

<b>ID</b>	3212
<b>Curricular Unit</b>	Kinanthropometry
<b>Regent</b>	Maria Isabel Caldas Januário Fragoso
<b>Learning Outcomes</b>	<p>To describe the morphologic variability of the human being during different growth phases.</p> <p>To relate Kinanthropometry with other areas of study of the human development (nutrition, health, performance).</p> <p>To identify basic and specific concepts related to dimensionality and to body composition.</p> <p>To differentiate biological adaptative phenomena, general and individual, from the variability and diversity of non-biological processes.</p> <p>To base the morphologic adaptations, occurring during the different phases of the human being evolution, on the interactions between genetic, embryogenic (internal factors) and environment (external factors) conditions.</p> <p>To use anthropometric and body composition techniques, and the quantitative techniques of data analysis.</p>
<b>Syllabus</b>	<p>GROWTH AND PROPORTIONALITY Basic notions and definitions. Intrauterine growth (germinative, embryonic and fetal stage and genetic birth defects). Postnatal growth: 1st and 2nd childhood, adolescence, young adult, elderly. Structural and functional anthropometry: Morphological study of the trunk, upper and lower limbs. Morphological study of standing and sitting positions.</p> <p>GROWTH AND MATURATION Basic notions and definitions. Methodology for the study of maturation.</p> <p>BODY COMPOSITION Basic notions and definitions. Normality and obesity. Body fat distribution. Changes in body composition during growth. Methodology for the study of body composition.</p> <p>MORPHOLOGICAL TYPE Basic notions and definitions. Morphological types. Type of morphology and growth. Methodology for the study of morphological typology.</p> <p>BIOSOCIAL IMPACT ON MORPHOLOGY Analysis of the morphology biosocial interference: space, dimension, time. Secular trend.</p>

**Evaluation**

We have lectures (50' per week) and practical classes (140' per week). This last one serves to transmit theoretical contents in a framework that meets the specific needs of each course but especially to implement practical information sheets, handling anthropometric material and contact with laboratory techniques and methods. As a function of motivation and means of assimilation it is used: (1) multimedia products, (2) laboratory equipment to experiment different measurements, (3) Course website [http:// www.fmh.utl.pt /agon/cpfmh/main.php](http://www.fmh.utl.pt/agon/cpfmh/main.php), where students can access information of (a) Teachers, (b) Evaluation, (c) Program (d) Bibliography published by teachers, (e) Other texts, etc. The evaluation consists of a mandatory oral exam (related with the first 4 anthropometry sheets) and two written tests (theoretical and practical tests). Achieving a rating of less than 7.5 points in one test, refer students to the final evaluation.

**Bibliography**

Vieira, F. & Fragoso, I. (2006). *Morfologia e Crescimento*. Cruz Quebrada: FMH - Serviço de Edições.

Fragoso, I. & Vieira, F. (2011). *Morfologia e Crescimento. Curso Prático*. Cruz Quebrada: FMH - Serviço de Edições.

Fragoso, I., & Vieira, F. (1999). *Antropometria aplicada*. Actas do 1º ciclo de conferências. Lisboa: Faculdade de Motricidade Humana. (CBM 733-21188).

Fragoso, I. & Vieira, F. (2006). *Variabilidade Morfológica no Idoso*. In: J. Barreiros, M. Espanha e P. Pezarat Correia (Eds), *Actividade Física e Envelhecimento* (pp. 61-71). Cruz Quebrada: FMH - Serviço de Edições.