

ID	3059
Curricular Unit	Exercise, Aging and Health
Regent	Maria de Fátima Marcelina Baptista
Learning Outcomes	This course is aimed to study the design and implementation of exercise programs in the health and well-being of the older adult. The content taught seek to address major changes that occur with aging and can be prevented or delayed with physical activity, such as prevention of falls and functional dependence, of osteopenia of sarcopenia, metabolic syndrome, and dementia.
Syllabus	<p>Lecture component:</p> <p>Demographics of aging in Portugal and in other countries</p> <p>Mechanisms underlying cellular aging</p> <p>Age-related changes in cardio-pulmonary, muscle-skeletal and sensory functions</p> <p>Physical activity, fitness, health and longevity</p> <p>Types and benefits of exercise programs</p> <p>Exercise prescription for the elderly, for frail elders and masters athletes</p> <p>Solutions to increase physical activity among elderly people</p> <p>Lecture/Practical component:</p> <p>Planning and implementing screening and assessment: medical history and risk factor assessment, physical fitness, balance and mobility tests, and interpretation of test results</p> <p>Planning and implementing exercise programs to improve: balance control, gait pattern, strength, flexibility and aerobic capabilities</p>
Evaluation	The program is divided into theoretical course and theoretical-practical (TP) course for the presentation of relevant information and skills training in the assessment, prescription and implementation of exercise programs for older people, respectively. The classification results from the average of the written and the TP examination, which includes the implementation of an exercise session for older people with different levels of functional fitness (16 points); and the participation on TP classes (4 values). It is mandatory to obtain at least 50% of the maximum score in each of the components of evaluation and the frequency of at least 2/3 of TP classes. An additional value is obtained in case of participation in events in the community level. The oral examination is compulsory for all students who obtain > 16 in the written examination and for all students with at least 9.5 in the final written exam, who have not attended at least 2/3 of the TPs.
Bibliography	<p>Spirduso, W.W, Francis, K.L. MacRae P.G. Physical Dimensions of Aging. Champaign: Human Kinetics, 2005</p> <p>Baptista, F., & Sardinha L.B. Avaliação da Aptidão Física e do Equilíbrio de Pessoas Idosas. Lisboa, Faculdade de Motricidade Humana, 2005.</p> <p>Rose, D.J. Fall Proof: A Comprehensive Balance and Mobility Training Program. Champaign: Human Kinetics, 2003.</p>