



## Elective COURSE SPECIFICATION

(Master Degree)

Faculty of Medicine- Mansoura University

### (A) Administrative information

(1) Programme offering the course.	<b>Master Degree</b>
(2) Department offering the programme.	<b>Orthopaedic Surgery Department</b>
(3) Department responsible for teaching the course.	<b>Orthopaedic Surgery Department</b>
(4) Part of the programme.	<b>2<sup>nd</sup> Part</b>
(5) Date of approval by the Department's council	<b>11.5.2016</b>
(6) Date of last approval of programme specification by Faculty council	<b>9/8/2016</b>
(7) Course title.	<b>Principles of microvascular surgery</b>
(8) Course code.	<b>OSURG 520 MS</b>
(9) Total teaching hours.	<b>15 Hours</b>

## **(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 defensible 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 musculoskeletal system problems requiring microsurgical techniques.

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

A 3: List the appropriate lines of treatment modalities for selected common musculoskeletal 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.

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 interference 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.

#### **D- Communication & Transferable skills**

D1: Conduct sincere and effective patient interviews, properly explain their condition and plan of management, obtain consents and convey bad news in a professional way.

D2: Personal drive, initiative and effectiveness in planning and implementing projects and accomplishing objectives together with the ability to manage time and work to deadlines.

D3: Self-awareness, learning autonomy and appreciation of need for Continuing Professional Development.

D4: Participate constructively in teams and assess the relevance and importance of the ideas of others.

D5- Communicate, consult and respect the role of other health-care providers.

### (3) Course content:

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

### (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.

4.4: Practical/laboratory sessions, workshop hand on in skill lab, residentials, Clinical bedside discussion.

### (5) Assessment methods:

5.1: Coursework, class tests, project, management report, oral presentation, seen and unseen written examinations, dissertation and monthly word meeting **for assessment of** Knowledge and Understanding.

5.2: Coursework, presentations, project, management report, seen and unseen written examinations, dissertation **for assessment of** Intellectual skills.

5.3: Coursework, individual and group assignments, presentations and project work, examinations, O.R. and ward rounds **for assessment of** Professional/practical skills.

5.4: Coursework, presentations 1 time/year, projects, management report, log, dissertation and skill lab. **For assessment of** Transferable skills.

#### Percentage of each Assessment to the total mark.

➤ Written exam: 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

## **Elective Microsurgery Course Curriculum**

### **A. Microsurgery lectures (6 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, musculocutaneous, fasciocutaneous transplant.
6. Reimplantation.

### **B. Microsurgical clinical applications (9 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 vascularized bone graft (Part 1).
8. Application of free vascularized bone graft (Part 2).

9. Application of free muscle, musculocutaneous, fasciocutaneous transfer (Part 1).
10. Application of free muscle, musculocutaneous, fasciocutaneous transfer (Part 2).
11. Application of reimplantation (Part 1).
12. Application of reimplantation (Part 2).

**Course coordinator:**

**Dr. Khalid Nour**

**Head of the department:**

**Prof dr. Hani Elmowafi**

**Date:**