

<b>ID</b>	2429
<b>Curricular Unit</b>	Kinanthropometry
<b>Regent</b>	Maria Isabel Caldas Januario Fragoso
<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>- To describe the morphologic variability of the human being during different growth phases.</li> <li>- To relate Kinanthropometry with other areas of study of the human development (nutrition, health, performance).</li> <li>- To identify basic and specific concepts related to dimensionality and to body composition.</li> <li>- To differentiate biological adaptative phenomena, general and individual, from the variability and diversity of non-biological processes.</li> <li>- 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.</li> <li>- To use anthropometric and body composition techniques, and the quantitative techniques of data analysis.</li> </ul>
<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 an mandatory oral (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.