School of Agriculture
Course Unit Syllabus

Level of qualification:
Second Cycle (EQF level 7) - Master
Study cycle:
Community Psychogerontology

Course Unit: **450004 – Nutrition, Rehabilitation an Development of Physical Activity**

Year 1 **Semester 1** **ISCED Code: 726** **ECTS: 5,0**

Tipe of Course Unit: Compulsory **Delivery Mode:** Face-to-face **Language of Instruction:** Portuguese

COURSE COORDINATOR: João Alberto Mendes Leal

HOURS OF WORK

TOTAL HOURS	Contact Hours								Hours in autonomous work
	Theory	Theory and practice	Practical and laboratory work	Field work	Seminar	Internship	Tutorial guidance	Other	
125		**27**					**8**		**90**

Prerequisites (if applicable): Not applicable

LEARNING OUTCOMES (knowledge, skills and competence)

Generally intended that each graduate student:

Recognizes the importance of regular physical activity and exercise on health; Know some of the theories that explain the process of adhesion to physical activity;

Identify the various groups and types of food and nutrients, classification and biological analysis and its use by man;

Establish the most significant and current relationship between food and health, with special emphasis on disorders of energy metabolism and body composition;

Learn about the key features and limitations of the elderly in physical activities;

Master some valuation techniques of physical condition for the elderly; Master the key issues to consider in exercise prescription for the elderly.

CONTENTS

Concepts: exercise, nutrition and health;

Physical activity rates in Portugal and other countries in the world;

Epidemiology of physical activity, physical condition and some chronic diseases;

Nutrition and health - daily nutrient recommendations. Groups of foods;

Evaluation of the components of energy balance and body composition. Caloric intake and energy expenditure. Metabolic calculations;

Main methods of assessing body composition and fat distribution;

Epidemiologic aspects of aging;

Effects of aging;

The importance of physical activity for seniors;

Benefits and contraindications of exercise;

Assessment protocols of the physical condition in the elderly;

General guidelines for exercise prescription for the elderly.

DEMONSTRATION OF THE CONTENTS COHERENCE WITH THE COURSE UNIT'S LEARNING OUTCOMES

In the last decades there are several studies that show the relationship between sedentary lifestyle and certain given conditions. Scientific evidence shows that physical activity and proper nutrition can have a major impact on health as it seems, poderse state that reduces the risk of both developing, as of dying from cardiovascular disease, which accounts for the highest death rate in industrialized countries throughout the world, reducing the risk of developing diabetes mellitus and hypertension, among others.

On the other hand, physical activity may increase the functional capacity in the elderly, as well as all those that have some temporary or chronic conditions and which have some limitations. Exercise and proper nutrition may be important since recommended by health technicians and accompanied by individuals with expertise in the intervention of these problems.

TEACHING METHODOLOGIES

in advance;

Practical work in the classroom;

Seminars with the participation of external institutions.

DEMONSTRATION OF THE COHERENCE BETWEEN THE TEACHING METHODOLOGIES AND THE LEARNING OUTCOMES

The theoretical practical nature of UC justifies the use of complementary form of active methodologies with a strong practical component associated with the theoretical exposition often used to support visual and audible aids, as well as using literature. Laboratory resources are also used to assess body composition and cardiorespiratory fitness;

It applicant to practice presentation by the students to grupoturma of survey results conducted independently and teacher's supervision.

EVALUATION METHODS

Realization of a working group and another individual related to the issues addressed, with presentation and discussion in class.

MAIN BIBLIOGRAPHY

ACSM (2013). ACSM's Guidelines for Exercise Testing and Prescription (9th edition). Baltimore: Williams & Wilkins.

ACSM (2013). ACSM's Resource Manual for Guidelines for Exercise Testing and Prescription (7th edition). Baltimore:

Williams & Wilkins.

Andújar, A. & Rodríguez J. (2010). Columna Vertebral. Ejercicio Físico y Salud. Editorial INDE. Barcelona. Heyward, V. (2002). Advanced Fitness Assessment Exercise Prescription. 4th edition. Champaign: Human Kinetics.

LLano M, Manz M & Oliveira S (2006). Guia Prático da Atividade Física na 3ª Idade. A. MANZ Produções.

Raposo F & Marques R (2009). Populações Especiais – Avaliação e Prescrição do Exercício. A. MANZ Produções.

Sardinha L, Matos M & Loureiro I (1999): Promoção da Saúde – Modelos e práticas de intervenção no âmbito da atividade física, nutrição e tabagismo. Edições FMH

Teixeira P, Sardinha L & Barata (2008): Nutrição, Exercício e Saúde. LIDEL – Edições Técnicas.

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