

**COURSE DATA****Data Subject**

<b>Code</b>	33230
<b>Name</b>	Specific applications for athletics training
<b>Cycle</b>	Grade
<b>ECTS Credits</b>	6.0
<b>Academic year</b>	2019 - 2020

**Study (s)**

<b>Degree</b>	<b>Center</b>	<b>Acad. year</b>	<b>Period</b>
1312 - Degree in Physical Activity and Sport Sciences	Faculty of Physical Education and Sport Sciences	4	First term
1331 - Degree in Physical Activity and Sport Sciences (Ontinyent)	Faculty of Physical Education and Sport Sciences	4	First term

**Subject-matter**

<b>Degree</b>	<b>Subject-matter</b>	<b>Character</b>
1312 - Degree in Physical Activity and Sport Sciences	28 - Applications for athletics training	Optional
1331 - Degree in Physical Activity and Sport Sciences (Ontinyent)	28 - Aplicación específica al entrenamiento en Atletismo	Optional

**Coordination**

<b>Name</b>	<b>Department</b>
CAMPOS GRANELL, JOSE FRANCISCO	122 - Physical and Sports Education

**SUMMARY**

The Subject **APPLICATION SPECIFIC TRAINING IN TRACK AND FIELD**, is an optional subject, quarterly, with a workload of 6 ECTS credits taught in the 4<sup>th</sup> Academic year of Grade in of Physical Activity and Sport Sciences.



**Athletics is one of the most traditional individual sports in the context of sports performance. The Course presents and analyzes athletic techniques from the perspective of the Sport Performance and the appropriate tools and techniques for the design of training plans in the groups of events in Track and Field: Running, Jumping and Throwing.**

## PREVIOUS KNOWLEDGE

### Relationship to other subjects of the same degree

There are no specified enrollment restrictions with other subjects of the curriculum.

### Other requirements

## OUTCOMES

### 1312 - Degree in Physical Activity and Sport Sciences

- Aplicar los principios fisiológicos, biomecánicos, comportamentales y sociales, a los diferentes campos de la actividad física y el deporte.
- Conocer y comprender los fundamentos del entrenamiento deportivo en deportes individuales.
- Planificar, desarrollar y evaluar la realización de programas de entrenamiento de especialidades atléticas.
- Aplicar las tecnologías de la información y comunicación (TIC) al ámbito del entrenamiento deportivo.
- Know the use and suitability of health products linked to nursing care, paying special attention to differences according to age and gender.
- Know and understand the fundamentals of physical fitness for physical activity and sport.
- Apply the principles of fundamental rights, gender equality, equal opportunities, universal accessibility for people with disabilities, solidarity, environmental protection, the culture of peace and democratic values.
- Design, implement and evaluate the teaching-learning processes related to physical activity and sport, paying attention to the individual, collective and contextual characteristics of people.
- Promote and evaluate the acquisition of enduring and autonomous habits of practising physical activity and sport.
- Plan, implement and evaluate physical activity and sports programmes targeted at special populations.
- Select and know how to use sports material and equipment, suitable for each type of activity and population.



- Apply information and communication technologies (ICTs) in the field of physical activity and sport sciences.
- Develop leadership, interpersonal and teamwork skills.
- Develop habits of professional excellence and quality.
- Know and understand the fundamentals of sports training in individual sports.
- Plan, implement and evaluate training programmes in athletic disciplines.
- Apply physiological, biomechanical, behavioural and social principles to the different fields of physical activity and sport.
- Apply information and communication technologies (ICT) to the field of sports training.

## LEARNING OUTCOMES

At the end of the course, students should demonstrate:

- **Knowledge and mastery of general and specific terminology.**
- **Advanced knowledge of athletic techniques.**
- **Knowledge of systems and means of specific training in athletic events.**
- **Capacity for observation and analysis.**
- **Knowledge of the specific research methodology.**

## DESCRIPTION OF CONTENTS

### 1. UNIT 1: BASIC CHARACTERISTICS OF TRACK AND FIELD TRAINING.

- 1.1.- Evolution of Training in Individual Sports.
- 1.2.- Training in Individual Sports: from Initiation to High Performance in Track and Field.

### 2. UNIT 2: PLANNING OF TRAINING IN TRACK AND FIELD

- 2.1.- Specific planning models.
- 2.2.- Structure Plan Training athletic modalities.
- 2.3.- Fundamentals of scientific advances in the training of strength and endurance and its practical application to training in athletics.

### 3. UNIT 3: PRACTICAL APPLICATIONS TO TRAINING IN SPRINT AND HURDLES

- 3.1.- Basis for Techniques in sprint events and hurdles.
- 3.2.- Contents of training.
- 3.3.- Performance Profiles.
- 3.4.- Means and specific training methods.
- 3.5.- Planning Training



#### **4. UNIT 4: PRACTICAL APPLICATIONS TO TRAINING IN ENDURANCE EVENTS.**

- 4.1.- Contents of training.
- 4.2.- Performance Profiles.
- 4.3.- Means and specific training methods.
- 4.4.- Planning Training

#### **5. UNIT 5: PRACTICAL APPLICATIONS TO TRAINING IN JUMPS.**

- 5.1.- Horizontal Jumps
  - 5.1.1.- Basics Techniques in Horizontal Jumps: Long Jump.
  - 5.1.2.- Contents of training.
  - 5.1.3.- Performance Profiles.
  - 5.1.4.- Means and specific training methods.
  - 5.1.5.- Planning Training
- 5.2.- Vertical Jumps
  - 5.2.1.- Basis for vertical jumps Techniques: The High Jump.
  - 5.2.2.- Contents of training.
  - 5.2.3.- Performance Profiles.
  - 5.2.4.- Means and specific training methods.
  - 5.2.5.- Planning Training

#### **6. UNIT 6: PRACTICAL APPLICATIONS TO TRAINING IN THROWING EVENTS.**

- 6.1.- HEAVY THROWS
  - 6.1.1 Technical Basics for Heavy Throws: The Shot Put.
  - 6.1.2 Contents of training.
  - 6.1.3 Performance Profiles.
  - 6.1.4 Means and specific training methods.
  - 6.1.5 Planning Training
- 6.2 Light Throws
  - 6.2.1 Technical basics for light throws: The Javelin.
  - 6.2.2 Contents of training.
  - 6.2.3 Performance Profiles.
  - 6.2.4 Media and specific training methods.
  - 6.2.5 Planning Training.

#### **7. ITEM 7: EVALUATION AND CONTROL OF TRAINING LOADS AND TECHNIQUE**

- 7.1.- Systems and Techniques of evaluation.
- 7.2.- Evaluation of Force
- 7.3.- Evaluation of Resistance
- 7.4.- Evaluation of Speed
- 7.5.- Qualitative analysis of the technique.

**WORKLOAD**

ACTIVITY	Hours	% To be attended
Theory classes	30,00	100
Classroom practices	30,00	100
Attendance at events and external activities	4,00	0
Development of group work	5,00	0
Development of individual work	15,00	0
Study and independent work	50,00	0
Preparation of evaluation activities	14,00	0
Resolution of case studies	2,00	0
<b>TOTAL</b>	<b>150,00</b>	

**TEACHING METHODOLOGY****DEVELOPMENT OF THE SUBJECT**

The course is built around activities as the theoretical and practical classes, as well as other as individual and group work, tutorials and independent study of the students.

- Theory.
- Exposure of the teacher.
- Group dynamics.
- Seminar.
- Practices.
- Practical sessions in athletics track, Gym, and outdoor natural circuits.
- Practical sessions in laboratory or classroom.
- Individual work.
- Group work.
- Tutorial





## EVALUATION

The evaluation of the student will be done by the system of continuous assessment in which the student may be subject to progressively eliminate contents:

- A / Partial Assessment at the completion of certain thematic blocks.
- B / Final Exam in the 1<sup>st</sup> Ordinary Call: for those students who have failed in partial assessments.
- C / Final Exam in the 2<sup>nd</sup> Ordinary Call: The exam will include all the contents of the Course.

The assessment mark is obtained by adding the result obtained by the student in the theoretical and practical assessment. The percentage share of each of those parts on the overall score is:

- Theoretical: 50% of the total grade.
- Practical: 50% of the total grade.
  - Analysis of texts and/or audiovisual productions: 15%
  - Individual or group projects: 25%.
  - Complementary work: 10%

## REFERENCES

### Basic

- Abbiss, C. R., & Laursen, P. B. (2008). Describing and understanding pacing strategies during athletic competition. *Sports Medicine*, 38(3), 239-252.

Bravo,J., Martínez,J.L., Duran,J., Campos,J. (1993). *Atletismo III. Lanzamientos*. Comité Olímpico Español, Madrid

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

Bravo,J., López,F., Ruf,H., Seilu-lo,F. (1992). *Atletismo II. Saltos*. Comité Olímpico Español, Madrid

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Campos, J., Ramón, V. (2001). *Teoría y Planificación del Entrenamiento Deportivo*. Paidotribo, Barcelona

Del Amo, J. L. L., Fresneda, A. G., Martínez, C. A. C., Vieco, A. M., & Miguel, P. G. (2012). *Análisis de*



la elección de la pierna de ataque predominante en la prueba de 400 m vallas de los XIII Campeonatos del Mundo de Atletismo Daegu 2011. Apunts Educación Física y Deportes, (110), 70-77.

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Graubner, R., & Nixdorf, E. (2011). Biomechanical analysis of the sprint and hurdles events at the 2009 IAAF World Championships in Athletics. *New studies in athletics*, 26(1/2), 19-53.

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Gil, F., Marín, J. & Pascua, M. (4ª Edición - 2005). *Atletismo 1. Velocidad, vallas y marcha* (Real Federación Española de Atletismo ed.). Madrid.

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Montoya Vieco, A. (2012). Perfil del rendimiento en los métodos de competición del corredor de 800 m: análisis de la distribución del ritmo y la zancada.

#### **Additional**

- Campos, J.; Gallach, J.E. (2004) *Las Técnicas del Atletismo. Manual práctico de enseñanza*. Paidotribo. Barcelona

Dal Monte,A. (1983). *La valutazione Funzionale dellatleta*, Sansoni, Firenze.

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García Verdugo, M, Leibar,X. (1997). *Entrenamiento de la Resistencia*. Gymnos, Madrid

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Hochmuth, G. (1973). *Biomecánica de los movimientos deportivos*. Doncel, Madrid  
I.A.A.F. (1985). *Athletes in Action*. International Amateur Athletic Federation, London

Matveev (1970). *Fundamentos del entrenamiento deportivo*. Ed. Riga. Moscu.

Piasenta,J. (1988). *LEducation Athletique*. INSEP, Paris

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## **ADDENDUM COVID-19**

**This addendum will only be activated if the health situation requires so and with the prior agreement of the Governing Council**

**English version is not available**