



Information about the subject

Degree: Bachelor of Sciences of Physical Activity and Sport

Faculty: Faculty of Physical Activity and Sport Sciences

Code: 280317 **Name:** Physical Activity and Health

Credits: 6,00 **ECTS** **Year:** 3 **Semester:** 1

Module: 3) Specific Obligatory Formation Module.

Subject Matter: Physical activity and physical exercise for health and with special populations.

Type: Compulsory

Field of knowledge: Ciencias de la Salud

Department: -

Type of learning: Classroom-based learning

Languages in which it is taught:

Lecturer/-s:

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Module organization

3) Specific Obligatory Formation Module.

Subject Matter	ECTS	Subject	ECTS	Year/semester
Teaching of Physical Education and Sports.	18,00	Design, Evaluation and Intervention in Educational Programmes	6,00	4/1
		Didactics and Methodology of Sports and Physical Activity	6,00	3/1
		Social Morality and Professional Deontology	6,00	4/1
Physical exercise, fitness and sports physical training.	18,00	Evaluation of Biological Condition	6,00	3/1
		Planning and Methodology of Training in PA	6,00	3/2
		Prevention and Rehabilitation of Injuries in PA	6,00	4/1
Physical activity and physical exercise for health and with special populations.	12,00	Physical Activity and Health	6,00	3/1
		Prescription and Programmes for Healthy Lifestyles	6,00	4/1
Sports organization and management.	12,00	Sports Marketing	6,00	3/2
		Sports Training Planning and Organisation	6,00	3/1



Learning outcomes

At the end of the course, the student must be able to prove that he/she has acquired the following learning outcomes:

- R1 Autonomously design and apply exercises and physical-sports activities oriented to health from a multidisciplinary perspective.
- R2 Select, after experimentation, the appropriate exercise for the prescription of healthy physical activity, attending to the needs of each population and context.
- R3 Identify, correct and optimize habits, activities and execution of technical exercises / gestures, providing adequate feedback avoiding health risks (relying on different methodologies).
- R4 Identify contexts of practice of activity that favor adherence to physical exercise, and the prevention of risks to physical and psychosocial health.
- R5 Analyze, discriminate and critically discuss various sources of documentary information (in Spanish and English) on the effects of physical activity.



Competencies

Depending on the learning outcomes, the competencies to which the subject contributes are (please score from 1 to 4, being 4 the highest score):

BASIC		Weighting			
		1	2	3	4
CB2	That students know how to apply their knowledge to their work or vocation in a professional way and possess the competencies that are often demonstrated through the development and defense of arguments and problem solving within your study area.		X		
CB3	That students have the ability to gather and interpret relevant data (usually within their area of ??study) to make judgments that include reflection on relevant social, scientific or ethical issues.			X	
CB4	That students can transmit information, ideas, problems and solutions to a public both specialized and not specialized.				X
GENERAL		Weighting			
GENERAL		1	2	3	4
CG1	Understand the scientific literature in English and in other languages ??of significant presence in the scientific field through proper information management.		X		
CG2	Know how to apply information and communication technologies (ICT).			X	
CG3	Develop skills to solve problems through decision making.				X
CG4	Convey any related information properly both in writing and orally.				X
CG5	Plan and organize any activity efficiently.				X
CG6	Develop interpersonal relationship skills and teamwork, both in international and national contexts and in interdisciplinary as well as non-interdisciplinary teams.				X
CG7	Be able to carry out critical reasoning using the knowledge acquired.				X



CG8	Recognize multiculturalism and diversity.	X
CG10	Develop skills for adaptation to new situations and for autonomous learning.	X
CG11	Develop skills for creativity, initiative and entrepreneurship.	X
CG13	Be able to apply theoretical knowledge in practice.	X
CG14	Use the internet properly as a means of communication and as a source of information.	X
CG18	Be able to self-evaluate.	X

