

## SYLLABUS

### 1. COURSE DESCRIPTION

<b>Degree:</b>	<b>Nutrition and Dietetics</b>
<b>Course:</b>	<b>Cineanthropometry and Nutrition</b>
<b>Module:</b>	<b>I</b>
<b>Department:</b>	<b>Sports and IT</b>
<b>Academic Year:</b>	<b>2017-18</b>
<b>Term:</b>	<b>First</b>
<b>ECTS credits:</b>	<b>4.5</b>
<b>Year:</b>	<b>3<sup>rd</sup> year</b>
<b>Type:</b>	<b>Optional</b>
<b>Language:</b>	<b>Spanish</b>

<b>Course Model:</b>	<b>C1</b>	
<b>a. Basic learning (EB):</b>		<b>50 %</b>
<b>b. Practical learning (EPD):</b>		<b>50 %</b>



## SYLLABUS

### 2. LECTURERS

**2.1. Coordinator: FRANCISCO JOSE BERRAL DE LA ROSA**

<b>2.2. Lecturers</b>	
<b>Name:</b>	<b>FRANCISCO JOSE BERRAL DE LA ROSA</b>
<b>School:</b>	<b>School of Sport</b>
<b>Department:</b>	<b>Sport and IT</b>
<b>Area:</b>	<b>Physical and Sport Education</b>
<b>Office Hours:</b>	<b>Tuesdays: 12.00-14.00 and Wednesdays: 10.30-13.30 and 17.30-18.30</b>
<b>Office:</b>	<b>11.2.7</b>
<b>E-mail:</b>	<b>fjberder@upo.es</b>
<b>Phone:</b>	<b>954348534</b>

## SYLLABUS

### 3. TOPICS

#### **BASIC LEARNING (EB):**

UNIT 1. Cineanthropometry as a basic science for the evaluation of human nutrition.

UNIT 2. Anatomical position. Planes and axes. Anatomical reference points. Proform equipment.

UNIT 3. Anthropometric techniques. Classification of cineanthropometric measures: linear, surface and mass.

UNIT 4. Heights. Transversal length measures: magnitude and diameters.

UNIT 5. Perimeters. Skin folds.

UNIT 6. Body composition. Mass-independent fractionation and its calculation.

UNIT 7. Body composition. Anthropometric assessment of nutritional status I: Laboratory techniques.

UNIT 8. Body composition. Anthropometric assessment of nutritional status II: Field methods.

UNIT 9. Body composition. The study of corpses.

UNIT 10. Muscle mass estimation.

UNIT 11. Estimation of the desired body weight as a health index.

UNIT 12. Proportionality.

UNIT 13. Human biotypology. Somatotype.

UNIT 14. Application of the anthropometric methodology in the daily clinic.

UNIT 15. Bioelectrical impedance. Introduction to circuit theory. Bioimpedance.

UNIT 16. Computer programs that evaluate body composition.

#### **PRACTICAL LEARNING (EPD):**

-Anthropometric measurement. Proforma.

-Indexes.

-Obtaining the fat percentage per perimeters.

-Body composition bi, tri, tetra and pentacompartmental fracture.



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- Z-Index proportionality. Other proportionality indexes.
- Somatotype. Instructions for calculating the anthropometric somatotype by means of the "Somatotype rating form" by Heath and Carter. Graphic interpretation of the somatotype: somatochart. Rouleaux triangle. Somatotype analysis: Individual and by groups.
- Bioelectric impedance. Mono and multifrequency. Estimation of the water compartment.
- Practical use of cineanthropometry programs in human nutrition.