



Information about the subject

Degree: Bachelor of Sciences of Physical Activity and Sport

Faculty: Faculty of Physical Activity and Sport Sciences

Code: 282052 **Name:** Athletics

Credits: 4,50 **ECTS** **Year:** 3 **Semester:** 2

Module: 4) Optional Module.

Subject Matter: Individual sports. **Type:** Elective

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

4) Optional Module.

Subject Matter	ECTS	Subject	ECTS	Year/semester
Professional Itinerary Electives.	27,00	Fitness and Physical Conditioning	6,00	This elective is not offered in the academic year 23/24
		Pedagogy in Educational Values in Sports and Physical Activity	6,00	This elective is not offered in the academic year 23/24
		Skills, Entrepreneurship and Employment	3,00	This elective is not offered in the academic year 23/24
		Sports Management of Human and Economic Resources	6,00	This elective is not offered in the academic year 23/24
		Theory and Practice of Training for High Performance in Sports	6,00	This elective is not offered in the academic year 23/24
Anthropology.	18,00	Anthropology	6,00	3/1
		Religion, Culture and Values	6,00	This elective is not offered in the academic year 23/24
		Science, Reason and Faith	6,00	3/2
Idiom.	9,00	Inglés Avanzado para Ciencias Actividad Física y Deporte	4,50	3/2



Idiom.		Inglés Intermedio para Ciencias Actividad Física y Deporte	4,50	3/2
Nutrition.	4,50	Nutrition	4,50	3/2
Sports Facilities.	4,50	Sports Facilities	4,50	This elective is not offered in the academic year 23/24
Methods and techniques of investigation.	4,50	Applied Research Methods and Techniques in Sport Sciences	4,50	This elective is not offered in the academic year 23/24
Sports in the Natural Environment.	4,50	Sports in Nature: Specific Techniques	4,50	This elective is not offered in the academic year 23/24
Inclusive Activities and Practices	4,50	Inclusive Activities and Practices in the Areas of Education and Leisure Time	4,50	3/2
Trends in sports practices	4,50	Trends in Sports Practices	4,50	This elective is not offered in the academic year 23/24
Direction and Management of Gyms and Sports Centers.	4,50	Gym and Sports Centre Management and Administration	4,50	This elective is not offered in the academic year 23/24
Individual sports.	22,50	Athletics	4,50	3/2
		Cycling	4,50	This elective is not offered in the academic year 23/24
		Gymnastics	4,50	This elective is not offered in the academic year 23/24



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Individual sports.		Swimming	4,50	This elective is not offered in the academic year 23/24
		Triathlon	4,50	3/2
Collective Sports.	22,50	Basketball	4,50	3/2
		Football	4,50	3/2
		Handball	4,50	3/2
		Hockey	4,50	This elective is not offered in the academic year 23/24
		Volleyball	4,50	This elective is not offered in the academic year 23/24
Adversary Sports.	18,00	Fencing	4,50	3/2
		Judo	4,50	3/2
		Paddle	4,50	This elective is not offered in the academic year 23/24
		Tennis	4,50	3/2



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 Describe and prioritize at a practical level the configuring elements of each of the structures (coordinative, cognitive and conditional) of Athletics in different contexts and populations.
- R2 Scientifically substantiate the contents related to Athletics in its different theoretical-practical applications.
- R3 Design and implement tasks, sessions and development programs for the different capacities and abilities of Athletics, in different contexts and populations.
- R4 Discriminate and apply evaluation procedures and instruments to establish the degree of acquisition of Athletics skills at different ages, oriented towards different contexts and populations.



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):

GENERAL	Weighting			
	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
CG12 Develop leadership skills.		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		
CG15 Transmit the knowledge acquired both to people specialized in the matter and to people not specialized in The subject in question.				x
CG18 Be able to self-evaluate.		x		



SPECIFIC	Weighting			
	1	2	3	4
CE 1.3 Communicate and interact appropriately and efficiently, in physical and sporting activity, in diverse intervention contexts, demonstrating teaching skills in a conscious, natural and continuous way.				X
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 2.4 Articulate and deploy an advanced level of skill in the analysis, design, and evaluation of assessment and control tests of physical condition and physical-sports performance.				X
CE 2.6 Deploy an advanced level in the planning, application, control and evaluation of physical training processes and sports.				X
CE 4.3 Develop and implement the technical-scientific evaluation of the elements, methods, procedures, activities, resources and techniques that make up the manifestations of movement and processes of physical condition and physical exercise; having taken into account the development, characteristics, needs and context of individuals, different types of population and spaces where physical activity and sports are carried out; in the various sectors of professional intervention and with an emphasis on populations of special character.				X



Assessment system for the acquisition of competencies and grading system

Assessed learning outcomes	Granted percentage	Assessment method
R2, R3, R4	40,00%	Carrying out a project.
R1, R2, R4	40,00%	Written / oral and / or practical tests.
R1, R3, R4	20,00%	Active participation.

Observations

- The student may keep the evaluation instruments passed during the 3 years following the first enrollment.
- It is necessary to obtain a 50% in all the instruments to pass the course. If this criterion is not met, the student will be graded with a maximum of 4.5 in that exam session.
- Attendance to the practical sessions indicated in the schedule is compulsory. In case of not attending 70% of the practical sessions, the student will not be evaluated during that academic year in accordance with article 8 of the UCV exam regulations (the student will appear as "No Present").

SPECIFICATIONS TO THE EVALUATION INSTRUMENTS

Written/oral and/or practical tests

It consists of a single final test on the dates of the official convocation. This instrument consists of a 7-question developmental exam.

Completion of a project

The project will be divided into two parts:

- Elaboration of a poster of an athletic technique (15%).
- Design of a session of an athletic discipline oriented to initiation (25%).

Active participation

A worksheet will be handed in for each of the practices, in which the corresponding athletic technique will have to be analyzed.

The detailed explanation (procedure for the works) as well as the evaluation tools (worksheets or rubrics) of each section will be posted on the platform of each group at the student's disposal.



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.
- M5 Laboratory practices.
- M8 Resolution of problems and cases.



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, M8	R1, R2, R3, R4	12,60	0,50
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. M3, M4, M5, M8	R1, R2, R3, R4	26,80	1,07
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. M4, M8	R1, R2, R3, R4	1,80	0,07
EVALUATION: Set of oral and / or written tests used in the evaluation of the student, including the oral presentation of the final degree project. M8	R1, R2, R3, R4	3,80	0,15
TOTAL		45,00	1,80



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	28,50	1,14
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. M2, M4, M8	R1, R2, R3, R4	39,00	1,56
TOTAL		67,50	2,70



Description of the contents

Description of the necessary contents to acquire the learning outcomes.

Theoretical contents:

Content block	Contents
Block 1: Introduction to Athletics. History and generalities	<ul style="list-style-type: none">1.1. Athletic specialties. Olympic program. Clue Deck. School calendar.1.2. Installation. Olympic track. Covered Track. modules Training.1.3. federative organization.1.4. Brief history of Athletics
Block 2: Structure of Athletics. Institutions, categories and stages of training	<ul style="list-style-type: none">2.1. Classic Athletics Classification.2.2. Classification of athletic skills.<ul style="list-style-type: none">2.2.1. Depending on the type of movement2.2.2. According to the motor wealth.2.2.3. According to the predominant physical quality.2.3. Basic criteria for the training stages in the initiation to athletics2.4. Stages of development and learning of the skills of the athletics<ul style="list-style-type: none">2.4.1. Initiation2.4.2. Sports Orientation2.4.3. Specialization2.4.4. High performance.2.5. New models of initiation to athletics



Block 3: Races in Athletics.

- 3.1. Career Overview
- 3.2. speed race:
 - 3.2.1. Characteristics of the technique
 - 3.2.2. Exercises, tasks, and games for their development.
 - 3.2.3. Analysis of the most common errors.
 - 3.2.4. Technical correction processes.
 - 3.2.5. frequency and amplitude
 - 3.2.6. Obtaining the optimal stride
- 3.3. The taco outlet.
- 3.4. Hurdling races:
 - 3.4.1. Characteristics of the technique
 - 3.4.2. Exercises, tasks, and games for their development.
 - 3.4.3. Analysis of the most common errors.
 - 3.4.4. Technical correction processes.
 - 3.4.5. Main training methods.
- 3.5. The relays
 - 3.5.1. 4x100 relay.
 - 3.5.2. 4x400 relay.
- 3.6. Means and methods of training sprint races.

