Information about the subject

Degree: Bachelor of Sciences of Physical Activity and Sport

Faculty: Faculty of Physical Activity and Sport Sciences

Code: 282007 **Name:** Athletics

Credits: 6,00 **ECTS Year:** 4 **Semester:** 1

Module: 11) Optional module

Subject Matter: Athletics **Type:** Elective

Field of knowledge: Sports Training

Department: Sports Training

Type of learning: Classroom-based learning

Languages in which it is taught: Spanish

Lecturer/-s:

OAC9	Julio Martin Ruiz **(Responsible Lecturer)**	julio.martin@ucv.es

Module organization

11) Optional module

Subject Matter	ECTS	Subject	ECTS	Year/semester
Athletics	6,00	Athletics	6,00	4/1
Football	6,00	Football/Soccer	6,00	4/1
Swimming	6,00	Swimming	6,00	This elective is not offered in the academic year 21/22
Tennis	6,00	Tennis	6,00	This elective is not offered in the academic year 21/22
Basketball	6,00	Basketball	6,00	4/1
New Tendencies of Practices in Sports Centers	6,00	New Trends of Practice in Sports Centres	6,00	This elective is not offered in the academic year 21/22
Paddel Tennis	6,00	Paddle	6,00	4/1
Direction and management of fitness and sports facilities	6,00	Direction and Management of Gymnasiums and Sports Centres	6,00	This elective is not offered in the academic year 21/22
Research Methods in Physical Activity	6,00	Research Methods and Techniques Applied to Behavioural Sciences. Physical Activity and Sport	6,00	4/1

Water recreation activities	6,00	Recreational Water Activities	6,00	This elective is not offered in the academic year 21/22
Sport in the Natural Environment: Specific Techniques	6,00	Sports in the Natural Environment: Specific Techniques	6,00	4/1

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 Knowing the origins and history of athletics, the institutions that regulate and diversity of its component modalities.

R2 Executing with certain motor skills in different athletic modalities.

R3 Knowing observe and perceive during technical executions, the correct gestures from the incorrect ones applying adequate feedbacks to the performers and making reports noted.

R4 Knowing how to apply different programs for the teaching and learning of athletics considering the stages and phases of the evolutionary development of the performers.

R5 Developing and display values and attitudes of cooperation, respect, constructive criticism and professionalism own multidisciplinary teams formed around the modern athletics.

R6 Documenting and justify the different proposals for intervention through literature searches or through web pages, critically analyzing the documentation provided.

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
CG2	Ability to apply information technology and communication (ICT)			x	
CG3	Develop skills to solve problems through decision-making			x	
CG4	Transmit any information regarding the contents of body expression both in writing and orally			x	
CG5	Plan and organize any activity efficiently			x	
CG7	Be capable of critical reasoning using the knowledge gained				x
CG13	Being able to apply theoretical knowledge in practice				x
CG14	Use Internet well as communication and as a source of information			x	

SPECIFIC		Weighting			
		1	2	3	4
CE9	Know and understand the different manifestations of expressive human movement				x
CE10	Design, plan and evaluate content of body language to improve motor skills				x
CE13	Applying physiological, biomechanical, behavioural and social principles to different fields of physical activity and sports			x	
CE16	Planning, developing and assessing physical activity programmes			x	
CE18	Select and know how to use the most appropriate teaching materials and resources for each type of activity			x	

Assessment system for the acquisition of competencies and grading system

Assessed learning outcomes	Granted percentage	Assessment method
R1, R3, R4	40,00%	Written/oral and/or practical tests.
R2, R3, R4, R5	20,00%	Active participation.
R1, R2, R3, R4, R5, R6	30,00%	Oral exhibition of individual and / or group works.
R2, R3, R4, R5, R6	10,00%	Design and evaluation of the final individual work supervised.

Observations

Mention of distinction:
Sum of scores greater than 9 pts., In order from highest to lowest based on the number of students and ratio as indicated by rules of the UCV.In case of equal numbers of the final grade, the teacher will consider the interest, willingness and involvement of students in the course.

TO PASS THE SUBJECT IN THE FIRST ENROLMENT WILL BE ESSENTIAL:

·Get a score less than 50% of the value of the written exam.

·Get a score less than 50% of the total carrying value, delivery (when due) and group work exposure.

·Add 5 points or more between the different sections of the assessment.

·Students who do not meet the requirements to pass the course but the overall rating is equal to or greater than 5 pts. will be graded with 4.5 pts.

Learning activities

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

M1 Exhibition of contents by the teacher.

M2 Dynamics and group activities.

M3 Resolution of problems and cases.

M5 Discussion in small groups.

M6 Practical lesson.

M7 Internship assistance.

IN-CLASS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
PRACTICAL /SEMINAR CLASS: Dynamics and group activities. Resolution of problems and cases. Laboratory practices. Data search in a computer room, library... Meaningful construction of knowledge through the interaction and activity of the student M2, M3, M6	R1, R2, R3, R4, R5, R6	34,00	1,36
TUTORY: Learning supervision, evolution. Discussion in small groups. Resolution of problems and cases. Presentation of results before the teacher. Presentation of schemes and indexes of the proposed works. M5	R4, R5, R6	2,00	0,08
EVALUATION: Set of oral and / or written tests used in the evaluation of the student, including the oral presentation of the final project. M1, M3	R1, R2, R3, R4	4,00	0,16
THEORETICAL CLASS: Presentation of content by the teacher. Competency analysis. Demonstration of skills, abilities and knowledge in the classroom. M1, M2, M5	R1, R3, R4	20,00	0,80
TOTAL		**60,00**	**2,40**

LEARNING ACTIVITIES OF AUTONOMOUS WORK

	LEARNING OUTCOMES	HOURS	ECTS
GROUP WORK: Problem solving. Preparation of exercises, works, memories, to exhibit or deliver in classes and / or in tutoring. M2, M3	R1, R2, R3, R4, R5, R6	50,00	2,00
AUTONOMOUS WORK: Study, Individual preparation of exercises, works, memories, to exhibit or deliver in classes and / or in tutoring. Platform activities or other virtual spaces. M3	R1, R2, R3, R4, R6	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
DIDACTIC UNIT I: INTRODUCTION	1.1. Specialties of athletics. Olympic program. Indoor. School Calendar.1.2. Installation. Olympic track. Indoor. Training modules.1.3. Federative organization.1.4. Brief History of Athletics
DIDACTIC UNIT II: ATHLETICS GENERALITIES	2.1. Athletics classical classification.2.2. Athletic skills classification.2.2.1. Depending on the type of movement.2.2.2. According driving wealth.2.2.3. According to the predominant physical quality.2.3. Basic criteria for training in the athletics initiation stage.2.4. Stages of development and learning skills of athletics.2.4.1. Initiation.2.4.2. Sports guidance.2.4.3. Specialization.2.4.4. High Performance.

DIDACTIC UNIT III: RACE WALKING AND RACES.	DIDACTIC UNIT III: RACE WALKING AND RACES.3.1. Race's generalities.3.2. Speed race (Sprints):3.2.1. Technical characteristics.3.2.2. Exercises, tasks, and games for its development.3.2.3. Analysis of the most common mistakes.3.2.4. Technical correction processes.3.2.5. Frequency and amplitude.3.2.6. Getting Optimum stride length3.3. Starting blocs practices3.4. Relays3.4.1. 4x100 relays.3.4.2. 4x400 relays.3.5. Hurdles races: 3.5.1. Technical characteristics.3.5.2. Exercises, tasks, and games for its development.3.5.3. Analysis of the most common mistakes.3.5.4. Technical correction processes.3.5.5. Main methods of training.3.6. Race walking:3.6.1. Technical characteristics.3.6.2. Exercises, tasks, and games for its development.3.6.3. Analysis of the most common mistakes.3.6.4. Technical correction processes3.6.5. Means and methods of training.3.7. Training means and methods in general races3.7.1. Continuous method3.7.1.1. Uniform3.7.1.2. Variable3.7.2. Fractional Method3.7.2.1. Interval3.7.2.1.1. Intensive3.7.2.1.2. Extensive3.7.2.2. Repetitions3.7.2.3. Competition and control
DIDACTIC UNIT IV: JUMPS	4.1. Jumps generalities in athletics. Common points.4.1.1. Vertical component jumps and horizontal component jumps.4.1.2. Biomechanical principles of the jumps.4.1.3. Multihops as a method of initiation into the jumps.4.1.4. Means of evaluating jumping ability.4.2. Feature long jump technique:4.2.1. Technical characteristics.4.2.2. Exercises, tasks, and games for its development.4.2.3. Analysis of the most common mistakes.4.2.4. Technical correction processes.4.3. Features high jump technique:4.3.1. Technical characteristics.4.3.2. Exercises, tasks, and games for its development.4.3.3. Analysis of the most common mistakes. 4.3.4. Technical correction processes.4.4. Technical characteristics of the triple jump:4.4.1. Technical characteristics.4.4.2. Exercises, tasks, and games for its development.4.4.3. Analysis of the most common mistakes.4.4.4. Technical correction processes.4.5. Features pole vault technique:4.5.1. Technical characteristics.4.5.2. Exercises, tasks, and games for its development.4.5.3. Analysis of the most common mistakes.4.5.4. Technical correction processes.

DIDACTIC UNIT V: THROWS	5.1 Shot overview. Common points.5.1.1. Biomechanical principles of shots.5.1.2. Multishots like initiation method for shots.5.1.3. Evaluation means for shot capability.5.2. Shot features:5.2.1. Technical characteristics.5.2.2. Exercises, tasks, and games for its development.5.2.3. Analysis of the most common mistakes.5.2.4. Technical correction processes.5.3. Throw features:5.3.1. Technical characteristics.5.3.2. Exercises, tasks, and games for its development.5.3.3. Analysis of the most common mistakes.5.3.4. Technical correction processes.5.4. Javelin features:5.4.1. Technical characteristics.5.4.2. Exercises, tasks, and games for its development.5.4.3. Analysis of the most common mistakes.5.4.4. Technical correction processes.5.5. Hammer throw features: 5.5.1. Technical characteristics.5.5.2. Exercises, tasks, and games for its development.5.5.3. Analysis of the most common mistakes.5.5.4. Technical correction processes.
DIDACTIC UNIT VI: COMBINED EVENTS	6.1. Combined Events Program. Outdoor. Indoor.6.2. The combined tests as a way of initiation for athletics.
DIDACTIC UNIT VII: APPLICATION AND DEVELOPMENT OF SPECIFIC TRAINING PROGRAMS IN ATHLETICS.	7.1. Implementation of programs for the development of the technique of the disciplines.7.2. Implementation of programs to improve the specific physical qualities specialties.7.3. Planning the training of a specific discipline for an entire season

Temporary organization of learning:

Block of content	Number of sessions	Hours
DIDACTIC UNIT I: INTRODUCTION	1,00	2,00
DIDACTIC UNIT II: ATHLETICS GENERALITIES	3,00	6,00
DIDACTIC UNIT III: RACE WALKING AND RACES.	8,00	16,00
DIDACTIC UNIT IV: JUMPS	6,00	12,00
DIDACTIC UNIT V: THROWS	5,00	10,00
DIDACTIC UNIT VI: COMBINED EVENTS	3,00	6,00
DIDACTIC UNIT VII: APPLICATION AND DEVELOPMENT OF SPECIFIC TRAINING PROGRAMS IN ATHLETICS.	4,00	8,00

References

BASIC BIBLIOGRAPHY:

Añó, V. (1997). *Planificación y organización del entrenamiento juvenil*. Madrid: Gymnos.

Arazi, H., Mohammadi, M., & Asadi, A. (2014). *Muscular adaptations to depth jump plyometric training: Comparison of sand vs. land surface. Interventional medicine & applied science*, 6(3), 125-130. doi:10.1556/IMAS.6.2014.3.5 [doi]

Badillo, J., y Gorostiaga, E. M. (1995). *Fundamentos del entrenamiento de la fuerza.* Barcelona: Inde.

Badillo, J., y Rivas, J. (2007). *Bases de la programación del entrenamiento de la fuerza.* Barcelona: Inde.

Billat, V. (2002). *Fisiología y metodología del entrenamiento.* Barcelona: Paidotribo.

Bompa, T. (2000). *Periodización del Entrenamiento Deportivo: Programa para obtener el máximo rendimiento en 35 deportes*. Barcelona: Paidotribo.

Bompa, T. (2016). *Periodización. Teoría y metodología del entrenamiento.* (1ª ed.). Barcelona: Hispano Europea.

Bosco, C. (1994). *La valoración de la fuerza con el test de Bosco.* Barcelona: Paidotribo.

Bravo, J. (2008). *Atenas 1896 - Atenas 2004 - Más de un siglo de atletismo olímpico*. Madrid: Real Federación Española de Atletismo.

Bravo, J., López, F., Ruf, H., & Seirul-lo, F. (1992). *Atletismo (II): saltos* (1ª ed.). Madrid: Comité Olímpico Español.

Bravo, J., Martínez, J., Durán, J., & Campos, J. (1993). *Atletismo (III) Lanzamientos.* Madrid: Comité Olímpico Español.

Bravo, J., Pascua, M., García-Verdugo, M., Landa, L., Gil, F., & Marín, J. (1998). *Carreras y marcha: Atletismo 1.* Madrid: Real Federación Española de Atletismo.

Bravo, J., Pascua, M., Gil, F., & Ballesteros, J. (1991). *Atletismo (I): Carreras (1ª ed.).* Madrid: Real Federación Española de Atletismo.

Bravo, J., Ruf, H., & Vélez, M. (2003). *Saltos verticales.* Madrid: Real Federación Española de Atletismo.

Brzycki, M. (1993). *Strength testing—predicting a one-rep max from reps-to-fatigue.* Journal of Physical Education, Recreation & Dance, 64(1), 88-90.

Cacolice, P., Carcia, C., Scibek, J., & Phelps, A. (2015). *The use of Functional Tests to Predict Sagittal Plane Knee Kinematics in Ncaa-D1 Female Athletes. International journal of sports physical therapy,* 10(4), 493-504.

CIO. (2016). *Sports. Athletics.* Retrieved from https://www.olympic.org/athletics

Cometti, G. (1998). *Los métodos modernos de musculación.* Barcelona: Paidotribo.

Cometti, G. (2007). *El entrenamiento de la velocidad*. Barcelona: Editorial Paidotribo.

Corominas, J. (1967). *Medio siglo de Atletismo español (1ª ed.).* Madrid: Comité Olímpico Español.

Cruz, A. (1999). *Historia de los mundiales y del atletismo español.* Madrid: Real Federación Española de Atletismo.

CSD. (2016). *Licencias Federativas.* Retrieved from http://www.csd.gob.es/csd/asociaciones/1fedagclub/03Lic/

Dessons, C., Drut, G., Dubois, R., Hebreard, J., Hubiche, J., Lacour, R., . . . Monnenet, J. (1986). *Tratado de atletismo, carreras: sprint, medio fondo, relevos, vallas.* Madrid: Editorial Hispano Europea.

Durán, J. (2000). *Manual básico de atletismo. Lanzamientos.* Madrid: Real Federación Española de Atletismo.

Durán, J., Grossocordón, J., Gil, F., Lizaur, P., & Sainz, Á. (2008). *Jugando al atletismo...¡qué fácil es!.* Madrid: Real Federación Española de Atletismo.

Epley, B. (1985). Poundage chart. Lincoln, NE: Boyd Epley Workout,

Etnoyer, J., Cortes, N., Ringleb, S., Van Lunen, B., & Onate, J. (2013). *Instruction and jump-landing kinematics in college-aged female athletes over time. Journal of athletic training,* 48(2), 161-171. doi: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.* Barcelona: 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.* In M. Izquierdo (Ed.), Biomecánica y Bases Neuromusculares de la Actividad Física y el Deporte. (1ª ed., pp. 173-201). Madrid: Panamericana.

García Manso, J. (1999). *Alto rendimiento: la adaptación y la excelencia deportiva.* Madrid: Gymnos.

García-Verdugo, M., & Landa, L. (2004). *Atletismo 4: Mediofondo y Fondo (La preparación del corredor de resistencia)* (1ª ed.). Madrid: Real Federación Española de Atletismo.

García-Verdugo, M., & Leibar, X. (1997). *Entrenamiento de la resistencia de los corredores de medio fondo y fondo.* Madrid: Gymnos.

Gil Sánchez, F., Sánchez, R., & Pascua, M. (2000). *Manual básico de Atletismo.* Madrid: Real Federación Española de Atletismo.

González, J., & Gorostiaga, E. (1995). *Fundamentos del entrenamiento de la fuerza: aplicación al alto rendimiento deportivo.* Barcelona: Inde.

González, J., y Rivas, J. (2007). *Bases de la programación del entrenamiento de la fuerza.* Barcelona: Inde.

Grosser, M. (1992). *Entrenamiento de la velocidad: fundamentos, métodos y programas*. Barcelona: Ediciones Martínez Roca.

