

## 25607 - Kinesiology

### Información del Plan Docente

Academic Year	2016/17
Academic center	127 - Facultad de Ciencias de la Salud
Degree	275 - Degree in Physiotherapy
ECTS	6.0
Course	1
Period	Second Four-month period
Subject Type	Basic Education
Module	---

### 1. Basic info

#### 1.1. Recommendations to take this course

#### 1.2. Activities and key dates for the course

### 2. Initiation

#### 2.1. Learning outcomes that define the subject

#### 2.2. Introduction

### 3. Context and competences

#### 3.1. Goals

#### 3.2. Context and meaning of the subject in the degree

#### 3.3. Competences

#### 3.4. Importance of learning outcomes

### 4. Evaluation

### 5. Activities and resources

#### 5.1. General methodological presentation

#### 5.2. Learning activities

#### 5.3. Program

### SECTION I: KINESIOLOGY

TOPIC I.1. INTRODUCTION TO KINESIOLOGY. Definition and concept of Kinesiology. Historical development of

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Kinesiology. Objectives of Kinesiology.

### **SECTION II: KINESIOLOGY OF THE TRUNK**

TOPIC II.1. KINESIOLOGY OF THE SPINE: spinal curves, intervertebral disc, global movements of the spine.

TOPIC II.2. KINESIOLOGY OF THE PELVIC GIRDLE. Movements of the pelvic girdle, muscles involved. Position influence on the joints of the pelvic girdle.

TOPIC II.3. KINESIOLOGY OF THE LUMBAR SPINE. Lumbar spine in different positions Movements. Range of motion of the lumbar spine. Muscles involved in the movements of the lumbar spine.

TOPIC II.4. KINESIOLOGY OF THE THORACIC SPINE. Movements. Range of motion of the thoracic spine. Movements of the ribs around the cost-vertebral joints. Muscles involved in movements.

TOPIC II.5. EXPLORATION OF THE LUMBAR AND THORACIC SPINE

TOPIC II.6. KINESIOLOGY OF THE CERVICAL SPINE. Movements. Range of motion of the cervical spine. Division. Muscles involved in movements of the cervical spine and head.

TOPIC II.7. EXPLORATION OF THE CERVICAL SPINE

### **SECTION III: KINESIOLOGY OF THE LOWER EXTREMITY**

TOPIC III.1. KINESIOLOGY OF THE HIP. Articular coaptation factors. Range of motion. Muscles involved in the movement of the hip. Relationship between hip joint, pelvic girdle and lower spine.

TOPIC III.2. MEASUREMENT AND EVALUATION OF JOINT AND MUSCLE OF THE HIP

TOPIC III.3. KINESIOLOGY OF THE KNEE. Movements. Lateral and cruciate ligaments: their physiology. Transverse, anteroposterior and rotational stability of the knee. Muscles involved in the movement of the knee.

TOPIC III. 4. MEASUREMENT AND EVALUATION OF JOINT AND MUSCLE OF THE KNEE.

TOPIC III. 5. KINESIOLOGY OF THE ANKLE AND FOOT. Movements. Anteroposterior and transverse stability of the ankle. Muscles involved in the movement of the ankle and foot.

TOPIC III. 6. MEASUREMENT AND EVALUATION OF JOINT AND MUSCLE OF THE ANKLE AND FOOT.

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### **SECTION IV: KINESIOLOGY OF THE UPPER EXTREMITY**

TOPIC IV. 1. KINESIOLOGY OF THE SHOULDER. Movements of the shoulder joints, its breadth and the factors that limit. Movements of the shoulder girdle. Muscles involved in the movements.

TOPIC IV. 2. EVALUATION OF JOINT AND MUSCLE OF THE SHOULDER COMPLEX.

TOPIC IV. 3. KINESIOLOGY OF THE ELBOW. Forearm and elbow joints: structure and movements. Muscles involved in movements of the elbow and the pronosupination.

TOPIC IV. 4. MEASUREMENT AND EVALUATION OF JOINT AND MUSCLE OF ELBOW AND PRONOSUPINATION

TOPIC IV. 5. KINESIOLOGY OF THE WRIST. Movements. Muscles involved in them.

TOPIC IV. 6. KINESIOLOGY OF THE HAND. Movements. Muscles involved in movements of the joints of the last four fingers: location. The thumb: movements and motor muscles.

TOPIC IV. 7. EVALUATION OF JOINT AND MUSCLE OF THE WRIST AND THE FINGERS.

### **5.4.Planning and scheduling**

### **5.5.Bibliography and recomended resources**