SPECIFIC	Weighting				
		1	2	3	4
CE 2.3 Design and apply fluently, naturally, consciously and continuously physical exercise and adequate physical condition, efficient, systematic, varied, based on scientific evidence, for the development of adaptation and improvement processes or readaptation of certain capacities of each person in relation to human movement and its optimization; with the purpose of being able to solve unstructured, increasingly complex and unpredictable problems and with an emphasis on populations of character special.				X	
CE 3.1 Analyze, identify, diagnose, promote, guide and evaluate strategies, actions and activities that promote the adherence to an active lifestyle and the participation and regular and healthy practice of physical activity and sport and physical exercise in an adequate, efficient and safe way by citizens in order to improve their integral health, well-being and quality of life, and with emphasis on populations of a special nature such as: the elderly (elderly), schoolchildren, people with disability and people with pathologies, health problems or similar (diagnosed and / or prescribed by a doctor) attending gender and diversity.			X		



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CE 3.4 Promote education, dissemination, information and constant orientation to people and leaders about the benefits, significance, characteristics and positive effects of the regular practice of physical and sports activity and physical exercise, of the risks and damages of an inadequate practice and of the elements and criteria that identify its adequate execution, as well as the information, guidance and advice on the possibilities of physical activity and appropriate sport in your environment in any professional intervention sector.

X

CE 5.4 Identify, organize, direct, plan, coordinate, implement and carry out technical-scientific evaluation of resources organizational and material resources and sports facilities, including their basic and functional design as well as adequate selection and use, for each type of activity, in order to achieve safe, efficient physical and sports activities and healthy, adapted to the development, characteristics and needs of individuals and the type of activity, space and entity in any type of organization, population, context and in any sector of professional intervention of physical activity and sport and with emphasis on special populations and guaranteeing safety, efficiency and professionalism in the activity carried out in compliance with current regulations.

X

CE 6.3 Articulate and deploy with rigor and a scientific attitude the justifications on which to elaborate, support, base and constantly and professionally justify all acts, decisions, processes, procedures, actions, activities, tasks, conclusions, reports and professional performance.

X



Assessment system for the acquisition of competencies and grading system

Assessed learning outcomes	Granted percentage	Assessment method
R1, R2, R3, R4, R5	30,00%	Carrying out a project.
R1, R2, R3, R4	60,00%	Written / oral and / or practical tests.
R5	5,00%	Student self-assessment.
R2, R3	5,00%	Active participation.

Observations

- The student will be able to keep the evaluation instruments passed during the 3 years following the first enrollment.
- It is necessary to obtain 50% in all the instruments to pass the subject. If this criterion is not met, the student will be graded with a maximum of 4.5 in said call.

Learning activities

The following methodologies will be used so that the students can achieve the learning outcomes of the subject:

- M2 Group dynamics and activities.
- M3 Practical lesson.
- M4 Presentation of content by the teacher.
- M7 Small group discussion.
- M8 Resolution of problems and cases.



M9 Attendance at practices.





IN-CLASS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
THEORETICAL CLASS: Presentation of contents by the teacher. Competency analysis. Demonstration of capabilities, skills and knowledge in the classroom. M2, M4, M7	R1, R2, R3, R4	34,00	1,36
PRACTICAL CLASS / SEMINAR: Group dynamics and activities. Resolution of problems and cases. Practical laboratories. Data search, computer room, library, etc. Meaningful construction of knowledge through interaction and student activity. M2, M3, M7, M8	R1, R2, R3, R4	16,00	0,64
TUTORING: Supervision of learning, evolution. Small group discussion. Resolution of problems and cases. Presentation of results before the teacher. Presentation of diagrams and indexes of the proposed works. M7	R1, R2, R3, R4, R5	4,00	0,16
EVALUATION: Set of oral and / or written tests used in the evaluation of the student, including the oral presentation of the final degree project. M2, M8	R1, R2, R5	6,00	0,24
TOTAL		60,00	2,40



LEARNING ACTIVITIES OF AUTONOMOUS WORK

	LEARNING OUTCOMES	HOURS	ECTS
GROUP WORK: Problem solving. Preparation of exercises, memoirs, to expose or deliver in classes and / or in tutoring. M2, M8	R1, R2, R3, R4, R5	50,00	2,00
SELF-EMPLOYED WORK: Study, individual preparation of exercises, works, memories, to expose or deliver in classes and / or in tutoring. Platform activities or other virtual spaces. M8	R1, R2, R3, R4, R5	40,00	1,60
TOTAL		90,00	3,60

Description of the contents

Description of the necessary contents to acquire the learning outcomes.

Theoretical contents:

Content block	Contents
BLOCK I	BASIC CONCEPTS AND CONTEXTUALIZATION OF PHYSICAL ACTIVITY AND HEALTH
BLOCK II	EFFECTS OF PHYSICAL ACTIVITY. BENEFITS AND RISKS
BLOCK III	HEALTHY PHYSICAL ACTIVITIES. GENERAL RECOMMENDATIONS IN THE PRESCRIPTION OF HEALTHY PHYSICAL ACTIVITY (ACSM)
BLOCK IV	CORRECT, SAFE AND EFFECTIVE PERFORMANCE OF THE EXERCISES. PRACTICAL APPLICATIONS



Temporary organization of learning:

Block of content	Number of sessions	Hours
BLOCK I	10,00	20,00
BLOCK II	4,00	8,00
BLOCK III	10,00	20,00
BLOCK IV	6,00	12,00



References

BASIC REFERENCES

- Ackerman, K. E. & Misra, M. (2018). *Amenorrhoea in adolescent female athletes*. 2(9), 677–688. [https://doi.org/S2352-4642\(18\)30145-7](https://doi.org/S2352-4642(18)30145-7) [pii]
- ACSM. (2014). *Manual ACSM para la valoración y prescripción del ejercicio*. Paidotribo.
- Adam, C., Klissouras, V., Ravazzolo, M., Renson, R. & Tuxworth, W. (1988). *EUROFIT: European test of physical fitness*.
- Andrés, M., Remesal, R., Merino, M. A. & Rivera, F. (2017). *Estilos de vida en jóvenes universitarios: estudios realizados en España en los últimos 5 años*. Universidad de Alicante. Proyecto Universidad Saludable. <http://rua.ua.es/dspace/handle/10045/67129>
- Badillo, J. J. G. & Serna, J. R. (2002). *Bases de la programación del entrenamiento de fuerza* (Vol. 308). Inde.
- Bahr, R., Maehlum, S. & Bolic, T. (2007). *Lesiones deportivas: Diagnóstico, tratamiento y rehabilitación*. Médica Panamericana.
- Behm, D. & Chaouachi, A. (2011). *A review of the acute effects of static and dynamic stretching on performance*. 111(11), 2633–2651.
- Behm, D. & Colado, J. C. (2012). *The effectiveness of resistance training using unstable surfaces and devices for rehabilitation*. 7(2), 226.
- Billat, V. (2002). *Fisiología y metodología del entrenamiento. De la teoría a la práctica* (Vol. 24). Paidotribo.
- BOE. (2011). *Ley 17/2011, de 5 de julio, de seguridad alimentaria y nutrición*. 160, 71283.
- Borg, G. (1961). *Perceived exertion in relation to physical work load and pulse-rate*. Departm. of Psychiatry, Medical School.
- Borg, G. A. (1982). *Psychophysical bases of perceived exertion*. 14(5), 377–381.
- Bouchard, C., Shephard, R. J., Stephens, T., Sutton, J. R. & McPherson, B. D. (1990). *Exercise, fitness, and health: a consensus of current knowledge: proceedings of the International Conference on Exercise, fitness, and health, May 29-June 3, 1988, Toronto, Canada*. Exercise, fitness, and health: a consensus of current knowledge: proceedings of the International Conference on Exercise, fitness, and health, May 29-June 3, 1988, Toronto, Canada.
- Boushel, R., Gnaiger, E., Calbet, J. A. L., Gonzalez-Alonso, J., Wright-Paradis, C., Sondergaard, H., Ara, I., Helge, J. W. & Saltin, B. (2011). *Muscle mitochondrial capacity exceeds maximal oxygen delivery in humans*. 11(2), 303–307. <https://doi.org/10.1016/j.mito.2010.12.006>
- Bouzas Marins, J. C., Ottoline Marins, N. M. & Delgado Fernández, M. (2010). *Aplicaciones de la frecuencia cardiaca máxima en la evaluación y prescripción de ejercicio*. 45(168), 251–258.
- CAM. (2017). *Mitos, falsedades y realidades en alimentación y nutrición*. <https://www.comunidad.madrid/servicios/salud/mitos-falsedades-realidades-alimentacion-nutricion>
- Campos Granell, J. & Ramón Cervera, V. (2001). *Teoría y planificación del entrenamiento deportivo (LIBRO CD)* (Vol. 24). Editorial Paidotribo.



- Castañer, M. (2001). *El cuerpo: gesto y mensaje no verbal*. 3, 39–49.
- Cholewa, J., Guimarães-Ferreira, L., da Silva Teixeira, T., Naimo, M. A., Zhi, X., de Sá, R. B. D. P., Lodetti, A., Cardozo, M. Q. & Zanchi, N. E. (2014). *Basic Models Modeling Resistance Training: An Update for Basic Scientists Interested in Study Skeletal Muscle Hypertrophy*. 229(9), 1148–1156.
- Cometti, G. (1998). *Los métodos modernos de musculación*. Paidotribo.
- Cometti, G. (2002). *El entrenamiento de la velocidad* (Vol. 24). Editorial Paidotribo.
- Cordero, M. J. A., Piñero, A. O., García, L. B., Segovia, J. P. N., Hernández, M. C. L. & López, A. M. S. (2015). *Efecto rebote de los programas de intervención para reducir el sobrepeso y la obesidad de niños y adolescentes; revisión sistemática*. 32(n06), 2508–2517.
- Cox, R. H. & COX, R. (2008). *Psicología del deporte: conceptos y sus aplicaciones*. Médica Panamericana.
- Crawford, F. (2009). *Athlete's foot*. 2009, 1712. <https://doi.org/10.1093/ageing/afy169> [pii]
- Cruz-Jentoft, A. J., Bahat, G., Bauer, J., Boirie, Y., Bruyère, O., Cederholm, T., Cooper, C., Landi, F., Rolland, Y., Sayer, A. A., Schneider, S. M., Sieber, C. C., Topinkova, E., Vandewoude, M., Visser, M. & Zamboni, M. (2019). *Sarcopenia: revised European consensus on definition and diagnosis*. 48(1), 16–31. <https://doi.org/10.1093/ageing/afy169>
- de Educación Física, D. (SF). *Salud y actividad física. Efectos positivos y contraindicaciones de la actividad física en la salud y la calidad de vida*.
- De Feo, P. (2013). *Is high-intensity exercise better than moderate-intensity exercise for weight loss?* 23(11), 1037–1042. <https://doi.org/10.1016/j.numecd.2013.06.002>
- Deepak, T. H., Mohapatra, P. R., Janmeja, A. K., Sood, P. & Gupta, M. (2014). *Outcome of pulmonary rehabilitation in patients after acute exacerbation of chronic obstructive pulmonary disease*. 56(1), 7–12.
- Devís, J. D. (2000). *Actividad física, deporte y salud*. Inde.
- Downie, R. S., Tannahill, C. & Tannahill, A. (1996). *Health promotion: models and values* (Vol. 40). Oxford University Press Oxford.
- Dubos, R. J. (1958). *Infection into disease*. 1(4), 425–435.
- Fenstermaker, K. L., Plowman, S. A. & Looney, M. A. (1992). *Validation of the Rockport Fitness Walking Test in females 65 years and older*. 63(3), 322–327.
- Ferreira L. (2019). *Manual BÁSICO Movilización Miofascial Inducida por el Movimiento*. (1a) Ed. Propia/SL.
- Férriz, R., González-Cutre, D., Sicilia, Á. & Beltrán, V. (2018). *Estrategias motivacionales para la promoción de la actividad física en niños y adolescentes desde el contexto escolar* (p. 109). Inde.
- Franks, B. D., Howley, E. T. & Lyriboz, Y. (1999). *The health fitness handbook*. Human Kinetics.
- Garber, C. E., Blissmer, B., Deschenes, M. R., Franklin, B. A., Lamonte, M. J., Lee, I.-M., Nieman, D. C. & Swain, D. P. (2011). *American College of Sports Medicine position stand. Quantity and quality of exercise for developing and maintaining cardiorespiratory, musculoskeletal, and neuromotor fitness in apparently healthy adults: guidance for prescribing exercise*. 43(7), 1334–1359. <https://doi.org/10.1249/MSS.0b013e318213fefb>



