

### Caraterização da Unidade Curricular / Characterisation of the Curricular Unit

<b>Designação da Unidade Curricular / Curricular Unit:</b>	[3181200610] Controlo Motor e Aprendizagem		
<b>Plano / Plan:</b>	[3181200610] Motor Control and Learning 2007/2008		
<b>Curso / Course:</b>	Desporto e Atividade Física Sport and Physical Activity		
<b>Grau / Diploma:</b>	Licenciado		
<b>Departamento / Department:</b>	CDM - Ciências do Desporto e Motricidade		
<b>Unidade Orgânica / Organic Unit:</b>	Escola Superior de Educação de Viseu		
<b>Área Científica / Scientific Area:</b>	Ciências da Motricidade		
<b>Ano Curricular / Curricular Year:</b>	1		
<b>Período / Term:</b>	S2		
<b>ECTS:</b>	5		
<b>Horas de Trabalho / Work Hours:</b>	0135:00		
<b>Horas de Contacto/Contact Hours:</b>			
(T) Teóricas/Theoretical:	0060:00	(TC) Trabalho de Campo/Fieldwork:	0000:00
(TP) Teórico-Práticas/Theoretical-Practical:	0000:00	(OT) Orientação Tutorial/Tutorial Orientation:	0000:00
(P) Práticas/Practical:	0000:00	(E) Estágio/Internship:	0000:00
(PL) Práticas Laboratoriais/Practical Labs:	0000:00	(O) Outras/Others:	0000:00
(S) Seminário/Seminar:	0000:00		

### Docente Responsável / Responsible Teaching

[2001] Abel Aurélio Abreu De Figueiredo

### Outros Docentes / Other Teaching

[2353] Jorge Filipe de Lima Arede

### **Learning Outcomes of the Curricular Unit**

1. Understand, differentiate, and situate the fundamental areas of Learning and Motor Control. 2. Acquire a comprehensive view of motor regulation and its main theories and explanatory models. 3. Recognize the process of motor competence development and its influential factors. 4. Synthesize the fundamental operations for promoting learning. 5. Understand the influence of practice organization on the learning process. 6. Acquire and evaluate knowledge regarding the methodology of observing and studying motor performance.

### **Learning Outcomes of the Curricular Unit (Lim:1000)**

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### **Syllabus (Lim:1000)**

1. MCA. . MCA in the study of Motor Behavior. . Learning, teaching and performance. . Evolution in the study of Motor Behavior.
- 2 . Motor regulation. Theories and explanatory models. . System, Model and Theory. . Information Processing. . Perceptive aspects of Action. . Memory. . Other approaches.
- 3 . Motor competency and its factors. . Motor competency. . Phases of technique learning. . Tactical thought development. . Expert-beginner paradigm.
- 4 . Operations to promote learning. . Exterocetive operations. . Proprioceptive operations.
- 5 . The organization of the practice in the learning process. . Types of practice organization. . Practice conditions variability hypothesis. . Task Analysis
- 6 . Methodology of observation and study of motor performance. . Performance analysis and measures of motor performance. . Acquisition, retention and transfer. . Tasks elaboration for performance evaluation.

### **Demonstration of the syllabus coherence with the curricular units' learning objectives**

The contents are organized in order to tackle the knowledge necessary to ensure that students develop the skills indicated in certain goals. Thus, the contents 1, 2, 3, 4, 5 and 6 correspond to compliance with the objectives 1, 2, 3, 4, 5 and 6. The contents are organized around three major areas: issues associated with regulatory processes and its interpretative theories (objectives and contents 1, 2 and 3), aspects associated with operations promoters of learning (objectives and contents 4 and 5) and aspects associated with the scientific analysis of motor performance (objective and content 6).

### **Teaching Methodologies (Including evaluation; Lim:1000)**

The contents will be addressed in sessions of theoretical-practical typology. The classes will be based on the expository approach, project-based learning, challenges or problems, as well as practical tasks. Continuous assessment will consist of an individual fieldwork assignment (50%), a theoretical-practical group assignment (20%), and a practical group exam (30%). Students who achieve a grade equal to or higher than 9.5 and have attended at least 70% of the total contact hours will pass the course in continuous assessment. The evaluation process follows the pedagogical regulations for attendance and assessment of the ESEV (School of Education).

### **Demonstration of the coherence between the teaching methodologies and the learning outcomes**

The outcome of understanding, differentiating, and situating the fundamental aspects of Learning and Motor Control will be primarily stimulated through the expository approach and will be assessed through a theoretical-practical group assignment. The outcome of acquiring a comprehensive view of motor regulation and its main theories and explanatory models will be developed through the expository approach and practical tasks, and its assessment will be conducted through a theoretical-practical group assignment. The outcome of recognizing the process of motor competence development and its influencing factors will be assessed through the completion of an individual fieldwork assignment and will be encouraged in classes through the expository approach and project-based learning, challenges, or problems. The outcomes of synthesizing the fundamental operations for promoting learning and understanding the influence of practice organization on the learning process will be developed using the expository approach, project-based learning, challenges, or problems, as well as practical tasks. The assessment of these outcomes will be conducted through a practical group exam. The outcome of acquiring and evaluating knowledge regarding the methodology of observing and studying motor performance will be stimulated through project-based learning, challenges, or problems, and practical tasks. The assessment of this outcome will be conducted through an individual fieldwork assignment.

**Bibliografia / Bibliography (Lim:1000)**

Button, C., Seifert, L., Chow, J. Y., Araujo, D., & Davids, K. (2021). Dynamics of skill acquisition: An ecological dynamics approach (2<sup>a</sup> ed.). Human Kinetics.

Edwards W. H. (2011). Motor learning and control: from theory to practice. Wadsworth Cengage Learning.

Godinho, M., Mendes, R., Melo, F.; Barreiros, J. (2007). Controlo motor e aprendizagem: Fundamentos e aplicações. (3<sup>a</sup> ed.). UTL FMH.

Hodges, N. J. (Ed.), & Williams, A. M. (Ed.). (2019). Skill acquisition in sport: Research, theory and practice (3<sup>a</sup> ed.). Routledge.

Magill R. A. & Anderson, D. I. (2017). Motor learning and control: concepts and applications (11<sup>a</sup> ed.). McGraw-Hill.

Schmidt, R. A., Lee, T. D., Winstein, C. J., Wulf, G., & Zelaznik, H. N. (2019). Motor control and learning: A behavioral emphasis (6<sup>a</sup> ed.). Human Kinetics.

Schmidt, R. A., & Lee, T. D. (2020). Motor learning and performance: From principles to application (6<sup>a</sup> ed.). Human Kinetics.