



## Information about the subject

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

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

**Code:** 280101 **Name:** -

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

**Module:** 2) Obligatory Formation module.

**Subject Matter:** Sports Fundamentals. **Type:** Compulsory

**Field of knowledge:** Ciencias sociales y Jurídicas.

**Department:** Physical Activity Management and Didactics

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

**Languages in which it is taught:**

**Lecturer/-s:**

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## Module organization

### 2) Obligatory Formation module.

Subject Matter	ECTS	Subject	ECTS	Year/semester
Manifestations of human motor skills.	18,00	-	6,00	1/1
		-	6,00	1/2
		-	6,00	2/2
Sports Fundamentals.	42,00	-	6,00	1/1
		-	6,00	1/2
		-	6,00	2/1
		-	6,00	2/2

## 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 Identify, express and reason about the different manifestations of human movement.
- R2 Compare, decide and apply the optimal learning strategies and pedagogical principles based on the characteristics of the group in the different contexts of physical-sports activity.
- R3 Adapt PA tasks applying the basic principles of learning and motor development to attend to different ages, levels and contexts.
- R4 Establish, develop and adapt the physical-sport teaching-learning processes in the formal and non-formal educational environment, taking into account diversity.
- R5 Select after theoretical-practical foundation the appropriate exercise for the prescription of physical activity, attending to the needs of each population and context.



## 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	
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
CG10	Develop skills for adaptation to new situations and for autonomous learning.			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	
CG16	Understand the proposals of other specialists and communicate with them, both in their language and in a second language foreign.	X			
CG18	Be able to self-evaluate.		X		
CG19	Develop habits of excellence and quality in professional practice.			X	



SPECIFIC	Weighting			
	1	2	3	4
CE 1.1 Understand, develop and know how to apply the procedures, strategies, activities, resources, techniques and methods involved in the teaching-learning process efficiently, developing the entire course of action in all sectors of intervention professional of physical activity and sports (formal and informal physical-sports education; physical and sports training; exercise physical for health; direction of physical activity and sport).				X
CE 1.2 Design and apply the methodological process integrated by observation, reflection, analysis, diagnosis, execution, evaluation technical-scientific and / or dissemination in different contexts and in all sectors of professional intervention of physical activity and sport.			X	
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 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			



CE 4.1 Fluently develop procedures and protocols to solve unstructured, unpredictable and growing problems complexity, articulating and displaying a domain of the elements, methods, processes, activities, resources and techniques that make up basic motor skills, physical activities, sports skills, play, expressive body activities and dance, and activities in nature in an appropriate, efficient, systematic, varied and methodologically integrated way for all the population and with emphasis on populations of a special nature such as: older people (seniors), schoolchildren, people with disabilities and people with pathologies, health problems or similar (diagnosed and / or prescribed by a doctor), attending to gender and diversity and in any sector of professional intervention of physical activity and sport (teaching formal and informal physical-sports; physical and sports training; physical exercise for health; direction of physical activity and sport).

X

CE 5.2 Identify, organize, direct, plan, coordinate, implement, and carry out technical-scientific evaluation of the various types of physical and sports activities adapted to the development, characteristics and needs of individuals and the typology of the activity, space and entity, in all types of physical activity and sport services, including sporting events, and in any type of organization, population, context, environment and population and with emphasis on populations of a special nature such as: elderly people (seniors), schoolchildren, people with disabilities and people with pathologies, health problems or assimilated (diagnosed and / or prescribed by a doctor) and in any sector of professional intervention of physical activity and sport (formal and informal physical-sports education; physical and sports training; physical exercise for health; management of physical activity and sport) guaranteeing safety, efficiency and professionalism in the activity carried out in compliance with of current regulations.

X

CE 6.1 Know and understand the bases of the methodology of scientific work.

X

CE 7.1 Know and know how to apply the ethical and deontological principles and of social justice in the performance and professional involvement as well as having habits of scientific and professional rigor and a constant attitude of service to citizens in the exercise of their professional practice with which improvement, excellence, quality and efficiency are intended.

X



CE 7.3 Understand, know how to explain and disseminate the functions, responsibilities and importance of a good professional Graduated in Sciences of Physical Activity and Sports as well as analyze, understand, identify and reflect critically and autonomously on their identity, training and professional performance to achieve the goals and benefits of physical activity and sport in an adequate, safe, healthy and efficient way in all the physical-sports services offered and provided and in any sector professional of physical activity and sports.

x

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

Assessed learning outcomes	Granted percentage	Assessment method
R1, R2, R3, R4, R5	50,00%	Written / oral and / or practical tests.
R2, R3, R4, R5	20,00%	Active participation.
R1, R2, R3, R4, R5	30,00%	Autonomous work.