- García Manso, J. M., Caballero, J. A. R. & Navarro, M. (1996). *Bases teóricas del entrenamiento deportivo: principios y aplicaciones*. Gymnos.
- García-Ramos, A., Pérez-Castilla, A., Garrido-Blanca, G., Delgado-García, G. & Piepoli, A. (2019). *Reliability and concurrent validity of seven commercially available devices for the assessment of movement velocity at different intensities during the bench press*.
- García-Verdugo, M. (2007). *Resistencia y entrenamiento: una metodología práctica*. Paidotribo.
- Grgic, J., Garofolini, A., Orazem, J., Sabol, F., Schoenfeld, B. J. & Pedisic, Z. (2020). *Effects of Resistance Training on Muscle Size and Strength in Very Elderly Adults: A Systematic Review and Meta-Analysis of Randomized Controlled Trials*. 50(11), 1983–1999.
<https://doi.org/10.1007/s40279-020-01331-7>
- Guerrero, L. & León, A. (2008). *Aproximación al concepto de salud. Revisión histórica*. 18(53).
- Guillén del Castillo, M. & Linares Girela, D. (2002). *Bases biológicas y fisiológicas del movimiento humano*. Médica Panamericana.
- Guthold, R., Stevens, G. A., Riley, L. M. & Bull, F. C. (2020). *Global trends in insufficient physical activity among adolescents: a pooled analysis of 298 population-based surveys with 1·6 million participants*. 4(1), 23–35. [https://doi.org/10.1016/S2352-4642\(19\)30323-2](https://doi.org/10.1016/S2352-4642(19)30323-2)
- Hackett, D. A. & Chow, C.-M. (2013). *The Valsalva maneuver: its effect on intra-abdominal pressure and safety issues during resistance exercise*. 27(8), 2338–2345.
<https://doi.org/10.1519/JSC.0b013e31827de07d>
- Harman, E. A., Rosenstein, R. M., Frykman, P. N. & Nigro, G. A. (1989). *Effects of a belt on intra-abdominal pressure during weight lifting*. 21(2), 186–190.
- Harvey, D. (1998). *Assessment of the flexibility of elite athletes using the modified Thomas test*. 32(1), 68–70.
- Hebert, L. & Miller, G. (1987). *Newer heavy load lifting methods help firms reduce back injuries*. 56(2), 57–60.
- Howe, S. M., Hand, T. M., Larson-Meyer, D. E., Austin, K. J., Alexander, B. M. & Manore, M. M. (2016). *No Effect of Exercise Intensity on Appetite in Highly-Trained Endurance Women*. 8(4), 223.
- Ikeda, E. R., Borg, A., Brown, D., Malouf, J., Showers, K. M. & Li, S. (2009). *The valsalva maneuver revisited: the influence of voluntary breathing on isometric muscle strength*. 23(1), 127–132. <https://doi.org/10.1519/JSC.0b013e31818eb256>
- INE. (2021). *INE*. https://www.ine.es/prensa/edcm_2020.pdf
- Isidro, F. (2007). *Manual del entrenador personal. Del fitness al wellness (Color)* (Vol. 93). Editorial Paidotribo.
- Jiménez Gutiérrez, A. (2005). *Entrenamiento personal: bases, fundamentos y aplicaciones*. INDE.
- Kovacs, F. (2015). *El libro de la espalda*. (1a). PLANETA.
- KAPANDJI, L. A. (1998). *Cuadernos de fisiología articular. Cuaderno III: Tronco y raquis*.
- Kim, K. & Lee, T. (2016). *Comparison of muscular activities in the abdomen and lower limbs while performing sit-up and leg-raise*. 28(2), 491–494. <https://doi.org/10.1589/jpts.28.491> [doi]
- Kim, T. H., Eke Dogra, S., Al-Sahab, B. & Tamim, H. (2014). *Comparison of functional fitness*



outcomes in experienced and inexperienced older adults after 16-week tai chi program. 20(3), 20–25.

Lagally, K. M. & Robertson, R. J. (2006). *Construct validity of the OMNI resistance exercise scale.* 20(2), 252–256. <https://doi.org/10.1519/R-17224.1>

Lander, J. E., Hundley, J. R. & Simonton, R. L. (1992). *The effectiveness of weight-belts during multiple repetitions of the squat exercise.* 24(5), 603–609.

Ley Orgánica 3/2013, de 20 de junio, de protección de la salud del deportista y lucha contra el dopaje en la actividad deportiva, (2013).

<http://www.boe.es/buscar/doc.php?id=BOE-A-2013-6732>

Liebenson, C. (1999). *Manual de rehabilitación de la columna vertebral* (Vol. 88). Editorial Paidotribo.

Lindsey, R. & Corbin, C. (1989). *Questionable exercises—some safer alternatives.* 60(8), 26–32.

López Cozar, R. & Rebollo, S. (2002). *Análisis de la relación entre práctica deportiva y características sociodemográficas en personas mayores.* 2(5), 69–98.

López Miñarro, P. A. (2001). *Ejercicios desaconsejados en la actividad física: detección y alternativas.* Inde.

López Miñarro, P. Á. (2002). *Mitos y falsas creencias en la práctica deportiva.* Inde.

López-Bueno, R., Calatayud, J., Casaña, J., Casajús, J. A., Smith, L., Tully, M. A., Andersen, L. L. & López-Sánchez, G. F. (2020). *COVID-19 Confinement and Health Risk Behaviors in Spain.* 11, 1426. <https://doi.org/10.3389/fpsyg.2020.01426>

López-Chicharro, J. & Vicente-Campos, D. (n.d.). *HIIT entrenamiento interválico de alta intensidad.* Exercise Physiology and Training.

Lucía, A., Pardo, J., Durández, A., Hoyos, J. & Chicharro, J. L. (1998). *Physiological differences between professional and elite road cyclists.* 19(5), 342–348.

<https://doi.org/10.1055/s-2007-971928>

Mak, W. Y. V. & Lai, W. K. C. (2015). *Acute Effect on Arterial Stiffness after Performing Resistance Exercise by Using the Valsalva Manoeuvre during Exertion.* 2015.

Marcén, C. S. (2021). *Prevención de la vigorexia: Programa de Educación para la Salud dirigido a adolescentes* Prevention of vigorexia: Health Education Program for adolescents. Universidad de Zaragoza.

Marfell-Jones, M., Olds, T., Stewart, A. & Carter, J. (2006). *International Standards for Anthropometric Assessment.*

McGill, S. M., Childs, A. & Liebenson, C. (1999). *Endurance times for low back stabilization exercises: clinical targets for testing and training from a normal database.* 80(8), 941–944.

Mendoza, R. (1988). *Los escolares y la salud: estudio de los hábitos de los escolares españoles en relación con la salud.* Ministerio de Sanidad y Consumo.

Myers, W., T. (2015). *Vías anatómicas. Meridianos miofasciales para terapeutas manuales y profesionales del movimiento.* (2a). Elsevier España, S.L.U.

MSCBS. (2022). *Informe Anual del Sistema Nacional de Salud.*

<https://www.sanidad.gob.es/estadEstudios/estadisticas/sisInfSanSNS/tablasEstadisticas/InfAnual>



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Müller, D. C., Boeno, F. P., Izquierdo, M., Aagaard, P., Teodoro, J. L., Grazioli, R., Cunha, G., Ferrari, R., Saez de Asteasu, M. L., Pinto, R. S. & Cadore, E. L. (2021a). *Effects of high-intensity interval training combined with traditional strength or power training on functionality and physical fitness in healthy older men: A randomized controlled trial.* 149, 111321.

<https://doi.org/10.1016/j.exger.2021.111321>

Mura, G. & Carta, M. G. (2013). *Physical activity in depressed elderly. A systematic review.* 9, 125–135. <https://doi.org/10.2174/1745017901309010125>

Murray, A. & Cardinale, M. (2015). *Cold applications for recovery in adolescent athletes: a systematic review and meta analysis.* 4(1), 1.

Naclerio Ayllón, F. (2009). *Evaluación de la Fuerza muscular con ejercicios de musculación* (G. H. Castañeda (ed.); pp. 309–337). Paidotribo.

Navarro, F. (1998). *La resistencia.* Gymnos.

Nordby, P., Rosenkilde, M., Ploug, T., Westh, K., Feigh, M., Nielsen, N. B., Helge, J. W. & Stallknecht, B. (2015). *Independent effects of endurance training and weight loss on peak fat oxidation in moderately overweight men: a randomized controlled trial.* 118(7), 803–810.

<https://doi.org/10.1152/japplphysiol.00715.2014>

Oliver-Martínez, P. A., Ramos-Campo, D. J., Martínez-Aranda, L. M., Martínez-Rodríguez, A. & Rubio-Arias, J. Á. (2020). *Chronic effects and optimal dosage of strength training on SBP and DBP: a systematic review with meta-analysis.* 38(10), 1909–1918.

