



## Information about the subject

**Degree:** Bachelor of Sciences of Physical Activity and Sport

**Faculty:** Faculty of Physical Activity and Sport Sciences

**Code:** 280404 **Name:** Planning and Methodology of Sports Training

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

**Module:** 6-9) Professional itinerary module

**Subject Matter:** Sports training **Type:** Compulsory

**Field of knowledge:** Sports training

**Department:** Sports Training

**Type of learning:** Classroom-based learning

**Languages in which it is taught:** Spanish

**Lecturer/-s:**

IEDM Didac Navarro Martinez (**Responsible Lecturer**) didac.navarro@ucv.es

IEDT Didac Navarro Martinez (**Responsible Lecturer**) didac.navarro@ucv.es



## Module organization

### 6-9) Professional itinerary module

Subject Matter	ECTS	Subject	ECTS	Year/semester
Education of the physical activity and the sport	12,00	Design, assessment and intervention of educational programs	6,00	4/1
		Pedagogy in Educational Values in Physical and Sports Activity	6,00	4/1
Sports training	12,00	Assessment of Biological Condition	6,00	4/1
		Planning and Methodology of Sports Training	6,00	4/1
Physical Activity and Quality of Life	12,00	Prescription and Assessment of Physical Exercise in Different Populations	6,00	4/1
		Promotion and Programs of Healthy Lifestyles	6,00	4/1
Management and sportive/sport recreation.	12,00	Sports Facilities	6,00	4/1
		Structure and Legislation in Sports Management	6,00	4/1

## Recommended knowledge

To have the option to chose the itinerary, students must have surpassed 6 ECTS applied knowledge relating to the itinerary, in this case the subject called Theory and Practice of Sports (3rd year).



## 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, key features, rationale, and scope of planning and periodization of athletic training.
- R2 Differentiate the phases of planning and be able to develop a proposal applied in the specific context of sports training (initiation, rehabilitation of injuries or performance).
- R3 Knowing the different temporal structures periodization of training, based on that, organize and distribute reasoned training loads depending on the level of the athlete and the training context.
- R4 Know the different models of sports training periodization, and elect their suitability in the specific context of training is presented.
- R5 Develop and display values and attitudes of cooperation, respect and constructive criticism needed to optimize the operation of the "staff" or coaching characterizing interdisciplinary professional development in the field of athletic training.
- R6 Find information on the record of various literature sources and analyze it critically to find specific solutions to problems arising from intervention in the context of sports training.
- R7 Be able to prepare a written document planning-periodization of training modulating different sports performance capabilities, as well as present and defend it orally in an orderly manner.



## 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	Understanding scientific literature in English and other important languages widely used in the scientific field achieving a good management of information			X	
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		
CG6	Develop interpersonal skills and teamwork, both international and domestic contexts and in interdisciplinary teams and non-interdisciplinary				X
CG7	Be capable of critical reasoning using the knowledge gained				X
CG10	Develop skills to adapt to new situations and autonomous learning		X		
CG13	Being able to apply theoretical knowledge in practice		X		
CG14	Use Internet well as communication and as a source of information		X		
CG19	Developing habits aiming at obtaining excellence and quality at work		X		
SPECIFIC		Weighting			
		1	2	3	4



CE1	Knowing and understanding the contents within the scope of Physical Activity and Sports Science				X
CE5	Know and understand the effects of the practice of body language and its manifestations in the personal development and health improvement				X
CE12	Plan, develop and control the theatrical process at different levels				X
CE13	Applying physiological, biomechanical, behavioural and social principles to different fields of physical activity and sports			X	
CE19	Learn to apply the techniques of information and communication within the body expression				X



## Assessment system for the acquisition of competencies and grading system

Assessed learning outcomes	Granted percentage	Assessment method
R1, R2, R3, R4	40,00%	Written/oral and/or practical tests.
R3, R5, R7	15,00%	Participation and self-assessment.
R2, R6, R7	20,00%	Completion of a project.
R2, R3, R4, R5, R6, R7	25,00%	Oral exhibition of individual and / or group works.

### Observations

#### AWARD CRITERIA FOR REGISTRATION OF HONOR:

- 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 take into account the interest, willingness and involvement of students in the course.

#### To overcome the subject in the 1st enrolment will be essential:

- Overcoming the theoretical consideration in your overall rating (> 5 pts). Without overcoming this other scores are not added together.
- Conduct group work and overcome in his overall rating (> 5 pts). If the job is rated as No Child in its 1st rate, after amendment, according to the corrections given by the teacher, in the 2nd delivery only eligible for the Child (= 5 pts).
- Add 5 points or more between the various subsections of the assessment described to this point.
- To be reviewed in the section "record of attendance and participation-attitude in practical classes", the student must attend 80% of the sessions indicated as practical, otherwise will be valued at zero in this section of the evaluation.
- In the other sections-skills, the student will be assessed again at the extraordinary session (repetition of the theoretical and practical tests and theoretical presentation of the work to achieve the APT).

#### To pass the subject or in the 2nd enrolment:

- Attend 80% of outstanding competencies related sessions (explained in 1st class).
- Overcoming the outstanding skills of previous calls (they retain the qualification of skills)



surpassed surpassed in calls)

- Competencies will be assessed:
- Earnings theoretical (conceptual skills unsurpassed) = Theoretical exam = 40%. Score less than 5 pts.
- Outstanding attendance practices (procedural competencies unsurpassed) = theoretical and practical examination = 20%. Score less than 5 pts.
- Outstanding teamwork and / or student work (attitudinal competencies unsurpassed) = Developing group work = 40%. Ranking each less than 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.
- M4 Laboratory practices.
- M5 Discussion in small groups.
- M6 Practical lesson.



## IN-CLASS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
<p>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</p> <p>M2, M3, M5, M6</p>	R2, R5, R6, R7	26,50	1,06
<p>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.</p> <p>M5</p>	R2, R7	2,00	0,08
<p>EVALUATION: Set of oral and / or written tests used in the evaluation of the student, including the oral presentation of the final project.</p> <p>M2, M3</p>	R1, R2, R3, R4	4,00	0,16
<p>THEORETICAL CLASS: Presentation of content by the teacher. Competency analysis. Demonstration of skills, abilities and knowledge in the classroom.</p> <p>M1, M2, M5</p>	R1, R3, R4	27,50	1,10
<b>TOTAL</b>		<b>60,00</b>	<b>2,40</b>





## 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	R2, R5, R6, R7	25,00	1,00
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	R2, R5, R6, R7	65,00	2,60
<b>TOTAL</b>		<b>90,00</b>	<b>3,60</b>



## Description of the contents

Description of the necessary contents to acquire the learning outcomes.

Theoretical contents:

Content block	Contents
UD I	Explanation of the module organization, outstanding skills and assessment criteria - passing the subject. Group formation.
UD II	Definitions and basic concepts in the field of planning and periodization of athletic training. Phases of planning and training variables to consider.
UD III	Factors affecting sports training.
UD IV	Structures of periodization of athletic training. Training periodization models.
UD V	Periodization training content according to the different contexts and temporary structures.
UD VI	Work order delivery. Call for examination and review of requirements for passing the subject.



## Temporary organization of learning:

Block of content	Number of sessions	Hours
UD I	3,00	6,00
UD II	5,00	10,00
UD III	5,00	10,00
UD IV	5,00	10,00
UD V	3,00	6,00
UD VI	9,00	18,00



## References

### BASIC BIBLIOGRAPHY:

- Bompa, T.O. (2003). *Periodización. Teoría y Metodología del Entrenamiento*. Barcelona. Paidotribo.
- Cometti, G (1998). *Los métodos modernos de musculación*. Barcelona: Paidotribo.
- García J.M., Navarro, M. & Ruiz, J.A. (1996). *Bases teóricas del entrenamiento deportivo*. Madrid: Gymnos.
- García J.M., Navarro, M. & Ruiz, J.A. (1996). *Planificación del Entrenamiento Deportivo*. Madrid: Gymnos.
- García-Verdugo Dimas, M. (2007). *Resistencia y entrenamiento*. Barcelona: Paidotribo.
- González Ravé, J. M., Pablos Abella, C. P., & Navarro Valdivielso, F. (2014). *Entrenamiento Deportivo: teoría y práctica*. Madrid: Panamericana.
- Grosser, M. (1989). *Alto rendimiento deportivo*. Barcelona: Ediciones Martínez Roca, S.A.
- Issurin, V. (2012). *Entrenamiento deportivo: periodización en bloques*. Barcelona: Paidotribo.
- López Chicharro, J. L., & Vicente Campos, D. (2018). *HiiT: Entrenamiento interválico de alta intensidad (1st ed.)*. Madrid: José Luis López Chicharro.
- Martin, D. (2001). *Manual de metodología del entrenamiento deportivo*. Barcelona: Paidotribo.
- Matveev, L. (2005). *El proceso de entrenamiento deportivo*. Buenos Aires. Stadium.
- Navarro, F., Oca, A., Rivas, A. (2010). *Planificación del entrenamiento y su control*. España. Cultivalibros.
- Navarro, F. (1998). *La resistencia*. Madrid: Gymnos.
- Stöggel, T. L., & Sperlich, B. (2015). *The training intensity distribution among well-trained and elite endurance athletes*. *Frontiers in Physiology*, 6, 295.
- Verkhoshansky, Y. (2002). *Teoría y metodología del entrenamiento deportivo*. Barcelona. Paidotribo.



