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:	**2nd 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:	Neurophysiology in orthopedic
(8) Course code:	**OSURG 625NP**
(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 theories of neurophysiology, in relation to advanced orthopedic surgery.

2- Critically review the skills to coordinate and, where appropriate, deliver or lead the management of the orthopaedic patients requiring neurophysiologic studies.

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 muscklusklетal system problems requiring neurophysiological assessment.

A 2: Defines and manage the possible early and late complications for regional muscklusklетal system injuries ,diseases, infections and tumours requiring neurophysiological assessment.

A 3: List the appropriate lines of treatment modalities for selected common muscklusklетal system injuries requiring neurophysiological assessment..

A4: Understand the nature of muscle dysfunctions and joint problems requiring neurophysiological assessment.

B- Intellectual skills

B1- Conceptualize the importance of physical assessment to the diagnosis of musculoskeletal problems requiring neurophysiological assessment.
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 neurophysiological assessment.

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 neurophysiological assessment.

(3) Course content:

1. Neurophysiological studies: a. Nerve conduction study b. Electromyography (EMG).	5
2. Diagnostic evaluation by neurophysiological study in a traumatized patient.	4
3. Intro-operative neurophysiological	2
4. Motor function of the spinal cord and cord reflexes.	2
5. Excitation of skeletal muscle.	2

(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: Hand out of the lectures and department book

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