Grossocordón, J., Sainz, Á., & Durán, J. (2011). *Análisis estadístico de jóvenes atletas de 14 a 17 años en el periodo 1997-2008 (1ª ed.).* Madrid: Real Federación Española de Atletismo.

Grupo correo. (1997). *Estrellas del Deporte. Figuras del Atletismo*. Madrid: Planeta De Agostini.

Hawkins, J., Sharp, E., & Williams, S. (2015). *Take a Page from Your Coach's Play Book: Teaching Technical and Tactical Skills in Athletic Training.* Athletic Training Education Journal, 10(3), 244-248.

Houvion, M., Peyloz, H., & Prost, R. (1986). *Tratado de atletismo: saltos: triple, longitud, altura, pértiga.* Barcelona: Hispano Europea.

IAAF. (2016). *IAAF Competition Rules 2016-2017, in force from 1 November 2015.* Retrieved from https://www.iaaf.org/about-iaaf/documents/technical#manuals-guidelines

Izquierdo, M. (2008). *Biomecánica y Bases Neuromusculares de la Actividad Fsica y el Deporte.* Madrid: Panamericana.

Lander, J. (1985). *Maximum based on reps.* NSCA journal, 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. The Journal of Strength & Conditioning Research, 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. Journal of human kinetics,* 45, 135-148. doi:10.1515/hukin-2015-0014 [doi]

Massó, N., Rey, F., Romero, D., Gual, G., Costa, L., & Germán, A. (2010). *Surface electromyography applications.* Apunts Medicina de l" Esport (English Edition), 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.* The Journal of Strength & Conditioning Research, 6(4), 200-206.

Meléndez, A. (1995). *Entrenamiento de la resistencia aeróbica: principios y aplicaciones.* Madrid: Alianza.

Navarro, F. (1998). *Entrenamiento de la Resistencia.* Madrid: Gymnos.

O'Connor, R., O'Connor, B., Simmons, J., & O'Shea, P. (1989). *Weight training today Thomson Learning.*

Puchalt, J., Gómez, J., Francisco, I., Giner, M., González, J., Martín, J., . . . Montoya, A. (2007). *Guía didáctica para la enseñanza del atletismo (1ª ed.).* Valencia: Fundación Deportiva municipal de Valencia.

Quercetani, R., & Cruz, A. (1992). *Historia del atletismo mundial, 1860-1991.* Madrid: Editorial Debate.

RFEA. (2016). *Reglamentos.* Recuperado de

http://www.rfea.es/revista/libros/reglamentoRFEA2015_2016.htm

Rodríguez, P. (2007). *Fuerza, su clasificación y pruebas de valoración.* Revista de la Facultad de Educación, Universidad de Murcia, , 2-10.

Ruiz, L. (1987). *Desarrollo motor y actividades físicas.* Madrid: Gymnos.

Ruiz, L. (1994). *Deporte y aprendizaje: procesos de adquisición y desarrollo de habilidades.* Madrid: 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.* Physiological reports, 4(12), 10.14814/phy2.12845. doi:10.14814/phy2.12845 [doi]

Tonnessen, E., Svendsen, I., Olsen, I., Guttormsen, A., & Haugen, T. (2015). *Performance development in adolescent track and field athletes according to age, sex and sport discipline*. PloS one, 10(6), e0129014. doi:10.1371/journal.pone.0129014 [doi]

Villa, J., & García-López, J. (2003). *Tests de salto vertical (I): Aspectos funcionales.* Revista digital: Rendimiento deportivo.com, 6, 1-14.

Wong, J., Bobbert, M., Van Soest, A., Gribble, P., & Kistemaker, D. (2016). *Optimizing the Distribution of Leg Muscles for Vertical Jumping. PloS one, 11(2),* e0150019. doi: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.* Measurement in physical education and exercise science, 6(2), 67-94.

Zaras, N., Spengos, K., Methenitis, S., Papadopoulos, C., Karampatsos, G., Georgiadis, G., . . . Terzis, G. (2013). Effects of Strength vs. Ballistic-Power Training on Throwing Performance. Journal of sports science & medicine, 12(1), 130-137.

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:

[X] Microsoft Teams

[X] 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:

X	Microsoft Teams
X	Kaltura

Explanation about the practical sessions:

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

ONSITE WORK

Regarding the Assessment Tools:

[X] 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: