

1. OVERVIEW

Subject area	Physical Activity for Health
Degree	Bachelor's Degree in Exercise and Sport Sciences
School/Faculty	Medicine, Health and Sports Science
Year	3rd
ECTS	6
Type	Compulsory
Language/s	Spanish/English
Delivery mode	On campus
Semester	S5 and S6
Academic year	25-26
Coordinating professor	Lidia B. Alejo

2. INTRODUCTION

There is an increasingly significant inverse relationship between physical activity and cardiovascular disease, high blood pressure, heart attacks, osteoporosis, type II diabetes, colon cancer, breast cancer, anxiety and depression (ACSM, 2009). In response to this, public and private institutions are increasing the number of programmes and actions aimed at boosting levels of physical activity across the population as a whole (International Society for Physical Activity and Health, 2010).

Despite all this, recent studies have shown that 34.8% of people in Europe are classed as inactive (Hallal et al., 2012), which is a worrying figure for the future of our population. These unhealthy lifestyles can cause a multitude of physical problems. According to Spain's latest National Health Survey, published in 2013, one in six Spanish people over the age of 15 already has a chronic health problem, and these problems are more prevalent in women (Spain's Ministry of Health, Social Services and Equality, 2013).

In light of this, it is essential that Exercise and Sport Sciences students learn how to use interventions based on physical activity and exercise to help prevent illness.

The subject area "Physical Activity for Health" is taught in the third year of the Bachelor's Degree in Exercise and Sport Sciences, in either the first or the second semester depending on the group. It is a 6 ECTS compulsory subject area on the degree programme, and it is taught in Spanish. Considering the intended learning outcomes, it provides students with basic and specific training about the benefits of physical activity and health and how to apply these benefits through exercise programmes for healthy people. The subject area is structured to allow students to progressively engage with and acquire new knowledge.

The ECTS for this subject area include lectures, case studies, problem-based learning, guided projects, tutorials, independent working and collaborative learning.

This all allows future graduates to acquire the knowledge and skills needed to correctly perform pre-exercise assessments and to design exercise programmes for healthy people, including with special considerations for groups such as children and elderly people.

3. SKILLS AND LEARNING OUTCOMES

Basic skills (CB, by the acronym in Spanish):

- CB2: Students can apply their knowledge to their work or vocation in a professional manner and possess the skills which are usually evident through the forming and defending of opinions and resolving problems within their study area.
- CB3: Students have the ability to gather and interpret relevant data (usually within their study area) to form opinions which include reflecting on relevant social, scientific or ethical matters.
- CB4: Students can communicate information, ideas, problems and solutions to both specialist and non-specialist audiences.

Cross-curricular skills (CT, by the acronym in Spanish):

- CT8: Information management: Ability to seek, choose, analyse and integrate information from diverse sources.
- CT17: Teamwork: Ability to integrate and collaborate actively with other people, departments and/or organisations to reach common goals.
- CT15: Responsibility: Ability to fulfil commitments to themselves and others when undertaking a task and try to meet a range of objectives within the learning process. Ability to face and accept the consequences of actions taken freely.

Specific skills (CE, by the acronym in Spanish):

- CE2: Ability to transmit attitudes and values in professional practice in all areas of physical activity and sport, helping to create a better society.
- CE4: Ability to analyse and apply physiological, biomechanical, psychological and social principles in different areas of physical activity, sport and recreation.
- CE5: Ability to identify inappropriate practices that pose a risk to health in order to prevent and correct them in different groups of people.
- CE11: Ability to use your own judgement to act in society, using theoretical, academic and professional discourse in relation to exercise and sport sciences.

Learning outcomes (RA, by the acronym in Spanish):

- RA1: To understand fundamental concepts related to the connections between physical activity and health, assessing the degree of vital importance of each one.
- RA2: To determine, based on specific programmes and tests, the degree of useful command of the knowledge acquired about the effects of physical activity/sport on health.
- RA3: To act professionally when using sports equipment and material and following safety protocols for practical exercises with people with diverse characteristics.
- RA4: To produce in-depth analysis and summaries based on key literature about physical activity and health.

The following table shows how the skills developed in the subject area match up with the intended learning outcomes:

Skills	Learning outcomes
CB3, CB4, CT8, CT15, CT17, CT8, CE4, CE5	RA1: To understand fundamental concepts related to the connections between physical activity and health, assessing the degree of vital importance of each one.
CB2, CB3, CT8, CT15, CT17, CE9, CE11	RA2: To determine, based on specific programmes and tests, the degree of useful command of the knowledge acquired about the effects of physical activity/sport on health.
CB2, CT8, CT15, CT17, CE2, CE5, CE11	RA3: To act professionally when using sports equipment and material and following safety protocols for practical exercises with people with diverse characteristics.
CB3, CB4, CT8, CT15, CT17, CE4	RA4: To produce in-depth analysis and summaries based on key literature about physical activity and health.

