation to training
Control of breathing	<ol style="list-style-type: none">1-Enumerate respiratory centers2-nervous regulation of respiration3-chemical regulation of respiration
Cardiac output	<ol style="list-style-type: none">1-define COP2- enumerate variations of COP3-Explain regulation of COP



Arterial blood pressure	<ol style="list-style-type: none">1-define ABP2- enumerate variations of ABP3-Explain regulation of ABP
cardiovascular response to exercise	<ol style="list-style-type: none">1-discuss effect of exercise on COP2-discuss effect of exercise on ABP3-Explain adaptation of cardiovascular system to exercise4- The cardiovascular response to exercise in different environmental conditions such as altitude and heat
Cardiac reserve and cardiac work	<ol style="list-style-type: none">1- Heart rate reserve2- Preload(EDV) reserve3- Afterload reserve4- ESV reserve5- Cardiac hypertrophy6- Venous oxygen reserve
Control of heart function at rest and during exercise	<ol style="list-style-type: none">1- Intrinsic mechanism2- Nervous control3- Cardiovascular reflexes
Myocardial adaptation to exercise training	<ol style="list-style-type: none">1- COP adaptation2- heart rate adaptation3- O₂ consumption adaptation

4– Teaching and learning methods:

4.1.methods used

4.1-1.General lectures

4.1.2.Practical sessions in the department lab.

4,1.3.-seminares

4,1.4-confrences

4.1.5 Thesis and review articles



5- Student assessment methods:

5-a) Assessment TOOLS:

مخرجات التعلم المستهدفة	الوسيلة	م
To assess knowledge & understanding, intellectual skills. 2.a.1.....2.a.5, 2.b.1,,2.b.9	Written examination	
To assess knowledge & understanding, intellectual skills & General & transferable skills 1.a.1.....1.a.5 1.b.1,,1.b.4, 1.d.1.....1.d.5	Oral examination	
To assess practical skills: 1.c.1.....1.c.3	Practical examination	
To assess knowledge & intellectual skills. 1.a.1.....1.a.5, 1.b.1,,1.b.3	MCQ examination	

5-b) TIME SCHEDULE:

Exam	Week
5- Final exam	(May&November)

5-c-Assessment time schedule

Assessment 1... Written , practical and oral

5-d-weighting system (formative or summative).

D) Weighting System:

Assessment 1... 1st. part Written, oral

Examination	Marks allocated	% of Total Marks
2- Final exam:		
a- Written	90	60%
b- practical	25	17%
c- Oral	25	17%



d- activity	10	6%
Total	150	100%

- Passing grades are: EXCELLENT >85%, VERY GOOD 75- <85%, GOOD 65- <75% and FAIR 60-<65%.

FORMATIVE ASSESSMENT:

- Student knows his marks after the Formative exam

5-E) Examination description:

Examination	Type	Description
Final Examination	1. Written	Written paper composed of short essay-type questions, long essay.
	2. Oral	One oral examination station with 2 staff members (10-15 minutes: 4-5 questions)
	3- practical	OSCE

6- List of references

- 6.1- John E Hall (2006): Guyton & hall physiology review. Eleventh edition.
- 6.2-Poul-Erik Paulev(2008): Medical Physiology And Pathophysiology Essentials and clinical problems.
- 6.3- William F Ganong (2003): review of medical physiology. Twenty – first edition.
- 6.4- John E Hall (2012): guyton&hall text book of medical physiology.twelfth edition.
- 6.5-Sembulingam K &Prema Sembulingam (2003): essentials of medical physiology .fourth edition.
- 6.6- Periodicals, Web sites, ...etc

www.jap.physiology.org.

www.physiologyonline.physiology.org/cgi/content

7- Facilities required for teaching and learning

1. Data show.
2. Overhead projector.
3. postgraduate laboratories with their equipments.



Course coordinator: Assistant prof. /Abeer Ahmed Shoman

Head of Department:

Date:

- تاريخ إقرار المقرر في مجلس الكلية: / / رقم:
- تاريخ إقرار المقرر في مجلس الكلية: / / رقم:





توصيف مقرر الكيمياء الحيوية فيما يخص الطب الرياضي
(للعام الأكاديمي 2021/2020)

جامعة : بنها

كلية: الطب البشرى

قسم :الكيمياء الحيوية الطبية

1- بيانات المقرر		
الفرقة / المستوى : دكتوراه (جزء اول)	اسم المقرر : First Part of Doctorate Degree in Sport Medicine.	الرمز الكودي : Sms703.
عدد الوحدات الدراسية : نظري <input type="text"/> عملي <input type="text"/>	التخصص : الطب الرياضى	



. Overall Aim of the Course:

2- هدف

- 1.1. Provide all students with a broad education in fundamental aspects of medical biochemistry and molecular biology;
- 1.2. Provide a sound knowledge and understanding of the biochemical importance of macro-, micronutrients, hormones and enzymes;
- 1.3. To enable the student to illustrate and/or describe the metabolic pathways of macronutrients and nucleotides;
- 1.4. Illustrate the contribution of the organs in metabolic process under different physiological circumstances;
- 1.5. To enable the student to understand the bioenergetics of the concerned metabolic pathways under different physiological circumstances and their integrator regulations with other working metabolic pathways;
- 1.6. Enable students to point out and understand the biochemical and the molecular basis of a range of diseases, their diagnosis and the development of therapies;
- 1.7. Acquire a critical understanding of the basic principles of molecular biology, different methods used in diagnosis of diseases;
- 1.8. Be familiar with biotechnology methods and their clinical implications and be able to explain some detailed examples;
- 1.9. Be able to devise and evaluate suitable experimental methods for the investigation of relevant areas of biochemistry and molecular biology;
- 1.10. To enable the student to describe major body fluids composition and their clinical impact;
- 1.11. Develop through a flexible and progressive structure, a range of subject-specific and transferable skills, including practical laboratory skills, self-management, information retrieval, communication and presentation skills, working with others, decision making and meeting deadlines, that equip students for future employment.

المقرر :

3- المخرجات التعليمية المستهدفة :



<p><i>By the end of the course, students should be able to:</i></p> <p>2.1.1. Describe the main metabolic pathways of the three main dietary sources of energy: carbohydrates, fats and proteins, their digestion absorption, their oxidation to release energy.</p> <p>2.1.2 Understand the regulation of these pathways and the integration of their metabolism</p> <p>2.1.3 point-out biochemical alteration in related metabolic disorders.</p> <p>2.1.4 Understand the role of vitamins and enzymes required for catalysis of these processes, in addition to their deficiency manifestations.</p> <p>2.1.5 Describe the contribution of certain tissues like liver, kidney, muscles and nervous system to metabolism in health and disease.</p> <p>2.1.6. Understand the metabolism of the major minerals and trace elements, their functions and alterations in metabolic processes due to deficiency or excess of these elements</p> <p>2.1.7. Acquire knowledge about nucleic acid metabolism with special emphasis on their role in protein synthesis.</p> <p>2.1.8 Understand the general principles of genetic engineering and how may this be used for the diagnosis and management of diseases.</p> <p>2.1.9 Describe the components of some body fluids e.g. blood and urine.</p>	<p>أ - المعرفة والفهم :</p>
<p>2.2.1 Analyze pathological glucose tolerance curve. 2.2.2 Interpret medical laboratory reports. 2.2.3 Solve problems related to metabolic disturbances in a given case study report.</p>	<p>ب - المهارات الذهنية:</p>
<p><i>By the end of the course, students should be able to:</i></p> <p>2.4.1. Communicate properly with the staff members as well as with each other. 2.4.2. Work effectively in groups. 2.4.3. Use available resources to get data& knowledge.</p>	<p>ج - المهارات العامة :</p>



Subject	rs)	s		
Blood pH regulation, acidosis and alkalosis				
Major pathways of glucose oxidation				
ulation, diabetes mellitus, galactosemia & glycogen storage disease				
Fructose metabolism & fructose intolerance				
a lipoproteins, hyperlipidemia, lipotropic factors & fatty liver				
osis, cholesterol metabolism, hypercholesterolemia and atherosclerosis				
rrors of amino acids metabolism, urea cycle, NPN compounds				
eme metabolism, hemoglobinopathies, porphyria and Jaundice				
Insulin, steroid, thyroid and parathyroid hormones				
Plasma enzymes & their diagnostic values				
Vitamins & their deficiency manifestation				
ate homeostasis, sodium, potassium, iron and their deficiency manifestation.				
Hyperuricemia & gout				
re, replication, transcription & Regulation of gene expression				
A structure, transcription and posttranscriptional modification				
DNA damage, mutation and repair				
Cell cycle & apoptosis, tumor markers				
rotein synthesis: translation and posttranslational modifications				
inant DNA technology, blotting techniques and gene therapy.				
Liver & kidney function tests				
CSF: normal and abnormal constituents & their clinical relevance.				
Biotransformations, the cytochrome P-450				
Total				

-4

محتوى

المقرر:

Tutorials:

Acidosis and alkalosis

Diabetes Mellitus, galactosemia & glycogen storage disease.

Hyperlipidemia.

Hypercholesterolemia and atherosclerosis.

ketosis.

Plasma enzymes & their diagnostic values.

PRACTICAL CLASSES: not applicable

Mineral metabolism: Calcium & phosphate homeostasis, sodium, potassium, iron, zinc and their deficiency manifestation.