Weineck, J. (2019). *Entrenamiento total*. Barcelona: Paidotribo.

**COMPLEMENTARY BIBLIOGRAPHY:**

Algarra, J.L. y Gorrotxategi, A. (1996). *El rendimiento en el ciclismo*. Capacidades entrenables. Madrid: Gymnos.

Allen, S. V., & Hopkins, W. G. (2015). *Age of Peak Competitive Performance of Elite Athletes: A Systematic Review*. Sports Medicine, 1-11.

Anderson, B. (1984). *Estirándose*. Barcelona: Editorial Integral.

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

Astrand, P.O. & Rodal, K. (1985). *Fisiología del trabajo físico*. Buenos Aires: Panamericana.

Baker D., Wilson G., Carlyon R. (1994) *Periodization: the effect on strength of manipulating volume and intensity*. Journal of strength and conditioning Research. (8)4, pp 235-242.

Balaguer, I. (1994). *Entrenamiento psicológico en el deporte*. Valencia: Albatros.

Blazquez, D. (1995). *La iniciación deportiva y el deporte escolar*. Barcelona: INDE.

Bompa, T.O. (1983). *Theory and Methodology of Training: The Key to Athletic Performance*. Dubuque, Iowa: Kendall/Hunt Publishing Company.

Bompa, T.O. (2000). *Periodización del entrenamiento deportivo*. Barcelona. Paidotribo.

Bompa, O. & Haff, G. (2009). *Periodization: theory and methodology of training*. Champaign, IL. Human Kinetics.

Bompa, T.O., & Buzzichelli, C. A. (2019). *Periodización del entrenamiento deportivo* (4.a ed.). Barcelona: Paidotribo.

Bonete, E. (2003). *Efectos de un período de sobreentrenamiento sobre indicadores subjetivos y hormonales*. (Tesis doctoral). Departamento de Psicología. Universidad de Valencia.

Campos, J. & Ramón, V. (2003). *Teoría y planificación del entrenamiento deportivo*. Barcelona: Editorial Paidotribo.

Costello, J. T., & Donnelly, A. E. (2010). *Cryotherapy and Joint Position Sense in Healthy*



*Participants: A Systematic Review.* Journal Of Athletic Training, 45(3), 306-316.

Dawes, J., & Rozzen, M. (Eds.). (2017). *Desarrollo de la agilidad y la velocidad* (1st ed.). Barcelona: Paidotribo.

Delgado, M., Gutiérrez, A. & Castillo, M.J. (1997). *Entrenamiento físico-deportivo y alimentación.* De la infancia a la edad adulta. Barcelona: Paidotribo.

Doma, K., & Deakin, G. (2015). *The Acute Effect of Concurrent Training on Running Performance Over 6 Days.* Research Quarterly for Exercise and Sport, 1-10.

García, J.M., Campos, J., Lizaur, P. & Pablos, C. (2003). *El talento Deportivo: Formación de élites deportivas.* Madrid: Gymnos.

García, J.M., Navarro, M. & Ruiz, J.A. (1996). *Pruebas para la valoración de la capacidad motriz en el deporte.* Madrid: Gymnos.

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

González-Badillo, J. J., Sánchez-Medina, L., Pareja-Blanco, F., & Rodríguez-Rosell, D. (2017). *La velocidad de ejecución como referencia para la programación, control y evaluación del entrenamiento de fuerza* (1st ed.). Murcia: ERGOTECH.

González Badillo, J.J. & Gorostiaga, E. (1995). *Fundamentos del entrenamiento de la fuerza.* Barcelona: INDE.

Gracia, A. & Oliveira, J. (1999). *La enseñanza de los juegos deportivos.* Barcelona: Editorial Paidotribo.

Grosser, M., Starischka, S., Zimmermann, E. (1988). *Principios del Entrenamiento Deportivo.* Barcelona: Ediciones Martínez Roca.

Grosser, M. (1992). *Entrenamiento de la velocidad.* Barcelona: Martinez Roca.

Hahn, E. (1988). *Entrenamiento con niños. Teoría, práctica, problemas específicos.* Barcelona: Martínez Roca.

Hernández Moreno, J. (1994). *Fundamentos del deporte. Análisis de las estructuras del juego deportivo.* Barcelona: INDE.



- Hoper, J., & Jobson, S. (2012). *Performance cycling: the science of success*. Londres: Bloomsbury Publishing Plc.
- Issurin, V. (2015). *Benefits and Limitations of Block Periodized Training Approaches to Athletes' Preparation: A Review*. Sports Medicine (Auckland, N.Z.).
- Issurin, V. (2013). *Training Transfer: Scientific Background and Insights for Practical Application*. Sports Med. 43: 675-694.
- Issurin V. (2010). *New horizons for the methodology and physiology of training periodization*. Sports Med. 40: 189-206.
- Issurin, V. y Yessis, M. (2008). *Block periodization: breakthrough in sports training*. Michigan. Ultimate Athlete Concepts.
- Krasuski, M. & Tederko, P. (2005). *Cryotherapy in contemporary rehabilitation: a review*. Ortopedia Traumatologia Rehabilitacja. 7(1), 60-5.
- Lacaba, R. (1993). *Técnica, sistemática y metodología de la musculación*. Madrid: Gymnos.
- Marcora, S. M., & Bosio, A. (2007). *Effect of exercise-induced muscle damage on endurance running performance in humans*. Scandinavian Journal of Medicine & Science in Sports, 17(6), 662-671.
- Martín, D., Carl, K. & Lehnertz, K. (2004). *Metodología general del entrenamiento infantil y juvenil*. Barcelona. Paidotribo.
- Matveiev, L. (1982). *El proceso de entrenamiento*. Buenos Aires: Stadium.
- Matveev, L. (1985). *Fundamentos del entrenamiento deportivo*. Moscú: Raduga.
- Mestre, J.A. (1995). *Planificación deportiva: teoría y práctica : bases metodológicas para una planificación de la educación física y el deporte*. Barcelona: INDE.
- McGowan, C. J., Pyne, D. B., Thompson, K. G., Raglin, J. S., Osborne, M., & Rattray, B. (2016a). *Elite sprint swimming performance is enhanced by completion of additional warm-up activities*. Journal of Sports Sciences, 1-7.
- McGowan, C. J., Pyne, D. B., Thompson, K. G., Raglin, J. S., & Rattray, B. (2016b). *Morning Exercise Enhances Afternoon Sprint Swimming Performance*. International Journal of Sports Physiology and Performance, 1-23.



- Pankhurst, A. (2007) *Planning and periodization*. Leeds. Coachwise/SportsCoachUK.
- Platonov, V.N. (1991). *El entrenamiento deportivo. Teoría y metodología*. Barcelona: Paidotribo.
- Platonov, V.N. & Bulatova, M.M. (1993). *La preparación física*. Barcelona: Paidotribo.
- Riera, J. (1989). *Fundamentos del aprendizaje de la técnica y la táctica deportivas*. Barcelona: INDE.
- Sánchez Bañuelos, F. (1984). *Bases para una didáctica de la educación física y el deporte*. Madrid: Gymnos.
- Richardson, S. O., Andersen, M. B. & Morriss, T. (2008). *Overtraining athletes*. Champaign: Human Kinetics.
- Sandler D. (2002). *A sample program for periodizing the general athlete, NSCA's Performance Training journal*, 1, 21-25.
- Scott, K. E., Rozenek, R., Russo, A. C., Crusemeyer, J. A., & Lacourse, M. G. (2003). *Effects of delayed onset muscle soreness on selected physiological responses to submaximal running*. Journal of Strength and Conditioning Research / National Strength & Conditioning Association, 17(4), 652-658.
- Sölveborn, S. (1989). *Stretching*. Barcelona: Martinez Roca.
- Stutz, J., Eiholzer, R., & Spengler, C. M. (2019). *Effects of Evening Exercise on Sleep in Healthy Participants: A Systematic Review and Meta-Analysis*. Sports Medicine (Auckland, N.Z.), 49(2), 269–287.
- Suay, F. (2003). *El síndrome del sobreentrenamiento: una visión desde la psicobiología del deporte*. Barcelona: Paidotribo.
- Tanner, R. K., & Gore, C. J. (2013). *Physiological tests for elite athletes (2nd Edition.)*. Australia: Human Kinetics.
- Vandenbogaerde, T. J. & Hopkins, W. G. *Effects of Acute Carbohydrate Supplementation on Endurance Performance: A Meta-Analysis*. Sports Medicine. 41(9): 773-92.
- Vasconcelos, A. (2000). *Planificación y organización del entrenamiento deportivo*. Barcelona: Paidotribo.





Weinberg, R.S. & Gould, D. (2010). *Fundamentos de la Psicología del Deporte y del Ejercicio Físico*. Madrid: Editorial médica panamericana S.A.



## 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: