

# 25607 - Kinesiology

#### Información del Plan Docente

Academic Year 2017/18

Faculty / School 127 - Facultad de Ciencias de la Salud

**Degree** 275 - Degree in Physiotherapy

**ECTS** 6.0 **Year** 1

Semester Second Four-month period

Subject Type Basic Education

Module ---

- 1.General information
- 1.1.Introduction
- 1.2.Recommendations to take this course
- 1.3.Context and importance of this course in the degree
- 1.4. Activities and key dates
- 2.Learning goals
- 2.1.Learning goals
- 2.2.Importance of learning goals
- 3.Aims of the course and competences
- 3.1.Aims of the course
- 3.2.Competences
- 4.Assessment (1st and 2nd call)
- 4.1. Assessment tasks (description of tasks, marking system and assessment criteria)
- 5.Methodology, learning tasks, syllabus and resources
- 5.1.Methodological overview
- 5.2.Learning tasks
- 5.3.Syllabus

**SECTION I: KINESIOLOGY** 



### 25607 - Kinesiology

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



# 25607 - Kinesiology

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

**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. Course planning and calendar

5.5.Bibliography and recommended resources