# COURSE SPECIFICATION

## Physiology

Orthopediac and traumatology master degree –First part

Faculty of Medicine– Mansoura University

## (A) Administrative information

| | |
|---|---|
| (1) Programme offering the course: | Orthopediac and traumatology master degree |
| (2) Department offering the programme: | Orthopediac department |
| (3) Department responsible for teaching the course: | Physiology |
| (4) Part of the programme: | First 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: | Physiology |
| (8) Course code: | Osur503 |
| (9) Total teaching hours: | 7.5 hrs |

## ( B) Professional information

### (1) Course Aims:

The broad aim of the course is to provide basic knowledge and understanding the physiology of musclоskletel system and background of orthopaedic disorders.

### (2) Intended Learning Outcomes (ILOs):

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

**A- Knowledge and Understanding**

A1. Describe Physiological function of skeletal muscle.

A 2. Discuss Excitation of skeletal muscle:

a. Neuro-muscular junction.
b. Muscle action potential.

A 3. Identify Hemostasis and blood cougulation:

c. Mechanisms of blood hemostasis and blood coagulation.
d. Excessive bleeding conditions.
e. Anticoagulats for clinical use.
f. Blood coagulation tests.

A 4. Describe Motor functions of the spinal cord and cord reflexes.

A 5. Discuss Orthopaedic endocrinlogy (growth, thyroid and adeno-cortical homones).

A 6. Identify regulation, mechanism of action and physiologic effects of hormones and hormonal control of growth.

A7. Identify the regulatory mechanisms of body fluid, body temperature and metabolism.

**B- Intellectual skills**

B1. Integrate the basic science knowledge into clinical practice to explain the various orthopedic disorders.

(3) Course content:

| Subjects | Lectures | Total Teaching Hours |
|---|---|---|
| Homeostasis (in short) | **1** | **1** |
| 1. Contraction of skeletal muscle. | **1** | **1** |
| 2. Excitation of skeletal muscle. | **1** | **1** |
| 3. Immunity (innative and acquired immunity). | **1** | **1** |
| 4. Hemostasis and blood cougulation | 1 | 1 |
| 5. Motor functions of the spinal cord and cord reflexes. | **1** | **1** |
| 6. Orthopaedic endocrinlogy (growth, thyroid and adeno-cortical homones).<br>7. Parathyroid harmone, calcitonin, calcium and phosphate metabolism and vit D. | **1** | **1.5** |

(4) Teaching methods:

Lectures

(5)assessment methods:

: **5.1: Written Exam to assess knowledge and intellectual skills.**

**5.2: Oral Exam to assess knowledge**

**5.3: MCQ exam : to assess knowledge and intellectual skills.**

**Assessment schedule:**

Assessment 1. Written Exams Short essay after 6 months from the date of registration to the degree

Assessment2: Oral Exams after 6 months from the date of registration to the degree

Assessment 3: MCQ continuous assessment exam at the end of the semester

**Percentage of each Assessment to the total mark:**

Written exam: 60 %

Oral exam: 40 %

Assessment 3: MCQ 20% of the written exam

| Written | MCQ | Oral | Total |
|---|---|---|---|
| 48 | 12 | 40 | 100 |

Other assessment without marks:

Assessment of attendance & absenteeism throughout the course

Research assignment to assess general transferable skills, intellectual skills

(6) References of the course:

6.1: Hand books: Book notes of Physiology department.

6.2: Text books: Ganong Text book of physiology.

(5) Facilities and resources mandatory for course completion:

- Lecture hall and data show

Course coordinator:
**Dr.Khalid Nour**
Head of the department:
Prof dr. Hani Elmowafi
Date: