ID	2953
Curricular Unit	Physiology of Human Movement
Regent	Paulo Armada da Silva
Learning Outcomes	To study human motor activity in a Bioenergetic perspective, viewing human physical and motor activity as an increase in body energy expenditure sustained by the coordinated response of the respiratory, cardiovascular and locomotor systems. To understand the health benefits of regular physical activity, particularly in populations with special needs. To assess functional capacity and exercise performance.
Syllabus	The basic concepts of physical actiivity, exercise and physical ability. Bioenergetics and the assessment of energy expenditure. General physiological responses to physical activity: 1. Respiratory responses; 2. Cardiovascular responses; 3. Metabolic responses. Health benefits of physical activity. The effect of aging and of physical inactivity on physical ability and functional capacity. Special populations, Health and disease. Functional assessment. Ergo-spirometry.
Evaluation	Continuous evaluation: Individual written test Group assignments: 1) elaborate a one-page resume of a scientific paper; 2) write a report and present in class the results of the exercise tests performed during pratical lessons. Final exam (for those failing in continuous evaluation): Written exam followed by an oral exam for those students that attained a minimal score of 10 points in the written exam. Final classification is given by the result of the oral exam.
Bibliography	Main bibliography: McArdle, W.D., Katch, F. I., Katch, V.I. (2001). Exercise Physiology – Energy, Nutrition, and Human Performance (5th Ed.). Philadelphia: Lippincott Williams & Wilkins. American College of Sports Medicine (2000). Guidelines for Exercise Testing and Prescription (6th Ed.). Baltimore: Williams & Williams. Written material for support of laboratory and pratical lessons. Other bibliography: Wilmore, J.H. & Costill, D.L. (1999). Physiology of Sport and Exercise. Champaign, Ill: Human Kinetics Publishers.