<https://doi.org/10.1097/HJH.0000000000002459>

OMS. (2018). *Actividad física.*

<https://www.who.int/es/news-room/fact-sheets/detail/physical-activity>

Organization, W. H. (2004). *Resolución WHA57.* 17. 57.

Ortega, F. B., Ruiz, J. R., España-Romero, V., Vicente-Rodriguez, G., Martínez-Gómez, D., Manios, Y., Béghin, L., Molnar, D., Widhalm, K., Moreno, L. A., Sjöström, M. & Castillo, M. J. (2011). *The International Fitness Scale (IFIS): usefulness of self-reported fitness in youth.* 40(3), 701–711. <https://doi.org/10.1093/ije/dyr039>

Panjabi, M. M. (1992). *The stabilizing system of the spine. Part I. Function, dysfunction, adaptation, and enhancement.* 5(4), 383–389; discussion 397.

Parsons, J. K. (2014). *Prostate cancer and the therapeutic benefits of structured exercise.* 32(4), 271–272. <https://doi.org/10.1200/JCO.2013.53.4289> [doi]

Pastor, J. (n.d.). *¿Salud para durar o bienestar para vivir?* (J. Pastor (ed.); pp. 55–77).

Wanceulen.

Pérez, V. (n.d.). *La Educación Física y la Salud desde la perspectiva del bienestar* (J. Pastor (ed.); pp. 79–98). Wanceulen.

Randell, R. K., Rollo, I., Roberts, T. J., Dalrymple, K. J., Jeukendrup, A. E. & Carter, J. M. (2017). *Maximal Fat Oxidation Rates in an Athletic Population.* 49(1), 133–140.

<https://doi.org/10.1249/MSS.0000000000001084>

Rankinen, T., Zuberi, A., Chagnon, Y. C., Weisnagel, S. J., Argyropoulos, G., Walts, B., Pérusse, L. & Bouchard, C. (2006). *The human obesity gene map: the 2005 update.* 14(4), 529–644.

<https://doi.org/10.1038/oby.2006.71>

Rikli, R. E. & Jones, C. J. (1999). *Development and validation of a functional fitness test for community-residing older adults.* 7, 129–161.

Robertson, R. J., Goss, F. L., Rutkowski, J., Lenz, B., Dixon, C., Timmer, J., Fazee, K., Dube, J. & Andreacci, J. (2003). *Concurrent validation of the OMNI perceived exertion scale for resistance exercise.* 35(2), 333–341. <https://doi.org/10.1249/01.MSS.0000048831.15016.2A>

Rodríguez Marín, J. (1995). *Psicología social de la salud.* Síntesis.

Ruiz, A. (1990). *Fuerza y Musculación: "Sistemas de Entrenamiento."* Agonos.

Russell, A. P., Foletta, V. C., Snow, R. J. & Wadley, G. D. (2014). *Skeletal muscle mitochondria: a major player in exercise, health and disease.* 1840(4), 1276–1284.

Salleras Sanmartí, L. (1985). *Educación sanitaria: principios, métodos y aplicaciones.* Díaz de Santos.

Sánchez García, A. (2019). *Trastornos de la conducta alimentaria en adolescentes: etiología y actuación enfermera.*

https://explore.openaire.eu/search/publication?articleId=od_1371::06d4bdfd6fdfced96304057478f91c78

Schwindling, S., Scharhag-Rosenberger, F., Kindermann, W. & Meyer, T. (2014). *Limited benefit of Fatmax-test to derive training prescriptions.* 35(4), 280–285.

<https://doi.org/10.1055/s-0033-1349106>

Selye, H. (1978). *The stress of police work.* 1(1), 7–8.

Serra Grima, J. R. & Begur Calafat, C. (2004). *Prescripción de ejercicio físico para la salud* (Vol. 1). Editorial Paidotribo.

Sillero Quintana, M. (2009). *Antropometría aplicada al entrenamiento personal* (G. H. Castañeda (ed.); pp. 339–374). Paidotribo.

Silva Piñeiro, R. & Mayán Santos, J. M. (2016). *Beneficios psicológicos de un programa proactivo de ejercicio físico para personas mayores.* 9(1), 24–32.

Skrypnik, D., Bogdanski, P., Madry, E., Pupek-Musialik, D. & Walkowiak, J. (2014). *Effect of physical exercise on endothelial function, indicators of inflammation and oxidative stress.* 36(212), 117–121.

Swain, D. P., Brawner, C. A. & Medicine, A. C. of S. (2012). *ACSM's resource manual for guidelines for exercise testing and prescription.* Lippincott Williams & Wilkins.

Tesch, P. A., Fernandez-Gonzalo, R. & Lundberg, T. R. (2017). *Clinical Applications of Iso-Inertial, Eccentric-Overload (YoYoTM) Resistance Exercise.* 8, 241.

<https://doi.org/10.3389/fphys.2017.00241>

Trojan, T. & McKeag, D. (2006). *Single leg balance test to identify risk of ankle sprains.* 40(7), 610–613; discussion 613. <https://doi.org/10.1136/bjsm.2005.024356>

Tuesca Molina, R. (2005). *La calidad de vida, su importancia y cómo medirla.* 21.

UE. (2022). *Vivifrail – Exercise for elderly adults.* <https://vivifrail.com/es/inicio/>

Velasco-Santos, L., Pradillo, J. L. P., Blanco-Alcántara, D. & Eguizábal, A. J. (2021). *Influencia del perfil de los jóvenes en sus valores del cuerpo (Influence of the profile of young people on their body values).* 41, 299–309.



- Vera-García, F. J., Monfort, M. & Sarti, M. A. (2005). *Prescripción de programas de entrenamiento abdominal. Revisión y puesta al día.* 81, 38–46.
- Weineck, J. (2000). *Salud, ejercicio y deporte* (Vol. 1). Editorial Paidotribo.
- Wells, K. F. & Dillon, E. K. (1952). *The sit and reach—a test of back and leg flexibility.* 23(1), 115–118.
- Wilke, J., Krause, F., Vogt, L., & Banzer, W. (2016). What Is Evidence-Based About Myofascial Chains: A Systematic Review. *Archives of Physical Medicine and Rehabilitation*, 97(3), 454-461. <https://doi.org/10.1016/j.apmr.2015.07.023>
- Wimbush, J. C. & Shepard, M. (1994). *Toward an Understanding of Ethical Climate: Its Relationship to Ethical Behavior and Supervisory Influence.* 13, 637–647.



Addendum to the Course Guide of the Subject

Due to the exceptional situation caused by the health crisis of the COVID-19 and taking into account the security measures related to the development of the educational activity in the Higher Education Institution teaching area, the following changes have been made in the guide of the subject to ensure that Students achieve their learning outcomes of the Subject.

Situation 1: Teaching without limited capacity (when the number of enrolled students is lower than the allowed capacity in classroom, according to the security measures taken).

In this case, no changes are made in the guide of the subject.

Situation 2: Teaching with limited capacity (when the number of enrolled students is higher than the allowed capacity in classroom, according to the security measures taken).

In this case, the following changes are made:

1. Educational Activities of Onsite Work:

All the foreseen activities to be developed in the classroom as indicated in this field of the guide of the subject will be made through a simultaneous teaching method combining onsite teaching in the classroom and synchronous online teaching. Students will be able to attend classes onsite or to attend them online through the telematic tools provided by the university (videoconferences). In any case, students who attend classes onsite and who attend them by videoconference will rotate periodically.

In the particular case of this subject, these videoconferences will be made through:



Microsoft Teams



Kaltura



Situation 3: Confinement due to a new State of Alarm.

In this case, the following changes are made:

1. Educational Activities of Onsite Work:

All the foreseen activities to be developed in the classroom as indicated in this field of the guide of the subject, as well as the group and personalized tutoring, will be done with the telematic tools provided by the University, through:



Microsoft Teams



Kaltura

Explanation about the practical sessions:



2. System for Assessing the Acquisition of the competences and Assessment System

ONSITE WORK

Regarding the Assessment Tools:



The Assessment Tools will not be modified. If onsite assessment is not possible, it will be done online through the UCVnet Campus.



The following changes will be made to adapt the subject's assessment to the online teaching.

Course guide		Adaptation	
Assessment tool	Allocated percentage	Description of the suggested changes	Platform to be used

The other Assessment Tools will not be modified with regards to what is indicated in the Course Guide.

Comments to the Assessment System: