



ID 3879

Curricular Unit Exercise and Chronic Disease

Regent

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To identify, understand and describe pathophysiological mechanisms underlying each disease contained in the syllabus.

Learning Outcomes

Knowing the effects of exercise in these conditions, in the prevention and therapy.

Mastering the theoretical foundations that underlie the methodologies for prescribing exercise in pathological situations taken into account the specific syllabus' themes.

- 1. Concept of disease, health and fitness.
- 2. Cardiovascular Pathology. Ischemic infarction.
- 3. Other Cardiovascular Diseases: Hypertension, heart failure, valvular disease, peripheral arterial disease.

Syllabus

- 4. Pathology of the Respiratory System. Chronic Obstructive Pulmonary Disease. Chronic Restrictive Lung Disease. Asthma.
- 5. Metabolic Diseases: Dyslipidemia, Obesity, Diabetes, Metabolic Syndrome.
- 6. Osteo-articular and muscular pathology. Osteoporosis. Arthritis and Osteoarthritis. Sarcopenia. Fibromyalgia.

Evaluation

Theoretical course with an eminently expositive feature (2 h/wk). The theoretical-practical course (1.5 h/wk), where the student solves problem situations in accordance with a guideline sheet, one for each session, according to the program of theoretical course. For the development and explanation of the different subjects in the program, powerpoint slides support are used, to which students have access. The supporting literature for each subject consists of a basic-general book like a "textbook" and also specific references for each subject. The assessment process consists of a written test in two ways: 1) multiple choice test; 2) essay question on selected topics, one per student theme, carried out in 24 hours, with consultation and under rigid rules of writing – like a review article. The successful students can perform an oral examination if they wish.

Bibliography

ACSM's Guidelines for Exercise Testing and Prescription [Spiral-Bound] American College of Sports Medicine. Eighth Ed, 2010.

L. Larry Durstine, Geoffrey E. Moore, Patricia L. Painter, Scott O. Roberts. Exercise Management for persons with chronic diseases and disabilities. ACSM. UK, Third Ed., 2009.

Claude Bouchard, Steven N. Blair, William L. Haskell. Physical activity and health. UK, 2007.

Jonathan K. Ehrman, Paul M. Gordon, Paul S. Visich, Steven J. Keteyian. Clinical Exercise Physiology. UK, 2003.