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:	**Principles of microvascular surgery**
(8) Course code:	**OSURG 625 MS**
(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 microsurgery, in relation to advanced orthopedic surgery and reconstructive 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, nerve, vessel, tendon, and in need of re implantation from injury to recovery.

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 microsurgical techniques.

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

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

A4: Understand the nature of microsurgery in orthopaedics and Traumatology in research and evaluate methods.

B- Intellectual skills

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

B2: Obtain, perform and document a complete medical history and physical examination.

B3: Critical evaluation of arguments and evidence.

B4: The ability to consistently apply knowledge and intellectual skills.

B5: Identify, analyse and draw reasoned conclusions from data and complex problems.

B6: Predict complications of major Orthopaedic dysfunctions problems requiring microsurgical techniques beyond the capacities of institute and or personnel and determine when to refer to a more well equipped location.

B7: 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 microsurgical techniques.

C- Professional and Practical Skills:

C1: The ability to identify appropriate management and leadership styles to motivate and influence individual and group behaviour, and resolve conflict through collaborative approaches.

C2: Assess the skill to examine patients with microsurgical problems requiring microsurgical interferece different joints including gait description, joint deformity, joint motion and measurements.

C3: Awareness and analysis of differing learning styles, requirements and processes.

C4: Giving and receiving feedback.

C5: Enterprise skills via different orthopaedic microsurgical operations understanding.

(3) Course content:

Subjects	Lectures	Clinical	Total Teaching Hours
Principles of microsurgery	8	7 Hours	15 Hours

A. Microsurgery lectures (8 hours):

1. Principles of microsurgery.
2. Microsurgical treatment of nerve injuries.
3. Microsurgical treatment of tendon injuries.
4. Free vascularized bone transplant.
5. Free vascularized muscle, musculocutanous, fasciocutaneous transplant.
6. Reimplantation.

B. Microsurgical clinical applications (7 hours):

1. Application of nerve repair, nerve graft (Part 1).
2. Application of nerve repair, nerve graft (Part 2).
3. Application of flexor and extensor tendon repair (Part 1).
4. Application of flexor and extensor tendon repair (Part 2).
5. Application of tendon transfer (Part 1).
6. Application of tendon transfer (Part 2).
7. Application of free vasularized bone graft (Part 1).
8. Application of free vasularized bone graft (Part 2).
9. Application of free muscle, musculocutanous, fasciocutaneous transfer (Part 1).
10. Application of free muscle, musculocutanous, fasciocutaneous transfer (Part 2).
11. Application of reimplantation (Part 1).
12. Application of reimplantation (Part 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:

5.1: Written Exam to assess knowledge and intellectual (16 degrees).

5.2: MCQ Exam to assess knowledge and intellectual (4 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: