



Elective COURSE SPECIFICATION

(Doctorate Degree)

Faculty of Medicine - Mansoura University

(A) Administrative information

(1) Program offering the course.	Doctorate Degree
(2) Department offering the programme.	Orthopaedic Surgery Department
(3) Department responsible for teaching the course.	Orthopaedic Surgery Department
(4) Part of the programme.	2 nd Part
(5) Date of approval by the Department's council	11/5/2016
(6) Date of last approval of programme specification by Faculty council	9/8/2016
(7) Course title:	Rehabilitation Programs & orthotics
(8) Course code:	OSURG 625RO
(9) Total teaching hours.	15 Hours

(B) Professional information

(1) Course Aims:

The broad aims of the course are as follows: (either to be written in items or as a paragraph)

- **1-** Critically evaluate the principles and relevant theory of physiology of rehabilitation, in relation to advanced orthopedic surgery, allied with the process of healing.
- **2-** Critically review the skills to coordinate and, where appropriate, deliver or lead the management of the orthopaedic trauma patient with associated skin, tendon, and in need of recovery from injury.
- **3-** Design a clear and defendable method of addressing the question.
- **4-** Conduct a planned, rigorous analysis of the data/information collected.

(2) Intended Learning Outcomes (ILOs):

Intended learning outcomes (ILOs); Are four main categories: knowledge & understanding to be gained, intellectual qualities, professional/practical and transferable skills.

On successful completion of the course, the candidate will be able to:

A- Knowledge and Understanding

- A1- Determine the appropriate diagnostic tools and therapeutic lines for the most important musckluskletal system problems requiring rehabilitation techniques and orthotic application.
- A 2: Defines and manage the possible early and late complications for regional musckluskletal system injuries ,diseases, infections and tumours requiring rehabilitation techniques and orthotic application.
- A 3: List the appropriate lines of treatment modalities for selected common musckluskletal system injuries requiring rehabilitation techniques and orthotic application.
- A4: Understand the nature of muscle dysfunctions and joint problems requiring rehabilitation techniques and orthotic application in orthopaedics and Traumatology.

B- Intellectual skills

- B1- Conceptualize the importance of physical assessment to the diagnosis of musculoskeletal problems requiring rehabilitation techniques and orthotic application.
- B2: Obtain, perform and document a complete medical history and physical examination.
- B3: Identify, analyse and draw reasoned conclusions from data and complex problems.
- B4: Predict complications of major Orthopaedic dysfunctions problems requiring rehabilitation techniques and orthotic application beyond the capacities of institute and or personnel and determine when to refer to a more well equipped location.
- B5: Monitor the effectiveness of therapy by identifying clinical and investigative parameters that can be used in assessing the patient's response to treatment and re-evaluate management plan accordingly particularly in musculoskeletal system problems requiring rehabilitation techniques and orthotic application.

(3) Course content:

Subject	Teaching hours
 Medical Aspects of Sports Medicine Section 1: Exercise and muscle physiology Section 2: Metabolic issue in Athletes Section 3: Sports-related injuries 	5
 2. Rehabilitation Section 1: Gait Section 2: Amputations Section 3: Prosthetics Section 4: Orthoses 	5
 3. Rehabilitation programs Section 1: Trauma treatments (Rehab. Programs during and after fracture treatment) - conservative - operative. Section 2: Spinal cord injury Section 3: Sports - specific knee Section 4: Sports - specific shoulder 	5

4. Teaching methods.

- **4.1:** lectures, seminars, group work, directed reading, electronic resources and case studies , master classes.
- **4.2.** Problem-based learning resources, research-based teaching materials, student-led discussions, and project/dissertation work.
- **4.3.** Group discussions, experiential learning, self-assessment, project work, residentials, research for dissertation, clinical operation room instructions.

5. Assessment methods:

Written exam: to assess knowledge and intellectual skills (20 Degrees).

6. References of the course.

- **6.1. Hand books.** Course notes prepared by some of the staff members in the department, Apley's System of Orthopaedics and Fractures.
- **6.2. Text books:** Campbell operative, Rockwood & Green's Fractures in Adults and Pediatrics, Current Diagnosis & Treatment in Sports Medicine, Orthopaedic Imaging: A Practical Approach, Surgical Exposures in Orthopaedics: The Anatomic Approach
- 6.3: Journals: JBJ (Am, and Br), HSJ, Trauma Journal.

7. Facilities and resources mandatory for course completion.

- The postgraduate teaching process in the orthopaedic surgery field extends to benefit from the facilities available in O.R, Outpatient clinics and the anatomy department (e.g. museums).
- Induction course introducing study skills
- Course specific hands-on library induction and study skills pack.
- Extensive library and other learning resources
- Computer laboratories with a wide range of software
- Intranet with a wide range of learning support material

Course coordinator: Dr/ Adham El-sharkawy

Head of the department: Professor Dr/ Hani El-mowafy

Date: 11/5/2016