### Observations

## 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.
- M7 Small group discussion.
- M8 Resolution of problems and cases.
- M9 Attendance at practices.



## IN-CLASS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
<p>THEORETICAL CLASS: Presentation of contents by the teacher. Competency analysis. Demonstration of capabilities, skills and knowledge in the classroom. M2, M4, M7</p>	R1, R2	34,00	1,36
<p>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</p>	R3, R4, R5	18,00	0,72
<p>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</p>	R1, R2, R3, R4, R5	4,00	0,16
<p>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</p>	R1, R2, R3, R4, R5	4,00	0,16
<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, memoirs, to expose or deliver in classes and / or in tutoring. M2, M8	R1, R2, R3, R4, R5	30,00	1,20
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	60,00	2,40
<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
1 Introduction to the study of learning and motor development: justification, structure and areas of knowledge.	Introduction to the study of learning and motor development: justification, structure and areas of knowledge.
2 Concept and characteristics of motor learning.	Concept and characteristics of motor learning.
3 Explanatory models of motor learning.	Explanatory models of motor learning.
4 Processes and phases of motor acquisition.	Processes and phases of motor acquisition.
5 Factors that influence motor learning.	Factors that influence motor learning.
6 Concept and characteristics of motor development	Concept and characteristics of motor development
7 Explanatory models of motor development.	Explanatory models of motor development.
8 Motor development in the different stages and periods of life	8 Motor development in the different stages and periods of life



## Temporary organization of learning:

Block of content	Number of sessions	Hours
1 Introduction to the study of learning and motor development: justification, structure and areas of knowledge.	2,00	4,00
2 Concept and characteristics of motor learning.	2,00	4,00
3 Explanatory models of motor learning.	3,00	6,00
4 Processes and phases of motor acquisition.	2,00	4,00
5 Factors that influence motor learning.	8,00	16,00
6 Concept and characteristics of motor development	1,00	2,00
7 Explanatory models of motor development.	2,00	4,00
8 Motor development in the different stages and periods of life	10,00	20,00



## References

- Antoraz, E y Villaba, J. ( 2010). Desarrollo cognitivo y motor. Madrid: Editex.
- Batalla Flores, A. (2000). Habilidades motrices. Barcelona: Inde.
- Bezzoli, E., Andreotti, D., Pianta, L., Mascheroni, M., Piccinno, L., Puricelli, L., et al. (2018). Motor control exercises of the lumbar-pelvic region improve respiratory function in obese men. A pilot study. *Disability and Rehabilitation*, 40(2), 152–158. <http://doi.org/10.1080/09638288.2016.1244292>
- Blakemore, S. y Frith, U. (2011). *Cómo aprende el cerebro*. Barcelona: Ariel
- Cabezuelo, G., & Frontera, P. (2010). *El desarrollo psicomotor: Desde la infancia hasta la adolescencia*. Madrid: Narcea.
- Cano de la Cuerda, R., Martínez Piédrola, R.M y Miangolarra Page, J.C. (2017). *Control y aprendizaje motor. Fundamentos, desarrollo y reeducación del movimiento humano*. Madrid: Editorial Médica Panamericana
- Carrasco, D. G., & Cantalapiedra, J. A. (2016). Efectividad de la imaginación o práctica mental en la recuperación funcional tras el ictus: revisión sistemática. *Neurología*, 31(1), 43-52.
- Carrasco, D. G., & Cantalapiedra, J. A. (2016). Effectiveness of motor imagery or mental practice in functional recovery after stroke: a systematic review. *Neurología (English Edition)*, 31(1), 43-52.
- Conte, L. y col. ( 2007). *Las 10 claves del aprendizaje motor*. Madrid: Adal.
- Chua, L. K., Dimapilis, M. K., Iwatsuki, T., Abdollahipour, R., Lewthwaite, R., & Wulf, G. (2019). Practice variability promotes an external focus of attention and enhances motor skill learning. *Human movement science*, 64, 307-319
- de Quel Pérez, Ó. M., & Quintana, M. S. (2014). Sobre la expresión “respuesta de reacción” y el concepto “tiempo de respuesta”. *Apuntes Educación Física y Deportes*, ( 118), 88-92.
- Díaz, J. (1999). *La enseñanza y aprendizaje de las habilidades y destrezas motrices básicas*. Barcelona: Inde.
- Domjan, M. (2007). *Principios de aprendizaje y conducta*. Editorial Paraninfo.
- Duran-Lluisaca, C. L., Aldas-Arcos, H. G., Ávila-Mediavilla, C. M., & Heredia-León, D. A. (2020). Evaluación de capacidades físicas básicas en edades tempranas orientada a la iniciación deportiva. *Revisión literaria. Polo del Conocimiento*, 5(11), 277-296.
- Ellis, J. (2007). *Aprendizaje Humano*. Madrid: Pearson.
- Famose, J.P. (1992). *Aprendizaje motor y dificultad en la tarea*. Barcelona: Paidotribo. Barcelona: Inde.
- Famose, J.P. (1999). *Cognición y rendimiento*. Barcelona: Inde.
- Ferré, J. y Ferré, M. (2005). *El desarrollo neuro-senso-psicomotriz de los tres primeros años de vida*. España: Jorge Ferré Veciana.
- Fernandez, E et al. (1999). *Escalas para la evaluación de las habilidades motrices básicas*. Madrid: CIDE.
- Fernández del Olmo, M.A. (2012). *Neurofisiología aplicada a la actividad física*. Madrid: Síntesis



- Ferreros, M<sup>a</sup> L. (2006). *Enséñale a aprender*. Barcelona: Planeta.
- Fisher-price juguetes. Guía: El desarrollo de tu bebé a través del juego.
- Gessel, A (1988). *El niño de 1 a 4 años*. Barcelona: Paidós.
- Granda, J. y Alemany, I (2002). *Manual de aprendizaje y desarrollo motor*. Barcelona: Paidós.
- Guillot, A., & Collet, C. (2008). Construction of the motor imagery integrative model in sport: a review and theoretical investigation of motor imagery use. *International Review of Sport and Exercise Psychology*, 1(1), 31-44.
- *Haba juguetes*. Catalogo de productos. Juguetes buenos para niños.
- Hick, W.E. (1952). On the rate of gain of information. *Quarterly Journal of Experimental Psychology*, vol. 4, pp.11-36.
- *Imaginarium juguetes*. (2010). Colección: juega conmigo. Guía para jugar y aprender con tus hijos. 4 volúmenes de 0 a 8 años.
- Izquierdo, E. G., & Tendero, G. R. (2017). Análisis del tiempo de compromiso motor en educación física. *EmásF: revista digital de educación física*, (45), 31-51.
- Jensen, E. (2010). *Cerebro y aprendizaje*. Madrid: Narcea.
- Joyce, D. (2015). *Sports Injury Prevention and Rehabilitation* (1st ed.). Routledge.  
<http://doi.org/10.4324/9780203066485>
- Kandel, E.R., Schwartz, J.H. y Jessell, T.M. (2001). *Principios de neurociencia*. Madrid: McGrawHill/Interamericana de España.
- Larousse.(2008). *Padres*. Barcelona: Larousse.
- Latash, Mark L. (2008). *Neurophysiological basis of movement*. Human Kinetics Europe Ltd.
- Le Boulch, J. (1987). *La educación psicomotriz en la escuela primaria*. Barcelona: Paidós.
- Le Boulch, J. (1991). *El deporte educativo: psicocinética y aprendizaje motor*. Barcelona: Paidós.
- Le Boulch, J. (1995). *El desarrollo psicomotor desde el nacimiento hasta los 6 años*. Barcelona: Paidós.
- Liebson, C. (2014). *Functional Training Handbook*. Lippincott Williams & Wilkins.
- López, C. (2009). *Actividad física y salud para el desarrollo motor en adultos y mayores*. Sevilla: Wasceulen.
- Losquadro, L. (2005 ). *Cómo desarrollar las habilidades motoras. Desde el nacimiento hasta los 5 años*. Barcelona: CEAC.
- Martín, D (2004 ). *Metodología del entrenamiento infantil y juvenil*. Barcelona: Paidotribo.
- Martínez Marín, M., Moreno Hernández, F. y Ruiz Pérez, L.M. (2014). *Control y aprendizaje motor*. Madrid: Síntesis.
- Massion, J. (2000). *Cerebro y motricidad*. Barcelona: Inde.
- Morales Aznar, J., Roca i Balasch, J., Universitat de Barcelona, & Institut Nacional d'Educació Física de Catalunya. (2006). *Motricidad y cognición: Un estudio empírico ( tesis doctoral)*.
- Molina, E. C. (2002). El proceso de transfer: revisión y nuevas perspectivas. *EduPsykhé: Revista de psicología y psicopedagogía*, 1(1), 69-96.
- Muratori, L. M., Lamberg, E. M., Quinn, L., & Duff, S. V. (2013). Applying principles of motor learning and control to upper extremity rehabilitation. *Journal of Hand Therapy*, 26(2), 94–103.  
<http://doi.org/10.1016/j.jht.2012.12.007>



- Oña, A (2005). Actividad física y desarrollo. Sevilla: Wasceulen.
- Oña, A y col. (1999). Control y aprendizaje motor. Madrid, Síntesis.
- Peña,G; Heredia, J.R., ; Lloret, C; Martín, M. y M.E. Da Silva-Grigoletto. Iniciación al entrenamiento de fuerza en edades tempranas: revisión. Rev Andal Med Deporte. 2016;9(1):41–49
- Philip Rice, F. (1997) .Desarrollo humano. Estudio del ciclo vital. Madrid: Pearson Educación
- Piaget, J. & Inhelder, B. ( 1993, 1ª edición1969). Psicología del niño. Madrid: Morata.
- Pons, E & Roquet-Jamal, D. ( 2010). Desenvolupament cognitiu i motor. Barcelona: Altamar.
- Roca, J. (1983).Desarrollo motriz y psicología. Barcelona: Instituto Nacional de Educación Física de Cataluña.
- Rothwell, John (1994). Control of human voluntary movement. Chapman and Hall.
- Ruiz Pérez L. M. (1994). Desarrollo motor y actividades físicas. Madrid: Gymnos.
- Ruiz,L.M.(1994). Deporte y aprendizaje. Procesos de adquisición y desarrollo de habilidades. Madrid: Visor.
- Ruiz, L.M. (1995). La competencia motriz. Madrid: Gymnos
- Ruiz, L.M y Aruza, J (2005). El proceso de toma de decisiones en el deporte: clave de la eficiencia y el rendimiento óptimo. Barcelona: Paidos.
- Ruiz, L.M et. al (2007). Desarrollo, comportamiento motor y deporte. Madrid: Síntesis.
- Ruiz Pérez, L.M., Gutiérrez Sanmartín, M., Graupera Sanz, J.L., Linaza Iglesias, J.L. y Navarro Valdivieso, F. (2014). Desarrollo, comportamiento motor y deporte. Madrid: Síntesis.
- Ruiz Pérez, L.M. (2020). Lecciones sobre Desarrollo Motor: Para estudiantes de Ciencias de la Actividad Física y del Deporte. Amazon.
- Ruiz Pérez, L.M. (2021). Educación Física y baja competencia motriz. Ediciones Morata.
- Ruiz Pérez, L.M. (2020). Deporte y aprendizaje: procesos de adquisición y desarrollo de actividades. Madrid: Antonio Machado.
- Sage, G. H. (1984) Motor learning and control. Dubuque,Wm. C. Brown. Iowa.
- Sánchez, F (1992). Bases para una didáctica de la educación física y el deporte. Madrid: Gymnos.
- Schmidt, R. (1991) Motor learning and performance: from principles to practice. Champaign: Human kinetics.
- Schmidt, R.A. y Lee, T. (2011). Motor Control and Learning. A behavioral emphasis. Champaign, I.L.: Human Kinetics. Schmidt, R.A. y Wrisberg. (2008). Motor Control.
- Sherindan, M. (2003). Desde el nacimiento hasta los 5 años: Proceso evolutivo, desarrollo y progresos infantiles. Madrid: Narcea.
- Schunk. D (1998). Teorías del aprendizaje. Madrid: Pearson Educación.
- SHUMWAY-COOK, A (2019). CONTROL MOTOR DE LA INVESTIGACION A LA PRACTICA CLINICA. Wolters Kluwer.
- Siff, M. C., & Verkhoshansky, Y. (2004). Superentrenamiento (Vol. 24). Editorial Paidotribo.
- Stassen , K (Kathleen Stassen Berger).(2007). Psicología del desarrollo: infancia y adolescencia. Madrid: Ed. Médica Panamericana.
- Tándem, Revista didáctica de la Educación Física Nº 36 ( abril, mayo, junio 2011). El aprendizaje motor. Barcelona: Graó



- Thomas, J & Nelson, J. (2007). Métodos de investigación en actividad física. Barcelona. Paidotribo
- Twombly, E & Gink, G. (2008). Actividades de aprendizaje de 0 a 5 años. Madrid: Narcea.
- Vaca, M. y Varela, M<sup>a</sup> S.( 2008). Motricidad y aprendizaje. Barcelona: Graó.
- van de Laar, M. C., van den Wildenberg, W. P., van Boxtel, G. J., & van der Molen, M. W. (2010). Processing of Global and Selective Stop Signals. Experimental Psychology.
- Velázquez. C. ( 2010). Aprendizaje cooperativo en Educación Física. Barcelona: Inde.