Nucleic Acids: structure, functions and protein biosynthesis. D



<u>METHODS USED:</u>		-5
1.	Lectures	أساليب التعليم والتعلم
2.	Tutorials.	
-6- تقويم الطلاب :		
<u>ADMISSION CRITERIA:</u> attendance percentage of > 75% must be fulfilled before the final exam.		أ-
<u>Assessment TOOLS:</u>		الأساليب المستخدمة
Tool	Purpose (ILOs)	
Written examination	To assess knowledge & intellectual skills.	
Oral examination	assess knowledge, intellectual skills& general& transferable skills.	
<u>TIME SCHEDULE:</u>		ب-
Exam	Time	التوقيت
1- Final exam	April or October	



Examination	Marks allocated	Total Marks
Written exam:	30	60%
Oral exam:	20	40%
Total	50	100%

ج- توزيع
الدرجات

The minimum passing grade is 30 marks (60% of the total marks), provided that at least 15 marks (60% of marks for written exam) are obtained in the written

Examination	Description
Written exam	Written exam (2 hour) composed of short essay questions & multiple choice questions.
Oral exam	one session of oral examination
Total	

7- قائمة الكتب الدراسية والمراجع :

Main Books: Department book (available for students to purchase from different bookstores in the faculty).

Essential books: Harper's Biochemistry by: Robert K. Murray, Daryl K. Granner, Peter D. Lehninger and Victor W. Rodwell.

Recommended Books: Lippincott's illustrated Biochemistry.

Periodical websites: www.clinchem.org

منسق المقرر : ا.د/ احمد هشام

رئيس مجلس القسم العلمي : ا.د/ نجلاء

عزب



*Benha University. Faculty of Medicine.
Department of Pharmacology*

COURSE SPECIFICATIONS

Course title: MD Of Science(Pharmacology) Sports Medicine .

Code: Sms 704

- **Department offering the course: Pharmacology Department**
- **Allocated marks: 50 marks .**
- **Course duration: 15 weeks of teaching.**

B- Professional Information

1- Overall aims of course

- 1.1. To **provide** the basic knowledge about commonly used groups of drugs affecting different body systems.
- 1.2. To **provide** drugs implications in therapy of diseases and health promotion.
- 1.3. To **enable** students to understand the safe use of drugs as regards adverse effects, contraindications and drug interactions.

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. **Students** will be able to describe the behavior & functional evolution of drugs from the moment they are administered until they



are eliminated from the body.

2.a.2. Students will be able to describe the basic pharmacological characteristics of the principal therapeutic drugs for various conditions & their mechanisms of action.

2.a.3. Students will acquire & use the appropriate pharmacological terminology & expressions in the clinical setting .

2.a.4. Students can identify the indications , purpose , pharmacological interactions , adverse effects & drug intoxication levels for each medication as well as perform a benefit risk analysis .

2.a.5. Students recognize & know how to correctly manage the medications they will administer , their presentation forms , routes , proper dosages & administration intervals .

2.a.6. Students will know how to relate certain physiological , pathological & inter individual variables can affect the action of drugs

2.a.7. Students will correctly interpret & apply the pharmacological prescriptions made by the doctor , following the administration guidelines to obtain an optimal therapeutic response

2.a.8. Students will be able to confidently inform the patient about the treatment they will receive and the techniques & procedures to be performed .

2.a.9. Students will be able to locate pertinent information regarding the medications that must be handled & administered to various patients in a clinical setting .

2.a.10. Students will be active participants in the health education of the general population specially on the proper use of medication & on efforts promote safety & rationale use .

2.b. Communication skills:

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



2.b.1. Communicate clearly, sensitively and effectively with colleagues from a variety of health and social care professions.

2.b.2. Establish good relations with other health care professionals regardless their degrees or rank (top management, subordinate or colleague).

2.b.3. Communicate effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.

2.b.4. Cope up with difficult situations as breaking news.

2.b.5. Respect superiors, colleagues and all members of the health profession.

2.c. Intellectual skills

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

2.c.1. Select properly the drugs suitable for different patient populations (renal ,hepatic , pediatric , geriatrics ,pregnancy)

2.c.2 Calculate accurately drug's dosage, bioavailability, plasma half life and volume of distribution in different patient populations (renal , hepatic, pediatric , geriatrics) and for nephrotoxic drugs

2.c.3. Obtain and record a comprehensive drug history of the patient.

2.c.4. Document drug adverse reactions.

2.c.5. Adopt the questioning approach to own work & that of others to solve clinical problems.



3- Course contents

1) General Pharmacology	<ul style="list-style-type: none">• Drug forms & routes of drug administration• Basic principles of pharmacokinetics• Basic principles of pharmacodynamics• Adverse effects of drugs• Drug interactions
2) Pharmacotherapy of pain & analgesic	<ul style="list-style-type: none">• Antipyretic & anti inflammatory drugs• Central analgesics – opioids
3) Pharmacotherapy of gout	<ul style="list-style-type: none">• Hypo uricemic & anti gout drugs
4) Pharmacology of autonomic nervous system	<ul style="list-style-type: none">• Cholinergic & adrenergic transmission



5) Pharmacology of skeletal muscle	<ul style="list-style-type: none"> • Muscle relaxants
6) Local & general	
anesthetic drugs	
7) Pharmacotherapy of epilepsy	<ul style="list-style-type: none"> • Anti epileptic & anti convulsive drugs
8) Cardiac pharmacology	<ul style="list-style-type: none"> • Positive inotropic drugs , anti anginal & anti arrhythmic drugs
9) Pharmacotherapy of hypertension	<ul style="list-style-type: none"> • Anti hypertensive drugs
10) Pharmacotherapy of dyslipidemias	<ul style="list-style-type: none"> • Lipid lowering drugs (anti hyperlipidemic)
11) Pharmacology of hemostasis & coagulation	
12) Pharmacotherapy of anaemia	
13) Pharmacotherapy of diabetes	<ul style="list-style-type: none"> • Insulin & non insulin anti diabetics



14) Doping control & banned substances	<ul style="list-style-type: none">• Anabolic androgenic steroids , peptide hormones , growth factors & mimetics , beta-2 agonists .
15) Sport supplementation	
16) Chemotherapeutic	<ul style="list-style-type: none">• Antibiotics
drugs	
17) Antifungal agents	
18) Antiviral agents	
19) Pharmacotherapy of gastrointestinal diseases	<ul style="list-style-type: none">• Peptic ulcer , spasmolytics , anti diarrheal drugs & antiemetic drugs.

4- Teaching and learning methods

METHODS USED:

- 4.1-Modified Lectures
- 4.2- Practical classes
- 4.3-Problem based pharmacotherapy.
- 4.4-Small group discussion
- 4.5-Self assessment questions and internet interrogation about self assessment questions.

5- Student Assessment Methods

5.A) Attendance Criteria:

1. Lectures (at least 50% attendance).
2. Practical (at least 75% attendance).
3. Log book



5-B) Weighting system:

Examination	Marks allocated
Final Exam :	
A) Written	30
B) Practical	20

Formative Assessment: Student knows his marks after the formative exams.

5-E) Examination description:

Examination	Description
1- Written	MCQ ,compare , explain, short essay questions
3- Practical	Assignments & practical books

6- List of References

6.1. **Handouts** updated administered by staff members

6.2. **Essential Books** (Text Books):

Principles of pharmacology (2012): the pathophysiologic basis of drug [et al.], Philadelphia : Lippincott Williams & Wilkins.

6.3. **Recommended Books:**

GOODMAN AND GILMAN (2011): THE PHARMACOLOGICAL BASIS OF THERAPEUTICS 12th edition.

6.4- **web Sites:**

www.micromediex.com

7- Facilities Required for Teaching and Learning

- Lecture rooms: 1

- Laboratories: 2



- Section rooms:2
- Audio-visual teaching equipments (Computer, Projector, Video, smart boardetc)
- Models ,video tapes, scientific pictures archives.

Course Coordinator: Assistant Professor : Dr. Mary

Elkoumos Boutros Yacoub Head of Department: Prof. Dr.

Nasr Nazmy





توصيف مقرر صحة لمسار تسجيل التحصينات وطب المستويات الدوائية

University: Benha

Faculty of Medicine

Department: Sports Medicine

1- Course information		
507Code: SM	Course name: صحة لمسار تسجيل التحصينات وطب المستويات الدوائية	Grade/ Level: MD of Sports Medicine
Number of modules: 1 credit hour		

Department offering the program: Sports Medicine •

Date of specification approval: department council, date 9/2020. •

Faculty council date 15/9/2020

Authorization date of course specification: 2020-2021

- Allocated marks: 50
- Course duration: 15 weeks of teaching.

2- Goal of the Course:	At the end of the course the candidate will be minded with all aspects of athletes vaccination.
3- Target educational output:	



A- Knowledge and understanding:	2.a. 1 Discuss Basics of immune system 2.a. 2 Describe Impact of sports on immune system 2.a. 3 Discuss Principles of Vaccination in Athletes 2.a. 4 List Indications for Vaccination in Athletes
B- Intellectual skills:	2.b. 1 Evaluate Risk benefit balance of vaccination in athletes 2.b. 2 Plan a vaccination schedule for athletes in different situations
C- Professional and practical skills:	2.c.1 Diagnose vaccination related side effects in athletes 2.c.2 Manage vaccination related side effects in athletes
D- General & Transferable skills	By the end of the course the candidate will be able to: 2.d.1 Utilize effectively various computer based instruction tools. 2.d.2 Utilize a variety of computer-based self-learning and self-assessment tools.

4- Course content:	<ol style="list-style-type: none">1. Basics of immune system2. Impact of sports on immune system3. Principles of Vaccination in Athletes4. Risk benefit balance of vaccination in athletes5. International vaccination for athletes6. Indications for Vaccination in Athletes7. Timing of vaccination8. Methods to reduce side effects9. Indications for Titer Control10. COVID-19 vaccination in athletes
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<p>5- Teaching and learning methods</p>	<ul style="list-style-type: none"> • Modified Lectures • Small Group discussion • Clinical Classes <table border="1" data-bbox="624 488 1353 1149"> <thead> <tr> <th colspan="3">طرق التدريس</th> <th colspan="2">نواتج التعلم للمقرر</th> </tr> <tr> <th>Clinical Classes</th> <th>Small Group discussion</th> <th>Modified Lectures</th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>✓</td> <td>✓</td> <td>✓</td> <td>2.a.1</td> <td rowspan="4">المعرفة والفهم</td> </tr> <tr> <td>✓</td> <td>✓</td> <td>✓</td> <td>2.a.2</td> </tr> <tr> <td>✓</td> <td>✓</td> <td>✓</td> <td>2.a.3</td> </tr> <tr> <td>✓</td> <td>✓</td> <td>✓</td> <td>2.a.4</td> </tr> <tr> <td>✓</td> <td>✓</td> <td>✓</td> <td>2.b.1</td> <td rowspan="2">المهارات الذهنية</td> </tr> <tr> <td>✓</td> <td>✓</td> <td>✓</td> <td>2.b.2</td> </tr> <tr> <td>✓</td> <td></td> <td></td> <td>2.c.1</td> <td rowspan="2">المهارات العملية والمهنية</td> </tr> <tr> <td>✓</td> <td></td> <td></td> <td>2.c.2</td> </tr> <tr> <td>✓</td> <td>✓</td> <td></td> <td>2.d.1</td> <td rowspan="2">المهارات العامة</td> </tr> <tr> <td>✓</td> <td>✓</td> <td></td> <td>2.d.2</td> </tr> </tbody> </table>	طرق التدريس			نواتج التعلم للمقرر		Clinical Classes	Small Group discussion	Modified Lectures			✓	✓	✓	2.a.1	المعرفة والفهم	✓	✓	✓	2.a.2	✓	✓	✓	2.a.3	✓	✓	✓	2.a.4	✓	✓	✓	2.b.1	المهارات الذهنية	✓	✓	✓	2.b.2	✓			2.c.1	المهارات العملية والمهنية	✓			2.c.2	✓	✓		2.d.1	المهارات العامة	✓	✓		2.d.2
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<p>6- Student evaluation:</p>																																																							
<p>A- The methods used</p>	<ul style="list-style-type: none"> • Written Exam: Assess Knowledge & Understanding and intellectual skills • Practical Exam: Assess Knowledge & Understanding, intellectual, practical and general & transferable skills 																																																						
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		✓		2.c.2	
		✓		2.d.1	المهارات العامة
		✓		2.d.2	
B- Timing	May or November				
C- Distribution of grades	<ul style="list-style-type: none">• Written Exam: 30 marks• Practical Exam: 20 marks				
7- List of textbooks and references:					
A- Lecture notes and handout					
B- Gärtner BC, Meyer T. Vaccination in elite athletes. Sports Med. 2014 Oct;44(10):1361-76. doi: 10.1007/s40279-014-0217-3.					
C- Tafuri S, Sinesi D, Gallone MS. Vaccinations among athletes: evidence and recommendations. Expert Rev Vaccines. 2017 Sep;16(9):867-869.					

Course coordinator:
Head of the Scientific Department Council Professor Hosny Abd El
Rahman



كلية: الطبالبشرى
قسم : الطب الرياضي

Sms 706 : توصيف مقرر :

بيانات المقرر
اسم المقرر: Methods of research and statistics
الرمز الكودى : SM 706
التخصص : Sport medicine
المستوى : First part of MD degree
عدد الوحدات الدراسية : 1 ساعات معتمدة

1-هدف المقرر:

- To equip the student with Principles of Biostatistics, types of data, methods of presentation of data, types of Epidemiological studies, Sampling, statistical methods& research methods.
- To provide the student with the knowledge and skills necessary to practice statistical analytical methods and research methods
- To enable the student to evaluate sport health problems.
- Knowledge of concept of demography, demographic features of the population, population distribution & demographic transition.

2- Intended learning outcomes(ILOs):

2.a Knowledge and understanding:



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

2.a.1. Describe the basics of Principles of Biostatistics, types of data, methods of presentation of data, types of Epidemiological studies, Sampling, statistical methods, research methods, demography & population estimation and its different tools.

2.a.2. Explain the usefulness of screening tests, and calculate sensitivity, specificity, and predictive values.

2.a.3. Define the screening tests pertinent to selected diseases and the at-risk approach in the application of screening tests.

2.a.4. Describe the study design, uses, and limitations.

2.a.5. Define clinical epidemiology and its basic components and measure disease risk factors.

2.a.6. Define the sources of data, methods of collection, sampling techniques and advantages of sampling.

2.b Intellectual Skills

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

2.b.1 Choose suitable methods for conducting research.

2.b.2 Choose suitable methods for analysis of data.

2.b.3 Summarize data, construct tables and graphs.

2.b.4 Calculate measures of central tendency dispersion and describe the normal curves and its uses.

2.b.5 Interpret selected tests of significance and the inferences obtained from such tests.

2.b.6 Analyze and evaluate scientific basic knowledge about his community and its problems and to do conclusions from it.



2.b.7 Solve players problems related to sport, making use of the available data.

2.c Professional and Practical Skill

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

2.c.1 Communicate clearly, sensitively and effectively with patients and their relatives and colleagues from a variety of health and social care professions.

2.c.2 Conduct proper counseling practices to provide appropriate basic research methods.

2.c.3 Respect the role of others, superiors, colleagues and all members of the health profession

2.c.4 Conduct different types of surveys.

2.c.5 Develop hypothesis & test it.

2.c.6 Apply the principles of statistical methods for collection, presentation & analysis of all types of data.

2.c.7 Adopt basic and new skills in sport medicine field.

2.c.8 Evaluate and develop the used methods in the field of sport medicine.

2.c.9 Use technological methods in professional practice.

2.d General and Transferable Skills:

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

2.d.1 Establish life-long self-learning required for continuous professional development.

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



2.d.3 Retrieve, manage, and manipulate information by all means, including electronic means.

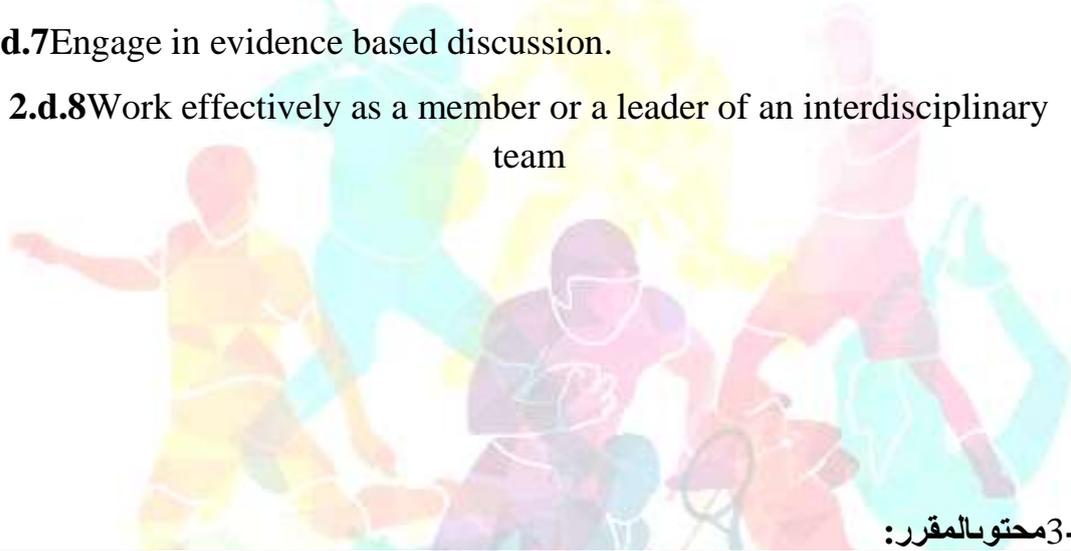
2.d.4 Present information clearly in written, electronic and oral forms.

2.d.5 Conduct counseling sessions for prevention & control of different conditions for healthy individuals, for patients as well as their families.

2.d.6 Establish effective interpersonal relationship to Communicate ideas and arguments & Work effectively as a member or a leader of an interdisciplinary team

2.d.7 Engage in evidence based discussion.

2.d.8 Work effectively as a member or a leader of an interdisciplinary team



3-محتوالمقرر:

Topics	Hours of Lectures	Practical/Tutorial	Total
Types of data			
Distribution of data			
Sources of data			
Collection of data: <ul style="list-style-type: none">• Sampling• Screening• Survey• Epidemiological studies			



Summarization of data: <ul style="list-style-type: none">• Measures of central tendency• Measures of scatter			
Presentation of data: <ul style="list-style-type: none">• Tabular presentation• Graphic presentation• Mathematical presentation			
Hypothesis testing steps			
Tests of significance: <ul style="list-style-type: none">• Parametric tests• Non parametric tests			
Total			

4-أساليب التعليم والتعلم :-

4.1 Modified lectures

4.2 Attending the department scientific seminars and thesis discussion

4.3 Group discussion

4.4 Brain storming

5-تقويم الطلاب :-

5.1- Written exams:

Short essay: to assess knowledge.

5.2- Oral Exams: to assess knowledge.

توزيع الدرجات:

- Written exam 60 % of total marks : 30 marks
- Practical exam 40 %: 20 marks

طرق اخرى للتقييم بدون درجات



- Seminars preparation
- Log book
- Attendance and absenteeism

قائمة الكتب الدراسية والمراجع:

- Basic materials like Department notebook: *Handouts* of the staff member in the department (2012-2013).
- Essential books (text books) like *Khalil IF, 1999*: Biostatistics, Cairo University and *Maxcy RL, 2008*: Public health and preventive medicine.
- Recommended books like statistics made easy, statistics at a glance and clinical epidemiology
- Periodicals, Web sites, etc:
 - WHO.int.com
 - Pub. Med
 - Google
 - Science direct

7- الإمكانيات المطلوبة للتعليم والتعلم

- Adequate infrastructure including teaching rooms, comfortable desks.
- Teaching tools including screen, smart board , computer and data show.

تمت مناقشة التوصيف واعتماده في مجلس القسم رقم () بتاريخ

المسئول عن المقرر : ا.د/ رشا شاكر الدسوقي رئيس القسم : ا.د/ حسنى عبدالرحمن



جامعة بنها
كلية الطب البشري
قسم الامراض الباطنة

توصيف مقرر الباطنة العامه لائحة حديثة
لدكتوراه الطب الرياضي جزء ثاني

1. بيانات المقرر		
الفرقة / المستوى : ماجستير جزء ثاني	اسم المقرر : مقرر علمي نظري وإكلينيكي في الامراض الباطنة وتخصصاتها العامه	الرمز الكودي Sms 707:
عدد الوحدات الدراسية : 18 credit hours		التخصص : الطب الرياضي
1. Respond to the educational and research training needs of doctors with a special interest in sports Medicine. 2. Prepare a sports medicine physician capable of making a proper diagnosis of different sports Medicine diseases on the basis of adequate history, physical examination and interpretation of supportive investigation. 3. Provide graduates with enough knowledge about disorders of internal organs relevant to sports Medicine 4. Improve students' standards of awareness of self-education as researchers and specialists in the field of sports Medicine.		2. هدف المقرر:
3. المستهدف من تدريس المقرر :		
By the end of the course, the student should be able to: 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. Discuss endocrinal disorders of the pituitary, thyroid, suprarenal and parathyroid glands 2.a.4. mention 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. describe professional knowledge, and theories in the field of internal medicine relevant to Rheumatology, Rehabilitation and Physical Medicine. 2.a.7. list basics of quality and professional performance. 2.a.8. Describe effect of professional performance on community health and environment protection.		أ- المعرفة والفهم:



<p>2.b.1. classify the scientific basis of patients' evaluation in the differential diagnosis of rheumatic diseases.</p> <p>2.b.2. List indications and laboratory tests and imaging procedures used in diagnosis and management of rheumatic diseases.</p> <p>2.b.3. list risk factors, problems, in chronological manner.</p> <p>2.b.4. assess specific problems in atypical situations.</p> <p>2.b.5. assess practical decisions according to available knowledge.</p>	<p>ب- المهارات الذهنية:</p>
<p>2.c.1. Examine patients including specific examinations of structure and function of musculoskeletal and neurological systems.</p> <p>2.c.2. apply controlled clinical trials in rheumatic diseases.</p> <p>2.c.3. Apply medical practical skills and recent techniques in the field of Rheumatology, Rehabilitation and Physical Medicine.</p> <p>2.c.4. write practical reports, investigational and therapeutic programs in the management of rheumatic and musculoskeletal disorders.</p>	<p>ج- المهارات المهنية الخاصة بالمقرر:</p>
<p>2.d.1. use information and communication technology effectively in the field of Internal Medicine to conduct researches in Sports Medicine.</p> <p>2.d.2. show continuous self-learning requirements following updates in the practice of Internal Medicine.</p> <p>2.d.3. Communicate ideas effectively with other specialties.</p> <p>2.d.4. apply scientific meetings of different sources for achieving knowledge and information.</p> <p>2.d.5. Apply working in a team and time mapping, operate with other sport medicine team and be able to analyze their performance.</p>	<p>د - المهارات العامة :</p>



ILOs	% of total	Total (hrs)	Small group (hrs)	Lectures (hrs)	Topic	4. محتوى المقرر:
2.a.5, 2.a.8, 2.b.1, 2.b.2, 2.b.3, 2.b.4 2.c.1, 2.d.4					<u>1) NEUROLOGY</u> - Hemiplegia, - Paraplegia, - Peripheral neuropathy, - Myopathy, - Cranial nerves, - Parkinsonism.	
2.a.1, 2.b.1, 2.b.2, 2.b.3, 2.b.4, 2.b.5					<u>2) CARDIOLOGY</u> - Hypertension, - Heart failure, - Pericardial effusion, - Ischemic heart disease.	
2.a.1, 2.a.2, 2.a.3, 2.a.4, 2.a.5, 2.b.5, 2.d.2					<u>3) NEPHROLOGY.</u> - Glomerulonephritis, - Nephrotic syndrome, - Renal failure, - Hematuria.	
2.a.4, 2.b.1, 2.b.2, 2.b.3, 2.b.5					<u>4) CHEST DISEASES</u> - Tuberculosis, - Pleural diseases, - Bronchial asthma, - Chronic obstructive pulmonary disease (COPD), - Interstitial pulmonary disease,	
2.a.6, 2.b.3, 2.b.5, 2.b.4					<u>5) BLOOD DISEASES</u> - Anemia, - Hemorrhagic blood diseases, - Iron overload.	
2.a.3, 2.b.5, 2.b.4					<u>6) ENDOCRINE DISEASES</u> - Diabetes, - Thyroid diseases, - Suprarenal gland diseases.	
2.a.7, 2.b.1, 2.c.1, 2.c.2, 2.c.3, 2.c.4, 2.d.1, 2.d.3, 2.d.5					<u>7) RHEUMATOLOGY</u> - Gout	
2.a.2, 2.b.4					<u>8) ACID-BASE BALANCE</u>	
2.a.2, 2.b.5,					<u>9) Na⁺ & K⁺ ABNORMALITIES</u>	
					Total	



1. Modified Lectures
2. Tutorial
3. Seminars

5. أساليب
التعليم
والتعلم

مصفوفة طرق التدريس مع نواتج التعلم لمقرر الباطنة العامة
الباطنة العامة

طرق التدريس			نواتج التعلم للمقرر	
Seminars	Tutorial	Modified Lectures		
■		■	2.a.1	المعرفة والفهم
	■	■	2.a.2	
■		■	2.a.3	
	■		2.a.4	
		■	2.a.5	
■		■	2.a.6	
	■		2.a.7	
	■		2.a.8	
		■	2.b.1	المهارات الذهنية
	■		2.b.2	
■		■	2.b.3	
		■	2.b.4	
		■	2.b.5	
■	■	■	2.c.1	المهارات المهنية
		■	2.c.2	
	■		2.c.3	
		■	2.c.4	
	■	■	2.d.1	المهارات العامة
■			2.d.2	
		■	2.d.3	
■	■	■	2.d.4	
		■	2.d.5	

6- تقويم الطلاب :



مصفوفة طرق التقويم مع نواتج التعلم لمقرر الباطنة العامة

أ- الأساليب المستخدمة

طرق التقويم		نواتج التعلم للمقرر
Structured Oral Exam	Written exam	
■	■	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.b.1
■	■	2.b.2
■	■	2.b.3
■	■	2.b.4
■	■	2.b.5
■	■	2.c.1
	■	2.c.2
	■	2.c.3
	■	2.c.4
	■	2.d.1
	■	2.d.2
	■	2.d.3
■		2.d.4
■	■	2.d.5
■	■	2.a.1
	■	2.a.2

1. **Written exams:** Assess knowledge & understanding and intellectual skills.
2. **Structured oral exams:** to assess knowledge and understanding, intellectual , professional and general and transferable skills.

- Final exam at May or November

ب- التوقيت



Examination	Marks allocated	ج- توزيع الدرجات
<ul style="list-style-type: none">• Written 600• Oral 150• Practical 150		
7- قائمة الكتب الدراسية والمراجع :		
<ul style="list-style-type: none">• Lectures notes		أ- مذكرات
Harrison's Principles of Internal Medicine, Twentieth Edition (Vol.1 & Vol.2) 20th Edition Jameson JL, Fauci A, Kasper D , et al (2018): Harrison's Principles of Internal Medicine. (Vol.1 & Vol.2). Twentieth Edition McGraw-Hill Education.		ب- كتب ملزمة
Davidson's Principles and Practice of Medicine 23rd Edition Ralston, S. H., Penman, I. D., Strachan, M. W. J., & Hobson, R. (Eds.). (2018). <i>Davidson's principles and practice of medicine</i> (23rd ed.). Elsevier Health Sciences. https://www.coursera.org/learn		ج- كتب مقترحة
		د - دوريات علمية أو نشرات



Course Contents/ILOs Matrix

ILOs Cours	a. Knowledge and understanding								2.b. Intellectual Skills					2.c.3. Practical & Clinical skills				2d. General and transferable Skills				
	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.b.1	2.b.2	2.b.3	2.b.4	2.b.5	2.c.1	2.c.2	2.c.3	2.c.4	2.d.1	2.d.2	2.d.3	2.d.4	2.d.5
NEUROLOGY					x			x	x	x	x	x		x							x	
CARDIOLOGY	x								x	x	x	x										
Nephrology	x	x	x	x	x								x						x			
CHEST DISEASES				x					x	x	x		x									
Blood Diseases											x	x	x									
ENDOCRINE DISEASES			x									x	x									
RHEUMATOLOGY							x		x					x	x	x	x	x		x		x
Acid-base balance		x										x										
Na+ & K+ ABNORMALITIES		x											x									

رئيس اقسام الباطنة العامة
أ.د / محمد احمد العسال



كلية: الطب البشرى
قسم: الامراض العصبية والطب النفسي

توصيف مقرر الطب النفسي الرياضي
لماجستير الطب الرياضى

1- بيانات المقرر		
المستوى دكتوراه جزء ثاني	اسم المقرر : الطب النفسي الرياضي	الرمز الكودي : SMs 708
<input type="checkbox"/>	عدد الوحدات الدراسية 2 ساعة معتمدة نظري	التخصص : الطب الرياضي