4. CONTENTS

This section lists the content of each of the topics in the learning units.

- Physical activity, physical exercise and health
 - Conceptual framework and implications.
 - Preventative value of physical activity.
 - Psychosocial aspects of physical activity and health.
 - Safety aspects in health-orientated physical activity and exercise programmes.
 - Settings for the promotion of physical activity and health.
- Fitness and health tests.
- Prescription of physical exercise programmes in the field of healthcare.
 - Technology used in health-orientated physical activity and exercise programmes.

The content will be divided into the following learning units:

Learning unit 1: Introduction to physical activity, exercise and health

- 1.1. Key concepts
- 1.2. History and evolution of physical activity and its relationship with health
- 1.3. Risks and benefits of regular exercise and physical activity
- 1.4. Strategies for boosting the adoption and maintenance of an active lifestyle

Learning unit 2: Pre-exercise health assessment

- 2.1. Questionnaires to assess fitness for physical activity
- 2.2. Risk stratification for cardiovascular events
- 2.3. Informed consent

Learning unit 3: Health-related physical fitness tests

- 3.1. Basic principles and guidelines for health-related physical fitness tests
- 3.2. Body composition
- 3.3. Cardiorespiratory fitness
- 3.4. Strength
- 3.5. Flexibility

Learning unit 4: General principles of exercise prescription for health reasons

- 4.1. Type of exercise
- 4.2. Main elements of an exercise session
- 4.3. Exercise prescription: FITT principles and components of fitness for health

Learning unit 5: Exercise prescription for health people with special considerations

- 5.1. Exercise prescription for children
- 5.2. Exercise prescription for elderly people

5. TEACHING/LEARNING METHODS

The types of teaching-learning methods are as follows:

- Lectures
- Case studies
- Collaborative learning
- Problem-based learning
- Simulation environments

6. LEARNING ACTIVITIES

The types of learning activities, plus the amount of time spent on each activity, are as follows:

On campus:

Learning activity	Number of hours
Lectures	20
Case studies	15
Reports and written work	16
Design and leadership of practical sessions	25
Design of strategies, procedures and intervention plans	25
Case studies	33
Tutorials	8
Asynchronous lectures	8
TOTAL	150

7. ASSESSMENT

The assessment methods, plus their weighting in the final grade for the course, are as follows:

On campus:

Assessment system	Weighting
-------------------	-----------

On-campus knowledge tests	35% (20–40%)
Participation in classroom activities	45% (40–60%)
Strategy design projects and intervention plans	20% (20–30%)

On the Virtual Campus, when you open the subject area, you'll find details of your assessment activities, including the submission dates and assessment procedures for each activity.

7.1. Ordinary exam period

To pass the subject area in the ordinary exam period, students must achieve a final grade of at least 5.0, based on the sum of the grades achieved in the different assessable tasks. A minimum grade of 5.0 is required in all the objective tests, while a minimum grade of 4.0 is required in the rest of the learning activities for them to be included in the weighted average grade.

7.2. Extraordinary exam period (resits)

To pass the subject area in the extraordinary exam period, students must achieve a final grade of at least 5.0, based on the sum of the grades achieved in the different assessable tasks. A minimum grade of 5.0 is required in all the objective tests, while a minimum grade of 4.0 is required in the rest of the learning activities for them to be included in the weighted average grade. Tasks not passed in the ordinary exam period, or those not delivered, must now be delivered after having received the relevant corrections to them by the professor.

8. TIMELINE

This section presents the timeline and submission dates for the assessable tasks in this subject area.

Assessable tasks	Date
Activity 1. Informed consent	Week 2
Activity 2. Cardiovascular risk factor report, metabolic syndrome and model of the states of change	Week 3
Activity 3. Physical fitness test	Week 6
Activity 4. Test report and exercise recommendations	Week 8
Activity 5. Planning	Weeks 7 and 8
Activity 6. Final report and presentation	Week 16
Activity 7. Participant feedback	Week 16
Activity 8. Objective test on cardiovascular risk factors	Week 4

Activity 9. Objective test on anthropometry	Weeks 4 and 5
Activity 10. Objective test UA5	Week 10

The timeline may be subject to modifications for logistical reasons. Students will be informed of any changes in due time and course.

9. BIBLIOGRAPHY

The recommended bibliography is indicated below:

Books

- Americal Collegue of Sport Medicine. (2021). *ACMS's Guidelines for Exercise Testing and Prescription*. The point: Baltimore.
- American College of Sport Medicine. (2014). *ACMS' Resources for the Health Fitness Specialist*. Wolters Kluwer: USA
- Airaska, D. (2002). *Actividad Física y Salud*. Web en línea: www.sobreetrenamiento.es
- Bandura, A. *A Social Fundations of Though and Action: A Social Cognitive Theory*. Prentice-Hall: USA
- Becker, MH. Maiman, LA. Kirscht, JP. Don, PH. Drachman, RH. (1977). *The Health Belief Model and Prediction of Dietary Compliance: A Field Experiment*. J Health Soc Behav.
- Bouchard, C. Blair, S. Haskell, W. (2012). *Physical Activity and Health*. Human Kinetics: USA.
- Bronfenbrenner, U. (1979). *The Ecology of Human Development: Experiments by Nature and Design*. Harvard Un: United Kingdom
- Devís, J. et al. (2000). *Actividad física, deporte y salud*. INDE: Barcelona.
- Dishman, R. Heath, G. Min Lee, I. (2013). *Physical Activity Epidemiology*. Human Kinetics: USA
- Font, P. (2003). *3ª edad. Actividad física y Salud*. Paidotribo: Barcelona
- García, J. Navarro, M. Ruíz, J. (1996). *Pruebas para la valoración de la capacidad motriz en el deporte. Evaluación de la CF*. Gymnos: Madrid
- Golding, L. (2000). *YMCA Fitness Testing and Assessment Manual*. Human Kinetics: USA.
- Heyward, V. (2014). *Evaluación de la Aptitud Física y Prescripción del Ejercicio*. Panamericana: Madrid.
- Legido, J. Segovia, J; Ballesteros, J. (1995). *Valoración de la Condición Física por Medio de Test*. Ediciones Pedagógicas: Madrid
- López, J. López, L. (2008). *Fisiología Clínica del Ejercicio*. Panamericana: Madrid.
- Naclerio, F. (2010). *Entrenamiento Deportivo. Fundamentos y aplicaciones en diferentes deportes*. Panamericana: Madrid.
- Olds, T. Norton, K. (1999). *Pre-exercise Health Screening Guide*. Human Kinetics: Australia.
- Prochaska, JO. DiClemente, C. (1983). *Stages and Processes of Selfchange of Smoking: Toward an Integrativa Model of Change*. J Consult Clin Psychol.
- Rikli, R. E. Jessie Jones, R.C. (2001). *Senior Fitness Test Manual*. Human Kinetics.
- Weineck, J. (1988). *Entrenamiento óptimo*. Hispano Europea, S.A: Barcelona

Institutions

- American College of Sport Medicine. <http://acsm.org/>
- American Heart Association. <http://www.heart.org/HEARTORG/>
- Canadian Society for Exercise Physiology. <http://www.csep.ca/english/view.asp?x=1>

- Eurobarómetro. http://ec.europa.eu/spain/sobre-la-ue/euro-barometro/index_es.htm
- Framingham Heart Study. <http://www.framinghamheartstudy.org/>
- Imsero. http://www.imsero.es/imsero_01/index.htm
- Instituto Nacional de Estadística. <http://www.ine.es/>
- McKinley Health Center. <http://www.mckinley.illinois.edu/>
- National Strength and conditioning association. <http://www.nscaspain.com/web/nsca.aspx>
- Nurses' Health Study. <http://www.channing.harvard.edu/nhs/>
- Organización Mundial de la Salud. <http://www.who.int/es/>

Apart from these bibliographical references, in the presentations that are developed in class, teachers will provide the scientific articles of recommended reading.

10. EDUCATIONAL GUIDANCE AND DIVERSITY UNIT

From the Educational Guidance and Diversity Unit we offer support to our students throughout their university life to help them reach their academic achievements. Other main actions are the students inclusions with specific educational needs, universal accessibility on the different campuses of the university and equal opportunities.

From this unit we offer to our students:

1. Accompaniment and follow-up by means of counselling and personalized plans for students who need to improve their academic performance.
2. In terms of attention to diversity, non-significant curricular adjustments are made in terms of methodology and assessment for those students with specific educational needs, pursuing an equal opportunities for all students.
3. We offer students different extracurricular resources to develop different competences that will encourage their personal and professional development.
4. Vocational guidance through the provision of tools and counselling to students with vocational doubts or who believe they have made a mistake in their choice of degree.

Students in need of educational support can write to us at:

orientacioneducativa@universidadeuropea.es

11. STUDENT SATISFACTION SURVEYS

Your opinion matters!

Universidad Europea encourages you to complete our satisfaction surveys to identify strengths and areas for improvement for staff, degree courses and the learning process.

These surveys will be available in the survey area of your virtual campus or by email.

Your opinion is essential to improve the quality of the course.

Many thanks for taking part.