Block 4: Jumps in Athletics

- 4.1. Generalities of jumps in athletics. Common points.
 - 4.1.1. Jumps with a vertical component and jumps with a horizontal component.
- 4.2. Characteristics of the long jump technique:
 - 4.2.1. Characteristics of the technique
 - 4.2.2. Exercises, tasks, and games for their development.
 - 4.2.3. Analysis of the most common errors.
 - 4.2.4. Technical correction processes.
- 4.3. Characteristics of the high jump technique:
 - 4.3.1. Characteristics of the technique
 - 4.3.2. Exercises, tasks, and games for their development.
 - 4.3.3. Analysis of the most common errors.
 - 4.3.4. Technical correction processes.
- 4.4. Means and methods of jump training.



Block 5: Throwing in Athletics.

- 5.1. Launches general. Common points.
 - 5.1.1. Biomechanical principles of launches.
 - 5.1.2. The multithrows as a method of initiation to the throws.
 - 5.1.3. Means of evaluation of the launching capacity.
- 5.2. Features of the Shot Put:
 - 5.2.1. Characteristics of the technique
 - 5.2.2. Exercises, tasks, and games for their development.
 - 5.2.3. Analysis of the most common errors.
 - 5.2.4. Technical correction processes.
- 5.3. Disc Launch Features:
 - 5.3.1. Characteristics of the technique
 - 5.3.2. Exercises, tasks, and games for their development.
 - 5.3.3. Analysis of the most common errors.
 - 5.3.4. Technical correction processes.
- 5.4. Means and methods of pitching training.

Block 6: Combined tests in Athletics.

- 6.1. Combined Test Program. Fresh air. Covered Track.
- 6.2. The combined tests as a means of initiation to athletics.

Temporary organization of learning:

Block of content	Number of sessions	Hours
Block 1: Introduction to Athletics. History and generalities	1,00	2,00
Block 2: Structure of Athletics. Institutions, categories and stages of training	1,00	2,00
Block 3: Races in Athletics.	13,00	26,00
Block 4: Jumps in Athletics	6,00	12,00
Block 5: Throwing in Athletics.	6,00	12,00
Block 6: Combined tests in Athletics.	3,00	6,00



References

- Añó, V. (1997). *Planificación y organización del entrenamiento juvenil*. Gymnos.
- Arazi, H., Mohammadi, M. & Asadi, A. (2014). *Muscular adaptations to depth jump plyometric training: Comparison of sand vs. land surface*. 6(3), 125–130.
<https://doi.org/10.1556/IMAS.6.2014.3.5> [doi]
- Athletics, W. (2020). *Reglamento Internacional*.
https://www.rfea.es/jueces/publicaciones/Reglamento_Competicion2020_WorldAthleticsESP.pdf
- Billat, V. (2002). *Fisiología y metodología del entrenamiento*. Paidotribo.
- Bompa, T. (2016). *Periodización. Teoría y Metodología del entrenamiento*. Europea.
- Bompa, T. O. (2000). *Periodización del Entrenamiento Deportivo: Programa para obtener el máximo rendimiento en 35 deportes*. Paidotribo.
- Bosco, C. (1994). *La valoración de la fuerza con el test de Bosco*. Paidotribo.
- Bravo, J. (2008). *Atenas 1896 - Atenas 2004 - Más de un siglo de atletismo olímpico* (p. 446). Real Federación Española de Atletismo.
- Bravo, J., López, F., Ruf, H. & Seirul-lo, F. (1992). *Atletismo (II): saltos* (1st ed.). Comité Olímpico Español.
- Bravo, J., Martínez, J. L., Durán, J. & Campos, J. (1993). *Atletismo (III) Lanzamientos*. Comité Olímpico Español.
- Bravo, J., Pascua, M., García-Verdugo, M., Landa, L., Gil, F. & Marín, J. (1998). *Carreras y marcha: Atletismo 1*. Real Federación Española de Atletismo.
- Bravo, J., Pascua, M., Gil, F. & Ballesteros, J. (1991). *Atletismo (I): Carreras* (1st ed.). Real Federación Española de Atletismo.
- Bravo, J., Ruf, H. & Vélez, M. (2003). *Saltos verticales*. Real Federación Española de Atletismo.
- Brzycki, M. (1993). *Strength testing—predicting a one-rep max from reps-to-fatigue*. 64(1), 88–90.
- Cacolice, P., Garcia, C., Scibek, J. & Phelps, A. (2015). *The use of Functional Tests to Predict Sagittal Plane Knee Kinematics in Ncaa-D1 Female Athletes*. 10(4), 493–504.
- CIO. (2020). *Sports. Athletics*. CIO. <https://www.olympic.org/athletics>
- Cometti, G. (1998). *Los métodos modernos de musculación*. Paidotribo.
- Cometti, G. (2007). *El entrenamiento de la velocidad* (Vol. 24). Paidotribo.
- Corominas, J. (1967). *Medio siglo de Atletismo español* (1st ed.). Comité Olímpico Español.
- correo, G. (1997). *Estrellas del Deporte. Figuras del Atletismo*. Planeta De Agostini.
- Cruz, A. (1999). *Historia de los mundiales y del atletismo español*. Real Federación Española de Atletismo.
- CSD. (2020). *Licencias federativas 2019*.
https://www.csd.gob.es/sites/default/files/media/files/2020-08/Licencias_y_Clubes_2019.pdf
- Dessons, C., Drut, G., Dubois, R., Hebreard, J., Hubiche, J., Lacour, R., Maigrot, J. &



- Monnenet, J. (1986). *Tratado de atletismo, carreras: sprint, medio fondo, relevos, vallas.* Hispano Europea.
- Durán, J. (2000). *Manual básico de atletismo. Lanzamientos.* Real Federación Española de Atletismo.
- Durán, J., Grossocordón, J., Gil, F., Lizaur, P. & Sainz, Á. (2008). *Jugando al atletismo... ¡qué fácil es!* Real Federación Española de Atletismo.
- Epley, B. (1985). *Poundage chart.*
- Etnoyer, J., Cortes, N., Ringleb, S., Van Lunen, B. & Onate, J. (2013). *Instruction and jump-landing kinematics in college-aged female athletes over time.* 48(2), 161–171.
<https://doi.org/10.4085/1062-6050-48.2.09> [doi]
- Fleuridas, C., Foureau, W., Hermant, P. & Monneret, R. (1986). *Tratado de atletismo: lanzamientos: jabalina, peso, disco y martillo.* Hispano Europea.
- Gámez, J., Garrido, D., Montaner, C. & Alcántara, E. (2008). *Aplicaciones tecnológicas para el análisis de la actividad física para el rendimiento y la salud.* (M. Izquierdo (ed.); 1st ed., pp. 173–201). Panamericana.
- García Manso, J. M. (1999). *Alto rendimiento: la adaptación y la excelencia deportiva.* 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. & Landa, L. (2004). *Atletismo 4: Mediofondo y Fondo (La preparación del corredor de resistencia)* (1st ed.). Real Federación Española de Atletismo.
- García-Verdugo, Mariano & Leibar, X. (1997). *Entrenamiento de la resistencia de los corredores de medio fondo y fondo.* Gymnos.
- Gil Sánchez, F., Sánchez, R. & Pascua, M. (2000). *Manual básico de Atletismo.* Real Federación Española de Atletismo.
- González, J. & Gorostiaga, E. (1995). *Fundamentos del entrenamiento de la fuerza: aplicación al alto rendimiento deportivo.* Inde.
- González, J. & Rivas, J. (2007). *Bases de la programación del Entrenamiento de la Fuerza.* Inde.
- Grosser, M. (1992). *Entrenamiento de la velocidad: fundamentos, métodos y programas.* Martínez Roca.
- Grossocordón, J., Sainz, Á. & Durán, J. (2011). *Ánalisis estadístico de jóvenes atletas de 14 a 17 años en el periodo 1997-2008* (1st ed.). Real Federación Española de Atletismo.
- Houvion, M., Peyloz, H. & Prost, R. (1986). *Tratado de atletismo: saltos: triple, longitud, altura, pértiga.* Hispano Europea.
- Izquierdo, M. (2008). *Biomecánica y Bases Neuromusculares de la Actividad Física y el Deporte.* Panamericana.
- Lander, J. (1985). *Maximum based on reps.* 6, 60–61.
- LeSuer, D., McCormick, J., Mayhew, J., Wasserstein, R. & Arnold, M. (1997). *The Accuracy of Prediction Equations for Estimating 1-RM Performance in the Bench Press, Squat, and*



Deadlift. 11(4), 211–213.