- 1- use understanding the pathophysiology of different psychiatric disorders and the associated neuroscience background.
2. **discuss** understanding the appropriate use and interpretation of common diagnostic studies.
3. **use** development of the necessary knowledge and skills to approach and manage the wide array of psychiatric disorders.
4. **manage** acquiring the skills for competently performing the basic psychiatric procedures.
5. **illustrate** effectively perform a detailed and an efficient psychiatric history taking and examination.
6. **discuss applying** to carry out the diagnosis and plan the treatment of the commonly encountered psychiatric disorders and emergencies in a compassionate, appropriate and effective manner.
7. **use** effectively work within a team and implement liaison with members of the other medical specialties.
8. **discuss** capacity to learn independently and to use the medical literature to improve the clinical practice.
9. **discuss** development of the necessary skills for finding scientific information, critical appraisal of medical literature and scientific

ستهدف من تدريس المقرر :



- a1. discuss the etiology of schizophrenia, causes, clinical picture, with special emphasis on medical, psychosocial and environmental causes, how to diagnose, and demonstrate management.
- a2. explain the principles of genetics and the role in bipolar disorder, schizophrenia ocd, anxiety , delirium, dementia describe causes managing classifying, explain of genetics with different psychiatric and neurological diseases.
- a3. identify the basics of neurodevelopmental disorders in children, supported by early clinical contact and demonstration.
- a4. Discuss how common is somatization disorder and hypochondria disease's clinical manifestations and differential diagnosis with medical diseases and liaison psychiatry.
- a5. explain somatoform disorder, anxiety disorders diagnostic studies with emphasis on their prioritization in management plans.
- a6. Define pharmacological principles of treatment including: drug effects/pharmacokinetics, dosage, drug-drug interactions and adverse reactions.
- a7. Describe the principles of non-pharmacological therapies, and their role in disease management (psychotherapy, electroconvulsive therapy, trans-cranial magnetic stimulation)
- a8. discuss the nature of childhood disability, as autism, ADHD, and mental disability its impact on the community and the principles of management including: rehabilitation, institutional and community care.
- a9. Identify the principles governing ethical decision making in clinical practice and the major ethical dilemmas in medicine and recognize the patient-doctor rights as a part of human rights in addiction and inpatients.
- a10. Describe how to apply his/her medical knowledge in the service of law with emphasis on medico-legal aspects of medical practice as in forensic psychiatry.
- a11. Specify the basics of normal and abnormal human behaviors in personality disorders.

مات
فهم



- b.1. describe insight for continued self assessment of their current medical practice aiming to update and improve it.
- b.2. Interpret clinical problems as how to differentiate between psychotic and neurotic disorders.
- b.4. Analyze medical problems to reach appropriate diagnosis and assess comorbid psychiatric disorders.
- b.5. Evaluate information objectively, recognizing its limitations.
- b.6. Integrate the results of history, physical and mental examination with neuropsychiatric investigation findings into a meaningful diagnostic formulation.
- b.7. choose the most relevant diagnostic tools as different psychometries for different suspected disorders.
- b.8. Retrieve and analyzes relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM).
- b.9. cope with uncertainty by proper counseling, consultation and referral.
- b.10. Evaluate emergency cases in psychiatry and manage them properly.
- b.11. Integrate the psychiatric and somatic manifestations to accurately evaluate the patient.
- b.12. discuss building therapeutic alliance with the patient based on professionalism and ethics.

- d.1. Estimate and understand the differences in beliefs and backgrounds among patients.
- d.2. Explain to patients and their families the clinical investigation's findings in relation to possible courses of therapy including indications, risks, benefits and alternatives as well as plans for follow up.
- d.3. discuss Knowing when and how to ask for senior consultation.
- d.4. discuss Giving accurate and clear oral summaries of the patient's illness.
- d.5. illustrate work collaboratively with other health professionals in other disciplines to maximize patient benefits and minimize the risk of errors.
- d.6. manage Adoption ethical behavior expected for doctors towards patients with recognition of patients' rights, particularly with regard to confidentiality and informed consent.



Os	% of Total	Total (hrs)	Relative value	Practical (hrs)	Relative value	Lectures (hrs)	Topic		
1,2.a.2,2.a.3, 7,2.a.8,2.a.9,2.a.10,2.a.11&2.b.1 2,2.b.3,2.b.4,2.b.5&2.c.2,2.c.4,2.c.4 5,2.c.6,2.c.9,&2.d.1,2.d.3,2.d.4,2.d.8			5.1	30	5.5	15	4.7	15	1- Psychiatry history and mental status
6,2.a.7,2.a.8,2.a.9,2.a.11& 2,2.b.3,2.b.6,2.b.7&2.c.1,2.c.3,2.c.5,2.c.8& 1,2.d.3,2.d.4,2.d.5,2.d.6			5.1	30	5.5	15	4.7	15	2- Classification in psychiatry
2,2.a.6,2.a.7,2.a.7,2.a.9,&2.b.1 3,2.b.4,2.b.5&2.c.3,2.c.4,2.c.5,2.c.6&2.d.1 2,2.d.3,2.d.5			5.9	35	5.5	15	6.3	20	3- Mood Disorders
3,2.a.4,2.a.5,2.a.6,2.a.7,2.a.8,2.a.9 1,2.b.2,2.b.4,2.b.5&2.c.5,2.c.6,2.c.7,2.c.8,2.c.9 d.1,2.d.2,2.d.3,2.d.4,2.d.5,2.d.7			5.9	35	5.5	15	6.3	20	3- Anxiety Disorders
1,2.a.6,2.a.7,2.a.8,2.a.9&2.b.2,2.b.4 5,2.b.6,2.b.6&2.c.3,2.c.4,2.c.6&2.d.3,2.d.4,2.d.5 6			5.9	35	5.5	15	6.3	20	4- Schizophrenia and other psychotic Disorders
4,2.a.5,2.a.5,2.a.6,2.a.7,2.a.8,2.a.9& 5,2.b.6,2.b.7&2.c.6,2.c.6,2.c.9&2.d.1,2.d.8,2.d.9			3.4	20	3.7	10	3.2	10	5-Dissociative Disorders
6,2.a.7,2.a.8,2.a.9,2.a.11&2.b.3, 4,2.b.5,2.b.6&2.c.3,2.c.4,2.c.5,2.c.6&2.d.2,2.d.3 4,2.d.5,2.d.6			8.5	50	7.4	20	9.5	30	6- Alcohol, opioids and other substance related disorders
4,2.a.5,2.a.5,2.a.6,2.a.7,2.a.8,2.a.9& 5,2.b.6,2.b.7&2.c.6,2.c.6,2.c.9&2.d.1,2.d.8,2.d.9			5.9	35	5.5	15	6.3	20	7-Somatoform Disorders, Factitious disorders and Malingering
2,2.a.3,2.a.6,2.a.7,2.a.9&2.b.1,2.b.5 6&2.c.3,2.c.4,2.c.5,2.c.6&2.d.1,2.d.3,2.d.4,2.d.6			11.9	70	11.1	30	12.7	40	8- Child and adolescent Psychiatry
4,2.a.5,2.a.5,2.a.6,2.a.7,2.a.8,2.a.9& 5,2.b.6,2.b.7&2.c.6,2.c.6,2.c.9&2.d.1,2.d.8,2.d.9			5.1	30	5.5	15	4.7	15	9- Delirium ,Dementia and Amnestic disorders
4,2.a.5,2.a.5,2.a.6,2.a.7,2.a.8,2.a.9& 5,2.b.6,2.b.7&2.c.6,2.c.6,2.c.9&2.d.1,2.d.8,2.d.9			5.9	35	5.5	15	6.3	20	



- 5.1. Modified lectures
- 5.3. Assignment
- 5.4. Attending the department scientific conference, workshops and thesis discussion
- 5.5. Group discussion
- 5.6. Problem solving
- 5.7. Brain storming
- 5.8. Scientific Symposium
- 5.9. E lectures • Final exam at May or November

لا ينطبق

ساليب التعليم والتعلم
ذوي القدرات المحدودة

يم الطلاب :

- a.1. **Written exams:** to assess knowledge, understanding and intellectual skills.
- a.3. **Structured oral exams (Viva cards):** to assess knowledge and understanding, intellectual and General and transferable skills. **Formative only assessment:** simple research assignment, Log book, attendance and absenteeism, case study presentation and group project

Final exam at May or November

- c. Final-term written examination 70
- Oral examination 30

مة الكتب الدراسية والمراجع :

a Course Notes:

- Lectures notes prepared by staff members in the department

b Essential Books (Text Books):

- Synopsis of psychiatry (three volumes) Benjamin James Sadock, Virginia Alcott Sadock 2018
- Comprehensive Textbook of psychiatry Benjamin J Sadock; Virginia A Sadock 2018.
- Case files psychiatry Toy Klamen 2004



c. Recommended Books:

- Neurobiology of mental illness: second edition

Dennis Charney, Eric Niestter 2005

- Handbook of psychiatric drugs Lawrence J., Rhoda K., Christopher 2005

d. Periodicals and Web Sites:

مصفوفة طرق التدريس مع نواتج التعلم لمقرر

طرق التدريس		نواتج التعلم للمقرر	
Other Methods	Modified Lectures		
*	*	2.a.1	المعرفة والفهم
*	*	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	
*	*	2.a.11	
*	*	2.b.1	المهارات الذهنية
*	*	2.b.2	
*	*	2.b.3	
*	*	2.b.4	
*	*	2.b.5	
*	*	2.b.6	
*	*	2.b.7	
*	*	2.b.8	
*	*	2.b.9	
*	*	2.b.10	
*	*	2.b.11	
*	*	2.b.12	المهارات العامة
*	*	2.d.1	
*	*	2.d.2	



*		2.d.3	
*		2.d.4	
*		2.d.5	
*		2.d.6	

مصفوفة طرق التقويم مع نواتج التعلم لمقرر

طرق التقويم		نواتج التعلم للمقرر	
Structured Oral Exam	Written exam		
*	*	2.a.1	المعرفة والفهم
*	*	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	
*	*	2.a.11	
*	*	2.b.1	المهارات الذهنية
*	*	2.b.2	
*	*	2.b.3	
*	*	2.b.4	
*	*	2.b.5	
*	*	2.b.6	
*	*	2.b.7	
*	*	2.b.8	
*	*	2.b.9	
*	*	2.b.10	
*	*	2.b.11	
*	*	2.b.12	
*		2.d.1	المهارات العامة
*		2.d.2	
*		2.d.3	
*		2.d.4	
*		2.d.5	



توصيف مقرر طب رياضي للمجاميع الخاصة ويشمل السيدات والمعوقين

University: Benha

Faculty of Medicine

Department: Sports Medicine

8- Course information		
097Code: SM	Course name: رياضي للمجاميع الخاصة ويشمل السيدات والمعوقين	Grade/ Level: MD of Sports Medicine
Number of modules: 2 theoretical credit hour		

Department offering the program: Sports Medicine •

Date of specification approval: department council, date 9/2020. •

Faculty council date 15/9/2020

Authorization date of course specification: 2020-2021

- Allocated marks: 100
- Course duration: 60 weeks of teaching.
- Teaching hours: 2 hours / week 120 total teaching hours.

9- Goal of the Course:	To provide candidates with skills making him/her able to deal with special groups.
10- Target educational output:	



E- Knowledge and understanding:	By the end of the course the candidate will be able to: 2.a. 5 Discuss physical differences between males and females. 2.a. 6 Discuss effects of hormonal changes on different physical aspects related to sports 2.a. 7 Define Disability 2.a. 8 Mention Types of disability
F- Intellectual skills:	By the end of the course the candidate will be able to: 2.b. 3 Plan a suitable nutritional regimen for women athletes. 2.b. 4 Compare between male and females regarding sports related physical and nutritional aspects as well as training capacity. 2.b. 5 Differentiate between disability, impairment and handicap.
G- Professional and practical skills:	
H- General & Transferable skills	By the end of the course the candidate will be able to: 2.d.1 Utilize effectively various computer based instruction tools. 2.d.2 Utilize a variety of computer-based self-learning and self-assessment tools.

11- Course content:	Women in sports: 1. Physical differences between the female and male 2. The influence of the male hormone testosterone 3. TRAINING CAPACITY OF WOMEN 4. AEROBIC FITNES 5. INJURIES
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	<p>6. EXERCISE AND MENSTRUAL FUNCTION</p> <p>7. Factors associated with menstrual changes in athletes</p> <p>8. PREGNANCY</p> <p>9. Nutritional Aspects of Women's Soccer</p> <p>10. Recommendation For nutrition plan for women athletes</p> <p style="text-align: right;">Disability</p> <p>1. Definition of Disability</p> <p>2. Types of disability</p> <p>3. Difference between disability, impairment and handicap.</p> <p>4. Impact of different disabilities on practicing sports.</p>
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12- Teaching and learning methods	<ul style="list-style-type: none">• Modified Lectures• Small Group discussion			
	طرق التدريس		نواتج التعلم للمقرر	
	Small Group discussion	Modified Lectures		
	✓	✓	2.a.1	المعرفة والفهم
	✓	✓	2.a.2	
	✓	✓	2.a.3	
	✓	✓	2.a.4	
	✓	✓	2.b.1	المهارات الذهنية
	✓	✓	2.b.2	
	✓	✓	2.b.3	
	✓	✓	2.d.1	المهارات العامة
	✓	✓	2.d.2	
13- Student evaluation:				



D- The methods used	<ul style="list-style-type: none">• Written Exam: Assess Knowledge & Understanding and intellectual skills• Oral Exam: Assess Knowledge & Understanding, intellectual and general & transferable skills																																						
	<table border="1"><thead><tr><th colspan="2">طرق التقويم</th><th colspan="2">نواتج التعلم للمقرر</th></tr><tr><th>Oral Exam</th><th>Written exam</th><th></th><th></th></tr></thead><tbody><tr><td>✓</td><td>✓</td><td>2.a.1</td><td rowspan="4">المعرفة والفهم</td></tr><tr><td>✓</td><td>✓</td><td>2.a.2</td></tr><tr><td>✓</td><td>✓</td><td>2.a.3</td></tr><tr><td>✓</td><td>✓</td><td>2.a.4</td></tr><tr><td>✓</td><td>✓</td><td>2.b.1</td><td rowspan="3">المهارات الذهنية</td></tr><tr><td>✓</td><td>✓</td><td>2.b.2</td></tr><tr><td>✓</td><td>✓</td><td>2.b.3</td></tr><tr><td>✓</td><td>✓</td><td>2.d.1</td><td rowspan="2">المهارات العامة</td></tr><tr><td>✓</td><td>✓</td><td>2.d.2</td></tr></tbody></table>	طرق التقويم		نواتج التعلم للمقرر		Oral Exam	Written exam			✓	✓	2.a.1	المعرفة والفهم	✓	✓	2.a.2	✓	✓	2.a.3	✓	✓	2.a.4	✓	✓	2.b.1	المهارات الذهنية	✓	✓	2.b.2	✓	✓	2.b.3	✓	✓	2.d.1	المهارات العامة	✓	✓	2.d.2
طرق التقويم		نواتج التعلم للمقرر																																					
Oral Exam	Written exam																																						
✓	✓	2.a.1	المعرفة والفهم																																				
✓	✓	2.a.2																																					
✓	✓	2.a.3																																					
✓	✓	2.a.4																																					
✓	✓	2.b.1	المهارات الذهنية																																				
✓	✓	2.b.2																																					
✓	✓	2.b.3																																					
✓	✓	2.d.1	المهارات العامة																																				
✓	✓	2.d.2																																					
E- Timing	May or November																																						
F- Distribution of grades	<ul style="list-style-type: none">• Written Exam: 70 marks• Oral Exam: 30 marks																																						
14-	List of textbooks and references:																																						
D-	Lecture notes and handout																																						
E-	Women in Sports Coaching. Edited By Nicole M. LaVoi. Copyright Year 2016																																						
F-	Wheelchair Sport: A complete guide for athletes, coaches, and teachers First Edition																																						
G-	Leveraging Disability Sport Events: Impacts, Promises, and Possibilities. 1st Edition. By Laura Misener, Gayle McPherson, David McGillivray, David Legg. June 30, 2020.																																						

Course coordinator:



Head of the Scientific Department Council Professor Hosny Abd El
Rahman

*Benha University Faculty of Medicine
Department of Forensic Medicine and Clinical Toxicology*

Course Specifications

***Course title: Performance-Enhancing
Drugs***

Code: SMs 710

- *Department offering the course: Forensic Medicine and Clinical Toxicology*
- *Academic year: 2nd part of MD degree of Sport medicine program*

A) Basic Information:

- *Allocated marks: 100 marks.*
- *Course duration: 60 weeks of teaching.*
- *Credit hours: 2 credit hour*

B) Professional Information:

1- Overall Aim of the Course:

- *To provide the postgraduate students with basic scientific knowledge related to drug used in sport [Performance-Enhancing Drugs [Drug Doping]].*
- *To provide the postgraduate students with basic ethical, professional, communication skills essential for establishing appropriate attitudes with colleagues.*

2- Intended Learning Outcomes (ILOs):

2.a. Knowledge and understanding:



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

- 2.a.1. Mention different categories and methods of drug doping.***
- 2.a.2. Discuss types, mechanism of actions, pathophysiology, clinical manifestations, laboratory investigations and management of different types and methods of drug doping.***
- 2.a.3. Explain the prohibited substances in particular sports.***
- 2.a.4. Discuss Doping control procedures.***
- 2.a.5. Illustrate exercise Addiction and Addiction in RetiredAthletes.***
- 2.a.6. Describe Concussion in Sports & Posttraumatic Stress inAthletes.***
- 2.a.7. Discuss Sudden death in athletes [different causes, typesand mechanism of death].***
- 2.a.8. Mention different Ethical issues and doping control.***

2.b. Intellectual

Skills:

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

- 2.a.1. Interpret laboratory investigations in different types and methods of drug doping.***
- 2.e.2. Differentiate between different categories and methodsof drug doping.***

2.c. Professional Attitude and Behavioral skills:

Not Applicable

2.d. General and transferable Skills

By the end of the program the graduate will be able to:

- 2.d.1. Communicate clearly, sensitively and effectively with his colleagues and medical staff.***
- 2.d.2. Communicate effectively with individuals regardless of their social, cultural, ethnic backgrounds, or***



their disabilities.

2.d.3. **Cope up** with difficult situations as breaking news.

2.d.4. **Respect** superiors, colleagues and all members of the health profession.

2.f.1. **Establish** life-long self-learning required for continuous professional development.

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

2.f.3. **Retrieve, manage, and manipulate** information by all means, including electronic means.

2.f.4. **Present** information clearly in written, electronic and oral forms.

2.f.5. **Establish** effective interpersonal relationship to communicate ideas and arguments.

3- Course contents :

Subject	Lectures / tutorials (hrs)	Total (hrs)	% of Total
1- Introduction, history & categories of drug Doping(pharmacology of Performance-Enhancing Drugs)			
2- Anabolic androgenic steroids			
3- Hormones and related substances			
4- B2-Agonists & Agents with anti-estrogenic activity			
5-Diuretics and other masking agents			



<i>6- Prohibited methods</i>			
<i>7- Stimulants</i>			
<i>8-Prohibited substances in particular sports</i>			
<i>9- Dietary supplements</i>			
<i>10- Doping control procedures</i>			
<i>11- Exercise Addiction: The Dark Side of Sports and Exercise</i>			
<i>12- Addiction in Retired Athletes</i>			
<i>13- Sudden death in athletes</i>			
<i>14-Concussion in Sports & Posttraumatic Stress in Athletes</i>			
<i>15- Ethical issues and doping control</i>			
<i>TOTAL</i>			

4- Teaching and learning methods:

METHODS USED:



1. *Modified lectures.*
2. *Tutorials.*
3. *Case study.*

Method	Evidence	ILOs
<i>Modified lectures/ Tutorials</i>	<i>CDs of lectures including (video films, brainstorming, problem solving, etc...)</i>	<i>Knowledge & Understanding Intellectual</i>
<i>Case study Tutorial</i>	<i>Case scenarios</i>	<i>Knowledge & Understanding Intellectual General and Transferable</i>

5-A) ATTENDANCE CRITERIA:

1. *Lectures (at least 50% attendance).*
2. *Log book (reports, field visits & students activity).*

5-B) Assessment TOOLS:

Tool	Evidence	Purpose (ILOs)
Written examination: <ul style="list-style-type: none"> • <i>MCQs</i> • <i>Case study</i> • <i>Short essay</i> • <i>Complete</i> • <i>True or false with explanation</i> 	<i>Attached module of examination</i>	<i>2.a.1-----2.a.8., 2.b.1.-2.b.2.</i>
<i>Oral examination</i>	<i>Viva card system</i>	<i>2.a.1 ---- -2.a.7, 2.c.1.----2.c.6 2.d.1.----2.d.4 , 2.f.1. ----2.f.5</i>



5-C) TIME SCHEDULE:

<i>Exam</i>	<i>Time</i>
<i>Assessment (Final Exam)</i>	<i>May or Movember</i>

FORMATIVE ASSESSMENT:

- *Student knows his marks after the Formative exams.*

5-D) Weighting System:

<i>Examination</i>	<i>Marks allocated</i>	<i>% of Total Marks</i>
<i>a- Writtenc-</i>	<i>70</i>	<i>70%</i>
<i>Oral</i>	<i>30</i>	<i>30%</i>

5-E) Examination description :

<i>Examination</i>	<i>Description</i>
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End semester:	
a- <i>Written</i>	<i>Short essay, select (MCQs), complete & case study, true or false with explanations.</i>
b- <i>Oral</i>	<i>Viva cards divided into in two sessions</i>
3- Assignments & other activities	<i>log book... etc.</i>

6- List of references:

6.1- Basic materials:

- **Department book by staff members.**
- ### **6.2- Essential books**

(textbooks):

- ***Clinical Sports Psychiatry*** Edited by David A.; Baron Claudia L.; Reardon Steven H. Baron (2013).
- ***Olympic Textbook of Science in Sport***. Edited by Ronald J. Maughan ©2009 International Olympic Committee. ISBN: 978-1-405-15638-7

6.3- Recommended books:

- ***Olympic Textbook of Medicine in Sport***, Edited by M. Schwellnus. ©2008 International Olympic Committee. ISBN: 978-1-4051-5637-

6.4- Periodicals, Web sites, etc:

- <http://www.pubmed.com>.
- <http://sciencedirect.com>.



7- Facilities required for teaching and learning:

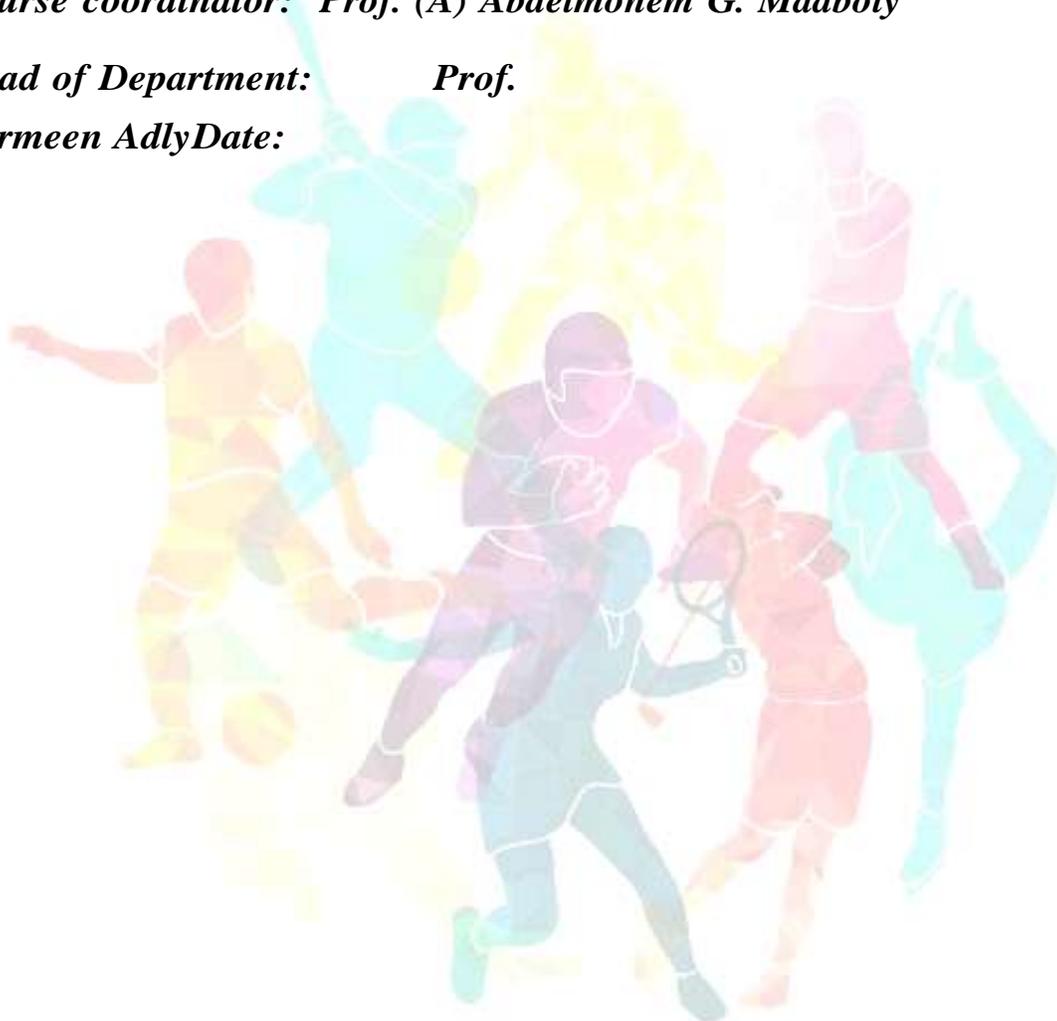
Facilities used for teaching this course include:

- Department lectures halls: two
- Department lab.

Course coordinator: Prof. (A) Abdelmonem G. Madboly

Head of Department: Prof.

Nermeen AdlyDate:





توصيف مقرر ميكانيكا حيوية فيما يخص الطب الرياضي

University: Benha
Faculty of Medicine
Department: Sports Medicine

15- Course information		
117Code: SMs	Course name: علم ميكانيكا الحركة مقدمة في	Grade/ Level: MD of Sports Medicine
Number of modules: 2 theoretical credit hour		

Department offering the program: Sports Medicine •

Date of specification approval: department council, date 9/2020. •

Faculty council date 15/9/2020

Authorization date of course specification:2020-2021

- **Allocated marks: 100**
- **Course duration: 60** weeks of teaching.
- **Teaching hours: 2** hours / week 120 total teaching hours.

16- Goal of the Course:	To provide the postgraduate with the advanced knowledge of biomechanics essential for the practice of Sports Medicine & Traumatology
17- Target educational output:	



I- Knowledge and understanding:	2.a.1 List the recent advances in the abnormal structure, function, growth and development of musculoskeletal system. 2.a.2 Mention recent advances in biomechanics.
J- Intellectual skills:	2.b.1. Interpret data acquired to understand applied physiology and biochemical reactions of musculoskeletal system. 2.b.2 innovate nontraditional solutions to for musculoskeletal & traumatology problems.
K- Professional and practical skills:	
L- General & Transferable skills	2.d.1 Utilize effectively various computer based instruction tools and E-learning of biomechanics and utilize a variety of computer-based self assessment tools.

18- Course content:	1- Biomechanics in the sports field. 2- Terminology used in the study of movement. 3- Basic concepts and principles in mechanics 4- Strength: to maintain equilibrium or to change motion.
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- 5- Kinematics of movement in a straight line.
- 6- Biorhythm
- 7- Isokinetic
- 8- Kinesotape
- 9- center of gravity
- 10- ergonomics
- 11- The area of the field according to the number of players in soccer.
- 12- Delaying the onset of fatigue for endurance sports.
- 13- ways to detect an injury amelioration.
- 14- Player Energy Measuring.
- 15- warm up
- 16- movement characteristics
- 17- locomotor system
- 18- 3D muscle balance
- 19- Calculate the level of development of the players.
- 20- Modern physical exams
- 21- innovations in energy production systems
- 22- Joint limits for athletes
- 23- The difference between training above heights and grandstands.
- 24- Pulse measurement, calculation, and intensity estimation



	25- Energy applications (potential energy / kinetic energy) 26- Newton's laws 27- Description of the objects motion in a straight line. 28- 7. Linear motion kinetics 29- Work, energy, power
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19- Teaching and learning methods	<ul style="list-style-type: none"> Modified Lectures Small Group discussion 			
	طرق التدريس			
	Small Group discussion	Modified Lectures	نواتج التعلم للمقرر	
	✓	✓	2.a.1	المعرفة
	✓	✓	2.a.2	والفهم
	✓	✓	2.b.1	المهارات
	✓	✓	2.b.2	الذهنية
✓		2.d.1	المهارات العامة	
20- Student evaluation:				
G- The methods used	<ul style="list-style-type: none"> Written Exam: Assess Knowledge & Understanding and intellectual skills Oral Exam: Assess Knowledge & Understanding, intellectual and general & transferable skills 			



	طرق التقويم		نواتج التعلم للمقرر	
	Oral Exam	Written exam		
	✓	✓	2.a.1	المعرفة
	✓	✓	2.a.2	والفهم
	✓	✓	2.b.1	المهارات
	✓	✓	2.b.2	الذهنية
	✓		2.d.1	المهارات العامة
H- Timing	May or November			
I- Distribution of grades	<ul style="list-style-type: none">• Written Exam: 70 marks• Oral Exam: 30 marks			
21-	List of textbooks and references:			
H-	Lecture notes and handouts.			
I-	Fundamentals of Biomechanics 2nd Edition			
J-	Biomechanics of Human Movement Illustrated Edition			
K-	Human Movement & Biomechanics: An Introductory Text, 7th Edition - March 26, 2019. Editors: Andrew Kerr, Philip Rowe			
L-	Biomechanics of Human Movement & Sport. Author(s): Danny Too, Christopher Williams. Edition: 2. Copyright: 2019			

Course coordinator:

Head of the Scientific Department Council Professor Hosny Abd El Rahman



توصيف مقرر إصابات الملاعب والعلاج الطبيعي
لدكتوراه الطب الرياضي (2020-2021)

6. بيانات المقرر	
اسم المقرر : إصابات الملاعب والعلاج الطبيعي	الرمز الكودي : SMs 712
الفرقة / المستوى : دكتوراه جزء ثاني	التخصص : الطب الرياضي
عدد الوحدات الدراسية : نظري 14 credit hours (12 نظري-2 عملي)	7. هدف المقرر:
<ol style="list-style-type: none">1. Provide postgraduate students with the scientific knowledge about the concept of sports injuries .2. Provide sufficient data about the mechanism of injury of different types of sports injuries.3. Focus on the practical application of skills and knowledge required by today's sports diagnosis and treatment options.4. Develop knowledge about prevention of different types of sports injuries .5. Provides the good stepping-stone to a professional career.6. Provide postgraduates with an opportunity to formulate research knowledge and presentation skills in these areas.7. Gain the needed skills to assist and perform different types of operations for treatment of sports injuries	
1 المستهدف من تدريس المقرر :	
<i>By the end of the course, the student should be able to :</i>	



<p>2.a.1. Mention the normal structure and function of the human musculoskeletal system.</p> <p>2.a.2. Describe the normal growth of the human musculoskeletal system.</p> <p>2.a.3. List the abnormal structure, function, growth and development of human musculoskeletal system</p> <p>2.a.4. Mention the natural history of sports related trauma Problems</p> <p>2.a.5. Describe the causation of sports related trauma and their pathogenesis</p> <p>2.a.6. Enumerate methods of fixation of different fractures and dislocations.</p> <p>2.a.7. List the clinical picture and differential diagnosis of sports related trauma.</p> <p>2.a.8. Enumerate the common diagnostic and laboratory techniques necessary to evaluate sports related trauma.</p> <p>2.a.9. Describe the various therapeutic methods/alternatives used for management of sports related trauma.</p> <p>2.a.10. Mention Ethical and legal principles of professional practice in the cases of sports related trauma</p> <p>2.a.11 Discuss physiotherapeutic options for different sports related traumas.</p>	أ- المعرفة والفهم:
<p>2.b.1. Interpret data acquired through history taking to reach a provisional diagnosis for sports related trauma.</p> <p>2.b.2. Solve the problems in the area of orthopedic surgery and traumatology</p> <p>2.b.3. Analyze and interpret data retrieved from reports (electrophysiological, endoscopic,) about sports related trauma cases.</p> <p>2.b.4. Make professional decisions in light of the available data.</p> <p>2.b.5 Schedule suitable physiotherapy plans for different sports related traumas</p>	ب- المهارات الذهنية:



<p>2.c.1. Perform the basic professional clinical skills in the area of sports related trauma.</p> <p>2.c.2. Perform first aid for cases with sports related trauma.</p> <p>2.c.3 Perform physiotherapeutic techniques to manage sports related trauma</p>	<p>ج- المهارات المهنية الخاصة بالمقرر:</p>
<p>2.d.1. Present sports related trauma cases in seminars effectively.</p> <p>2.d.2. Assess himself and identify his personal learning needs.</p> <p>2.d.3. Use different sources for information and knowledge</p> <p>2.d.4. Work coherently and successfully as a part of a team and effectively manage time.</p> <p>2d.5. Lead a team in familiar professional contexts</p> <p>2.d.6. Obtain knowledge continuously and independently in sports related trauma field.</p>	<p>د - المهارات العامة:</p>



Introduction:

1. Epidemiology
2. General clinical approach
3. general principles of prevention of sports injuries
4. Muscle and soft tissue injuries:
5. Acute soft tissue injuries
6. Prevention of acute muscle injuries in sport

Knee injuries:

- .1 Clinical assessment of the acutely injured knee in the athlete
- .2 Acute injuries of the knee
- .3 Functional anatomy of the knee joint
- .4 Acute injuries to the anterior cruciate ligament
- .5 Acute injuries to the posterior cruciate ligament
- .6 Acute injuries of the collateral ligaments of the knee
- .7 Acute meniscal injuries of the knee
- .8 Acute fractures of the knee
- .9 Clinical assessment of the athlete with chronic knee pain
- .10 Clinical biomechanics of overuse injuries of the athlete
- .11 surgical management of Chronic anterior knee pain in the athlete
- .12 surgical management of Chronic medial knee pain in the athlete
13. Surgical treatment of chronic knee pain in the athlete

2
محتوى
المقرر:



Leg injuries:

1. Clinical assessment of the acutely injured leg in the athlete
2. Acute injuries of the leg in athletes
3. Functional anatomy of the leg
4. Clinical assessment of the athlete with chronic pain in leg
5. Clinical biomechanics of overuse injuries of the leg in the athlete
6. Overuse injuries of the leg
7. Surgical treatments of chronic leg pain in athletes

Ankle and foot injuries:

1. Functional anatomy of the ankle joint
2. Clinical assessment of the acutely injured ankle and foot
3. Acute fractures to the ankle and foot in athletes
4. acute ligamentous injuries of the ankle and foot of athlete
5. Prevention of acute ligamentous injuries of the ankle
6. Clinical assessment of the athlete with chronic pain in the ankle and foot
7. Sports injury
8. Clinical biomechanics of overuse injuries of the ankle and foot
9. Surgical management of Chronic heel pain in the athlete
10. Surgical management of Chronic midfoot pain in the athlete
11. surgical management of Chronic forefoot pain in the athlete
12. Surgical treatment of chronic ankle and foot pain in athlete

Wrist and Hand injuries in the athlete:

1. Functional anatomy of the hand and wrist
2. Clinical biomechanics
3. Clinical assessment of acute hand and wrist injuries
4. Acute fractures of the hand and wrist
5. Acute soft tissue injuries
6. Clinical assessment of the athlete with chronic hand and wrist pain
7. Surgical treatment of chronic wrist and hand pain
8. Splinting the hand and wrist in athletes

3



Injuries to lumbar spine in athletes:

1. Functional anatomy of the lumbar spine
2. Clinical biomechanics
3. Clinical assessment of acute lower back injury
4. Acute fractures of the lumbar spine
5. Acute soft tissue injuries
6. Clinical assessment of chronic lower back pain
7. Overuse injuries of the lower back
8. Surgical treatment of chronic lower back pain

Shoulder injuries:

1. Shoulder dislocation
2. Shoulder Instability
3. Shoulder impingement
4. Rotator cuff tear

Elbow injuries:

1. Ligament injuries of the elbow
2. Tennis elbow
3. Golf elbow

Hip injuries:

1. Labral injury of the hip
2. Pincer hip (femero acetabular impingement)

4

1. lectures
2. Clinical rounds
3. Round table discussions
4. Attending operations

5 أساليب
التعليم
والتعلم

لا ينطبق

5- أساليب
التعليم والتعلم
للطلاب ذوي
القدرات
المحدودة

6- تقويم الطلاب :



<p>4. Written exams: Assess knowledge & understanding and intellectual skills.</p> <p>5. Structured oral exams: to assess knowledge and understanding, intellectual , professional and general and transferable skills.</p> <p>6. Clinical exams: : to assess knowledge and understanding, intellectual, practical & professional and general and transferable skills.</p>	أ- الأساليب المستخدمة
<ul style="list-style-type: none">• Final exam at May or November	ب- التوقيت
<ul style="list-style-type: none">• Written exam 500• Oral and practical exams 100• Clinical Exam 100	ج- توزيع الدرجات
7- قائمة الكتب الدراسية والمراجع :	
<ul style="list-style-type: none">• Lectures notes	أ- مذكرات
<p>- Essential books (text books):</p> <p>Campbell"s Operative Orthopedic,11th edition (Canal & Beat, 2007)</p> <p>6.2- Recommended Books:</p> <p>Surgical exposure in orthopedic, stanle Hoppenfeld, Piet DeBoer, Richard Eric 2009</p> <ul style="list-style-type: none">• Manual of internal fixation, 2003• Spine Journal• British bone and joint Journal• American bone and joint Journal• Journal of hand and microsurgery• Clinical Orthopedic Journal	ب- كتب ملزمة
<p>https://www.youtube.com/channel/UCZWQHOGoaEGe0RRo5PoNf3A</p>	ج- قناة youtube



أستاذ المادة
رئيس مجلس القسم العلمي