- Lombardi, V. (1989). *Beginning weight training: the safe and effective way*. William C Brown Pub.
- Mackala, K., Fostiak, M. & Kowalski, K. (2015). *Selected determinants of acceleration in the 100m sprint*. 45, 135–148. <https://doi.org/10.1515/hukin-2015-0014> [doi]
- Massó, N., Rey, F., Romero, D., Gual, G., Costa, L. & Germán, A. (2010). *Surface electromyography applications*. 45(166), 127–136.
- Mayhew, J. L., Ball, T. E., Arnold, M. D. & Bowen, J. C. (1992). *Relative Muscular Endurance Performance as a Predictor of Bench Press Strength in College Men and Women*. 6(4), 200–206.
- Meléndez, A. (1995). *Entrenamiento de la resistencia aeróbica: principios y aplicaciones*. Alianza.
- Navarro, F. (1998). *Entrenamiento de la Resistencia*. Gymnos.
- O'Connor, R., O'Connor, B., Simmons, J. & O'Shea, P. (1989). *Weight training today*. Thomson Learning.
- Pascua, M., Gil, F. & Marín, J. (2005). *Atletismo 1. Velocidad, vallas y Marcha* (p. 214). Real Federación Española de Atletismo.
- Puchalt, J., Gómez, J., Francisco, I., Giner, M., González, J., Martín, J. & Montoya, A. (2007). *Guía didáctica para la enseñanza del atletismo*. Comité Organitzador del XII Campionat del Món IAAF d'Atletisme en Pista Coberta-VALENCIA 2008.
- Quercetani, R. & Cruz, A. (1992). *Historia del atletismo mundial, 1860-1991*. Editorial Debate.
- RFEA. (2020). *Reglamento de competición*. https://www.rfea.es/normas/pdf/reglamento2020/00_normas_generales.pdf
- RFEA. (2020a). *Mujer y Atletismo*. https://www.rfea.es/mujer_atletismo/mujeres_historia.asp
- RFEA. (2020b). *Reglamento de competición*. https://www.rfea.es/normas/pdf/reglamento2020/00_normas_generales.pdf
- Rodríguez, P. (2007). *Fuerza, su clasificación y pruebas de valoración*. 2–10.
- Ruiz, L. (1987). *Desarrollo motor y actividades físicas*. Gymnos.
- Ruiz, L. (1994). *Deporte y aprendizaje: procesos de adquisición y desarrollo de habilidades*. Visor.
- Sperlich, B., Achtzehn, S., de Marees, M., von Papen, H. & Mester, J. (2016). *Load management in elite German distance runners during 3-weeks of high-altitude training*. 4(12), 10.14814/phy2.12845. <https://doi.org/10.14814/phy2.12845> [doi]
- Villa, J. & García-López, J. (2003). *Tests de salto vertical (I): Aspectos funcionales*. 6, 1–14.
- Wong, J., Bobbert, M., Van Soest, A., Gribble, P. & Kistemaker, D. (2016). *Optimizing the Distribution of Leg Muscles for Vertical Jumping*. 11(2), e0150019. <https://doi.org/10.1371/journal.pone.0150019> [doi]
- Wood, T., Maddalozzo, G. & Harter, R. (2002). *Accuracy of seven equations for predicting 1-RM performance of apparently healthy, sedentary older adults*. 6(2), 67–94.
- Zaras, N., Spengos, K., Methenitis, S., Papadopoulos, C., Karampatos, G., Georgiadis, G., Stasinaki, A., Manta, P. & Terzis, G. (2013). *Effects of Strength vs. Ballistic-Power Training on*



Throwing Performance. 12(1), 130–137.

